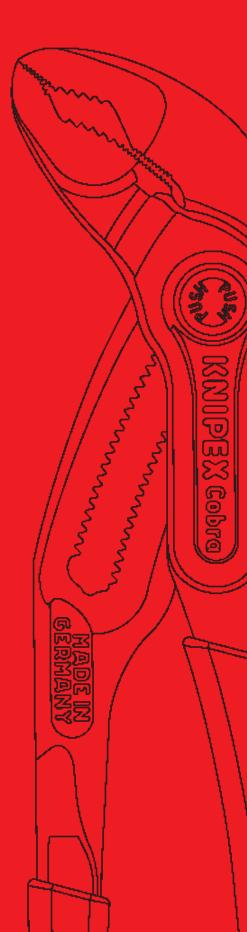
GENERAL CATALOGUE



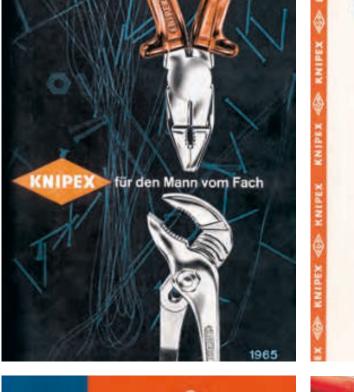


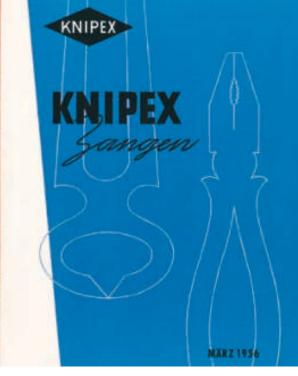


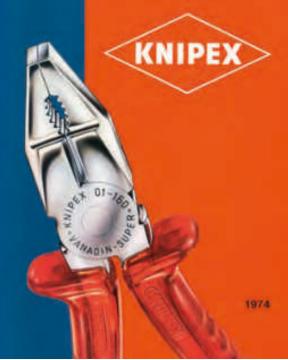
The pliers company

KNIPEX Quality – Made in Germany

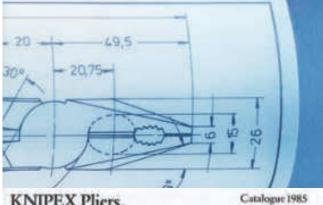
KNIPE







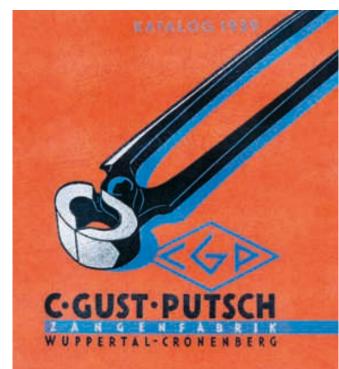




KNIPEX Pliers. German craftsmanship from design to production.

Catalogue 1985





KNIPEX – the company behind the pliers.

For over 130 years and four generations, we have been working passionately on being the best manufacturer of pliers for our customers and users – with a clear focus, high demands and a constant flow of new ideas. Throughout the world, our brand enjoys a great deal of trust, and we aim to consistently meet and rebuild this.

Success is important to us, but is not something we look for at any price. We are guided by values, orientate our actions towards sustainability, and face up to our responsibility towards society and the natural environment in which and with which we live. We invest heavily in the efficiency of our location and the qualification of our employees, working today on the success of tomorrow and the day after that — so that we can also continue to be a strong and reliable partner in the future.

Yours, Ray Rubely



Ralf Putsch, Managing Partner.

















KNIPEX pliers are different: ideas for more use and performance.

Ever better pliers – that is our guiding principle to which we devote all of our expertise and creativity. We are not satisfied with standard solutions, but rather continuously develop new and improved models that are better to work with and easier to use.

Working in this way means that sometimes we find unconventional solutions to situations, which then go on to set new benchmarks in the industry: novel methods of power transmission, easier and faster handling, combining various functions in a single tool and imaginative problem solvers for special applications. These save our users energy and time, giving them better work results with less effort.

In addition to major innovations, we work continuously on reworking our models in lots of small steps to improve their function, ergonomics and service life.

- 1 Compact force: CoBolt® XL two-hand operation for maximum cutting force.
- 2 Easy operation: Cobra® fast grip, precise adjustment, hold with self-locking.
- 3 Multifunctional: electrical installation pliers six functions in one pair of pliers.
- 4 Universal cutting force: X-Cut[®] the first high leverage diagonal cutters with box joint and precision cutting edges.
- 5 Speed and versatility: pliers wrench screws, holds, bends and presses without damaging materials.
- 6 High performance cutting edges: TwinForce® high strength thanks to unique transmission.
- 7 End cutting nippers redefined: bolt end cutting nippers light, slim, cut directly on the pivot point.
- 8 Problem-solver: spring hose clamp pliers the only pliers for all clamps; apply safely from all angles.

Step by step: from idea to product.

A large number of steps lie between an initial idea and the finished product. We never lose sight of the fact that every new or further development must represent a noticeable improvement for the user. We deploy the most up to date technologies and processes when putting our ideas into practice.

We begin by carefully establishing the requirements and selecting the best concepts. The tool is constructed on a computer, and the function is simulated with the help of special software. This is followed by the first models made on a 3D printer and by milling and extensive tests on steel prototypes – naturally in close dialogue with experienced users. The first products manufactured using series production processes are subjected to further extensive tests – under conditions far more stringent than normal load.



The locking mechanism on the spring hose clamp pliers permit simple and safe work, even with closed clamps. Modern CAD technology simulates the mechanism on the screen.

Filip Marovic, project manager for KNIPEX Product Development – "It can be seen repeatedly during the development cycles how important even the smallest detail can be. This is the very thing that motivates me to find creative new solutions. During the process we also take new technical possibilities in processing technology and materials into consideration."

-

62.88

1.8

20.74

54

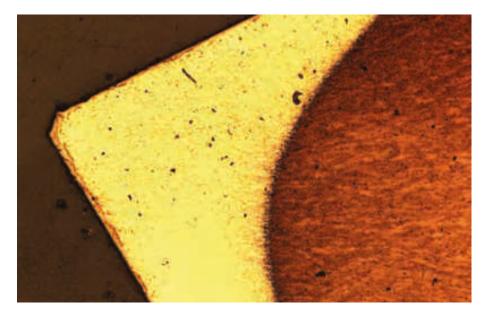
2.48

61

Core qualities: steel – and what we make from it.

You can expect a great deal more from a pair of KNIPEX pliers. This starts with the material. Because the many models of pliers in our range are designed for different requirements and loads, we use steel alloys that have been specially selected for the application and rolled according to our high specifications. Long lasting cutting capability when working with very hard wires, strength when working with high torque loads, and good resistance to corrosion are examples of these targets.

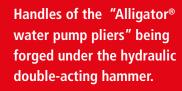
The respective materials are then given their specific molecular structure in a number of coordinated heat treatment steps to produce the optimal relationship between hardness and toughness. These processes allow us to achieve the high degree of reliability, durability and service life that are the very definition of KNIPEX pliers.



Macro image of a cutter after induction hardening. The specially hardened cutter area (light) is in sharp contrast to the softer structure of the body of the pliers (dark).







Islat

This is how our pliers are given their shape: hot and under high pressure.

Forging as a forming process is an old cultural technique and continues to hold fascination today. With an impact of up to five tonnes, the yellow glowing piece of steel is pounded in the upper and lower die at a temperature of 1,250°C. This gives it its basic shape and simultaneously a well-compacted structure.

The production of the forging die in our toolmaking works requires a great deal of experience and high precision, as this raw component will be crucial to the subsequent quality of the pliers. The contours of the forged component are milled at processing centres in the hardened and high strength die block.



Forging die for the high leverage diagonal cutters with forged-in axle.

The technology behind the pliers: machines made by KNIPEX.

All tools can only be as good as the production technology used to manufacture them. In other words, there can be no superior products without advances in production processes.

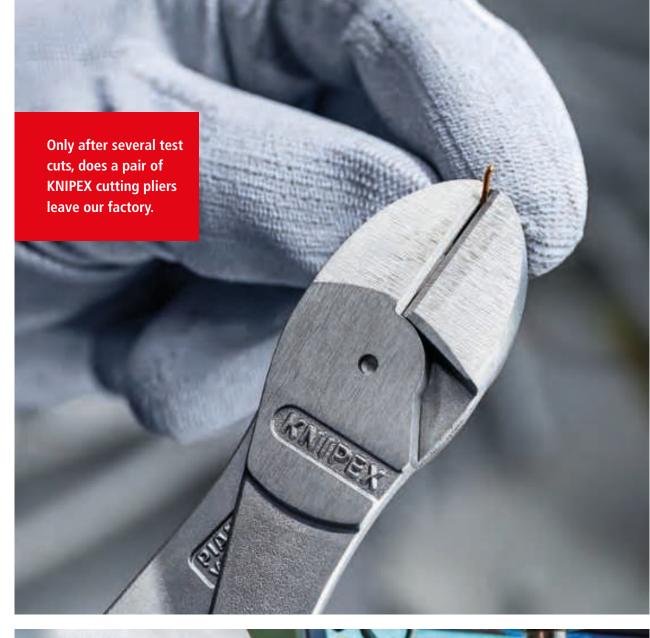
Due to our specialisation, we can focus on the technologies needed to produce high quality pliers efficiently. We have more than 400 machines, built with the specialised knowledge of generations. We build many of the machines ourselves or adapt machines precisely to our high standards using components we have manufactured. We even programme the software for the control and operation of the machinery ourselves in many cases.

From the product idea to the despatch of the finished pliers to our customers: everything is done under one roof. In this way we can directly influence all steps of value creation ourselves in terms of quality and efficiency, and make continuous improvements. Short paths and direct dialogue simplify coordination of processes and communication between employees.



We ensure our high standards by developing our own processes and machinery.







We take it very literally: 100% reliability.

The precision of pliers is essential for their function: without accuracy there can be no reliable cutting, gripping and shaping, and also no zero backlash. The tight tolerances, which we make sure are complied with through the use of modern production technology, enable us to meet our stringent quality specifications.

We ensure compliance through strict measurements and diverse inspections – both after the various production steps and at the end of the entire process. To do this we use the most up-to-date measurement technology and endurance test plants – as well as the practical component test by hand.



Shape and roughness of the diagonal cutter's cutting edge are precisely measured with an optical 3D measuring system.

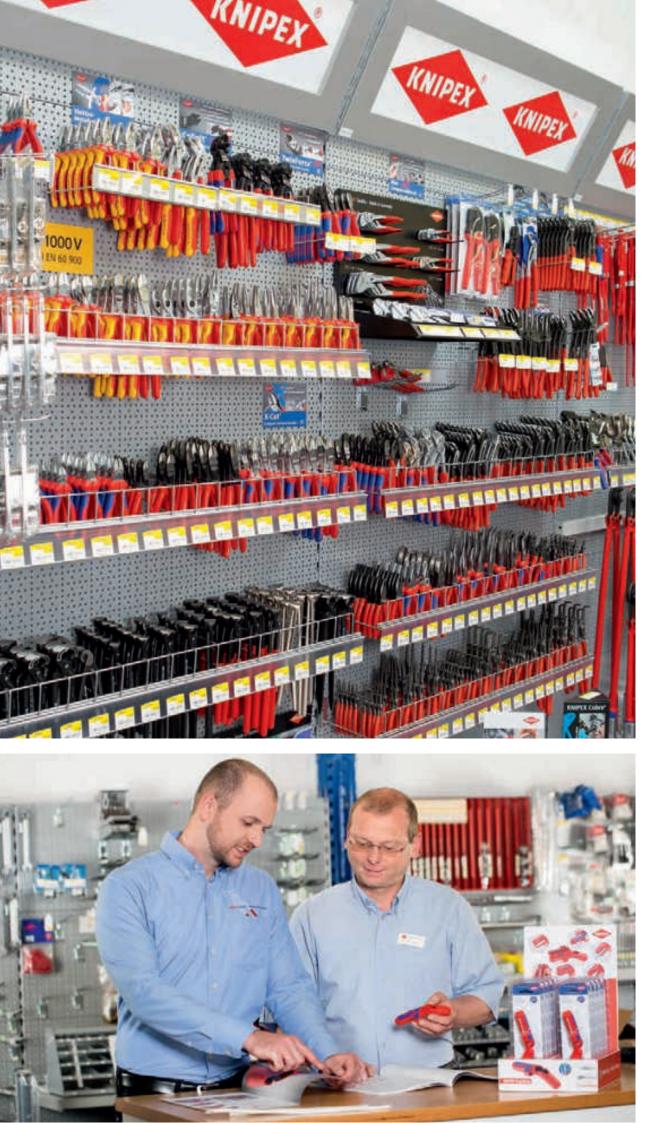
More than excellent pliers: what else you can expect from us.

Quality does not stop with the product. Trust, reliability and a collaborative approach define our business relationships – with consistent customer orientation, good service and competent field staff. We provide advice and training, and supply you with extensive digital product data whose format we adapt to your specific requirements. Added to this are diverse possibilities for sales support.

You will not find the breadth and depth of our range with any other manufacturer worldwide – so that your customers can always find the tool they are looking for.



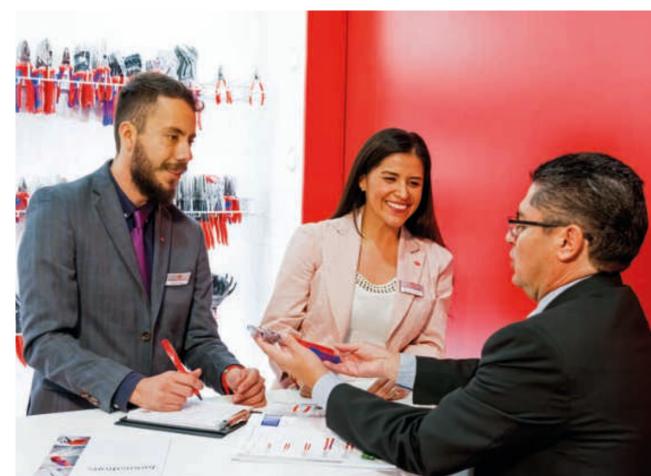
We also present the breadth and depth of our range at in-house exhibitions and open days.











At home in the world: locations in more than 100 countries for you.

KNIPEX is the global pliers brand. We are present in all continents, with a dense network of customers, representatives and branches. In order to be closer still to our retailers and be able to give them even better support, we are further extending our international activities all the time.

There is no substitute for direct contact, which is why we are there for you personally at more than 100 trade fairs each year. On platforms and with the help of the most varied media – classic and digital – we provide comprehensive information about our range and application opportunities in over 30 languages. We reach users and fans throughout the whole world via social media and hundreds of KNIPEX online videos.



We make up to date information available digitally in several languages on all usual channels.

The key factor: our employees.

The most important basis of our success is our employees. Their knowledge and skills, their dedication and their ideas are crucial to our efficiency and thus to our future.

As a company, we are a social community. We want to shape our culture in such a way that allows our employees to participate and identify through their work but also as individuals. We create good conditions for our employees to develop their potential, to obtain further qualifications and to stay healthy. It is also important to us that our employees are able to successfully balance family and career

We invest a significant amount of both expense and care in the training of young people, but also impart a wide spectrum of professional and personal skills to other employees.



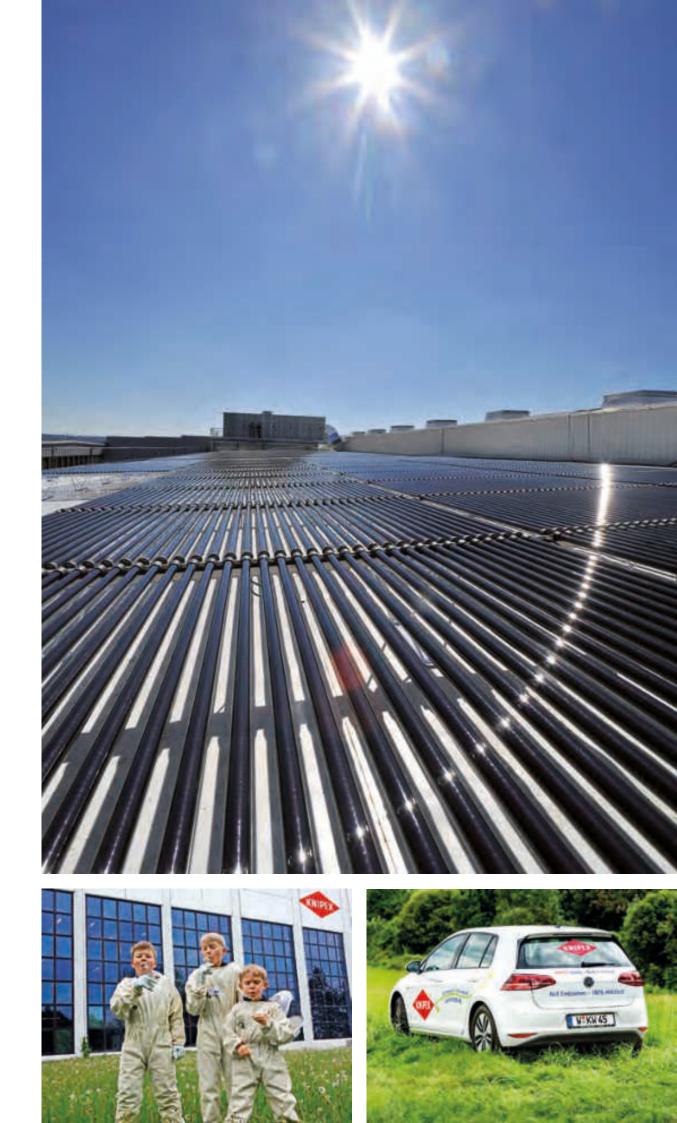
Our junior staff obtain their qualifications in our own modern training workshop.











Acting responsibly – sustainable management.



As a company, we believe we share responsibility for our natural environment and the well-being of society. We interact with both in various ways. We consume resources, but take care to use them as carefully as possible, and want to make a contribution to ensuring that they are available to future generations in the same or where possible a better form.

Our ecological objectives include a continuous reduction in our energy consumption, reduction in the volumes of waste and caring for the biodiversity at our site. In addition, we participate in major climate protection projects.

Companies should also be good citizens. We support numerous institutions and organisations from the areas of education and culture. We maintain a close exchange with schools and universities, and strengthen civic engagement in our region in diverse ways.



We support the Bergische music school in the "Singpause" project which, with the help of specially trained teachers, communicates the foundations of music and pleasure at singing together in schools.

At a glance

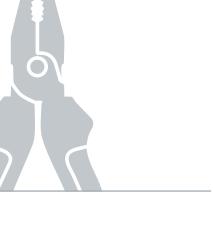
Overview of products

2	Combination and Multifunctional Pliers Combination Pliers Pliers for Installation Round Nose and Flat Nose Pliers	
18	Wire Strippers and Dismantling Tools Insulation Strippers with adapted blades MultiStrip 10 Dismantling Tools	
44	Gripping and Grip Pliers Flat Nose Pliers Round Nose Pliers Grip Pliers	
56	Circlip Pliers Circlip Pliers Precision Circlip Pliers Circlip Pliers Sets	P
72	Carpenters' Pincers and Concreters' Nippers Carpenters' Pincers Concreter's Nippers High Leverage Concreters' Nippers	to
78	Cutting Pliers Diagonal Cutters Bolt Cutters End Cutting Nippers	<u> </u>
102	Pipe Wrenches and Water Pump Pliers Pliers Wrenches Cobra [®] Alligator [®] Pipe Wrenches	50
124	Special Pliers and Control Cabinet Keys Pipe Cutters Spring Hose Clamp Pliers Magnetic LED Lamp Control Cabinet Keys	
146	Cable and Wire Rope Shears Cable Shears Cable Cutters with ratchet action Wire Rope Shears	Ô
162	Crimping Pliers and Crimp Assortments Crimp System Pliers PreciForce [®] Cable Connectors	
194	Insulated Tools Pliers Wrenches Screwdrivers Sets	
238	Electronics Pliers and Precision Tweezers Cutting Pliers Gripping Pliers Precision Tweezers	
262	Pliers with tether attachment point for mounting a fall protection	AND DO
268	Tool Assortments and Tool Cases Pliers Sets Tool Bags Tool Cases	
330	Index / Article Number Index Pliers-ABC	

Combination and Multifunctional Pliers

G

Combination Pliers	4
High Leverage Combination Pliers	5
Needle-Nose Combination Pliers	6
Mini Combination Pliers	8
"Lineman's Pliers" American style	9
Pliers for Electrical Installation	10
Electricians' Pliers	12
Round Nose Pliers with cutting edge (Jewellers' Pliers)	13
Flat Nose Pliers with cutting edges (Precision Mechanics Pliers)	14
Snipe Nose Pliers with centre cutter (Telephone Pliers)	14
Snipe Nose Side Cutting Pliers (Radio Pliers)	15
Snipe Nose Side Cutting Pliers (Stork Beak Pliers)	16



Combination Pliers

- > With gripping zones for flat and round material, suitable for versatile use
- > With cutting edges for soft and hard wire
- >Long cutting edges for thicker cables
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 60 HRC
- > Special tool steel, forged, multi stage oil-hardened
- > DIN ISO 5746

03 06 180 T*

> Pliers with tether attachment point for mounting a fall protection









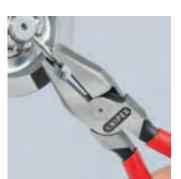
								Cutting of	capacities		
Article No.	EAN 4003773-	∢→ mm		Pliers	Head	Handles	Ø mm	Ø mm	Ø mm	mm ²	۲۵ g
03 01 140	015192	140			polished			1.8	9.0	10	106
03 01 160	013235	160					3.1	2.0	10.0	16	187
03 01 180	013242	180		black atramentized		plastic coated	3.4	2.2	12.0	16	216
03 01 200	013259	200		atramentizeu			3.8	2.5	13.0	16	276
03 01 250	015222	250					3.8	2.5	15.0	25	480
03 02 160	023203	160					3.1	2.0	10.0	16	223
03 02 180	023197	180		black atramentized	polished	with multi-component grips	3.4	2.2	12.0	16	254
03 02 200	034940	200		atramentizeu			3.8	2.5	13.0	16	322
03 05 140	039730	140				2.8	1.8	9.0	10	139	
03 05 160	039518	160			chrome plated	with multi-component grips	3.1	2.0	10.0,0	16	222
03 05 180	034933	180		chrome plated		with multi-component grips	3.4	2.2	12.0	16	254
03 05 200	041146	200					3.8	2.5	13.0	16	324
03 06 160	021902	160					3.1	2.0	10.0	16	228
03 06 180	021926	180	₩₩₩ ₩ 1000 V @ €	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	3.4	2.2	12.0	16	264
03 06 200	033776	200			platea		3.8	2.5	13.0	16	355
03 06 180 T	081395	180	ᲚᲚŨ ▶◀ ৡ1000 V @@@	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested, with in- tegrated insulated tether attachment point for a tool tether	3.4	2.2	12.0,0	16	270
03 07 160	015307	160					3.1	2.0	10.0	16	254
03 07 180	015314	180			chrome	with discord in what is NDE to the	3.4	2.2	12.0	16	285
03 07 200	015321	200	£ 1000 V 🖄 🚰	chrome plated	plated	with dipped insulation, VDE-tested	3.8	2.5	13.0	16	339
03 07 250	015345	250	1				3.8	2.5	15.0	25	597

High Leverage Combination **Pliers**

- ► 35 % less effort required than with conventional combination pliers
- ▶ With cutting edges (hardness approx. 63 HRC) for heavy duty
- > Easier work due to optimised leverage
- > Easier cutting, powerful gripping, bending and pulling
- > Long cutting edges for thicker cables
- > With gripping zones for flat and round material, suitable for versatile use
- > High-grade special tool steel, forged, multi stage oil-hardened
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 63 HRC
- > DIN ISO 5746

02 02 225 T*

> Pliers with tether attachment point for mounting a fall protection











	EAN	- →							•	₿	52
Article No.	4003773-	mm		Pliers	Head	Handles	Ømm	Ømm	Ømm	mm ²	g
02 01 180	033134	180					2.5	2.0	11.5	16	202
02 01 200	039679	200		black atramentized	polished	plastic coated	2.8	2.2	13.0	25	298
02 01 225	013198	225					3.0	2.5	14.0	25	355
02 02 180	034896	180					2.5	2.0	11.5	16	240
02 02 200	034902	200		black atramentized	polished	with multi-component grips	2.8	2.2	13.0	25	342
02 02 225	043379	225					3.0	2.5	14.0	25	405
02 02 225 T	079934	225		black atramentized	polished	with multi-component grips and integrated tether attachment point	3.0	2.5	14.0	25	410
02 05 180	043072	180			chrome plated		2.5	2.0	11.5	16	238
02 05 200	043089	200		chrome plated		with multi-component grips	2.8	2.2	13.0	25	342
02 05 225	010005	225					3.0	2.5	14.0	25	400
02 06 180	010012	180					2.5	2.0	11.5	16	247
02 06 200	010029	200	A 1000 V 🖄 🗲	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	2.8	2.2	13.0,0	25	343
02 06 225	010036	225					3.0	2.5	14.0	25	401
02 07 200	022299	200		chromo plated	chromo platod	with dipped insulation, VDE-tested	2.8	2.2	13.0	25	380
02 07 225	022305	225	🛧 1000 V 🖄 😭	chrome plated	chrome plated	with upped insulation, VDE-tested	3.0	2.5	14.0	25	486

Needle-Nose Combination Pliers

Small High Leverage Combination Pliers with pointed jaw.

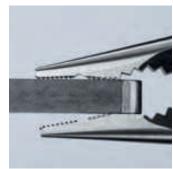
For all common installation and repair work.

- ▶ Handy use when working in confined areas thanks to slim head design and pointed jaws (anti-twist)
- Gripping surfaces with special convex contour on one side for secure gripping of flat parts
- ▶ Milled groove in the gripping area permits small parts such as nails, pins and bolts to be held and pulled
- > The reliable and diverse combination pliers when out and about
- > Easy cutting thanks to the high leverage joint
- > With cutting edges for soft, medium-hard and hard wire
- > Long service life and stable tips
- > Forged from special high grade tool steel, manifold oil-hardened
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 59 - 63 HRC
- > DIN ISO 5746

08 22 145 T / 08 26 145 T*

> Pliers with tether attachment point for mounting a fall protection





Firm grip also on flat material due to threepoint rest



Tip keeps its shape even during greater torsional forces



Milled groove in the gripping area

Slim head for ideal accessibility



							Cutting capacities				
Article No.	EAN 4003773-	∢ ► mm		Pliers	Head	Handles	Ø mm	Ø mm	Ø mm	mm ²	۵ ^۲ ۵ g
08 21 145	078951	145		black atramentized	polished	plastic coated	3.0	2.0	8.0	16	116
08 22 145	078968	145		black atramentized	polished	with multi-component grips	3.0	2.0	8.0	16	145
08 22 145 T	080640	145		black atramentized	polished	with multi-component grips and integrated tether attachment point	3.0	2.0	8.0	16	150
08 25 145	078975	145		chrome plated	chrome plated	with multi-component grips	3.0	2.0	8.0	16	145
08 26 145	079361	145	ᲚᲚŨ ▶◀ ৡ1000 V @@	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	3.0	2.0	8.0	16	145
08 26 145 T	081401	145	ЩЩ ▶ ● ∯1000 V @€	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested, with integrated insulated tether attachment point for a tool tether	3.0	2.0	8.0	16	155

Combination Pliers

Chrome Vanadium

- > For heavy duty
- > With gripping zones for flat and round material, suitable for versatile use
- > With cutting edges for soft, hard and piano wire
- > Long cutting edges for thicker cables
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC
- > Particularly wear resistant gripping jaws; hardness of the gripping jaws approx. 53 HRC
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened
- > DIN ISO 5746, DIN EN 60900, IEC 60900



	EAN	∢ —▶							•	•	52
Article No.	4003773-	mm		Pliers	Head	Handles	Ømm	Ømm	Ømm	mm ²	g
01 06 160	040729	160		chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	2.0	1.5	10.0	16	220
01 06 190	040415	190	☆ 1000 V 🖄 😭				2.5	2.0,0	13.0	25	320

Mini Combination Pliers

- > Compact combination pliers for professionals and hobbyists
- > With gripping zones for flat and round material, suitable for versatile use
- > With cutting edges for soft and hard wire
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 60 HRC
- > Vanadium electric steel, forged, multi stage oil-hardened



						Cutting capacities				
	EAN	∢ —▶						•	•	52
Article No.	4003773-	mm	Pliers	Head	Handles	Ømm	Ømm	Ømm	mm ²	g
08 05 110	034957	110	chrome plated	chrome plated	with multi-component grips	2.5	1.6	9.0	10	85

Lineman's Pliers

American style

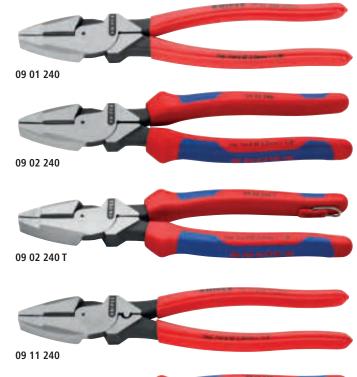
- ▶ High transmission ratio for easy cutting
- Requires 50 % less effort compared with conventional combination pliers thanks to optimised transmission ratio
- > Solid construction for heaviest strain; universally applicable
- > Ergonomically optimised handle shape for firm contact to the hand and fatigue reducing operation
- > Particularly effective cross-hatched knurled gripping zone in the jaws for strong gripping and pulling
- > Additional gripping zone below the joint for powerful leverage and pressing performance
- > With cutting edges for soft and hard wire
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC
- > Vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 5746, ASME B107.20

09 02 240 T / 09 12 240 T*

> Pliers with tether attachment point for mounting a fall protection

09 11 240 / 09 12 240 / 09 12 240 T*

> With fish tape puller in the joint gap; with universal mandrel crimping point below the joint







09 12 240 T



09 11/12 240: fish tape puller in the joint gap



Cross-hatched, knurled gripping zone for firm gripping and pulling, e. g. for fence construction



Long cutting edges for cutting flat cables



09 11/12 240: universal mandrel crimping area below the joint

							Cutting		
Article No.	EAN 4003773-	∢→ mm		Pliers	Head	Handles	Ø mm	Ø mm	۵'ک g
09 01 240	064992	240	XX 🛌	black atramentized	polished	with non-slip plastic coating	4.6	3.0	435
09 02 240	065005	240	XX 💌	black atramentized	polished	with multi-component grips	4.6	3.0	470
09 02 240 T	079941	240	S 🔊	black atramentized	polished	with multi-component grips and integrated tether attachment point	4.6	3.0	463
09 11 240	071952	240		black atramentized	polished	with non-slip plastic coating	4.6	3.0	435
09 12 240	071969	240		black atramentized	polished	with multi-component grips	4.6	3.0	470
09 12 240 T	079958	240		black atramentized	polished	with slim multi-component grips, with integrated tether attachment point for a tool tether	4.6	3.0	455

*Other tools with tethering can be found from page 266

Pliers for Electrical Installation

The all-rounder for professionals

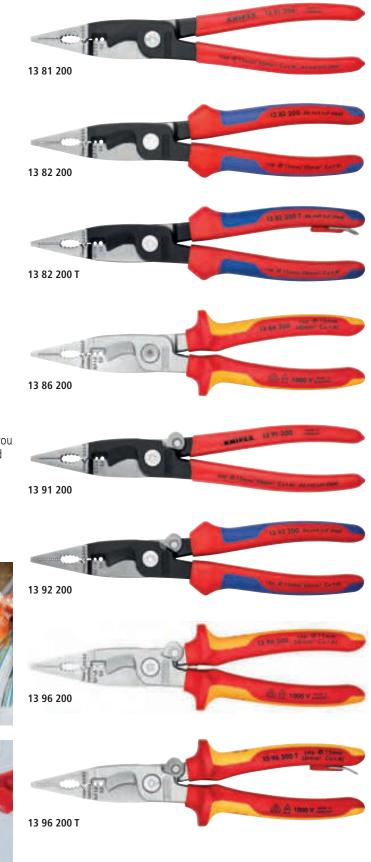
- ▶ 6 functions in one pair of pliers
- Multifunctional pliers for the electrical installation; to grip flat and round material, for bending, deburring, cutting cable, stripping and crimping wire ferrules
- > Smooth surfaces near the tips grip single cores without damaging them; serrated gripping surfaces and pipe grip for gripping flat and round material
- > Clear-cut outside edge on the gripping surfaces for working on flush-mounted junction boxes and deburring feed-through holes
- > Stripping holes for conductors of $0.75 1.5 \text{ mm}^2$ and 2.5 mm^2
- > Crimping die for wire ferrules 0.5 2.5 mm^2
- > Cable shears with (induction-hardened) precision cutting edges for copper and aluminium cables up to 5 x 2.5 mm² / dia. 15 mm
- > Slim dimensions for easy access
- > Bolted joint: precise, zero backlash operation of pliers
- > High-grade special tool steel, forged, multi stage oil-hardened

13 82 200 T / 13 96 200 T*

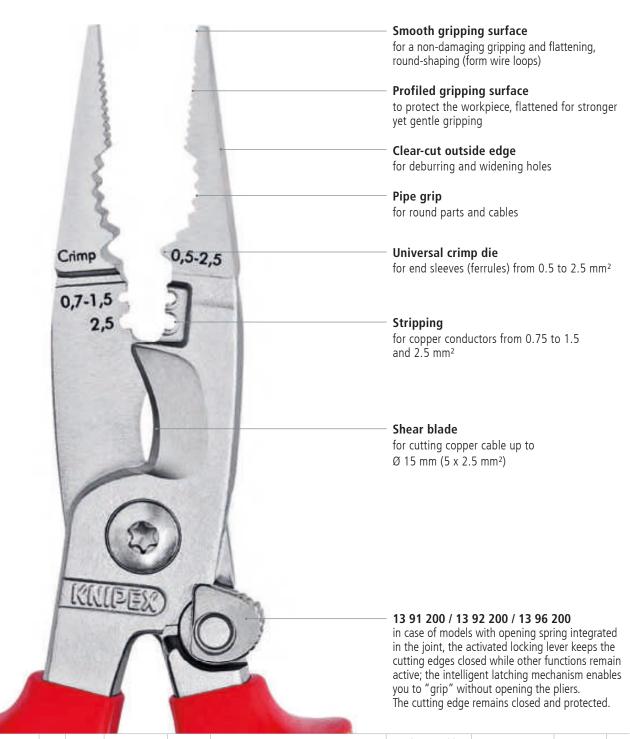
> Pliers with tether attachment point for mounting a fall protection

13 91 200 / 13 92 200 / 13 96 200

> In case of models with opening spring integrated in the joint, the activated locking lever keeps the cutting edges closed while other functions remain active; the intelligent latching mechanism enables you to "grip" without opening the pliers. The cutting edge remains closed and protected.







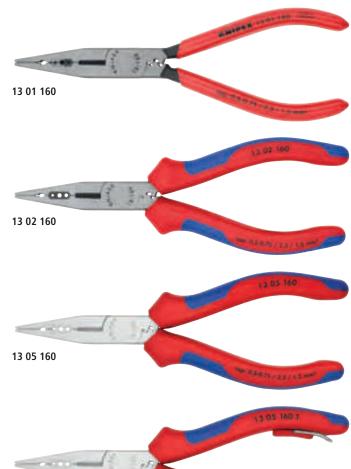
							Cutting capacitie				
Article No.	EAN 4003773-	∢- ► mm		Pliers	Head	Handles	Ø mm	mm ²	Stripping capacity for cross-sections mm ²	Crimping capacities mm²	۵'ک g
13 81 200	075240	200		black atramentized	polished	plastic coated	15.0	50	0.75 - 1.5 / 2.5	0.5 - 2.5	265
13 82 200	075080	200		black atramentized	polished	with multi-component grips	15.0	50	0.75 - 1.5 / 2.5	0.5 - 2.5	280
13 82 200 T	079972	200		black atramentized	polished	with multi-component grips and integrated tether attachment point	15.0	50	0.75 - 1.5 / 2.5	0.5 - 2.5	267
13 86 200	075097	200	≙ 1000 V @ €	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	15.0	50	0.75 - 1.5 / 2.5	0.5 - 2.5	280
13 91 200	075257	200		black atramentized	polished	plastic coated	15.0	50	0.75 - 1.5 / 2.5	0.5 - 2.5	265
13 92 200	075103	200		black atramentized	polished	with multi-component grips	15.0	50	0.75 - 1.5 / 2.5	0.5 - 2.5	280
13 96 200	075110	200	≙ 1000 V @€	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	15.0	50	0.75 - 1.5 / 2.5	0.5 - 2.5	280
13 96 200 T	081425	200	£ 1000 V ביייייייייייייייייייייייייייייייייייי	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested, with integrated insulated teth- er attachment point for a tool tether	15.0	50	0.75 - 1.5 / 2.5	0.5 - 2.5	275

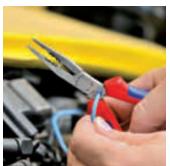
Electricians' Pliers

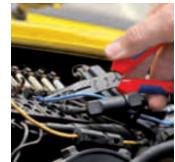
- > The ideal pliers for cable work
- > For gripping and bending wire
- > For cutting medium hard and hard wire
- > Precision cutting edges additionally induction-hardened, cutting edge hardness approx. 60 HRC
- > With precision stripping holes
- > For crimping wire ferrules
- > Vanadium electric steel, forged, multi stage oil-hardened

13 05 160 T*

> Pliers with tether attachment point for mounting a fall protection



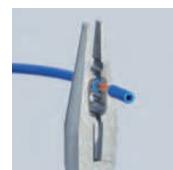




13 05 160 T



Cutting Edges



Stripping





Crimping 0.5 to 2.5 mm²

Gripping

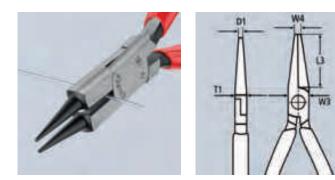
						Cutting o	apacities		
Article No.	EAN 4003773-	← ► mm	Pliers	Head	Handles) Ø mm	Ø mm	Stripping capacities mm ²	۵'ک g
13 01 160	034971	160	black atramentized	polished	plastic coated	2.5	1.6	0,5 - 0,75 / 1,5 / 2,5	112
13 02 160	010470	160	black atramentized	polished	with multi-component grips	2.5	1.6	0,5 - 0,75 / 1,5 / 2,5	139
13 05 160	071426	160	chrome plated	chrome plated	with multi-component grips	2.5	1.6	0,5 - 0,75 / 1,5 / 2,5	139
13 05 160 T	079965	160	chrome plated	chrome plated	with multi-component grips and integrated tether attachment point	2.5	1.6	0,5 - 0,75 / 1,5 / 2,5	142

Round Pliers with cutting edge

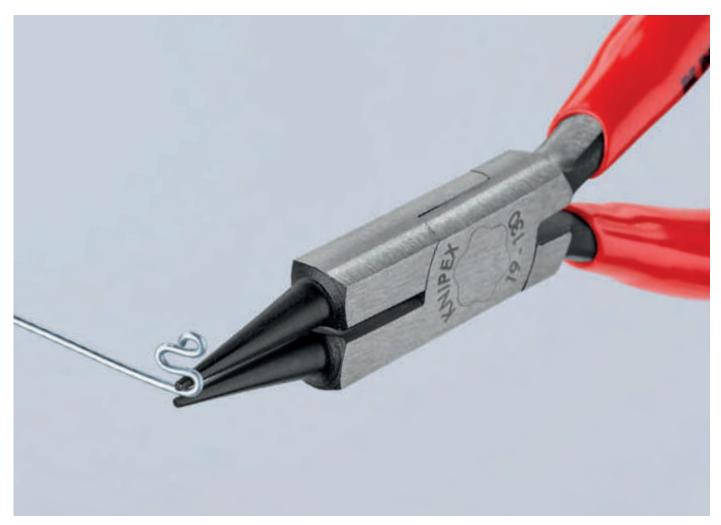
Jewellers' Pliers

- > For gripping and manipulating fine wires, e.g. in jewellery work
- > Ideal for cutting and bending activities, also in electronics
- > For bending wire loops
- > Precision-ground round jaws with fine, pointed tips
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 60 HRC
- > Vanadium electric steel, forged, multi stage oil-hardened





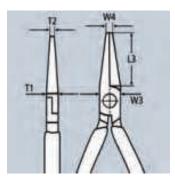
							Cutting capacities		Dimensions					
	EAN								D1	L3	T1	W3	W4	52
Article No.	4003773-	mm		Pliers	Head	Handles	Ømm	Ømm	mm	mm	mm	mm	mm	g
19 01 130	034995	130	8	black atramentized	polished	plastic coated	2.2	1.6	1.0	32.0	8.0	13.5	2.0	73
19 03 130	014348	130		chrome plated	chrome plated	plastic coated	2.2	1.6	1.0	32.0	8.0	13.5	2.0	72



Flat Nose Pliers with cutting edges

Precision Mechanics Pliers

- > Suitable for finer gripping and cutting work
- > Flat, long jaws, tapering
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 60 HRC
- > High-grade special tool steel, forged, multi stage oil-hardened
- > DIN ISO 5745



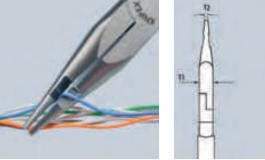
					Cutting c	Dimensions						
	EAN	∢ →			\bullet	\bullet	T1	L3	W3	W4	T2	52
Article No.	4003773-	mm	Head	Handles	Ømm	Ømm	mm	mm	mm	mm	mm	g
23 01 140	041290	140	polished	plastic coated	2.5	1.6	7.0	35.0	12.5	3.0	4.5	75

Snipe Nose Pliers with centre cutter

Telephone Pliers

- > For gripping and separating of single wires in harnesses
- > With centre cutter for soft wire
- > Half-round jaws
- > Knurled gripping surfaces
- > Chrome vanadium electric steel, forged, oil-hardened





								Dimensions			
	EAN	-→				L3	W3	T1	W4	T2	5
Article No.	4003773-	mm		Head	Handles	mm	mm	mm	mm	mm	g
27 01 160	016106	160	$\blacksquare \blacksquare \ominus \blacksquare$	polished	plastic coated	47.0	16.5	9.5	3.0	2.0	120



	And the second second
	2
27 01 160	Concernations.

Snipe Nose Side Cutting Pliers

Radio Pliers

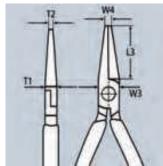
- > Suitable for finer gripping and cutting work
- > Half-round, long, tapered jaws
- > Knurled gripping surfaces
- > With cutting edges for soft, medium-hard and hard wire
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 61 HRC
- > Vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 5745

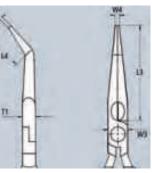
25 06 160 T*

> Pliers with tether attachment point for mounting a fall protection















							Cutting o	apacities			Dimer	nsions			
Article No.	EAN 4003773-	∢ → mm		Pliers	Head	Handles	Ø mm	Ø mm	L3 mm	L4 mm	W3 mm	T1 mm	W4 mm	T2 mm	۲۵ g
25 01 125	015932	125					2.2	1.6	27.0		13.0	7.0	2.5	1.8	73
25 01 140	033158	140		black atra- mentized	polished	plastic coated	2.5	1.6	42.0		15.0	8.0	2.5	2.0	90
25 01 160	033912	160		mentized			2.5	1.6	50.0		16.5	9.0	3.0	2.5	115
25 02 140	023159	140		black atra-	polished	with multi-component grips	2.5	1.6	42.0		15.0	8.0	2.5	2.0	109
25 02 160	023166	160		mentized	polisileu	with multi-component grips	2.5	1.6	50.0		16.5	9.0	3.0	2.5	144
25 03 125	043065	125		chrome plated	chrome plated	plastic coated	2.2	1.6	27.0		13.0	7.0	2.5	1.8	72
25 05 140	035015	140		chrome	chrome	with multi-component grips	2.5	1.6	42.0		15.0	8.0	2.5	2.0	111
25 05 160	022817	160		plated	plated	with multi-component grips	2.5	1.6	50.0		16.5	9.0	3.0	2.5	144
25 06 160	033806	160	₩₩ <u>A</u> 1000 V AG	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	2.5	1.6	50.0		16.5	9.0	3.0	2.5	146
25 06 160 T	081432	160	₩₩ ₩ Å 1000 V @ € ⊖	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested, with integrated insulated tether attachment point for a tool tether	2.5	1.6	50.0		16.5	9.0	3.0	2.5	155
25 21 160	050476	160		black atra- mentized	polished	plastic coated	2.5	1.6	50.0	23.0	16.5	9.0	3.0	2.5	116
25 25 160	016007	160		chrome plated	chrome plated	with multi-component grips	2.5	1.6	50.0	23.0	16.5	9.0	3.0	2.5	143
25 26 160	052111	160	▲ 1000 V ▲ € ⊖ ∡40°	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	2.5	1.6	50.0	23.0	16.5	9.0	3.0	2.5	144

*Other tools with tethering can be found from page 266

Snipe Nose Side Cutting Pliers

Stork Beak Pliers

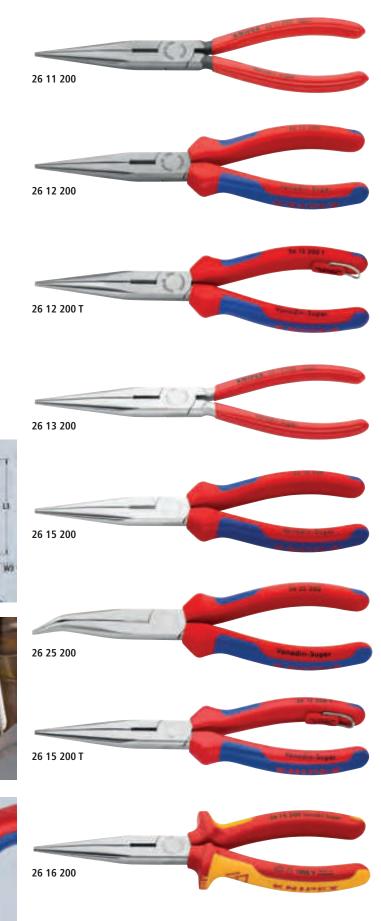
- Elastic tips: dimensionally stable even when twisted
- > Distortion-tolerant, elastic precision tips
- > Half-round, long, tapered jaws
- > With cutting edges (hardness approx. 61 HRC) for soft, medium-hard and hard wire
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 61 HRC
- > Vanadium electric steel, forged, multi stage oil-hardened > DIN ISO 5745

ŵ.

11

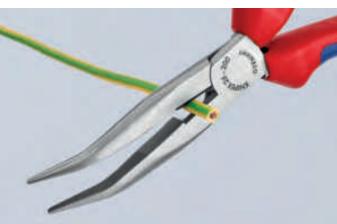
26 12 200 T / 26 15 200 T / 26 16 200 T / 26 22 200 T / 26 25 200 T / 26 26 200 T*

> Pliers with tether attachment point for mounting a fall protection









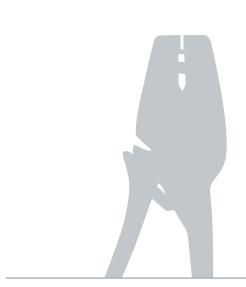
TI



							Cutt capac	ities	Dimensions						
Article No.	EAN 4003773-	←→ mm		Pliers	Head	Handles	Ø mm	Ø mm	L3 mm	L4 mm	W3 mm	T1 mm	W4 mm	T2 mm	۲ ع
26 11 200	022824	200		black atra- mentized	polished	plastic coated	3.2	2.2	73.0		18.0	9.5	3.0	2.5	17
26 12 200	023142	200		black atra- mentized	polished	with multi-component grips	3.2	2.2	73.0		18.0	9.5	3.0	2.5	20
26 12 200 T	079989	200		black atra- mentized	polished	with multi-component grips and integrated tether attach- ment point	3.2	2.2	73.0		18.0	9.5	3.0	2.5	20
26 13 200	040590	200		chrome plated		plastic coated	3.2	2.2	73.0		18.0	9.5	3.0	2.5	16
26 15 200	035022	200		chrome plated	chrome plated	with multi-component grips	3.2	2.2	73.0		18.0	9.5	3.0	2.5	19
26 15 200 T	079996	200		chrome plated	chrome plated	with multi-component grips and integrated tether attach- ment point	3.2	2.2	73.0		18.0	9.5	3.0	2.5	204
26 16 200	022831	200	≝∰ № 1000 V 🆄 🖨 ⊖	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	3.2	2.2	73.0		18.0	9.5	3.0	2.5	20
26 16 200 T	081449	200	ᲚᲚ <u></u> ∯ 1000 V @@ ⊖	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested, with integrat- ed insulated tether attachment point for a tool tether	3.2	2.2	73.0		18.0	9.5	3.0	2.5	21
26 17 200	016069	200	≝∰ ▶ ¶ ≵1000 V @ € ⊖	chrome plated	chrome plated	with dipped insulation, VDE-tested	3.2	2.2	73.0		18.0	9.5	3.0	2.5	21
26 21 200	022848	200	ЩЩ ▶ ⊖ ∡40°	black atra- mentized	polished	plastic coated	3.2	2.2	73.0	23.0	18.0	9.5	3.0	2.5	17
26 22 200	023135	200	ЩЩ ▶ ⊖ ∡40°	black atra- mentized	polished	with multi-component grips	3.2	2.2	73.0	23.0	18.0	9.5	3.0	2.5	19
26 22 200 T	080008	200		black atra- mentized	polished	with multi-component grips and integrated tether attach- ment point	3.2	2.2	73.0	23.0	18.0	9.5	3.0	2.5	202
26 25 200	035039	200	ЩЩ ▶ ⊖ <u>∡4</u> 0°	chrome plated	chrome plated	with multi-component grips	3.2	2.2	73.0	23.0	18.0	9.5	3.0	2.5	199
26 25 200 T	080015	200		chrome plated	chrome plated	with multi-component grips and integrated tether attach- ment point	3.2	2.2	73.0	23.0	18.0	9.5	3.0	2.5	20!
26 26 200	022855	200	▲ 1000 V ▲ 🖨 ⊖	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	3.2	2.2	73.0	23.0	18.0	9.5	3.0	2.5	204
26 26 200 T	081456	200	₩₩ A 1000 V ACC O X40°	chrome plated	chrome plated	with multi-component grips and integrated tether attach- ment point	3.2	2.2	73.0	23.0	18.0	9.5	3.0	2.5	21
26 27 200	016090	200	₩₩ \$\frac{1000 V}{2000 V} (2000 V) (2000 V) (2000 C) (2	chrome plated	chrome plated	with dipped insulation, VDE-tested	3.2	2.2	73.0	23.0	18.0	9.5	3.0	2.5	220

Wire Strippers and Dismantling Tools 0.03

Insulation Strippers	20
Electronics Wire Stripping Shears	21
Electronics Wire Stripper	21
Diagonal Insulation Strippers	22
Precision Insulation Strippers with adapted blades	24
Insulation Strippers with adapted blades	25
KNIPEX MultiStrip 10 – Automatic Insulation Stripper	26
Self-Adjusting Insulation Strippers	27
KNIPEX PreciStrip16 – Automatic Insulation Stripper	28
Automatic Insulation Stripper	30
Automatic Insulation Stripper for flat cable	31
Automatic Stripping Pliers	31
Mini Wire Stripper	32
Wire Stripper for fibre optics	32
Stripping Tool for fibre optics	33
Stripping Tweezers for coated wire	33
Stripping Pliers	34
KNIPEX StriX $^{\circ}$ – Insulation strippers with cable shears	35
Insulation Strippers	36
Stripping Tools with scalpel blade	36
Folding Knife for Electricians	37
Stripping Tools for spiral cutting	37
Stripping Tool for coax cables	38
Wire Stripping Tool for coax and data cable	39
Stripping Tool for flat and round cables	40
Stripping Tool for data cables	40
Universal Stripping Tools	41
Depth Stripping Tool	41
KNIPEX ErgoStrip [®] – Universal Stripping Tool	43



Insulation Strippers

universal

- > For single, multiple and fine stranded conductors with plastic or rubber insulation up to 5.0 mm dia. or 10 mm² cable cross-section
- > Easy adjustment to the required diameter of solid or stranded wire with knurled screw and lock nut
- > Special tool steel, forged, oil-hardened

11 06 160 T

> Pliers with tether attachment point for mounting a fall protection













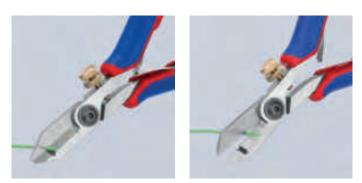


	EAN	-						ping cities		52
Article No.	4003773-	mm		Pliers	Head	Handles	Ømm	mm ²	AWG	g
11 01 160	033868	160	MM	black atramentized	polished	plastic coated	5.0	10	7	131
11 02 160	023180	160	MM	black atramentized	polished	with multi-component grips	5.0	10	7	165
11 05 160	039570	160	MM	chrome plated	chrome plated	with multi-component grips	5.0	10	7	157
11 06 160	021933	160	≜1000V മ≧ ് ММ	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	5.0	10	7	200
11 06 160 T	081418	160	≜1000V @ € MM	chrome plated	chrome plated	insulated with multi-component grips with integrated insulated tether attachment point, VDE tested	5.0	10	7	180
11 07 160	015499	160	≜1000V @ @ MM	chrome plated	chrome plated	with dipped insulation, VDE-tested	5.0	10	7	180
11 12 160	034964	160		black atramentized	polished	with multi-component grips	5.0	10	7	156
11 09 01	052326	Set of	spare parts (scr	ew and nut) for 11 160						

Electronics Wire Stripping Shears

- > For cutting and stripping solid, multicore and finely stranded conductors with conductor cross-section up to 0.75 mm²
- > Pointed head of shears above the wire stripping hole for the accurate cutting of fine wire in confined places
- > Easy adjustment to the required diameter of solid or stranded wire with knurled screw and lock nut
- > With opening spring
- > Special tool steel, oil-hardened



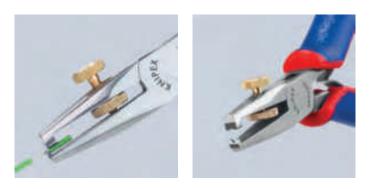


	EAN	-→				Stripping capacities	52
Article No.	4003773-	mm		Head	Handles	mm²	g
11 82 130	071648	140	MM	polished	with multi-component grips	0.01 - 0.75	85

Electronics Wire Stripper

- > Easy adjustment to the required diameter of solid or stranded wire with knurled screw and lock nut
- > With opening spring
- > The mirror polish together with a fine film of oil offer effective rust protection no circuit faults caused by peeling chrome from plated tools
- > Special tool steel, forged, oil-hardened



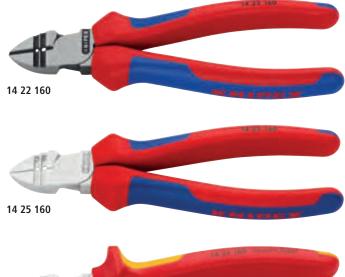


	EAN	∢ —▶				Stripping capacities	52
Article No.	4003773-	mm		Head	Handles	Ø mm	g
11 92 140	016908	140	MM	mirror polished	with multi-component grips	0.1 - 0.8	99

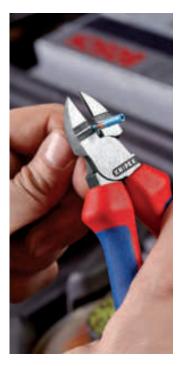


Diagonal Insulation Strippers

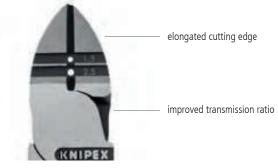
- ► With long cutter
- ► High cutting capacity due to high leverage joint
- > Precision stripping holes for single conductors of 1.5 and 2.5 mm²
- > Convenient cutting of NYM cables up to $5 \times 2.5 \text{ mm}^2$
- > Long tips for ultra fine cutting work also in confined areas
- > Induction-hardened precision blades, cutting edge hardness approx. 60 HRC
- > Vanadium electric steel, forged, multi stage oil-hardened











									Cutting ca	pacities	
Article No.	EAN 4003773-	∢ → mm		Pliers	Head	Handles	Stripping capacities mm ²	AWG	Ø mm	Ø mm	۵۵ g
14 22 160	034988	160		black atramentized	polished	with multi-component grips	1.5 / 2.5	15 / 13	2.5	1.5	206
14 25 160	028697	160	~	chrome plated	chrome plated	with multi-component grips	1.5 / 2.5	15 / 13	2.5	1.5	224
14 26 160	040279	160	<u>A</u> 1000 V A €	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	1.5 / 2.5	15 / 13	2.5	1.5	216

Precision Insulation Strippers

with adapted blades

- > Form-fit stripping also of difficult-to-remove insulating materials made of PTFE, silicone, Radox[®], Kapton[®] and rubber; multi-layer too
- > A second pair of blades holds the remaining insulation reliably in place > Replaceable shaped blade adapted precisely to the respective conductor
- cross-section
- > With length stop for constant stripping length during repetitive work
- > Blade: special tool steel, oil-hardened
- > Pliers body: steel





Precise cutting of the insulation to a complete extent



12 12 02 with cable guide and length stop

Maximum cable cross-section (in mm²) per profile:



12 19 02



the blades



12 19 12

12 19 13











12 12 02

> With additional cable guide for exact positioning of the cable in the stripping area of the blade

12 12 11 / 12 12 12 for solar cable

- > Specially adapted to multilayer and Radox® insulation
- > With additional cable support for a better centring of multilayer insulated conductors in the stripping profiles

12 12 13 / 12 12 14

> Especially for cables in accordance with the American specification (AWG)



12 19 10



12 19 14



12 19 11

Principle of operation with adapted blades

Properly and precise stripping with an annular cut through the complete insulation. This is particularly important with conductors, which must be stripped precisely.

This works without any problem even with difficult insulating materials made of PTFE, Radox[®] and multilayer insulations.



Precisely and reliably

Two pairs of blades (1) cut the insulation to a complete extent. Then the blade pairs move apart, and thus the insulation is removed form-fit (2). The pliers open automatically after the stripping procedure.



Article No.	EAN 4003773-	←→ mm		Pliers	Handles	Stripping capacities mm ²	AWG	۵۵ g	
12 12 02	048077	195				0.03 - 0.09 / 0.14 / 0.38 / 0.57 / 1 / 1.5 / 2.08	32 - 14	447	
12 12 06	049005	195	(PATENTED)	burnished	with multi-component grips	0.14 - 0.25 / 0.75 / 1.5 / 2.5 / 4 / 6	26 - 10	445	
12 12 10	049012	195	PATENTED			2.5 / 4 / 6 / 10	13 - 7	445	
12 12 11	062998	195	MM			1.5 / 2.5 / 4 / 6	15 - 10	449	
12 12 12	073758	195	PATENTED	burnished	with multi-component grips	4 / 6 / 10	11 - 7	450	
12 12 13	077534	195	M	h			10 / 12 / 14 / 16 / 18 / 20	450	
12 12 14	077541	195	95 PATENTED	burnished	with multi-component grips		16 / 18 / 20 / 22 / 24 / 26	450	
12 19 02	049036	1 set	of spare blac	des for 12 12	02				
12 19 06	049043	1 set	of spare blac	des for 12 12	06				
12 19 10	049050	1 set	of spare blac	des for 12 12	10				
12 19 11	063001	1 set	set of spare blades for 12 12 11						
12 19 12	073765	1 set	set of spare blades for 12 12 12						
12 19 13	077558	1 set	of spare blac	des for 12 12	13				
12 19 14	077565	1 set	of spare blac	des for 12 12	14				

Insulation Strippers

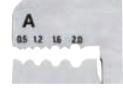
with adapted blades

- > With replaceable blades for 4 (adapted to diameters) or 6 (adapted to cross-sections) different conductor cross-sections
- > Leave wire undamaged thanks to precision-ground blade shapes, even multi-stranded conductors are stripped gently
- > During stripping, the wire is held firmly by clamping jaws
- > A spring leads the stripper back to the starting position
- > Blade: special tool steel, oil-hardened
- > Pliers body: aluminium

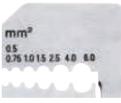








12 11 180: wire diameter in mm



12 21 180: wire cross-sections in mm²

	EAN	-				Stripping capacities			52	
Article No.	4003773-	mm		Pliers	Handles	Ømm	mm²	AWG	g	
12 11 180	000792	180		black	with plastic	0.5 / 1.2 / 1.6 / 2.0			368	
12 21 180	000815	180	MM	lacquered	grips		0.5 - 0.75 / 1 / 1.5 / 2.5 / 4 / 6	20 - 19 / 17 / 15 / 13 / 11 / 10	335	
					·					
12 19 180	022145	1 paii	pair of spare blades for 12 11 180							
12 29 180	022152	1 paiı	r of spare blades for 12 21 180							

KNIPEX MultiStrip 10

Automatic Insulation Stripper

- Stripping without re-adjustment from 0.03 to 10.0 mm²
- Recessed wire cutter
- ▶ Universal blade geometry -robust and more durable
- Ideal grip design with excellent haptics
- > Fully automatic adjustment to all single-, multi- and fine-stranded conductors with standard insulation throughout the entire capacity range from 0.03 to 10.0 mm²
- > No manual fine adjustment necessary
- > No damage to the conductors
- > The clamping jaws made of steel hold the cable in a way that prevents slipping without damaging the remaining insulation
- > With recessed wire cutter for Cu and Al conductors, stranded up to 10 mm² and single wire up to 6 mm²
- > Particularly smooth-running mechanics and very low weight
- > Replaceable blades block and length stop
- > Handle with soft-plastic zone for a steady grip
- > Body: plastic, fibreglass-reinforced
- > Blade: special tool steel, oil-hardened







Steel clamping jaws avoid slipping of the cable



Precise stripping from 0.03 to 10 $\rm mm^2$ without re-adjustment



Wire cutter for multiple stranded wire cables up to 10.0 mm²



Mode of operation of straight cutters

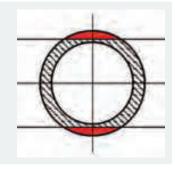
Patented mechanics

wire-stripping range are used.

The incision depth of the stripping blade adjusts fully automatically to the diameter of the wire and accordingly also to the thickness of all standard insulating materials. There is no need for any manual adjustment which is still necessary when other conventional pliers with a wide

An incision is made in the red area only.

Not suitable for highly-flexible or armoured insulation materials or for multi-layered insulation.



Article No.	EAN 4003773-	⊶ → mm		Stripping capacities mm ²	AWG	۵'ک g				
12 42 195	054580	195	MM (PATENTED)	0.03 - 10	32 - 7	136				
				·						
12 49 04	053071	Torsio	n spring for 12 40/50 200							
12 49 21	057581	Spare	Spare blades block for 12 42 195							
12 49 23	057604	Spare	are length stop for 12 42 / 52 195							

Self-Adjusting Insulation Strippers

- > For single, multiple and fine stranded conductors with plastic or rubber insulation
- > Adapts automatically to the respective cable cross-section; prevents damage to the conductor
- > Cutting depth can be adjusted for different insulation materials
- > With wire cutter for copper and aluminium wires, multiple stranded up to 10 mm² and single stranded up to 6 mm²
- > Smoothly operating mechanism
- > Stripping blades and clamping jaws easily replaceable
- >Low weight
- > Body: plastic, fibreglass-reinforced
- > Blade: special tool steel, oil-hardened

12 40 200

> For thin ribbon cables up to 10.0 mm width in a single pass



12 40 200



12 50 200





12 40 200: Adjustable length stop



12 40 200: Precise stripping prevents damage to the conductor



Article No.	EAN 4003773-	∢ ► mm		Stripping capacities mm ²	AWG	Length stop mm	۵'ک g			
12 40 200	026662	200	MM	0.03 - 10	32 - 7	3.0 - 18.0	202			
12 50 200	034407	200	MM	2.5 - 16	13 - 5		200			
		1								
12 49 01	026679	1 pair	pair of spare blades for 12 40 200							
12 49 02	026686	1 pair	pair of spare clamping jaws for 12 40 200							
12 49 03	026693	Spare	length stop for	12 40 200						
12 49 04	053071	Torsio	Forsion spring for 12 40/50 200							
12 49 05	053088	Coil s	Coil spring in the head for 12 40/50 200							
12 59 01	034414	1 pair	I pair of spare blades for 12 50 200							
12 59 02	034421	1 pair	1 pair of spare clamping jaws for 12 50 200							

KNIPEX PreciStrip16

Automatically strips insulation – and thanks to additional zero correction, it also grips where automatic devices would otherwise fail KNIPEX

12 52 195

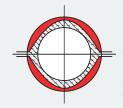
capacity of capa_16 mm? 0,08

KNIPEX PreciStrip16

Properly stripped away: with deft precision, strip everything from very fine to thick cables with stranded or solid conductors

- Simple, precise stripping of fine wires and solid round cables with a wide capacity range from 0.08 to 16 mm² with only one pair of pliers
- Good grip provided by semi-circular grooved metal holding clamps and exact cut from parabolic stripping blade
- A patented automatism regulates the depth of the cut; the neutral point of the automatism can be adjusted in fine steps in special operating conditions (insulation material, temperature)
- > With cable cutter for stranded wire from 0.08 to 16 mm²
- > With tether attachment point, suitable for KNIPEX Tethered Tools accessories
- > Inscription area for customisation
- > With adjustable length stop for precision work repeated accurately each time
- > Comfortable operation with ergonomic dual-component handle
- > Easily replaceable blade cassette





How parabolic blades work

The parabolic bulging blade pair (red) extensively encloses and cuts the insulation and is thus suitable for many flexible materials



Semi-circular grooved holding clamp for better grip that holds practically any insulation material securely in place



For special requirements, such as particularly hard or soft insulation materials, optimum fine adjustments can be made using the adjusting wheel with its tactile locking positions



With cable cutter on the top side for up to 16 mm^{2}

Article No.	EAN 4003773-	∢ —► mm	mm ²	AWG	۵ ^۲ ۵ g
12 52 195	085829	195	0.08 - 16	28 - 5	180
12 52 195 SB	085997	195	0.08 - 16	28 - 5	180
12 49 31	086000	Spare blade pair	r for 12 52 195		10

Automatic Insulation Stripper

Work faster: Adjusts automatically to most cable types, with fine adjustment for special materials

- Strips cables with standard materials without any need for manual adjustment
- ► Fine adjustment enables accurate setting of the blades to special materials or temperature requirements
- Compact, handy and lightweight tool for common cable cross-sections and insulating materials
- > For single, multiple and fine stranded cables of 0.2 up to 6 mm² with standard insulation
- > Narrow head style for use in confined areas
- $\,>\,$ With wire cutter for copper and aluminium wires up to 2.5 mm^2
- > With adjustable length stop from 6.0 18.0 mm for cutting the same stripping lengths during repetitive work
- > Body: plastic, fibreglass-reinforced
- > Blades: special tool steel, oil-hardened, interchangeable





Article No.	EAN 4003773-	← ► mm		Stripping capacities mm ²	AWG	۵'ک g				
12 62 180	054573	180	MM	0.2 - 6	24 - 10	151				
12 69 21	060093	1 pair	I pair of spare blades for 12 62 180							
12 69 23	067115	Spare	re length stop for 12 62 180							

Automatic Insulation Stripper for flat cable

- > For PVC insulated flat cables up to a max. 12 mm width and 0.75 to 2.5 $\rm mm^2$
- > Adapts automatically to various conductor heights; prevents damage to the conductor
- > Long stripping lengths possible
- > Blade replaceable
- > Smoothly operating mechanism
- > Low weight
- > Body: plastic, fibreglass-reinforced
- > Blade: special tool steel, oil-hardened



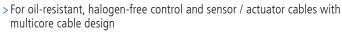
12 64 180



Article No.	EAN 4003773-	∢→ mm		Stripping capacities mm ²	AWG	۵'ک g			
12 64 180	073284	180	MM	0.75 - 2.5	19 - 13	125			
12 69 31	12 69 31 073932 1 pair of spare blades for 12 64 180								

Automatic Stripping Pliers

- ► For control and sensor cables / actuator cables, also for stripping flexible feed cables and extension cable
- Automatic adjustment to cable diameters between 4.4 mm and 7.5 mm
- ▶ No damage to the inner conductor or shield braid



- > Shielded and unshielded
- > Suitable for highly flexible TPE-U-pipes, PUR and PVC cable sheathing, rubber leads such as H05 etc.
- > Long stripping lengths possible
- > Body: plastic, fibreglass-reinforced
- > Blades: special tool steel, oil-hardened, interchangeable



12 74 180 SB



Sectional view of an extension cord





Complex cutter design for precise and damage-free stripping of round cables

Required stripping length easy to read off

Article No.	EAN 4003773-	≺→ mm		Stripping capacities Ø mm	۲۵ م
12 74 180 SB	082323	175	MM	4.4 - 7.5	145
12 79 31	082682	1 pair of spare blad	es for 12 74 180 SB		

Mini Wire Stripper

- > Precise stripping, stepwise adjustment to the conductor diameters
- >With wire cutter
- > Adjustable length stop from 4.0 15.0 mm
- > With locking device
- > Housing: plastic, impact-proof

12 80 040 SB

> For thin copper conductors dia. 0.12 to 0.4 mm

12 80 100 SB

> For thin copper conductors dia. 0.3 to 1.0 mm



12 80 100 SB



Article No.	EAN 4003773-	∢→ mm		Stripping capacities Ø mm	AWG	۵۵ g
12 80 040 SB	071655	100	٨٨٨٨	0.12 - 0.4	36 - 26	35
12 80 100 SB	043119	100	- MM	0.3 - 1.0	28 - 18	34

Wire Stripper for fibre optics

> To remove primary and secondary coating of fibre optics
 > Chrome vanadium electric steel in special quality, oil-hardened





		EAN	>			Stripping capacities	52
Article	No.	4003773-	mm	Pliers	Handles	Ømm	g
12 82	130 SB	050094	130	burnished	with plastic grips	primary-coating: 0.125 mm; secondary-coating: 0.250 mm	75

Stripping Tool for fibre optics

- > To remove primary coating of fibre optics Ø 0.125 mm
- > Blade dia. 0.18 mm, hole for cable feeding 0.30 mm dia.
- > Adjustable length stop
- > Housing: plastic, impact-proof



12 85 100 SB



Article No.	EAN	←→	Stripping capacities	۵ ^۲ ۵
	4003773-	mm	Ø mm	g
12 85 100 SB	043126	100	primary-coating 0.125 mm	25

Stripping Tweezers for coated wire

- > For stripping off varnished insulation on copper wires
- > Blades for other wire diameters available as spare parts
- > Tweezers body: spring steel, oil-hardened
- > Handle shells: plastic



15 11 120



Article No.	EAN 4003773-	∢ ► mm	Stripping capacities Ø mm	۲۵ ع					
15 11 120	015550	120	0.6	34					
15 19 005	021551	1 pair c	f spare blades for 15 11 120 Ø 0.5 mm						
15 19 006	021568	1 pair c	air of spare blades for 15 11 120 Ø 0,6 mm						
15 19 008	021575	1 pair c	air of spare blades for 15 11 120 Ø 0,8 mm						
15 19 010	021582	1 pair c	f spare blades for 15 11 120 Ø 1,0 mm						

Stripping Pliers

Multifunctional – cutting and stripping with one pair of pliers

- ► For time-saving stripping of all round sheathed and dampproof installation cables (e.g. NYM cable)
- Simplified access especially into deep mounted junction boxes thanks to slim head design and optimally angled cable sheath cutter
- Strip cables easily and without damage thanks to circular cutting edge with depth limiter
- > Suitable for universal use: precision wire stripping holes for conductors from 1.5 and 2.5 $\rm mm^2$
- > With side cutters for cutting and trimming conductors, wires, small screws and nails
- > All cutters additionally induction-hardened to approx. 61 HRC for high wear resistance
- > 30 % lighter than comparable pliers
- > Vanadium electric steel, forged, multi stage oil-hardened





Cutting cable up to Ø 13 mm



Cutting when shortening single conductors



Stripping deep down in a flush-mounted junction box



Wire stripping holes for 1.5 and 2.5 mm² conductors

Article No.	EAN 4003773-	∢→ mm		Pliers	Head	Handles	Dismantling capacities Ø mm	Stripping capacities mm ²	Ø mm	Ø mm	۵۵ g
13 42 165	079675	165		black atramentized	polished	with multi-component grips	8.0 - 13.0	0.75 - 1.5 / 2.5	3.2	2.2	176
13 45 165	079682	165		chrome plated	chrome plated	with multi-component grips	8.0 - 13.0	0.75 - 1.5 / 2.5	3.2	2.2	176
13 46 165	079699	165	À 1000 V े €	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	8.0 - 13.0	0.75 - 1.5 / 2.5	3.2	2.2	190

KNIPEX StriX®

Insulation strippers with cable shears Two functions in one pair of pliers

- > For single, multiple and fine stranded conductors with plastic or rubber insulation up to 5.0 mm dia. or 10 mm² cable cross-section
- > Increments in the jaw provide a visual orientation aid for stripping consistent lengths (11 mm and 16 mm)
- > Easy adjustment to the required diameter of solid or stranded wire with knurled screw and lock nut
- > Shear blade for cutting copper and aluminium cable up to Ø 15 mm (5 x 2.5 mm²)
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 57 HRC
- > Slim dimensions for easy access
- > Bolted joint: precise, zero backlash operation of pliers
- > High-grade special tool steel, forged, multi stage oil-hardened

13 66 180 T*

> Pliers with tether attachment point for mounting a fall protection



13 66 180 T



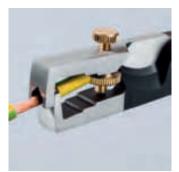
Induction-hardened precision cutter



Length mark: Profiling on the inner side helps when stripping wire in standard lengths (11 mm and 16 mm)



Induction-hardened shear blade with precisely ground cutting edges for crush-free cutting of copper and aluminium cables of up to Ø 15 mm (5 x 2.5 mm^2)



Lock nut prevents any unintentional adjustment



	EAN	-				Stripping	capacities		52
Article No.	4003773-	mm		Pliers	Handles	Ømm	mm ²	AWG	g
13 62 180	081302	180		black atramentized	with multi-component grips	5.0	10	8	200
13 66 180	081319	180	🛧 1000 V 🖄 🚭	chrome plated	insulated with multi-component grips, VDE-tested	5.0	10	8	215
13 66 180 T	081906	180	<u> </u>	chrome plated	insulated with multi-component grips with integrated insulated tether attachment point, VDE tested	5.0	10	8	215

Insulation Strippers

> For stripping thin cables

- > Accurate boring to match diameter of wire, precise stripping prism; non-adjustable
- > With opening spring
- > Chrome vanadium electric steel, forged, oil-hardened





Article No.	EAN 4003773-	∢→ mm		Head	Handles	Stripping capacities Ø mm	۵۵ g
15 51 160	044451	160				0.5	101
15 61 160	014843	160	MM	polished	plastic coated	0.6	102
15 81 160	015574	160]		0.8	102	

Stripping Tools

with scalpel blade

- > For stripping all common round cables
- > Self-tightening holding lever
- > With adjusting screw for cutting depth adjustment
- > Turnable blade for circular and longitudinal cutting



- > Secure grip due to soft component material on handle and holding lever to avoid slipping
- > Housing: plastic, impact-proof

16 20 165 SB

> With knife and hook blade, protective cap included



16 20 16 SB



16 20 165 SB



EAN 4003773-	∢ ► mm		Stripping capacities Ø mm	ے'ک g
060451	130		4 - 16	70
060468	130	/VVV\	8 - 28	95
043133	165	MM .	8 - 28	85
042140	c 11			
	060451 060468	EAN 4003773- mm 060451 130 060468 130 043133 165	EAN 4003773- mm 060451 130 060468 130 043133 165	EAN 4003773- mm Ømm 060451 130 4-16 060468 130 8-28 043133 165 MM

Folding Knife for Electricians

Always to hand: the high-quality all-purpose cutter

- ► Universal folding cutter for everyday use
- Durable and robust: top quality, extremely sharp blade – Made in Solingen



16 20 50 SB

- > Ergonomic handle shape for comfortable holding and easy guidance
- > Handle made from robust, shock-resistant plastic
- > Good power transmission during use
- > Stable blade
- > Tether attachment at the end of the cutter allows a fastener to be attached; also suitable for KNIPEX Tethered Tools
- > Blade made of stainless steel



Easy opening thanks to the practical diamond-shaped grip on the blade

Stripping Tools

for spiral cutting

> For dismantling round cable sheaths made of PVC, rubber, silicone or PTFE from 6.0 - 29.0 mm dia.

attached

- > Self-tightening holding lever
- > With knurled nut for cutting depth adjustment
- > Changing from circular to longitudinal cutting by turning the tool body
- > Spiral cutting for removing intermediate pieces
- > Replaceable blade
- > Housing: plastic, impact-proof



Setting the tool for circular cut

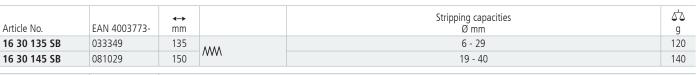


For KNIPEX Tethered Tools: the tether attach-

ment on the handle allows a fastener to be

Longitudinal cut

Spiral cutting



16 39 135 027317 Spare blade for 16 30 135 SB / 16 30 145 SB

	EAN	∢ —▶	Blade length	52
Article No.	4003773-	mm	mm	g
16 20 50 SB	082705	120	80	85



The Electricians' Folding Cutter is quickly available to hand and is suitable for all the usual cutting tasks



16 30 145 SB

Stripping Tools

- > For dismantling round cables exceeding 25.0 mm dia.
- > Removes all sheaths of standard cables
- > Suitable for longitudinal and circular cutting
- > Cutting depth can be adjusted up to 5.0 mm
- > Replaceable blade (both sides can be used)
- > Tool body: plastic, fibreglass-reinforced



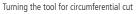
16 40 150



Setting the tool for longitudinal cut

Longitudinal cut









Article No.	EAN 4003773-	←→ mm	Stripping capacities Ø mm	۵'ک g
16 40 150	026709	150	> 25	210
16 49 150	026716	Spare blade for 1	16 40 150	



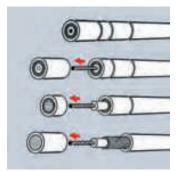
Adjustable cutting depth

Stripping Tool for coax cables

- > For stripping coax cables (RG 58, RG 59 and RG 62)
- > For stripping outer sheath, shield and insulation in a
- single process
- > With three built-in blades
- > The cutting depth of each blade can be adjusted individually by means of a hexagonal key (Allen key)
- > The blade spacing remains constant
- > Housing: plastic, impact-proof



16 60 05 SB



Stripping of a Coax cable in three steps

	EAN	4-			5
Article No.	4003773-	mm		Cable type	g
16 60 05 SB	044888	105	MM	RG 58, RG 59 + RG 62	75

Wire Stripping Tool for coax and data cable

- > Universal stripping tool for Coax cables RG 59, RG 6, RG 7, RG 11
- > For stripping outer sheath, shield and insulation in a single process
- > Adjustable stripping blade for data cable
- > Two stripping blades for cutting and stripping telephone ribbon cable (4P/6P/8P) in a single operation
- > Integrated blade for cutting data cables
- > Housing: plastic, impact-proof



16 60 06 SB



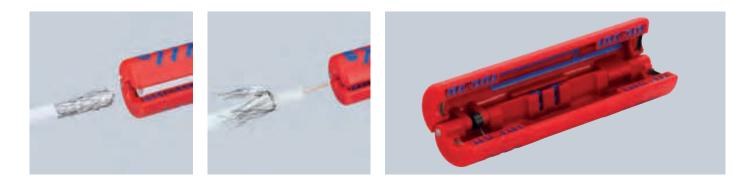
	EAN	- >			52
Article No.	4003773-	mm		Cable type	g
16 60 06 SB	077961	125	MM	RG 59, RG 6, RG 7, RG 11	100

Stripping Tool for coax cables

- > For stripping all common coax cables between
 4.8 7.5 mm dia. (e.g. for TV- and satellite antenna), also suitable for PVC round cable 3 x 0.75 mm²
- >With length scale 5.0 20.0 mm
- > Double shell, folding back stripping tool
- > With opening spring and locking device
- > Body: plastic, fibreglass-reinforced



16 60 100 SB



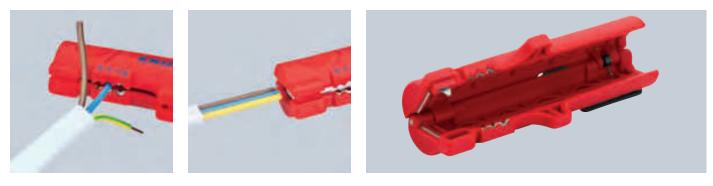
Article No.	EAN	∢→	Stripping capacities	۵۵
	4003773-	mm	Ø mm	g
16 60 100 SB	040811	100	Coax cables 4.8 - 7.5 round cables 3 x 0.75 mm ²	22

Stripping Tool for flat and round cables

- > For flat cables up to 12 mm in width
- > For stripping all common round and damp-proof installation cables \emptyset 4.0 to 13.0 mm (e.g. NYM cable 3 x 1.5 mm² up to 5 x 2.5 mm²)
- > Stripping device for cross-sections 0.8 / 1.5 / 2.5 mm² (AWG 20 / 16 / 14)
- > With opening spring and locking device
- > For use in confined and difficult to access work areas
- > Also for use in conduit and distribution boxes
- > Body: plastic, fibreglass-reinforced



16 64 125 SB



	EAN	← →		Stripping		52	
Article No.	4003773-	mm		Ømm	mm ²	Types of cables	g
16 64 125 SB	076933	125	MM	4 - 13	0.8 - 2.5	flat cable 12 mm / round cable Ø 4 - 13 mm	48

Stripping Tool for data cables

- > For stripping UTP and STP data cables with diameters of 4.5 to 10.0 mm
- > Stripping device for cross-sections 0.2 / 0.3 / 0.8 / 1.5 / 2.5 / 4 mm²
- > Double shell, folding back stripping tool
- > With opening spring and locking device
- > Practical clip for easy transport
- > Body: plastic, fibreglass-reinforced
- > Blades: special tool steel, oil-hardened, TiN-coated



16 65 125 SB



	EAN	∢ →		Stripping	capacities		52
Article No.	4003773-	mm		Ømm	mm ²	Types of cables	g
16 65 125 SB	043157	125	MM	4.5 - 10	0.2 - 4	CAT 5, CAT 6, CAT 7, Twisted-Pair (UTP/STP)	50

Universal Stripping Tools

- > For stripping all common round and damp-proof installation cables between 8.0 13.0 mm dia. (e.g. 3 x 1.5 mm² up to 5 x 2.5 mm²)
- > Also for use in conduit and distribution boxes
- > Double shell, folding back stripping tool
- > With opening spring and locking device
- > Practical clip for easy transport
- > Body: plastic, fibreglass-reinforced

16 85 125 SB

> With additional blade for longitudinal cuts; telescopic blade inside; stripping device for cross-sections 0.2 / 0.3 / 0.8 / 1.5 / 2.5 / 4 mm²; with integrated cable guide for longitudinal cut.This enables rigid insulation (e.g. halogen-free) to be stripped more easily



16 85 125 SB



	EAN	~		Stripping	capacities		52
Article No.	4003773-	mm		Ømm	mm ²	Types of cables	g
16 80 125 SB	040828	125	MM	8 - 13		round cable, e.g.: 3 x 1,5 mm ² up to 5 x 2,5 mm ²	75
16 85 125 SB	060444	125	MM	8 - 13	0.2 - 4	round cable, e.g.: 3 x 1,5 mm ² up to 5 x 2,5 mm ²	79

Depth Stripping Tool

> Long, ergonomic design for work in deep connector sockets







16 80 175 SB

	EAN	-	Stripping capacities	52
Article No.	4003773-	mm	Ømm	g
16 80 175 SB	084129	175	8 - 13	90

Universal Stripping Tool for building and industrial cables

- > With opening spring and locking device
- > For stripping all common round and damp-proof installation cables between 8.0 13.0 mm dia. (e.g. 3 x 1.5 mm² up to 5 x 2.5 mm²)
- > Also for use in conduit and distribution boxes> Body: plastic, fibreglass-reinforced
- For use in confined and difficult to access work areas
- > Specially suitable for larger cross-sections and for difficult insulating materials
- > No adjustment of blades to cutting depth required
- > Stripping device for conductors and strands 1.5 mm² and 2.5 mm²
- > Two-way length stop (ideal for right and left-handers)
- > Fastening device on the end of the handle (drop protection system)



16 90 130 SB



	EAN	4 >		Stripping	capacities		52
Article No.	4003773-	mm		Ømm	mm ²	Types of cables	g
16 90 130 S	3 076940	130	MM	8 - 13	1.5 / 2.5	round cable, e.g.: 3 x 1,5 mm ² up to 5 x 2,5 mm ²	47

KNIPEX ErgoStrip®

Universal Stripping Tool

- For the fast and precise stripping of all common round and damp-proof installation cables (e.g. NYM cable 3 x 1.5 mm² up to 5 x 2,5 mm²), data cable (e.g. twisted pair) and coax cable
- Innovative, ergonomic pistol grip design for easy cutting, stripping and longitudinal cut of the sheath
- > Conical, slimmed down tool ends for better access in confined areas
- > Stripping device for cross-sections 0.2 / 0.3 / 0.8 / 1.5 / 2.5 / 4 mm²
- > Simplified insertion of single wires for stripping using location ridges> With opening spring and locking device
- > Easy insertion of coax and data cable thanks to opening aid
- > Multi-component design with a soft plastic zone for comfortable use and a secure grip
- > Housing made from stable glass fibre reinforced plastic

16 95 02 SB

> For left-handers







Stripping of a coax cable



Stripping of a coax cable



Stripping of a NYM cable



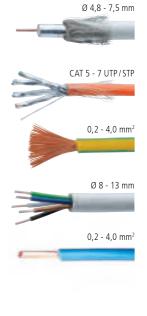
Wire stripping on single conductors



Stripping of a data cable



With concealed cutter in overhanging thumb rest on the side for convenient lengthwise cut



				Stripping capacities					
Article No.	EAN 4003773-	∢→ mm		round cable Ø mm	coax cable Ø mm	۵۵ g			
16 95 01 SB	079927	135	MM (PAT. PEND)	8 - 13	0.2 - 4	CAT 5 - 7, Twisted pair (UTP/STP)	4.8 - 7.5	75	
16 95 02 SB	082910	135	M (PAT. PEND.)	8 - 13	0.2 - 4	CAT 5 - 7, Twisted pair (UTP/STP)	4.8 - 7.5	75	

Gripping and Grip Pliers

3128-280 SINY

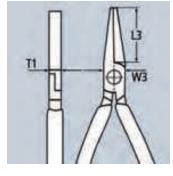
GERNA

Flat Nose Pliers	46					
Round Nose Pliers	47					
Long Reach Needle Nose Pliers	48					
Long Reach Needle Nose Pliers with transverse profiles Telephone Pliers Gripping Pliers (Needle Nose Pliers) Long Nose Pliers Relay Adjusting Pliers Duckbill Pliers						
Telephone Pliers	49					
Gripping Pliers (Needle Nose Pliers)	49					
Long Nose Pliers	50					
Relay Adjusting Pliers	51					
Duckbill Pliers						
Gripping Pliers for precision mechanics	52					
Mechanics' Pliers	53					
Universal Grip Pliers	54					
Welding Grip Pliers	54					
Grip Pliers	55					

Flat Nose Pliers

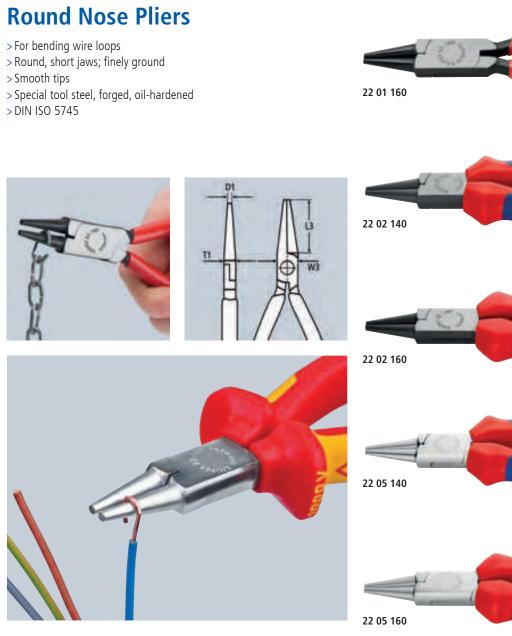
- > Flat, short, wide jaws
- > Knurled gripping surfaces
- > Special tool steel, forged, oil-hardened
- > DIN ISO 5745





								Dimensions			
	EAN	4- >					L3	W3	T1	52	
Article No.	4003773-	mm		Pliers	Head	Handles	mm	mm	mm	g	
20 01 125	033875	125		black atramentized	polished	plastic coated	27.0	14.5	8.0	80	
20 01 140	022794	140					28.0	15.5	9.5	105	
20 01 160	033882	160					30.0	17.0	9.5	140	
20 01 180	042440	180					35.0	19.0	10.0	185	
20 02 140	043386	140			a allah ad	u tale un dat en un en en entre	28.0	15.5	9.5	137	
20 02 160	035008	160		black atramentized	polished	with multi-component grips	30.0	17.0	9.5	172	
20 05 140	042464	140		chromo plated	chrome plated	with multi-component grips	28.0	15.5	9.5	136	
20 05 160	042457	160		chrome plated	chiome plated	with multi-component grips	30.0	17.0	9.5	176	
20 06 160	033783	160	■1000 V @@	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	30.0	17.0	9.5	176	





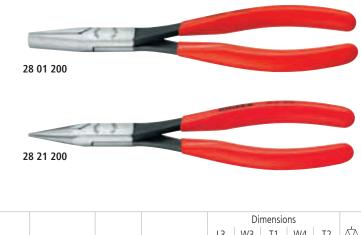


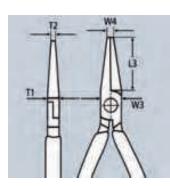


							Dimensions				
Article No.	EAN 4003773-	∢ → mm		Pliers	Head	Handles	L3 mm	W3 mm	D1 mm	T1 mm	4
22 01 125	033899	125		T Hero	Ticuu		27.0	14.5	2.0	8.0	75
22 01 125	022099	125		black atramentized	polished	plastic coated	27.0	14.5	2.0	0.0	75
22 01 140	022800	140	8				28.0	16.5	2.5	9.5	100
22 01 160	033905	160					30.0	18.0	3.0	9.5	135
22 02 140	043430	140	18	black atramentized	polished	with multi-component grips	28.0	16.5	2.5	9.5	129
22 02 160	023173	160	L 8				30.0	18.0	3.0	9.5	170
22 05 140	042891	140	8	chrome plated	chromo platad	with multi-component grips	28.0	16.5	2.5	9.5	127
22 05 160	042907	160		chrome plated	chrome plated	with multi-component grips	30.0	18.0	3.0	9.5	169
22 06 160	033790	160		chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	30.0	18.0	3.0	9.5	175

Long Reach Needle-Nose Pliers

- > Specially suitable for gripping and assembly work with a higher prehensile power
- > Knurled gripping surfaces
- > High-grade special tool steel, forged, oil-hardened





								Di	mensio	ins		
Article No.	EAN 4003773-	∢→ mm		Pliers	Head	Handles	L3 mm	W3 mm	T1 mm	W4 mm	T2 mm	۵۵ g
28 01 200	044468	200		black atra- mentized	polished	plastic coated	33.0	13.5	10.5	4.0	10.5	197
28 21 200	028246	200	$\blacksquare \Theta$	black atra- mentized	polished	plastic coated	34.0	13.5	10.5	3.0	3.0	187

Long Reach Needle-Nose Pliers

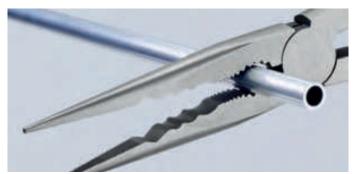
with transverse profiles

Long Reach Needle-Nose Pliers with wave profile

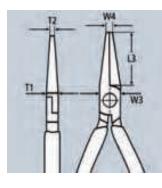
- ► For gripping, adjustment and assembly work in hard to reach areas thanks to slim, very long design
- Deep down situated parts can be easily reached using the slim, half-round tips
- > Careful yet reliable gripping, holding and guiding of small copper pipes, screws and cables as well as other round parts thanks to milled grooves with smooth surfaces
- > Serrated pipe grip to grip round parts
- > Particularly suitable for work in the automotive trade and in mechanical engineering
- > Slim yet robust tool
- > Forged from special tool steel, oil-hardened and tempered > DIN ISO 5745

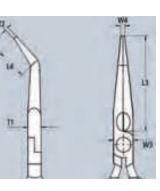


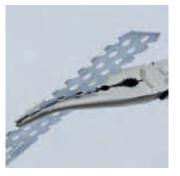
28 81 280



Wave-shaped gripping profile: transverse profile for gripping, holding and guiding









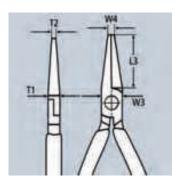
									Dimer	isions			
	EAN	<->					L3	L4	W3	T1	W4	T2	52
Article No.	4003773-	mm		Pliers	Head	Handles	mm	mm	mm	mm	mm	mm	g
28 71 280	079415	280	$\blacksquare \Theta$	black atramentized	polished	plastic coated	76.5		20.0	9.0	3.0	2.5	235
28 81 280	079422	280	Щ ∡45°	black atramentized	polished	plastic coated	70.0	20.0	20.0	9.0	2.5	2.5	235

Telephone Pliers

- > Gripping surfaces cross-hatched, knurled
- > Chrome vanadium electric steel, forged, oil-hardened
- > DIN ISO 5745

29 21 160 / 29 25 160

> Extra slim, fine tips; also suitable for soldering work





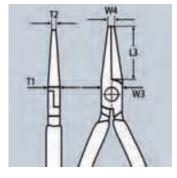
								Di	mensic	ns		
	EAN	∢ →					L3	W3	T1	W4	T2	52
Article No.	4003773-	mm		Pliers	Head	Handles	mm	mm	mm	mm	mm	g
29 11 160	016175	160	∞∞	black atramentized	polished	plastic coated	55.0	14.0	8.0	2.5	8.5	103
29 21 160	043454	160	\otimes Θ	black atramentized	polished	plastic coated	54.0	14.0	9.0	2.0	2.0	112
29 25 160	043478	160	\otimes Θ	chrome plated	chrome plated	with multi-component grips	54.0	14.0	9.0	2.0	2.0	139

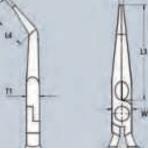
Gripping Pliers

Needle-Nose Pliers

- > Precision pliers for very exact assembly, bending and adjusting work
- > With extra long jaws: length of jaws 55.0 mm
- > Smooth ground gripping surfaces
- > Edges carefully deburred
- > Chrome vanadium electric steel, forged, oil-hardened







									Dime	nsions			
	EAN	>					L3	L4	W3	T1	W4	T2	52
Article No.	4003773-	mm		Pliers	Head	Handles	mm	mm	mm	mm	mm	mm	g
31 11 160	044475	160	$\Box \Box$	black atramentized	polished	plastic coated	55.0		16.0	7.5	1.8	2.5	100
31 15 160	016465	160	$\Box \Box$	chrome plated	chrome plated	with multi-component grips	55.0		16.0	7.5	1.8	2.5	124
31 21 160	046790	160	 ∡45°	black atramentized	polished	plastic coated	55.0	27.0	16.0	7.5	1.8	2.5	97
31 25 160	016489	160	 ∡45°	chrome plated	chrome plated	with multi-component grips	55.0	27.0	16.0	7.5	1.8	2.5	123

Long Nose Pliers

- > Heavy duty and wear resisting
- > Different jaw styles
- > Chrome vanadium electric steel, forged, oil-hardened
- > DIN ISO 5745

Style 1

> Long, trapezoidal jaws; knurled gripping surfaces

Style 2

> Long, half-round jaws; knurled gripping surfaces

Style 3

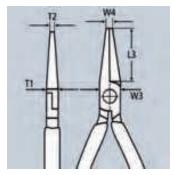
> Long, round jaws; smooth gripping surfaces





30 11 160

30 15 160



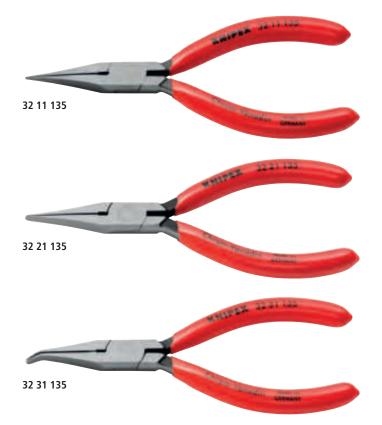


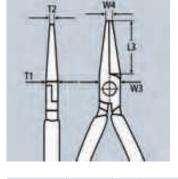
									D	imensio	าร		
Article No.	EAN 4003773-	∢→ mm		Style	Pliers	Head	Handles	L3 mm	W3 mm	T1 mm	W4 mm	T2 mm	۵۵ g
30 11 140	033936	140		1				42.0	15.0	8.0	2.5	4.0	86
30 11 160	023128	160		1	black atramentized	polished	plastic coated	46.5	16.5	9.5	3.0	5.0	121
30 11 190	043492	190	_	1				50.0	18.5	9.5	3.0	7.0	145
30 13 140	016298	140		1	chromo plated	chrome plated	plastic coated	42.0	15.0	8.0	2.5	4.0	87
30 13 160	043485	160		1	chrome plated	chrome plated	plastic coated	46.5	16.5	9.5	3.0	5.0	118
30 15 140	042914	140		1				42.0	15.0	8.0	2.5	4.0	106
30 15 160	035046	160		1	chrome plated	chrome plated	with multi-component grips	46.5	16.5	9.5	3.0	5.0	149
30 15 190	001881	190		1				50.0	18.5	8.0	3.0	7.0	171
30 16 160	001904	160	■1000 V @@	1	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	46.5	16.5	9.5	3.0	5.0	150
30 21 140	042433	140		2				42.0	15.0	8.0	2.5	2.0	95
30 21 160	035053	160	$\blacksquare \Theta$	2	black atramentized	polished	plastic coated	50.0	16.5	9.5	3.0	2.5	121
30 21 190	043508	190		2				50.0	18.5	8.0	3.0	2.4	145
30 23 140	016373	140	$\blacksquare \Theta$	2	chrome plated	chrome plated	plastic coated	42.0	15.0	8.0	2.5	2.0	95
30 25 140	001980	140		2				42.0	15.0	8.0	2.5	2.0	114
30 25 160	035060	160	Θ	2	chrome plated	chrome plated	with multi-component grips	50.0	16.5	9.5	3.0	2.5	151
30 25 190	043515	190		2				50.0	18.5	8.0	3.0	2.4	168
30 31 160	035077	160	8	3	black atramentized	polished	plastic coated	41.0	16.5	9.5	5.0	2.5	110
30 33 160	043539	160	8	3	chrome plated	chrome plated	plastic coated	41.0	16.5	9.5	5.0	2.5	111
30 35 140	043102	140		3	chrome plated	chrome plated	with multi-component grips	37.5	15.0	8.0	4.0	2.0	102
30 35 160	035084	160		3	chiome plated		with multi-component grips	41.0	16.5	9.5	5.0	2.5	138
30 36 160	002123	160		3	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	41.0	16.5	9.5	5.0	2.5	141

50

Relay Adjusting Pliers

- > For gripping components and wires of the smallest diameters and for bending contact and relay springs
- > Polished gripping surfaces
- > Edges carefully deburred
- > High-grade special tool steel, forged, oil-hardened

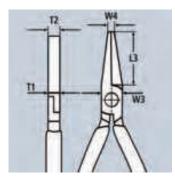




								Dii	mensio	ns		
	EAN	∢ —▶					L3	W3	T1	W4	T2	52
Article No.	4003773-	mm		Pliers	Head	Handles	mm	mm	mm	mm	mm	g
32 11 135	035091	135	\Box	black atramentized	polished	plastic coated	34.0	12.5	7.0	1.0	1.5	73
32 21 135	043553	135	$\Box \Box$	black atramentized	polished	plastic coated	34.0	12.5	7.0	1.0	3.5	74
32 31 135	043560	135		black atramentized	polished	plastic coated	32.0	12.5	7.0	1.0	3.5	73

Duckbill Pliers

- > Duckbill shaped jaws 9 mm wide at the tip and tapering to 1.5 mm thickness
- > Smooth gripping surfaces
- > Chrome vanadium electric steel, forged, oil-hardened





								Di	mensio	ns		
	EAN	∢ —▶					L3	W3	T1	W4	T2	52
Article No.	4003773-	mm		Pliers	Head	Handles	mm	mm	mm	mm	mm	g
33 01 160	016663	160	$\Box \Box$	black atramentized	polished	plastic coated	55.0	15.0	7.5	3.0	9.0	103
33 03 160	016670	160	\Box	chrome plated	chrome plated	plastic coated	55.0	15.0	7.5	3.0	9.0	103

Gripping Pliers

for precision mechanics

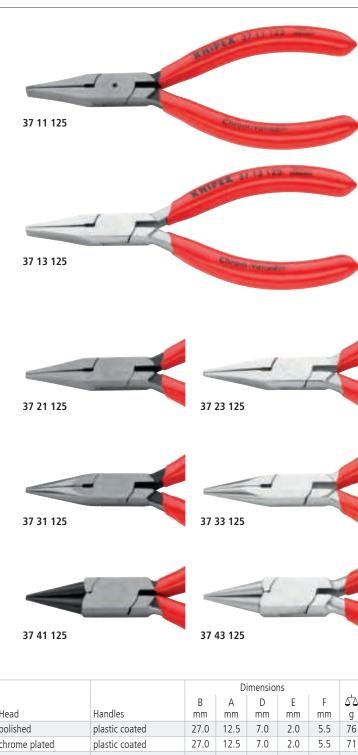
- > Precision pliers for fine assembly work, e g. in electronics and fine mechanics
- > For gripping, holding, bending and adjusting
- > Tips precision-ground
- > Smooth gripping surfaces
- > Edges carefully deburred
- > Lap joint
- > High-grade special tool steel, forged, oil-hardened > DIN ISO 9655

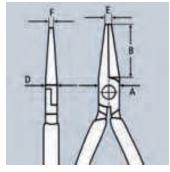
Style 1 > Flat, wide jaws

Style 2 > Flat, concave and pointed jaws

Style 3

> Half-round jaws





									D	imensio	ns		
	EAN	∢ →						В	Α	D	E	F	52
Article No.	4003773-	mm		Style	Pliers	Head	Handles	mm	mm	mm	mm	mm	g
37 11 125	014287	125	$\Box \Box$	1	black atramentized	polished	plastic coated	27.0	12.5	7.0	2.0	5.5	76
37 13 125	043638	125	\Box	1	chrome plated	chrome plated	plastic coated	27.0	12.5	7.0	2.0	5.5	71
37 21 125	035138	125	$\Box \Box$	2	black atramentized	polished	plastic coated	27.0	12.5	7.0	2.0	2.0	74
37 23 125	043645	125	\Box	2	chrome plated	chrome plated	plastic coated	27.0	12.5	7.0	2.0	2.0	72
37 31 125	035145	125	Θ	3	black atramentized	polished	plastic coated	27.0	12.5	7.0	2.0	1.6	74
37 33 125	016960	125	Θ	3	chrome plated	chrome plated	plastic coated	27.0	12.0	7.0	2.0	1.6	78
37 41 125	035152	125	<	4	black atramentized	polished	plastic coated	27.0	14.5	8.0	2.0	1.0	76
37 43 125	043652	125	<	4	chrome plated	chrome plated	plastic coated	27.0	14.5	8.0	2.0	1.0	76

Mechanics' Pliers

- > High bending strength of the pliers tips
- > Gripping surfaces cross-hatched, knurled
- > Vanadium electric steel; forged, oil-hardened
- > DIN ISO 5745

Style 2

> 40° angled jaws

Style 3

> Curved tip

38 35 200 T*

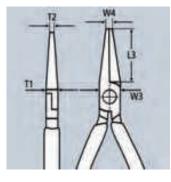
> Pliers with tether attachment point for mounting a fall protection

38 71 200

> 70° angled, half-round jaws, suitable for pulling split pins; for gripping at points that are difficult to access

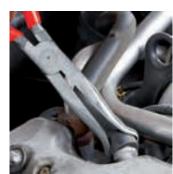
38 91 200 / 38 95 200

> 45° angled, half-round, long jaws, also suitable for gripping spark plugs and round components (spark plug cover "grabber")











								Di	mensic	ons		
A (* 1. M	EAN	∢ →					L3	W3	T1	W4	T2	52
Article No.	4003773-	mm		Pliers	Head	Handles	mm	mm	mm	mm	mm	g
38 11 200	035169	200	$\boxtimes \Theta$	black atramentized	polished	plastic coated	73.0	17.5	9.5	3.0	2.5	179
38 15 200	039594	200	$\boxtimes \Theta$	chrome plated	chrome plated	with multi-component grips	73.0	17.5	9.5	3.0	2.5	209
38 21 200	035176	200	∞∞ ⊖ ∡40°	black atramentized	polished	plastic coated	73.0	17.5	9.5	3.0	2.5	175
38 25 200	043669	200	∞∞3 ⊖ ∡40°	chrome plated	chrome plated	with multi-component grips	73.0	17.5	9.5	3.0	2.5	209
38 31 200	040712	200	\otimes Θ	black atramentized	polished	plastic coated	73.0	17.5	9.5	3.0	2.5	176
38 35 200	017134	200	$\otimes \otimes \Theta$	chrome plated	chrome plated	with multi-component grips	73.0	17.5	9.5	3.0	2.5	205
38 35 200 T	083771	200	∞ 🕬	chrome plated	chrome plated	with multi-component grips, with integrated tether attachment point for a tool tether	73.0	17.5	9.5	3.0	2.5	210
38 41 190	017141	190	∞	black atramentized	polished	plastic coated	50.0	18.0	8.0	4.0	8.0	139
38 45 190	043676	190	∞ =	chrome plated	chrome plated	with multi-component grips	50.0	18.0	8.0	4.0	8.0	171
38 71 200	017202	200	≪≪3 ⊖ ∡70°	black atramentized	polished	plastic coated	73.0	17.5	9.5	3.0	2.0	174
38 91 200	017219	200	∞∞ ⊖ ∡45°	black atramentized	polished	plastic coated	73.0	17.5	9.5		2.5	177
38 95 200	017233	200	∞∞3 ⊖ ∡45°	chrome plated	chrome plated	with multi-component grips	73.0	17.5	9.5		2.5	207

*Other tools with tethering can be found from page 266

Universal Grip Pliers

- > Hold round, profile and flat material securely
- > Heavy duty model
- > With adjustment screw and release lever
- > One-hand operation
- > High clamping pressure due to toggle lever action
- > Pliers body: rolled steel, high-strength
- > Gripping jaws: chrome vanadium electric steel, forged

40 14 250

> With one pivoting jaw







	EAN	∢ —▶		EO		\Box	52
Article No.	4003773-	mm	Pliers	mm	mm	mm	g
40 04 180	022190	180	a humized	35	25	32	310
40 04 250	002710	250	galvanized	35	30	32	521
40 14 250	080329	250	galvanized	43	42	45	600

Welding Grip Pliers

- > For gripping, clamping and holding of diverse profiles
- > Heavy duty model
- > With adjustment screw and release lever
- > One-hand operation
- > High clamping pressure due to toggle lever action
- > Pliers body: rolled steel, high-strength

42 14 280

> Heat resistant malleable cast iron jaws; section or flat material items lying side by side are held in place during welding; also for section material with vertical webs up to 15 mm height

42 24 280

> Heat resistant malleable cast iron jaws; round or tubular material items lying centrally side by side are held securely during welding

42 34 280

> Gripping jaws of chrome vanadium steel, drop forged; clamps cumbersome workpieces and sections with high webs up to 40 mm

42 44 280

> With moveable jaws; gripping jaws of chrome vanadium steel, drop forged; clamps and balances bulky work components and profiles with high ridges of up to 40 mm

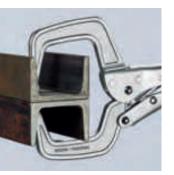








42 34 280



42 44 280



	EAN	-		ĘO	□]‡	52
Article No.	4003773-	mm	Pliers	mm	mm	g
42 14 280	022206	280	galvanized	30 - 65	50	917
42 24 280	022213	280	galvanized	10 - 70		850
42 34 280	022220	280	galvanized		90	692
42 44 280	080350	280	galvanized		90	740

Grip Pliers

- > Hold round, profile and flat material securely
- > Heavy duty model
- > With adjustment screw and release lever
- > One-hand operation
- > High clamping pressure due to toggle lever action
- > Pliers body: rolled steel, high-strength
- > Gripping jaws: chrome vanadium electric steel, forged

Style 0

> Jaws for round workpieces, with wire cutter

Style 1

> Jaws with double prism for round, section and flat material

Style 2

> Straight jaws for flat material

Style 3

> Long-Nose Grip Pliers, narrow, long jaws

Style 4

> Long-Nose Grip Pliers, narrow, long jaws; very suitable for areas that are difficult to reach; non-serrated gripping area for pinching off hoses



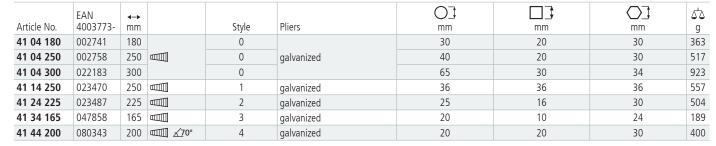










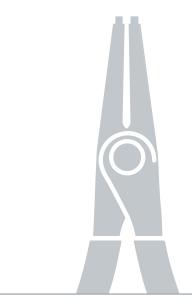


uninn.

(XENIMON)

OP

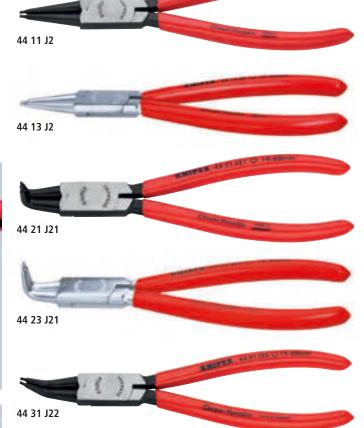
Circlip Pliers for internal circlips in bore holes	58
Circlip Pliers for external circlips on shafts	59
Precision Circlip Pliers for internal circlips in bore holes	60
- with overstretching limiter	61
Precision Circlip Pliers for external circlips on shafts	62
- with overstretching limiter	63
Circlip Pliers for large internal circlips up to 400 mm	64
Circlip Pliers for large external circlips up to 400 mm	64
Circlip Tool for circlips up to 1000 mm	65
Special Retaining Ring Pliers for retaining rings on shafts	66
Circlip Pliers for grip rings on shafts	66
Sets of Circlip Pliers	67
Pliers Sets in a foam tray	69
Precision Circlip Pliers Sets	70
Tool Box "SRZ"	71



for internal circlips in bore holes



- > Slim pattern, forged
- > Non-slip, solid tips
- > Pliers body and tips: chrome vanadium steel, forged, oil-hardened







Style 1 > DIN 5256 C, straight tips
Style 2 > DIN 5256 D; 90° angled tips
Style 3

> 45° angled tips

Article No.	EAN 4003773-	∢→ mm		Style	Pliers	Head	Handles	Size of bore Ø mm	Tips Ø mm	۲۵ g
44 11 J0	040286	140		1				8 - 13	0.9	88
44 11 J1	022862	140		1				12 - 25	1.3	88
44 11 J2	022879	180	C	1	black atramentized	polished	plastic coated	19 - 60	1.8	135
44 11 J3	033943	225		1				40 - 100	2.3	196
44 11 J4	042549	320		1				85 - 140	3.2	469
44 13 J0	048176	140		1				8 - 13	0.9	89
44 13 J1	042938	140		1				12 - 25	1.3	88
44 13 J2	042945	180	C	1	chrome plated	chrome plated	plastic coated	19 - 60	1.8	138
44 13 J3	042952	225	_	1				40 - 100	2.3	194
44 13 J4	017301	320		1				85 - 140	3.2	463
44 21 J01	040132	130		2	2 black atramentized			8 - 13	0.9	88
44 21 J11	022886	130		2				12 - 25	1.3	88
44 21 J21	022893	170	<u>⊀</u> 90° ♡	2		polished	plastic coated	19 - 60	1.8	139
44 21 J31	033769	215		2				40 - 100	2.3	196
44 21 J41	043683	300		2				85 - 140	3.2	462
44 23 J11	042969	130		2				12 - 25	1.3	89
44 23 J21	042976	170	<u>∡9</u> 0° ୯୦	2	chrome plated	chrome plated	plastic coated	19 - 60	1.8	138
44 23 J31	042983	215		2				40 - 100	2.3	200
44 31 J02	066941	140		3				8 - 13	0.9	90
44 31 J12	066958	140		3				12 - 25	1.3	90
44 31 J22	066965	180	<u>∡4</u> 5° (°)	3	black atramentized	polished	plastic coated	19 - 60	1.8	140
44 31 J32	066972	225		3				40 - 100	2.3	195
44 31 J42	066989	310		3				85 - 140	3.2	465

for external circlips on shafts

- > Slim pattern, forged
- > Non-slip, solid tips
- > Pliers body and tips: chrome vanadium steel, forged, oil-hardened







Style 1
> DIN 5254 A; straight tips
Style 2

> DIN 5254 B; 90° angled tips

Style 3 > 45° angled tips

Article No.	EAN 4003773-	∢→ mm		Style	Pliers	Head	Handles	Size of shaft Ø mm	Tips Ø mm	۵ ^۲ ۵ g
46 11 A0	033950	140		1				3 - 10	0.9	85
46 11 A1	022909	140		1				10 - 25	1.3	86
46 11 A2	022916	180	MM O	1	black atramentized	polished	plastic coated	19 - 60	1.8	134
46 11 A3	033974	210		1				40 - 100	2.3	220
46 11 A4	042532	320		1				85 - 140	3.2	505
46 13 A0	017417	140		1				3 - 10	0.9	85
46 13 A1	042990	140	AAAA 23	1				10 - 25	1.3	82
46 13 A2	043003	180	MM O	1	chrome plated	chrome plated	plastic coated	19 - 60	1.8	133
46 13 A3	043010	210		1				40 - 100	2.3	211
46 21 A01	033967	125		2		nentized polished		3 - 10	0.9	85
46 21 A11	023005	125		2				10 - 25	1.3	85
46 21 A21	022923	170	<u>∡9</u> 0° MM Ö	2	black atramentized		plastic coated	19 - 60	1.8	132
46 21 A31	033981	200	/////	2				40 - 100	2.3	219
46 21 A41	039365	300		2				85 - 140	3.2	510
46 23 A01	017509	125		2				3 - 10	0.9	84
46 23 A11	043027	125	<u>∡9</u> 0°	2				10 - 25	1.3	84
46 23 A21	043034	170	MW O	2	chrome plated	chrome plated	plastic coated	19 - 60	1.8	132
46 23 A31	043041	200		2				40 - 100	2.3	221
46 31 A02	066996	130		3				3 - 10	0.9	83
46 31 A12	067009	130	1,	3				10 - 25	1.3	85
46 31 A22	067016	185	<u>∡4</u> 5° MM Ö	3	black atramentized	polished	plastic coated	19 - 60	1.8	133
46 31 A32	067023	210	100010	3				40 - 100	2.3	213
46 31 A42	067030	310		3				85 - 140	3.2	511

Precision Circlip Pliers

for internal circlips in bore holes

- Heavy duty in continuous operation: up to 10 times longer service life compared to turned tips
- ▶ With inserted tips for reliable work
- > Bolted joint: precise, zero backlash operation of pliers
- > Non-slip plastic coating on the handles
- > Inserted tips: spring steel wire, drawn
- > Pliers body: chrome vanadium electric steel, forged, oil-hardened

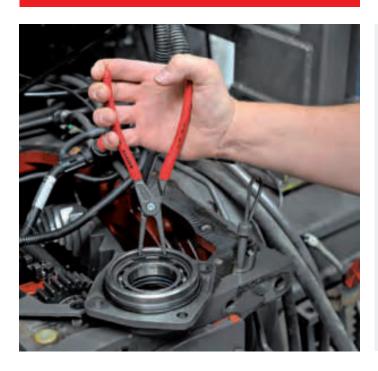
Style 1 > DIN 5256 C, straight tips

Style 2 > DIN 5256 D; 90° angled tips



High precision quality

Easy and reliable assembly: form-fitting inserted and pressed-in tips made of high-density spring steel offer a high level of protection against excessive stress and strain, e.g. when removing stuck rings. The large supporting surfaces and the position of the tips make it more difficult for the rings to bounce off.



KNIPEX circlip pliers with overexpansion guard

For the standardized fitting of circlips in the industrial serial production. Particularly manufacturers of sensitive, safety-relevant components (e.g. brakes or gears) highly appreciate the compliance of DIN 471 and 472. The mounting of circlip rings in this case requires pliers with overexpansion guard or a cone. KNIPEX Circlip Pliers with overexpansion guard meet the requirements and furthermore offer a superior durability.



Sturdy, inserted tips: made from high-density spring steel



Tight fit through compression

Article No.	EAN 4003773-	∢→ mm		Style	Pliers	Handles	Size of bore Ø mm	Tips Ø mm	ے'ک g
48 11 J0	048510	140		1			8 - 13	0.9	105
48 11 J1	048527	140		1	grey atramentized		12 - 25	1.3	105
48 11 J2	048534	180	C	1		with non-slip plastic coating	19 - 60	1.8	175
48 11 J3	048541	225		1			40 - 100	2.3	266
48 11 J4	048558	320		1			85 - 140	3.2	580
48 21 J01	048619	130		2			8 - 13	0.9	105
48 21 J11	048633	130	1	2			12 - 25	1.3	105
48 21 J21	048640	165	<u>∡9</u> 0° (℃	2	grey atramentized	with non-slip plastic coating	19 - 60	1.8	175
48 21 J31	048657	210	1	2			40 - 100	2.3	265
48 21 J41	048664	305	1	2	-		85 - 140	3.2	576

▶ With overstretching limiter

▶ For all circlips with a diameter of 8 - 100 mm

- > With overstretching limiter for standardized assembly according to DIN 472
- > The adjustable stop screw prevents overexpansion
- > Adjustment using hexagonal screw
- > Ideal for series production as excessive expansion of rings is effectively prevented

Style 3

> DIN 5256 C, straight tips

Style 4

> DIN 5256 D; 90° angled tips



KNIPEX circlip pliers with overexpansion guard

For the standardized fitting of circlips in the industrial serial production. Particularly manufacturers of sensitive, safety-relevant components (e.g. brakes or gears) highly appreciate the compliance of DIN 471 and 472. The mounting of circlip rings in this case requires pliers with overexpansion guard or a cone. KNIPEX Circlip Pliers with overexpansion guard meet the requirements and furthermore offer a superior durability.





Article No.	EAN 4003773-	∢→ mm		Style	Pliers	Handles	Size of bore Ø mm	Tips Ø mm	۵۵ g
48 31 J0	079552	140		3	grey atramentized		8 - 13	0.9	105
48 31 J1	073864	140	63	3		uniale and all and a state and at a	12 - 25	1.3	105
48 31 J2	073871	180	0	3		with non-slip plastic coating	19 - 60	1.8	175
48 31 J3	073888	225		3			40 - 100	2.3	266
48 41 J01	079569	130		4			8 - 13	0.9	105
48 41 J11	079576	130	<u>∡9</u> 0° ୯)	4	arey strementized	with non-dia plastic conting	12 - 25	1.3	105
48 41 J21	080695	165	X 30 ()	4	grey atramentized	with non-slip plastic coating	19 - 60	1.8	175
48 41 J31	079590	210]	4			40 - 100	2.3	265

Precision Circlip Pliers

for external circlips on shafts

- Heavy duty in continuous operation: up to 10 times longer service life compared to turned tips
- ▶ With inserted tips for reliable work
- > Large contact faces on the tips: no distortion of circlips, easy fitting
- > Bolted joint: precise, zero backlash operation of pliers
- > Internal opening spring, protected and captive
- > Non-slip plastic coating on the handles
- > Precise, smoothly-operating screw joint
- > Slim head style allows use in confined areas
- > Handles with non-slip plastic coating
- > Inserted tips: spring steel wire, drawn
- > Pliers body: chrome vanadium electric steel, forged, oil-hardened

Style 1

> DIN 5254 A; straight tips

Style 2

> DIN 5254 B; 90° angled tips



High precision quality

Easy and reliable assembly: form-fitting inserted and pressed-in tips made of high-density spring steel offer a high level of protection against excessive stress and strain, e.g. when removing stuck rings. The large supporting surfaces and the position of the tips make it more difficult for the rings to bounce off.



Spring inside the joint: the spring is protected inside the precisely bolted joint. It does not hinder work and cannot get dirty or lost.



KNIPEX Precision Circlip Pliers: fit circlips without distortion; easy and quick assembling

KNIPEX circlip pliers with overexpansion guard

For the standardized fitting of circlips in the industrial serial production. Particularly manufacturers of sensitive, safety-relevant components (e.g. brakes or gears) highly appreciate the compliance of DIN 471 and 472. The mounting of circlip rings in this case requires pliers with overexpansion guard or a cone. KNIPEX Circlip Pliers with overexpansion guard meet the requirements and furthermore offer a superior durability.



Sturdy, inserted tips: made from high-density spring steel



Tight fit through compression

Article No.	EAN 4003773-	∢→ mm		Style	Pliers	Handles	Size of shaft Ø mm	Tips Ø mm	۲۵ g
49 11 A0	048718	140		1			3 - 10	0.9	101
49 11 A1	048725	140		1			10 - 25	1.3	100
49 11 A2	048732	180	MM O	1	grey atramentized	with non-slip plastic coating	19 - 60	1.8	170
49 11 A3	048749	225		1			40 - 100	2.3	270
49 11 A4	048756	320		1			85 - 140	3.2	599
49 21 A01	048817	130		2			3 - 10	0.9	100
49 21 A11	048824	130	/200 1111	2			10 - 25	1.3	102
49 21 A21	048831	165	<u>∡9</u> ° MM	2	grey atramentized	with non-slip plastic coating	19 - 60	1.8	169
49 21 A31	048848	210	Ŭ	2			40 - 100	2.3	272
49 21 A41	048855	305		2			85 - 140	3.2	601

► With overstretching limiter

- ▶ For all circlips with a diameter of 3 100 mm
- > With overstretching limiter for standardized assembly according to DIN 471
- > The adjustable stop screw prevents overexpansion
- > Adjustment using hexagonal screw
- > Ideal for series production as excessive expansion of rings is effectively prevented

Style 3

> DIN 5254 A; straight tips, with overstretching limiter for standardized assembly according to DIN 471: the adjustable stop screw prevents overexpansion

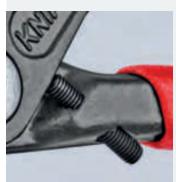
Style 4

> 90° angled tips; with overstretching limiter for standardized assembly in accordance with DIN 471; the adjustable stop screw prevents the rings from overstretching



KNIPEX circlip pliers with overexpansion guard

For the standardized fitting of circlips in the industrial serial production. Particularly manufacturers of sensitive, safety-relevant components (e.g. brakes or gears) highly appreciate the compliance of DIN 471 and 472. The mounting of circlip rings in this case requires pliers with overexpansion guard or a cone. KNIPEX Circlip Pliers with overexpansion guard meet the requirements and furthermore offer a superior durability.









Article No.	EAN 4003773-	← ► mm		Style	Pliers	Handles	Size of shaft Ø mm	Tips Ø mm	۵۵ g
49 31 A0	061748	140		3			3 - 10	0.9	103
49 31 A1	073895	140	MM O	3	arou atramontized	with non-slip plastic coating	10 - 25	1.3	100
49 31 A2	073901	180	////// ()	3	grey atramentized	with hon-silp plastic toating	19 - 60	1.8	170
49 31 A3	073918	225		3			40 - 100	2.3	270
49 41 A01	061755	130		4			3 - 10	0.9	102
49 41 A11	079606	130	<u>∡9</u> 0° MM	4	arou atramontized	with non-slip plastic coating	10 - 25	1.3	102
49 41 A21	079613	165	Ö	4	grey atramentized	with hon-slip plastic coating	19 - 60	1.8	169
49 41 A31	079620	210		4	-		40 - 100	2.3	272

for large internal circlips

> With locking device, can be released

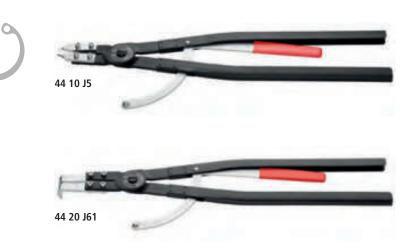
- > With replaceable tips made of tempered steel
- > Black powder-coated
- > Pliers body: rolled steel, high-strength
- > Tips: special tool steel, oil-hardened

Style 1

> DIN 5256 C, straight tips

Style 2

> DIN 5256 D; 90° angled tips



Article No.	EAN 4003773-	≁→ mm		Style	Pliers	Size of bore Ø mm	Tips Ø mm	۲۵ g
44 10 J5	024910	570	69	1		122 - 300	3.5	1738
44 10 J6	024927	580	Ö	1	black powder-coated	252 - 400	4.5	1755
44 20 J51	024958	590	/00° (°)	2		122 - 300	3.5	1803
44 20 J61	024965	600	<u>⊀9</u> 0° ()	2	black powder-coated	252 - 400	4.5	1723
44 19 J5	024934	1 pair	of spare tips fo	or 44 10 J5				
44 19 J6	024941	1 pair	of spare tips fo	or 44 10 J6				
44 29 J51	024972	1 pair	of spare tips for	or 44 20 J51				
44 29 J61	024989	1 pair	of spare tips for	or 44 20 J61				

Circlip Pliers

for large external circlips

> With locking device, can be released

- > With replaceable tips made of tempered steel
- > Black powder-coated
- > Pliers body: rolled steel, high-strength
- > Tips: special tool steel, oil-hardened

Style 1

> DIN 5254 A; straight tips

Style 2

> DIN 5254 B; 90° angled tips







Article No.	EAN 4003773-	⊶ mm		Style	Pliers	Size of shaft Ø mm	Tips Ø mm	۵'ک g
46 10 A5	024996	560	29	1		122 - 300	3.5	1773
46 10 A6	025009	570	0	1	black powder-coated	252 - 400	4.5	1795
46 20 A51	025023	570	(00° Å)	2		122 - 300	3.5	1832
46 20 A61	025030	580	<u>∡9</u> 0° ()	2	black powder-coated	252 - 400	4.5	1826
46 19 A5	024316	1 pair	of spare tips fo	or 46 10 A5				
46 19 A6	025016	1 pair	of spare tips fo	or 46 10 A6				
46 29 A51	025047	1 pair	of spare tips fo	or 46 20 A51				
46 29 A61	025054	1 pair	of spare tips fo	or 46 20 A61				

Circlip Tool

for internal and external circlips up to 1,000 mm nominal size

- > Universally usable for large circlips with diameters of 400 1000 mm
- > Reliable opening and closing of the circlips and holding by self-locking precision spindle drive
- > For fitting and removing circlips
- > Circlips are reliably catched thanks to short, direct attachment
- > Replaceable tips having working ends with diameters of 6 and 9 mm, for perfect adaption to the handling bores in the circlips
- > Optional operation by hand, with Allen key, ratchet wrench or cordless screwdriver
- > Areas of application are heavy engines where very high forces and torques are transmitted with large shafts and bearings , e.g. wind turbines, tidal power stations, generator construction, hydropower stations, large machine construction (rolling mills, presses), shipbuilding, aerospace
- > Tool in a plastic case with foam insert
- > Tip material: chrome-vanadium electric steel





Manually operable













Replaceable inserts for internal and external circlips

Article No.	EAN 4003773-		Size of bore Ø mm	Size of shaft Ø mm	۲۵ g
46 10 100	075417	00	400 - 1000	400 - 1000	2200
46 19 100 01	084549	Spare tips 6 mm			
46 19 100 02	084556	Spare tips 9 mm			

Special Retaining Ring Pliers

for retaining rings on shafts

- > For fitting horseshoe-shaped spring retaining rings and circlips without grip holes
- > For shaft retaining devices
- > With opening spring
- > Chrome vanadium electric steel, forged, oil-hardened

45 10 170

> For retaining rings with a minimum ring split gap of 3.6 mm

45 21 200

> Angled jaws with centering hole; for snap rings larger than 12.0 mm dia., e.g. for securing cardan shafts in a motor vehicle; minimum ring split gap of the rings 2.2 mm





45 10 170

45 21 200





45 21 200

	EAN	∢ —▶				52
Article No.	4003773-	mm		Pliers	Handles	g
45 10 170	017370	170	MM O	burnished		156
45 21 200	031208	200	<u>x</u> 30° MM O	burnished	plastic coated	186

Circlip Pliers

for grip rings on shafts

- > For fitting grip rings on shafts from 1.5 30 mm dia.
- > With opening spring
- > Solid style, forged
- > Non-slip, solid tips
- > Pliers body and tips: chrome vanadium steel, forged, oil-hardened

46 11 G0

> For rings of 1.5 - 4.0 mm dia., with adjustable stop screw to prevent overstretching



Article No.	EAN 4003773-	∢→ mm		Pliers	Head	Handles	Size of shaft Ø mm	Tips Ø mm	۵'ک g
46 11 G0	047896	140	MM	black atramentized	polished	plastic coated	1.5 - 4.0	0,9	87
46 11 G1	031062	140			polished		4.0 - 7.0	1,3	85
46 11 G2	031079	140		h ha ala a tua na anti-ana d			5.0 - 13.0	1,3	85
46 11 G3	031086	140	MM	black atramentized		plastic coated	14.0 - 18.0	1,3	86
46 11 G4	031093	180					20.0 - 30.0	1,8	134

Set of Circlip Pliers

Compactly packed: four-piece circlip plier sets in practical roll-up bag



00 19 56



00 19 56 V01

- > Tool roll made of hard-wearing polyester fabric
- > With practical, adjustable quick release fastener
 - > Dimensions, open (L x H): 315 x 275 mm



00 19 57



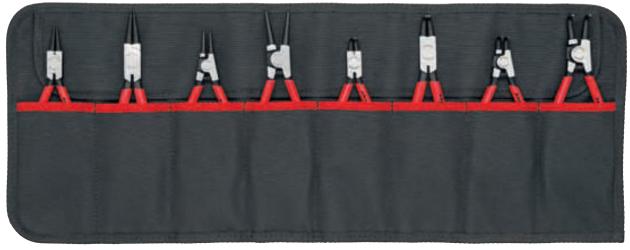
00 19 57 V01

Article No.	EAN 4003773-				Style	Capacity Ø mm	Tips Ø mm	Number	۲۵ g
00 19 56	030973		Circlip Pliers	Set, 4 parts					670
		C	44 11 J2	Circlip Pliers for internal circlips in	straight tips	19 - 60	1.8	1	
		() <u>⊀9</u> 0°	44 21 J21	bore holes	angled tips	19 - 60	1.8	1	
		ÖMM	46 11 A2	Circlip Pliers for external circlips	straight tips	19 - 60	1.8	1	
		© <u>∡</u> 9° MM	46 21 A21	on shafts	angled tips	19 - 60	1.8	1	
00 19 56 V01	081548		Circlip Pliers	Set, 4 parts					615
		O	44 11 J1	Circlip Pliers for internal circlips in		12 - 25	1.3	1	-
		O	44 11 J2	bore holes		19 - 60	1.8	1	-
		ÖMM	46 11 A1	Circlip Pliers for external circlips	straight tips	10 - 25	1.3	1	
		OW	46 11 A2	on shafts		19 - 60	1.8	1	-
00 19 57	050056		Precision Cir	clip Pliers Set, 4 parts					665
		63	48 11 J1	Precision Circlip Pliers for internal		12 - 25	1.3	1	
		Ö	48 11 J2	circlips in bore holes		19 - 60	1.8	1	
		25 4444	49 11 A1	Precision Circlip Pliers for external	straight tips	10 - 25	1.3	1	
		ÖM	49 11 A2	circlips on shafts		19 - 60	1.8	1	
00 19 57 V01	081555		Precision Cir	clip Pliers Set, 4 parts					871
		C	48 11 J2	Precision Circlip Pliers for internal	straight tips	19 - 60	1.3	1	1
		() <u>⊀9</u> 0°	48 21 J21	circlips in bore holes	bent tips	19 - 60	1.8	1	1
		ÖMM	49 11 A2	Precision Circlip Pliers for external	straight tips	19 - 60	1.3	1	1
		© <u>⊀</u> 9° MM	49 21 A21			19 - 60	1.8	1	1
00 19 56 LE	035954		Tool Roll, em	pty, 4 compartments					171

Set of Circlip Pliers

Handy storage: eight-piece range in space-saving roll-up bag

> Tool roll made of hard-wearing polyester fabric
 > With practical, adjustable quick release fastener
 > Dimensions, open (L x H): 610 x 240 mm



00 19 57 V01



Article No.	EAN 4003773-				Style	Capacity Ø mm	Tips Ø mm	Number	۵'ک g
00 19 58 V01	081562		Circlip Pliers	Set, 8 parts					1156
		C	44 11 J1	· · · · · · · · · · · · · · · · · · ·	straight tips	12 - 25	1.3	1	
		C	44 11 J2	Circlip Pliers for internal	straight tips	19 - 60	1.8	1	
		() <u>⊀</u> 90°	44 21 J11	circlips in bore holes	an al a d Ala a	12 - 25	1.3	1	
		() <u>⊀9</u> 0°	44 21 J21		angled tips	19 - 60	1.8	1	
		ÖMM	46 11 A1		and also also	10 - 25	1.3	1	
		ŐMM	46 11 A2	Circlip Pliers for external	straight tips	19 - 60	1.8	1	
		© <u>∡</u> 90° MM	46 21 A11	circlips on shafts	an al a d Ala a	10 - 25	1.3	1	
		©∡9° MM	46 21 A21	_	angled tips	19 - 60	1.8	1	
00 19 58 V02	081579		Precision Cir	clip Pliers Set, 8 parts					1357
		0	48 11 J1		straight tips	12 - 25	1.3	1	
		0	48 11 J2	Precision Circlip Pliers for	straight tips	19 - 60	1.8	1	
		() <u>⊀</u> 90°	48 21 J11	internal circlips in bore holes	angled ting	12 - 25	1.3	1	
			48 21 J21		angled tips	19 - 60	1.8	1	
		ÖMM	49 11 A1		straight tips	10 - 25	1.3	1	
		0/////	49 11 A2	Precision Circlip Pliers for	straight tips	19 - 60	1.8	1	
		(3 (000 AAAA	49 21 A11	external circlips on shafts	an al a d Ala a	10 - 25	1.3	1	1
		ଠ <u>⊀</u> ୭° MM	49 21 A21		angled tips	19 - 60	1.8	1	1
00 19 58 LE	081920		Tool Roll, em	pty, 8 compartments					281

Pliers Sets

Ideally stored and versatile: pliers sets in matching foam insert for workbench and workshop trolley

> In a foam tray for workbenches and tool trolleys

- > Clearly organised storage of tools
- > Precisely-sized recesses for holding the pliers
- > Foam tray dimensions (W x H x D): 335 x 165 x 33 mm
- > Material: two colour, closed pore foam



00 20 01 V02 Pliers Set "SRZ"



00 20 01 V09 Pliers Set "SRZ II"

Article No.	EAN 4003773-				Number	ے ل g		
00 20 01 V02	069652		Pliers Set "S	RZ", six precision circlip pliers in a foam tray				
		C 3	48 11 J1		1			
		Ö	48 11 J2	Precision Circlip Pliers for internal circlips in bore holes	1			
		° <u>∡9</u> 0°	48 21 J21		1			
		23 4444	49 11 A1		1			
		0 //// 49 11 A2	Precision Circlip Pliers for external circlips on shafts	1				
		© MM <u>∡</u> 90°	49 21 A21		1			
00 20 01 V09	073291		Pliers Set "S	RZ II", four precision circlip pliers in a foam tray		820		
		C	48 11 J2		1			
		° <u>∡9</u> 0°	48 21 J21	Precision Circlip Pliers for internal circlips in bore holes	1			
		ÖMM	49 11 A2	Description Circulta Different enternal similiar an aboffs	1	1		
		Ö MM ∡90°	49 21 A21	Precision Circlip Pliers for external circlips on shafts	1	-		

Precision Circlip Pliers Set

- > Attractive sales packaging with Euro standard perforation
- > Contains common Precision Circlip Pliers for highest requirements
- > Sturdy plastic packaging, also suitable for storage of the pliers





00 20 03 SB

00 20 04 SB

Article No.	EAN 4003773-				Style	Capacity Ø mm	Tips Ø mm	Quantity	۵۵ g
00 20 03 SB	050100		Precision C	irclip Pliers Set, 4 parts					685
		OFI	48 11 J1	Precision Circlip Pliers, for internal		12 - 25	1.3	1	
			48 11 J2	circlips in bore holes	straight ting	19 - 60	1.8	1	
			49 11 A1	Precision Circlip Pliers, for external	straight tips	10 - 25	1.3	1	
		ÖTIM	49 11 A2	circlips on shafts		19 - 60	1.8	1	
00 20 04 SB	062417		Precision C	recision Circlip Pliers Set, 8 parts					
			48 11 J1	Precision Circlip Pliers, for internal		12 - 25	1.3	1	
			48 11 J2	circlips in bore holes	at the factor of the state of	19 - 60	1.8	1	
			49 11 A1	Precision Circlip Pliers, for external	straight tips	10 - 25	1.3	1	
		ÖTIM	49 11 A2	circlips on shafts		19 - 60	1.8	1	1
			48 21 J11	Precision Circlip Pliers, for internal		12 - 25	1.3	1	1
		♥ ♥♥ ₹90°	48 21 J21	circlips in bore holes	1.1.0	19 - 60	1.8	1	1
		0 ES MM	49 21 A11	Precision Circlip Pliers, for external	angled tips	12 - 25	1.3	1	1
			49 21 A21	circlips on shafts		19 - 60	1.8	1	1

Set of Circlip Pliers

- > Attractive sales packaging with Euro standard perforation
- > Contains common Circlip Pliers for internal and external circlips
- > Sturdy plastic packaging, also suitable for storage of the pliers





00 20 03 V02

00 20 04 V01

Article No.	EAN 4003773-				Style	Capacity Ø mm	Tips Ø mm	Quantity	۵'ک g	
00 20 03 V02	077640		Set of Circl	ip Pliers, 4 parts						
		63	44 11 J1	Circlip Pliers, for internal		12 - 25	1.3	1		
		0	44 11 J2	circlips in bore holes	at a faile that the s	19 - 60	1.8	1		
		23	46 11 A1	Circlip Pliers, for external	straight tips	10 - 25	1.3	1		
		0	46 11 A2	circlips on shafts		19 - 60	1.8	1		
00 20 04 V01	077633		Set of Circl	ip Pliers, 8 parts	I				890	
		69	44 11 J1	Circlip Pliers, for internal		12 - 25	1.3	1		
		0	44 11 J2	circlips in bore holes		19 - 60	1.8	1		
		29	46 11 A1	Circlip Pliers, for external	straight tips	10 - 25	1.3	1		
		0	46 11 A2	circlips on shafts		19 - 60	1.8	1		
		63 /000	44 21 J11	Circlip Pliers, for internal		12 - 25	1.3	1		
		_⊖ <u>⊀</u> 90°	44 21 J21	circlips in bore holes	1.1.0	19 - 60	1.8	1		
		1000	46 21 A11	Circlip Pliers, for external	angled tips	10 - 25	1.3	1	-	
		_© <u>∡9</u> 0°	46 21 A21			19 - 60	1.8	1	1	

Tool Box "SRZ" Precision Circlip Pliers

Well fixed, safely transported: Extensive range in handy case

- > High-quality, impact-resistant plastic case
- > Contains common Precision Circlip Pliers for highest requirements
- > Precisely-sized recesses for holding the pliers
- > Clearly organised storage of tools
- > Dimensions, exterior (W x H x D): 260 x 80 x 210 mm



Article No.	EAN 4003773-				Style	Capacity Ø mm	Tips Ø mm	Number	۲ d	
00 21 25	050131		Tool Box "S	RZ", Precision Circlip Pliers, 8 parts						
		C 3	48 11 J1	Precision Circlip Pliers for internal		12 - 25	1.3	1		
		O	48 11 J2	circlips in bore holes	straight ting	19 - 60	1.8	1		
		23 4444	49 11 A1	Precision Circlip Pliers for external	straight tips	10 - 25	1.3	1		
		0 MM	49 11 A2	circlips on shafts		19 - 60	1.8	1		
		U <u>×9</u> 0°	48 21 J11	Precision Circlip Pliers for external		12 - 25	1.3	1		
		$O \underline{\times 90^{\circ}}$	48 21 J21	circlips on shafts	angled ting	19 - 60	1.8	1	_	
		C AAAA /000	49 21 A11	Precision Circlip Pliers for external circlips on shafts	angled tips	10 - 25	1.3	1		
		° MM ∡90°	49 21 A21	circlips on shafts		19 - 60	1.8	1		



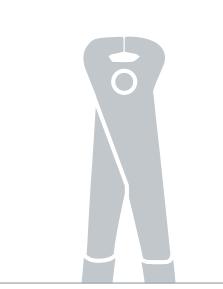


Carpenters' Pincers and Concreters' Nippers

2007 1 4G

BOHER CUP

Carpenters' Pincers	74		
Hammerhead Style Carpenters' Pincers	74		
Farriers' Pincers (Tear-off Pliers for vehicle bodywork)	75		
Potters' Pincers (Brick Pincers)	75		
End Cutting Nippers	75		
Concreters' Nippers (Tower Pincers, Steel Fixers' Nippers)	76		
High Leverage Concreters' Nippers			



Carpenters' Pincers

> For heavy duty

- > Specially favoured by craftsmen for their precise workmanship
- > Extreme wear resistance and well balanced
- > Cutting edge hardness approx. 60 HRC
- > Special tool steel, forged, oil-hardened
- > DIN ISO 9243



50 00 160



50 00 210



50 00 160

							Cutting capacities	
	EAN	>						52
Article No.	4003773-	mm		Pliers	Head	Handles	Ømm	g
50 00 160	023111	160					1.8	225
50 00 180	021940	180					2.0	320
50 00 210	021957	210			a a liab a d		2.2	425
50 00 225	021964	225		black atramentized	polished		2.2	440
50 00 250	022930	250					2.2	570
50 00 300	039662	300					2.4	862
50 01 160	035275	160					1.8	235
50 01 180	035282	180					2.0	330
50 01 210	035299	210					2.2	445
50 01 225	035305	225		black atramentized	polished	plastic coated	2.2	465
50 01 250	035312	250	1				2.2	595
50 01 300	016915	300					2.4	903

Hammerhead Style Carpenters' Pincers

> With striking face to hammer down nails

- > Cutting edge hardness approx. 60 HRC
- > Special tool steel, forged, oil-hardened
- > DIN ISO 9243





Multi-functional: driving in and pulling nails

						Cutting capacities	
	EAN	4- >				\bullet	5
Article No.	4003773-	mm	Pliers	Head	Handles	Ømm	g
51 01 210	023104	210	black atramentized	polished	plastic coated	2.2	413

51 01 210

Farriers' Pincers

Tear-off Pliers for vehicle bodywork

> The ideal pliers for the farrier

- > With small head and anvil for redirecting horseshoe-nails
- > Also suitable for dismantling work in vehicle body workshops
- > Cutting edges additionally hardened; cutting edge hardness approx. 59 HRC
- > Special tool steel, forged, multi stage oil-hardened



55 00 300





Potters' Pincers

Brick Pincers

> For pottery work

- > With wire cutter for soft wire
- > Cutting edges additionally hardened; cutting edge hardness approx. 59 HRC
- > Special tool steel, forged, multi stage oil-hardened



58 30 225

Article No.	EAN 4003773-	∢→ mm	Pliers	Head	Head width mm	۵'ک g
58 30 225	014331	225	black atramentized	polished	20	347

End Cutting Nippers

- The head shape provides optimised movement when tightening steel mesh knots during reinforced concrete work
- > With cutting edges for soft and hard wire
- > Also suitable for twisting and cutting binding wire
- > Cutting edges additionally hardened; cutting edge hardness approx. 61 HRC
- > High-grade special tool steel, forged, multi stage oil-hardened



68 01 280



						Cut	ting capaci	ties	
	EAN	>				\bullet			52
Article No.	4003773-	mm	Pliers	Head	Handles	Ømm	Ømm	Ømm	g
68 01 160	013792	160			4.0	2.8	2.3	202	
68 01 180	013808	180	black atramentized	polished	plastic coated	4.0	3.2	2.5	284
68 01 200	013815	200			plastic coateu	4.0	3.5	2.8	319
68 01 280	077664	280				4.5	4.0	3.2	465

Concreters' Nippers

Tower Pincers, Steel Fixers' Nippers

- > To twist and cut wire in one operation: fast, reliable and economical
- > Cutting edges additionally hardened; cutting edge hardness approx. 61 HRC
- > High-grade special tool steel, forged, multi stage oil-hardened
- > DIN ISO 9242

99 00 220 K12

> With 12 mm head, particularly suitable for tile paving work



99 00 280



99 00 220 K12



99 01 220



99 04 280





						Cutting c	Cutting capacities		
Article No.	EAN 4003773-	∢→ mm		Pliers	Head	Handles	Ømm	Ø mm	۵۵ g
99 00 200	014393	200					1.8	1.4	230
99 00 220	013273	220		black atramentized			2.4	1.6	315
99 00 250	013280	250			polished		2.4	1.6	405
99 00 280	014096	280					2.8	1.8	455
99 00 300	014409	300					3.1	1.8	510
99 00 220 K12	027812	220		black atramentized	polished		2.4	1.6	315
99 01 200	021452	200				plastic coated	1.8	1.4	247
99 01 220	021469	220					2.4	1.6	334
99 01 250	021483	250		black atramentized	polished		2.4	1.6	429
99 01 280	021490	280					2.8	1.8	480
99 01 300	014416	300					3.1	1.8	548
99 04 220	048398	220					2.4	1.6	315
99 04 250	048213	250		bright zinc plated			2.4	1.6	405
99 04 280	048220	280					2.8	1.8	455

High Leverage Concreters' Nippers

high lever transmission

- 25 % less effort required compared to conventional concreters' nippers of the same size
- Extra-slim form for tying deep mounted steel rods
- > To lace concrete reinforcing steel with binding wire from a roll
- > Wire is twisted and cut in a single pass
- > High-leverage joint, minimising strain, even when thick binding wires are used
- > The high damping of the cutting stroke on cutting through the binding wire reduces the strain on tendons and muscles
- > Cutting edges additionally hardened; cutting edge hardness approx. 61 HRC
- > High-grade special tool steel, forged, multi stage oil-hardened > DIN ISO 9242

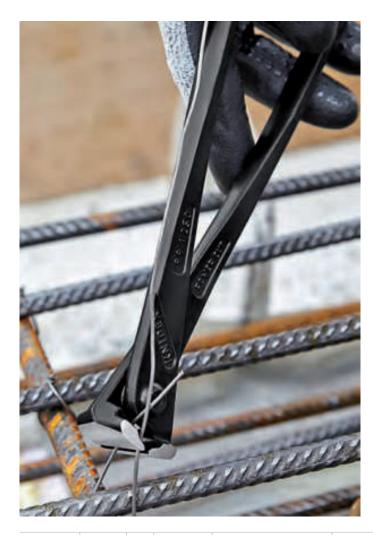


99 10 250





99 14 250





							Cutting capacities			
Article No.	EAN 4003773-	∢→ mm		Pliers	Head	Handles	Ø mm	Ø mm	Head width Ø mm	5
AITICIC NO.	1000110			THEIS	ncau	Tidridies	0 mm	0 mm	0 mm	y
99 10 250	071396	250		black atramentized	polished		3.3	1.8	25	350
99 10 300	022398	300					3.8	2.0	25	501
99 11 250	071402	250		black atramantized	ed polished	d plastic coated	3.3	1.8	25	350
99 11 300	042365	300		black atramentized			3.8	2.0	25	537
99 14 250	071419	250		bright zinc plated			3.3	1.8	25	350
99 14 300	028116	300					3.8	2.0	25	505

Cutting Pliers

10-160 HADE RH GERMANT

NER INT F. IDDOX I

Contraction of the second seco

2

Diagonal Cutters for plastics						
High Leverage Flush Cutter						
Diagonal Cutter for fibre optics						
Diagonal Cutters						
Diagonal Cutters for electromechanics	86					
KNIPEX X-Cut [®] – Compact Diagonal Cutters	87					
High Leverage Diagonal Cutters	88					
KNIPEX TwinForce [®] – High Performance Diagonal Cutters						
High Leverage Centre Cutters						
KNIPEX CoBolt [®] S – Compact Bolt Cutters						
KNIPEX CoBolt [®] – Compact Bolt Cutters						
KNIPEX CoBolt [®] XL – Compact Bolt Cutters						
Bolt Cutters						
Concrete Mesh Cutter						
Bolt End Cutting Nippers						
High Leverage End Cutting Nippers						
End Cutting Nippers						
End Cutting Nippers for mechanics						



Diagonal Cutters for plastics

> Cutting face flush

- > For nearly flush cutting of moulded plastic components from sprues
- > Cuts soft materials such as lead in a flush cut
- > With opening spring
- > Vanadium electric steel; forged, oil-hardened







	EAN	>				27
Article No.	4003773-	mm		Head	Handles	g
72 01 140	043713	140				120
72 01 160	041245	160	//	polished	plastic coated	164
72 01 180	046837	180				193
72 02 125	044215	125	//	polished	with multi-component grips	109
72 11 160	046813	160	/ <u>⊀</u> 45° MM	polished	plastic coated	156
72 21 160	046820	160	/ ₹85° MM	polished	plastic coated	165
72.00.04	052445	5	. (70.04			
72 09 01	053415	Pressure	spring for 72 01			

High Leverage Flush Cutter

for soft metal and plastic

- > For the flush cutting of soft materials, e.g. plastic, aluminium, copper, lead
- > Permits the energy-saving cutting of thick work components made of soft metal and plastic
- $>20^\circ$ angled head with single-sided joint bar and diagonal cutting edge for flush cutting; with space for gripping
- > Opening spring and locking device are integrated in the handles also for comfortable work and protected transport
- > Precision cutting edges for soft material
- > Cutting edges additionally hardened; cutting edge hardness approx. 59 HRC
- > Chrome vanadium electric steel, forged, multi stage oil-hardened



72 62 200





Clean, flush cutting of copper conductor rails



Ideal for the flush cutting plastic sprues with large diameters

						Cutting capacities	
	EAN	∢ —▶				\bigcirc	52
Article No.	4003773-	mm		Pliers	Handles	Ø mm	g
72 62 200	081913	200	MW 🗾	black atramentized	with slim multi-component grips	6.0	375

Diagonal Cutter for fibre optics

- > Specially developed for cutting fibre optics (glass fibre cables)
- > Cutting face flush
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 63 HRC
- > With opening spring
- > Vanadium electric steel, forged, multi stage oil-hardened





	EAN	∢ →				52
Article No.	4003773-	mm		Head	Handles	g
72 51 160	028031	160	MW 🗾	polished	plastic coated	166

KNIPEX WORLD OF DIAGONAL CUTTERS

With four tailor-made diagonal cutters, KNIPEX provides solutions for every application. An extraordinary variety ensures an excellent response from the "KNIPEX World of diagonal cutters" to whatsoever specification.

KNIPEX-Diagonal Cutter The classic model. The indispensable cutting tool for versatile use.

KNIPEX-High Leverage Diagonal Cutter The robust. For very tough, continuous use.

KNIPEX X-Cut[®] The all-rounder. Compact and light. Powerful and precise.

KNIPEX TwinForce®

The superior model. For comfortable cutting, repetitive cutting or extremely hard cutting jobs.

Diagonal Cutter



Long cutting edges for cutting cable; also precise enough for the finest stranded wires Hand force is multiplied by 12

High Leverage Diagonal Cutter



Forged on hinged joint for robust use Hand force is multiplied by 13

TwinForce[®]



The reapplying cutter Double-hinged design Hand force is multiplied by 39

X-Cut[®]



Box joint: greatest stability with little weight Hand force is multiplied by 16





Diagonal Cutters

- > The indispensable diagonal cutter for all-round use
- > High-quality material and precise workmanship for long service life
- > Precision cutting edges for soft and hard wire
- > Clean cutting of thin copper wires, also at the cutting edge tips
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 62 HRC
- > Narrow head style for use in confined areas

Clean cutting of thin copper wires, also at the cutting edge tips

- > Vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 5749

70 05 160 T / 70 05 180 T / 70 06 160 T / 70 06 180 T*

> Pliers with tether attachment point for mounting a fall protection



CUTTING PLIERS



							Cu	tting capac	ities	
	EAN	-→								52
Article No.	4003773-	mm		Pliers	Head	Handles	Ømm	Ømm	Ømm	g
70 01 110	014324	110	-				3.0	2.0	1.2	80
70 01 125	013402	125		black atramentized	polished	plastic coated	3.0	2.3	1.5	80
70 01 140	013419	140	-		l'	•	4.0	2.5	1.8	126
70 01 180	018070	180					4.0	3.0	2.5	200
70 01 160	013426	160		black atramentized	polished	plastic coated	4.0	3.0	2.0	171
70 02 125	034025	125					3.0	2.3	1.5	119
70 02 140	023098	140		black atramentized	polished	with multi-component grips	4.0	2.5	1.8	150
70 02 180	034049	180					4.0	3.0	2.5	252
70 02 160	034032	160		black atramentized	polished	with multi-component grips	4.0	3.0	2.0	206
70 05 125	039501	125	_		chrome		3.0	2.3	1.5	119
70 05 140	039488	140		chrome plated	plated	with multi-component grips	4.0	2.5	1.8	154
70 05 180	043706	180					4.0	3.0	2.5	246
70 05 160	039600	160	P4	chrome plated	chrome plated	with multi-component grips	4.0	3.0	2.0	207
70 05 180 T	080039	180	P1	chrome plated	chrome plated	with multi-component grips and integrated tether attachment point	4.0	3.0	2.5	258
70 05 160 T	080022	160	P1	chrome plated	chrome plated	with multi-component grips and integrated tether attachment point	4.0	3.0	2.0	210
70 06 125	018124	125				•	3.0	2.3	1.5	121
70 06 140	040293	140	▶ 🕀 1000 V 🖄 📻	chrome plated	chrome	insulated with multi-component grips,	4.0	2.5	1.8	160
70 06 180	033813	180			plated	VDE-tested	4.0	3.0	2.5	254
70 06 180 T	081470	180	▶ ●	chrome plated	chrome plated	insulated with multi-component grips with integrated insulated tether attachment point, VDE tested	4.0	3.0	2.5	270
70 06 160	021995	160	🏓 🛧 1000 V 🖄 🚰	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	4.0	3.0	2.0	216
70 06 160 T	081463	160	▶ ● 🛧 1000 V 🖄 🚭	chrome plated	chrome plated	insulated with multi-component grips with integrated insulated tether attachment point, VDE tested	4.0	3.0	2.0	230
70 07 180	018179	180	▶◀ ଛ 1000 V 🕸 🗃	chrome plated	chrome plated	with dipped insulation, VDE-tested	4.0	3.0	2.5	269
70 07 160	018155	160	🏓 🛧 1000 V 🖄 🚅	chrome plated	chrome plated	with dipped insulation, VDE-tested	4.0	3.0	2.0	227
70 11 110	018193	110	MW 🗲	black atramentized	polished	plastic coated	3.0	2.0	1.2	91
70 15 110	029649	110		chrome plated	chrome plated	with multi-component grips	3.0	2.0	1.2	98
70 26 160	018223	160	📂 🎘 1000 V 🖄 🚰	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	4.0			216

Diagonal Cutter

for electromechanics

- > With sharp, precisely aligned cutting edges
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 63 HRC
- >Lap joint
- > Vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 5749

76 12 125

> Low-friction double spring for gentle and even opening

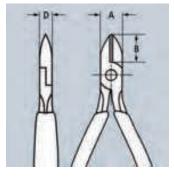
76 22 125

> Low-friction double spring for gentle and even opening; without bevel for flush cutting of soft wires

76 81 125

> Particularly tapered head with small bevel for work in confined areas (cable harnesses, multiple stranded wires)





							Cutting capacities			Di	mensio	ns		
Article No.	EAN 4003773-	∢ ► mm		Pliers	Head	Handles	Ø mm	0 Ø mm	0 Ø mm	Ø mm	A Ø mm	B Ømm	D Ømm	۲۵ g
76 01 125	044482	125		black atramentized	polished	plastic coated	0.4 - 3.0	2.3	1.5	0.6	14.5	16.0	9.0	85
76 03 125	048923	125		chrome plated	chrome plated	plastic coated	0.4 - 3.0	2.3	1.5	0.6	14.5	16.0	9.0	85
76 05 125	005315	125		chrome plated	chrome plated	with multi-component grips	0.4 - 3.0	2.3	1.5	0.6	14.5	16.0	9.0	118
76 12 125	048015	125	MW 🗲	black atramentized	polished	with multi-component grips	0.4 - 3.0	2.3	1.5	0.6	14.5	16.0	9.0	112
76 22 125	048022	125		black atramentized	polished	with multi-component grips	0.4 - 2.5				14.5	16.0	9.0	107
76 81 125	040644	125		black atramentized	polished	plastic coated	0.4 - 1.7	1.3	0.8		14.5	16.0	9.0	85

KNIPEX X-Cut®

Compact Diagonal Cutters high lever transmission

- Cuts finest strands as well as multi-core cables and piano wires
- ▶ Powerful, light and universal
- > High cutting performance with minimum effort due to optimum co-ordination of the cutting edge angle and transmission ratio
- > Box-joint design: highest stability with low weight
- > Doubly supported joint axis for heavy duty
- > Large opening width for thicker cables
- > Cuts precisely, even through fine copper wires
- > Compact, low-weight construction
- > Universally usable, in the assembly, maintenance and production
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened
- > Precision cutting edges additionally induction-hardened, cutting edge hardness approx. 62 HRC
- > DIN ISO 5749

73 05 160 T / 73 06 160 T*

> Pliers with tether attachment point for mounting a fall protection



73 06 160

40% less effort

required compared to diagonal cutters of the same length. With double mounted hinged joint.







Box-joint design: highest stability with low weight

								Cutti	ng capa	cities		
Article No.	EAN 4003773-	←→ mm		Pliers	Head	Handles	Ø mm	Ø mm	Ømm	Ø mm	Ø mm	۲۵ g
73 02 160	075127	160	P4	black atramentized	polished	with multi-component grips	4.8	3.8	2.7	2.2	12.0	175
73 05 160	075134	160		chrome plated	chrome plated	with multi-component grips	4.8	3.8	2.7	2.2	12.0	175
73 05 160 T	080077	160	P4	chrome plated	chrome plated	with multi-component grips and integrated tether attachment point	4.8	3.8	2.7	2.2	12.0	180
73 06 160	075141	160	▶ 1000 V	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	4.8	3.8	2.7	2.2	12.0	175
73 06 160 T	081487	160	▶ 1000 V	chrome plated	chrome plated	insulated with multi-component grips with integrated insulated tether attachment point, VDE tested	4.8	3.8	2.7	2.2	12.0	185

*Other tools with tethering can be found from page 266

High Leverage Diagonal Cutters

> For very tough, continuous use

- > High cutting performance with minimum effort due to optimum co-ordination of the cutting edge angle and transmission ratio
- > Precision cutting edges additionally induction-hardened (cutting edge hardness approx. 64 HRC), for all sorts of wire including piano wire
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened > DIN ISO 5749

Style 1

> With opening spring; to be activated if required

Style 2

> 12° angled head offers clearance for gripping

Length 250 mm

> The 250-mm-long diagonal cutter is suitable for copper conductors up to 16 mm² and aluminium conductors up to 35 mm²

74 02 200 / 74 02 250 / 74 06 250 T / 74 22 200 / 74 22 250 T*

> Pliers with tether attachment point for mounting a fall protection





20% less effort

required compared to high-leverage diagonal cutters of the same length. With integrated forged joint axle.



74 12: just gentle sliding with your thumb will activate the opening spring



74 12: opening spring in deactivated position









With integrated forged axle for heavy duty

								Cut	ting capac	ities	
	EAN	∢ —▶									52
Article No.	4003773-	mm		Style	Pliers	Head	Handles	Ømm	Ømm	Ømm	g
74 01 140	039747	140		0				3.1	2.0	1.5	131
74 01 160	033141	160		0	_			3.4	2.5	2.0	178
74 01 180	022008	180		0	black atramentized	polished	plastic coated	3.8	2.7	2.2	241
74 01 200	034056	200		0				4.2	3.0	2.5	263
74 01 250	034063	250		0				4.6	3.5	3.0	391
74 02 140	042419	140		0				3.1	2.0	1.5	157
74 02 160	023081	160		0				3.4	2.5	2.0	209
74 02 180	023074	180		0	black atramentized	polished	with multi-component grips	3.8	2.7	2.2	273
74 02 200	040309	200		0				4.2	3.0	2.5	304
74 02 250	042402	250		0				4.6	3.5	3.0	437
74 02 200 T	080084	200		0		a a l'ala a d	with multi-component grips and integrated	4.2	3.0	2.5	305
74 02 250 T	080091	250		0	black atramentized	polished	tether attachment point	4.6	3.5	3.0	460
74 05 140	039617	140		0				3.1	2.0	1.5	157
74 05 160	022961	160		0				3.4	2.5	2.0	209
74 05 180	022978	180		0	chrome plated	chrome plated	with multi-component grips	3.8	2.7	2.2	270
74 05 200	035367	200		0		plated		4.2	3.0	2.5	303
74 05 250	039754	250		0	_			4.6	3.5	3.0	440
74 06 160	040705	160		0				3.4	2.5	2.0	215
74 06 180	022985	180	▶ 4 ≙ 1000 V	0		chrome	insulated with multi-component grips,	3.8	2.7	2.2	280
74 06 200	033820	200	2 6	0	chrome plated	plated	VDE-tested	4.2	3.0	2.5	304
74 06 250	041955	250		0	_			4.6	3.5	3.0	453
74 06 200 T	081494	200	▶ ● 🛧 1000 V	0	chrome plated	chrome	insulated with multi-component grips with integrated insulated tether attachment	4.2	3.0	2.5	305
74 06 250 T	081500	250	≙€	0	chiome plated	plated	point, VDE tested	4.6	3.5	3.0	465
74 07 200	018414	200	卢 🕈 🛧 1000 V	0	chroma platad	chrome	with dispad inculation V/DE tostad	4.2	3.0	2.5	328
74 07 250	018421	250	æ	0	chrome plated	plated	with dipped insulation, VDE-tested	4.6	3.5	3.0	510
74 12 160	065111	160		1		a a l'ale a d		3.4	2.5	2.0	209
74 12 180	060192	180	M	1	black atramentized	polished	with multi-component grips	3.8	2.7	2.2	273
74 21 180	069973	180		2				3.8	2.7	2.2	235
74 21 200	050483	200	▶4 <u>∕1</u> 2°	2	black atramentized	polished	plastic coated	4.2	3.0	2.5	258
74 21 250	045021	250		2				4.6	3.5	3.0	390
74 22 200	051831	200	400	2				4.2	3.0	2.5	300
74 22 250	071372	250	▶ <u>√1</u> 2°	2	black atramentized	polished	with multi-component grips	4.6	3.5	3.0	437
74 22 200 T	080107	200		2			with multi-component grips and integrated	4.2	3.0	2.5	305
74 22 250 T	080114	250	_ ▶ ¶ <u>∡1</u> 2°	2	black atramentized	polished	tether attachment point	4.6	3.5	3.0	460

KNIPEX TwinForce®

High Performance Diagonal Cutters

- The superior High-Leverage Diagonal Cutter with patented double joint
- > Ideal transmission of force due to double-hinged design
- > Reliably cuts all types of wire, including steel tape
- > For rough or very fine cutting
- > Low cutting impact: gentle on hands. The tension on muscles and tendons is relieved
- > For comfortable cutting, repetitive cutting or extremely hard cutting jobs
- > High degree of stability and zero-backlash due to precisely milled forged-in axles
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened
- > Precision cutting edges additionally induction-hardened, cutting edge hardness approx. 63 – 64,5 HRC
- > DIN ISO 5749

73 72 180 F

> With opening spring to simplify reapplication and for repetitive cutting



The high performance diagonal cutters with opening spring for easier reapplication and for heavy use



The opening spring can be easily activated and deactivated by a press of the thumb



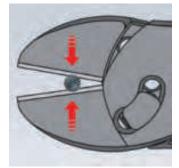
73 72 180 F

Cuts again 50% easier than the tried and tested KNIPEX high leverage diagonal cutters

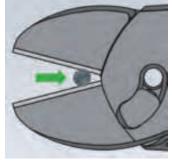
The option to reapply the tool. The KNIPEX TwinForce[®] cuts even 4 mm thick wire without great effort when reapplied two or three times.

Conventional high leverage diagonal cutters either cannot cut these diameters or only with very great effort.

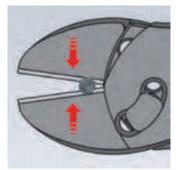
KNIPEX TwinForce® Reapplying



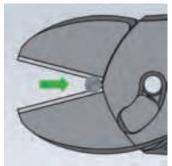
Insert the wires as close to the hinge as possible. In case of cutters with very high transmission, the width of the gap between the cutting edges close to the fulcrum may be less than the thickness of the wire. Wires may slip forward when the cutting starts.



First make a notch in the wire using the KNIPEX TwinForce® until the required hand force increases considerably. Now open the pliers and slide the wire backwards towards the joint. Hold the cutting edge in the notches you have made in step 1.

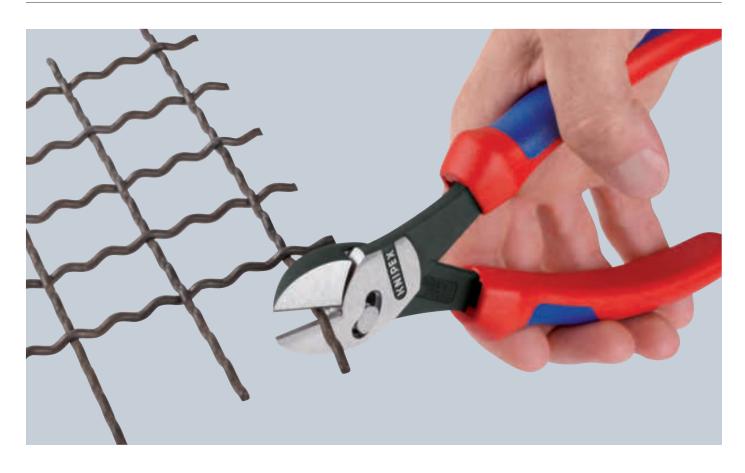


Continue cutting in the same location along the wire. Now cutting is much more easier because the wire remains in place closer to the fulcrum.



You can repeat this process if necessary.

							Ømm Ømm Ømm Ømm				
Article No.	EAN 4003773-	∢→ mm		Pliers	Head	Handles	Ø mm	0 Ø mm	Ø mm	Ø mm	۵۵ g
73 71 180	074762	180	PATENTED	black atramentized	polished	plastic coated	5.5	4.6	3.2	3.0	255
73 72 180	074779	180	PATENTED	black atramentized	polished	with multi-component grips	5.5	4.6	3.2	3.0	280
73 72 180 F	077657	180		black atramentized	polished	with multi-component grips	5.5	4.6	3.2	3.0	280



High Leverage Centre Cutters

- > With integrated forged axle for heavy duty
- > With precision cutting edges for soft, hard and piano wire
- > Cuts thick wires with less effort than other diagonal cutters of the same length
- > Centric precision cutting edges
- > High cutting performance with minimum effort due to optimum co-ordination of the cutting edge angle and transmission ratio
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened



74 91 250



The cutting edges are in the centre of the cutter head

							Cutting c	apacities	5	
	EAN	∢ —▶				\bigcirc	\bigcirc			52
Article No.	4003773-	mm	Pliers	Head	Handles	Ømm	Ømm	Ømm	Ømm	g
74 91 250	034070	250	black atramentized	polished	plastic coated	5.0	5.0	3.8	3.5	395

KNIPEX CoBolt[®] S

KNIPE

Compact and powerful

In a handy length of 160 mm

KNIPEX CoBolt® S

Compact Bolt Cutters

- Specially suitable for small hands
- > Precision cutting edges for soft and hard wire as well as piano wire
- > Cuts components such as bolts, nails, rivets etc. up to \emptyset 4.4 mm
- > Extremely high cutting capacity with little effort required due to extremely effective joint design
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC
- > The microstructure on cutters keeps the material to be cut in a good insertion position: makes optimal use of the mechanics
- > With gripping surface below the joint for gripping and pulling wires from Ø 1.0 mm
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened



71 01 160

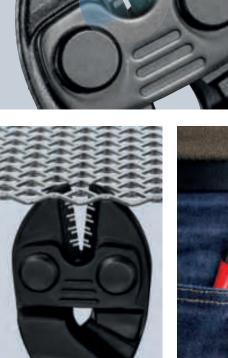
71 31 160







Powerful through to the tips





Slim head for ideal accessibility

KNIPEX

Compact, light and always to hand

						Cutting o	apacities	5	
	EAN	-→			\bullet				52
Article No.	4003773	mm	Pliers	Handles	Ømm	Ømm	Ømm	Ømm	g
71 01 160	082668	160	black atramentized	plastic coated	5.3	4.4	3.2	3.0	200
71 31 160	084587	160	black atramentized	plastic coated	5.3	4.4	3.2	3.0	200

KNIPEX CoBolt®

Compact Bolt Cutters

Clever muscle man

- > With precision cutting edges for soft, hard and piano wire
- > Cuts bolts, nails, rivets, etc. up to 5.2 mm dia.
- > Efficient joint design ensures exceptional cutting performance with little effort
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened
- > DIN ISO 5743

CoBolt[®]

60% less effort

required compared to conventional high-leverage diagonal cutters. The ingenious lever-action mechanism ensures an extremely favourable lever ratio with very little friction. The cutting force is about 30 times higher than the hand force applied.

- Micro-structured cutting edge reduces slipping of the material from the jaws
- With gripping surface below the joint for gripping and pulling wires with a diameter as from 1 mm

71 12 200

opening spring and locking device are integrated in the handles also for comfortable work and protected transport

71 02 200 T*

Pliers with tether attachment point for mounting a fall protection



Micro-structured cutting edge allows easy cutting of large cross-sections



Opening spring and locking device are integrated in the handles also for comfortable work and protected transport



With gripping surface below the joint for gripping and pulling wires with a diameter as from 1 mm



71 01 200



71 02 200



71 02 200 T



71 12 200

						Cutting capacities					
	EAN	4- >							42		
Article No.	4003773-	mm	Pliers	Handles	Ømm	Ømm	Ømm	Ømm	g		
71 01 200	033165	200	black atramentized	plastic coated	6.0	5.2	4.0	3.6	335		
71 02 200	047056	200		with slim multi-component grips	6.0	5.2	4.0	3.6	372		
71 02 200 T	080046	200	black atramentized	with multi-component grips and integrated tether attachment point	6.0	5.2	4.0	3.6	376		
71 12 200	066859	200	black atramentized	with slim multi-component grips	6.0	5.2	4.0	3.6	375		

- The recess in the blade allows easier cutting of thicker wires, e.g. for anchor bolts in false ceilings
- ► With gripping surface below the joint for gripping and pulling wires with a diameter as from 1 mm

71 32 200 / 71 32 200 T*

opening spring and locking device are integrated in the handles also for comfortable work and protected transport

71 32 200 T*

Pliers with tether attachment point for mounting a fall protection



71 31 200/71 32 200/71 32 200 T The recess in the blade allows easier cutting of thicker wires, e.g. for anchor bolts in false ceilings



71 31 200/71 32 200/71 32 200 T With gripping surface below the joint for gripping and pulling wires with a diameter as from 1 mm



							Cutting of	apacities		
	EAN	-				\bullet				52
Article No.	4003773-	mm	Style	Pliers	Handles	Ømm	Ømm	Ømm	Ømm	g
71 31 200	042327	200	3	black atramentized	plastic coated	6.0	5.2	4.0	3.6	330
71 32 200	066880	200			with slim multi-component grips	6.0	5.2	4.0	3.6	370
71 32 200 T	080060	200	3	black atramentized	with multi-component grips and integrated tether attachment point	6.0	5.2	4.0	3.6	374

71 31 200

► 20° angled head with single-sided joint bar and diagonal cutting edge for flush cutting; with space for gripping

71 22 200 / 71 22 200 T*

opening spring and locking device are integrated in the handles also for comfortable work and protected transport

71 22 200 T*

Pliers with tether attachment point for mounting a fall protection

71 41 200

the recess in the blade allows easier cutting of thicker wires, e.g. for anchor bolts in false ceilings



71 21 200



e 60 mm

71 22 200

							Cutting of	capacities		
Article No.	EAN 4003773-	∢ ► mm		Pliers	Handles	Ømm	Ø mm	Ø mm	Ømm	۲ _q
71 21 200	066866	200	<u>∡2</u> 0° ▶ ◀	black atramentized	plastic coated	6.0	5.2	4.0	3.6	320
71 22 200	066873	200			with slim multi-component grips	6.0	5.2	4.0	3.6	375
71 22 200 T	080053	200	<u>∡2</u> 0° ▶ ₩₩	black atramentized	with multi-component grips and integrated tether attachment point	6.0	5.2	4.0	3.6	379
71 41 200	066897	200	<u>∡2</u> 0° ▶ ◀	black atramentized	plastic coated	6.0	5.2	4.0	3.6	335

KNIPEX CoBolt® XL

Compact Bolt Cutters

The compact bolt cutters from KNIPEX now also available with long handles for one and two-hand operation. Up to a 40-fold increase of manual force.

- ► For powerful cutting of larger cross-sections as well as very hard materials
- Two-hand operation for maximum cutting force
- > 60 % less effort required compared to conventional high-leverage diagonal cutters
- > 40-fold increase of manual force due to special joint design
- > With gripping surface below the joint for gripping and pulling wires from Ø 1.0 mm
- > Induction-hardened precision blades: cutting edge hardness approx. 64 HRC
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened

71 01 250

> Straight cutting edges

71 31 250

> Blades with recess for easier cutting of larger cross-sections thanks to better leverage close to the fulcrum



71 01 250



71 31 250





Two-hand operation for maximum cutting force

					Cu	tting capac	ities	
A	EAN	>						52
Article No.	4003773-	mm	Pliers	Handles	Ømm	Ømm	Ømm	g
71 01 250	079637	250	black atramentized	plastic coated	5.6	4.0	3.8	465
71 31 250	079644	250	black atramentized	plastic coated	6.0	4.3	4.2	475



Bolt Cutters

Cuts hard components up to 48 HRC

- > Cutting capacity up to 48 HRC hardness
- > Robust cutting edges are additionally induction-hardened, cutting edge hardness approx. 62 HRC
- > Forged-in stopper with comfortable shock- absorber
- > Good access due to very flat construction of head and joint area
- > Ergonomically angled handles to minimise effort
- > Sturdy non-slip two-colour dual component handle sleeves
- > Precise adjustment (12 positions) by eccentric bolt
- > High cutting performance with minimum effort due to optimum co-ordination of the cutting edge angle and transmission ratio
- > Bolted cutter head, replaceable
- > Joint: special tool steel, forged
- > Handles: steel tube, powder-coated
- > Blade: chrome vanadium heavy-duty steel, forged, multi stage oil-hardened





Forged-in stopper with damping inserts: cushions the cutting stroke comfortably







						Cu	itting capaci	ties	
Article No.	EAN 4003773-	←→ mm		Head	Handles	HRC 19 Ømm	HRC 40 Ø mm	HRC 48 Ø mm	۵۵ g
71 72 460	066750	460				8.0	6.0	5.0	2100
71 72 610	066767	610		arey strementized	with multi component aving	9.0	8.0	7.0	2550
71 72 760	066774	760		grey atramentized	with multi-component grips	11.0	9.0	8.0	4250
71 72 910	066781	910				13.0	10.0	9.0	4950
71 79 460	066804	Spare cu	utter he	ad for 71 72 460 complete with screws	S				
71 79 610	066811	Spare ci	utter he	ad for 71 72 610 complete with screws	S				
71 79 760	066828	Spare ci	utter he	ad for 71 72 760 complete with screws	S				
71 79 910	066835	Spare cu	utter he	ad for 71 72 910 complete with screws	S				

Concrete Mesh Cutter

- > Cutting capacity up to 48 HRC hardness
- > Robust cutting edges are additionally induction-hardened, cutting edge hardness approx. 62 HRC
- > Forged-in stopper with comfortable shock- absorber
- > Good access due to very flat construction of head and joint area
- > Ergonomically angled handles to minimise effort
- > Sturdy non-slip two-colour dual component handle sleeves
- > Precise adjustment (12 positions) by eccentric bolt
- > High cutting performance with minimum effort due to optimum co-ordination of the cutting edge angle and transmission ratio
- > Bolted cutter head, replaceable
- > Joint: special tool steel, forged
- > Handles: steel tube, powder-coated
- > Blade: chrome vanadium heavy-duty steel, forged, multi stage oil-hardened





The special shape of the mesh cutter head, 71 82 950, enables it to cut structural steel that is lying down flat



71 82 950



						Cutting capacities			
	EAN	∢ —▶				HRC 19	HRC 40	HRC 48	52
Article No.	4003773-	mm		Head	Handles	Ømm	Ømm	Ømm	g
71 82 950	066798	950		grey atramentized	with multi-component grips	11.0	9.0	6.0	4110
71 89 950	066842	Spare of	utter hea	ad for 71 82 950 compl	ete with screws				

Bolt End Cutting Nippers

high lever transmission

- Powerful, compact, comfortable
- > Better handling, geater capacity and lower handforce required compared to conventional bolt end cutting nippers
- > With cutting edges for soft, hard and piano wire
- > Particularly high cutting capacity with minimum effort due to optimum transmission ratio
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC
- > Handles angled for better accessibility
- > Vanadium electric steel, forged, multi stage oil-hardened

61 02 200

> With slim multi-component grips without collar for better handling and easier transport; with large contact surface on the handles for better allotment of pressure and more comfort at work





Extraordinary cutting performance: also for piano wire

Particularly efficient for fence construction

							Cutting capacities				
	EAN	-→					\bullet				52
Article No.	4003773-	mm		Pliers	Head	Handles	Ømm	Ømm	Ømm	Ømm	g
61 01 200	033172	200	▶ २ <u>४</u> 85°	black atramentized	polished	plastic coated	1.0 - 6.0	4.0	3.5	3.0	435
61 02 200	067047	200	▶ ¶ <u>∡</u> 85°	black atramentized	polished	with slim multi-component grips	1.0 - 6.0	4.0	3.5	3.0	435

High Leverage End Cutting Nippers

> With cutting edges for soft, hard and piano wire

- > High cutting capacity with little effort due to optimum co-ordination of cutting edge angle and transmission ratio
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened
- > DIN ISO 5748





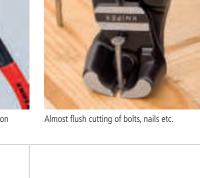
							Cutting o	apacities		
Article No.	EAN 4003773-	∢→ mm	Pliers	Head	Handles	O Ø mm	Ø mm	Ø mm	Ø mm	۵۵ g
67 01 140	043690	140				4.0	3.1	2.0	1.5	152
67 01 160	040620	160	black atramentized	polished	plastic coated	4.5	3.4	2.5	2.0	237
67 01 200	040637	200				5.0	3.8	3.0	2.5	318
67 05 140	017929	140				4.0	3.1	2.0	1.5	176
67 05 160	017936	160	chrome plated	chrome plated	with multi-component grips	4.5	3.4	2.5	2.0	266
67 05 200	017943	200				5.0	3.8	3.0	2.5	361



61 01 200



61 02 200





End Cutting Nippers

- The head shape provides optimised movement when tightening steel mesh knots during reinforced concrete work
- > With cutting edges for soft and hard wire
- > Also suitable for twisting and cutting binding wire
- > Cutting edges additionally hardened; cutting edge hardness approx. 61 HRC
- > High-grade special tool steel, forged, multi stage oil-hardened
- > DIN ISO 5748



68 01 180



68 01 280



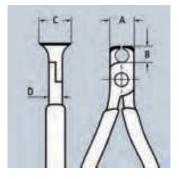
										Cutting capacities				
	EAN	∢ >					\bullet			52				
Article No.	4003773-	mm		Pliers	Head	Handles	Ømm	Ømm	Ømm	g				
68 01 160	013792	160					4.0	2.8	2.3	202				
68 01 180	013808	180		black atramentized	polished	plastic coated	4.0	3.2	2.5	284				
68 01 200	013815	200					4.0	3.5	2.8	319				
68 01 280	077664	280		black atramentized	polished	plastic coated	4.5	4.0	3.2	465				

End Cutting Nippers

for mechanics

- > With cutting edges for soft, hard and piano wire; also suitable for thin copper wires
- > Lap joint
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened
- > DIN ISO 5748





						Cutting capacities								
	EAN	>					\bigcirc	•		А	В	D	С	5
Article No.	4003773-	mm	Pliers	Head	Handles	Ømm	Ømm	Ømm	Ømm	Ømm	Ømm	Ømm	Ømm	g
69 01 130	017974	130	black atramentized	polished	plastic coated	0.4 - 2.0	1.3	1.0	0.8	16.0	7.5	10.0	20.0	111
69 03 130	018001	130	chrome plated	chrome plated	plastic coated	0.4 - 2.0	1.3	1.0	0.8	16.0	7.5	10.0	20.0	111

Pipe Wrenches and Water Pump Pliers

Pliers Wrenches	104
Pliers Wrench XL	106
Set of Pliers Wrenches	106
Pliers Wrench protective jaws	107
Multiple Slip Joint Spanner	108
KNIPEX Smart Grip [®] – Water Pump Pliers	108
KNIPEX Cobra [®] XS – Hightech Water Pump Pliers	109
KNIPEX Cobra [®] – Hightech Water Pump Pliers	110
KNIPEX Cobra [®] XL / XXL – Hightech Water Pump Pliers	112
KNIPEX Cobra®-Set	113
KNIPEX Cobra [®] matic – Water Pump Pliers	113
KNIPEX Cobra [®] QuickSet – Hightech Water Pump Pliers	114
KNIPEX Cobra [®] VDE – Hightech Water Pump Pliers	115
KNIPEX Cobra [®] ES – Water Pump Pliers	115
KNIPEX Alligator [®] – Water Pump Pliers	116
KNIPEX Alligator® XL – Water Pump Pliers	118
Water Pump Pliers with groove joint	119
Mini Water Pump Pliers with groove joint	119
Pipe Wrenches 90°	120
Pipe Wrenches 45°	120
Pipe Wrenches S-type	121
Pipe Wrenches S-Type with fast adjustment	121
Siphon- and Connector Pliers	123



Pliers Wrenches

Pliers and a wrench in a single tool

- ▶ Replaces the need for sets of metric and imperial spanners
- Smooth jaws for damage free installation of plated fittings working directly on chrome!
- > Adjustable tightening tool
- > Also excellent for gripping, holding, pressing and bending workpieces
- > Push the button for adjustment on the workpiece
- > Zero backlash jaw pressure prevents damage to edges of sensitive components
- > Parallel jaws give a more solid grip; its design allows flexible adjustment of all widths up to the specified maximum size
- > Reliable catching of the hinge bolt: no unintentional shifting
- > The ratchet type principle allows quick and easy tightening and release of all bolted connections
- > Lever transmission greater than 10 : 1 for strong gripping power
- > Fast adjustment by pushing a button directly on the workpiece
- > No unintentional shift of the gripping jaws and no slipping of the joint
- > Replaces the need for sets of metric and imperial spanners
- > Chrome vanadium electric steel, forged, oil-hardened

Length 150 mm

> Ideal multi-purpose wrench in pocket size; indispensable companion in emergency tool kit

Length 180 mm

> With narrow gripping jaws – for tightening situations that require a slim tool

86 01 180 / 86 01 250 / / 86 01 300 / 86 02 180 / 86 02 250 / 86 03 250 / 86 05 250 / 86 06 250

> With scaling for presetting the width apart from the workpiece

86 43 250

> 15° angled pliers handle provides space for counter screw connections or bolted fittings on surfaces

86 05 180 T / 86 05 250 T*

> Pliers with tether attachment point for mounting a fall protection



86 01 250



86 02 250

Litter

86 03 125



86 01 180



86 02 180



86 01 300

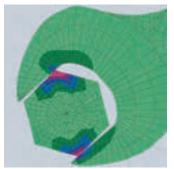


86 03 150

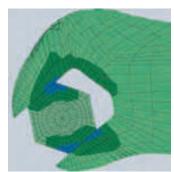


86 03 180





Conventional open end wrench: edge pressure causes surface damage



Pliers wrench: zero backlash contact pressure, no damage to edges

86 03 180

The smooth jaws grip all parallel surfaces in the capacity range with a high degree of pressure if necessary and open up almost unlimited application possibilities for the pliers wrench: e.g. for tightening locknuts, exerting pressure to activate the adhesive power of contact adhesives, edge breaking in tile work, snapping cable ties, utilisation as a small vice.



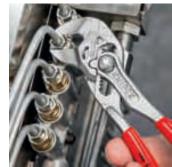
Working on plated fittings without damage of the surface



Replaces the need for sets of metric and imperial spanners



Ideal for bending operations



The mini pliers wrench for precision mechanics



Opening width lasered onto the pliers head (metric on the front and imperial on the back)



Fast adjustment at the touch of a button







									D	imensio	าร	
	EAN	∢ —▶				\Box	\Box	Adjustment	B1	B2	B3	52
Article No.	4003773-	mm		Pliers	Handles	Inch	mm	positions	mm	mm	mm	g
86 01 180	084273	180	\Box	black atramentized	plastic coated	1 1/2	40	15	5.0	8.0	12.0	230
86 01 250	082385	250	\Box	black atramentized	with non-slip plastic coating	2	52	19	8.0	8.0	14.0	465
86 01 300	084662	300	\Box	black atramentized	with non-slip plastic coating	2 3/4	60	24	9.5	9.5	15.0	645
86 02 180	084280	180	\Box	black atramentized	with multi-component grips	1 3/8	35	15	5.0	8.0	12.0	255
86 02 250	082392	250	\Box	black atramentized	with multi-component grips	2	52	19	8.0	8.0	14.0	485
86 03 125	077497	125	\Box	chrome plated	plastic coated	7/8	23	11	3.0	5.0	9.5	105
86 03 150	069676	150	\Box	chrome plated	plastic coated	1	27	14	4.7	7.0	10.5	175
86 03 180	035466	180	\Box	chrome plated	plastic coated	1 1/2	40	15	5.0	8.0	12.0	230
86 03 250	033837	250	\Box	chrome plated	plastic coated	2	52	19	8.0	8.0	14.0	465
86 03 300	041429	300	\Box	chrome plated	plastic coated	2 3/8	60	24	9.5	9.5	15.0	725
86 05 150	069928	150	\Box	chrome plated	with multi-component grips	1	27	14	4.7	7.0	10.5	193
86 05 180	047162	180	\Box	chrome plated	with multi-component grips	1 1/2	40	15	5.0	8.0	12.0	260
86 05 180 T	080121	180		chrome plated	with multi-component grips, with integrated tether attachment point for a tool tether	1 1/2	40	13	5.0	8.0	12.0	280
86 05 250	047841	250	\Box	chrome plated	with multi-component grips	2	52	19	8.0	8.0	14.0	490
86 05 250 T	080138	250		chrome plated	with multi-component grips, with integrated tether attachment point for a tool tether	2	52	19	8.0	8.0	14.0	500
86 06 250	082408	250	☐ <u>A</u> 1000 V A 1000 V	chrome plated	insulated with multi-component grips, VDE-tested	2	52	19	8.0	8.0	14.0	525
86 43 250	081296	250	✓ <u>15°</u>	chrome plated	plastic coated	1 3/4	46	17	8.0	8.0	14.0	535

Pliers Wrench XL

Pliers and a wrench in a single tool

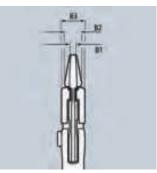
- ▶ The unique installation tool now also in 400 mm length
- ▶ For opening widths up to 85 mm / 3 3/8"
- > Also excellent for gripping, holding, pressing and bending workpieces
- > Optimised adjustment to the workpiece with hand-friendly position of grips
- > Reliable catching of the hinge bolt: no unintentional shifting
- > Lever transmission greater than 10 : 1 for strong gripping power
- > Adjustable tightening tool
- > Replaces diverse expensive, large open-end wrenches up to AF 85 mm or 3 3/8"
- > Parallel jaws give a more solid grip; its design allows flexible adjustment of all widths up to the specified maximum size
- > Smooth jaws, for damage free installation of quality union joints made from brass, red brass or stainless steel
- >Zero backlash jaw pressure prevents damage to edges of sensitive components
- > The ratchet type principle allows quick and easy tightening and release of all bolted connections
- > Push the button for adjustment on the workpiece
- > Chrome vanadium electric steel, forged, oil-hardened



86 03 400







									Dimensions			
	EAN	∢ →				\bigcirc	\bigcirc		B1	B2	B3	52
Article No.	4003773-	mm		Pliers	Handles	Inch	mm	Adjustment positions	mm	mm	mm	g
86 03 400	077312	400	\Box	chrome plated	plastic coated	3 3/8	85	25	12.5	16.0	20.0	1460

Set of Pliers Wrenches

5-piece

- > Tool roll made of hard-wearing polyester fabric
- > With hook-and-loop fastener
- > Equipped with pliers wrenches in five different lengths from 125 to 300 mm
- > Dimensions, open (L x H): 430 x 325 mm



00 19 55 S4

Article No.	EAN 4003773-			Quantity	۵'۵ g
00 19 55 S4	077817	Set of pliers	wrenches		2015
		86 03 125	Mini Pliers Wrench, pliers and a wrench in a single tool	1	
		86 03 150	Mini Pliers Wrench, pliers and a wrench in a single tool	1	
		86 03 180	Pliers Wrench, pliers and a wrench in a single tool	1	
		86 03 250	Pliers Wrench, pliers and a wrench in a single tool	1	
		86 03 300	Pliers Wrench, pliers and a wrench in a single tool	1	

Pliers Wrench

with roughened jaws especially for opening plastic cable connectors

- > Pliers wrench with special laser shearing for a good hold: grip, compress or loosen the head of the cable tie, all without cutting it
- > Roughened jaws for a better grip
- > Also excellent for gripping, holding, pressing and bending workpieces
- > No unintentional shift of the gripping jaws and no slipping of the joint
- > Lever transmission greater than 10 : 1 for strong gripping power
- > Fast adjustment by pushing a button directly on the workpiece
- > Infinitely variable gripping of parallel surfaces up to the specified capacity by means of parallel jaws
- > Zero-backlash, full-surface contact
- > Chrome vanadium electric steel, forged, oil-hardened



86 05 150 S02





	EAN	4-				$[\bigcirc]$	$[\bigcirc]$		52
Article No.	4003773-	mm		Pliers	Handles	Inch	mm	Adjustment positions	g
86 05 150 S02	071785	150	∞	chrome plated	with multi-component grips	1	27	14	193

Protective jaws

for 86 XX 180 / 86 XX 250 / 86 XX 300

- > The perfect choice for designer fittings and other highly sensitive materials thanks to the soft, smooth gripping surfaces
- > Permits use on chrome if the jaws of the pliers wrench have been damaged due to improper or rough use
- > Easy to attach by hand and reliable fixing on the gripping jaws by means of an internal snap hook
- > Set consisting of 3 pairs of protective jaws made of plastic







Article No.	EAN 4003773-	<u>ح'ک</u> g
86 09 180 V01	085805	9
86 09 300 V01	085812	18
86 09 250 V01	084143	24



Multiple Slip Joint Spanner

- > For metric and imperial nuts and screws with widths across flats from 10 to 32 mm (3/8" up to 1 1/4"); self-locking from 17 mm: no slipping on the workpiece
- >Zero-backlash gripping of metric or imperial hexagonal headed screws, no rounding of bolt heads
- > Reliable and tight gripping of rounded, rusty, or thick coated bolts and screws
- > Ideal for work on vehicle brake systems
- > Quick tightening of bolted connections using ratchet action
- > Push the button for adjustment on the workpiece, also possible with one hand only
- > Fine adjustment for optimum adaptation to different sizes of workpieces and a comfortable handle width
- > Box-joint design for high stability due to double guide
- > Reliable catching of the hinge bolt: no unintentional shifting
- > Favourable lever action: optimum transmission of force
- > Pinch guard prevents operators' fingers being pinched
- > Replaces a set of wrenches, ideal for tightening locknuts
- > Chrome vanadium electric steel, forged, multi stage oil-hardened







Self-locking: no slip on workpieces; less effort required



In operation on rusted nut with rounded edges

The Raptor Pliers combines the convenience of the comfortable push-button adjustment on the workpiece and the function of an all-purpose tightening tool. Jaw gripping with zero backlash prevents slipping on the bolt head or rounding edges. Even rusty or thick coated bolted connections which have no surfaces capable of being gripped reliably by a conventional spanner can be managed by the exceptionally powerful closing gripping jaws of this spanner.



Article No.	EAN 4003773-	←→ mm		Pliers	Head	Handles	Inch	mm mm	Adjustment positions	۲۵ g
87 41 250	054566	250	(PATENTED)	grey atramentized	polished	with non-slip plastic coating	10 - 32	15	328	328

KNIPEX SmartGrip®

Water Pump Pliers with automatic adjustment

- > Ideal for frequent changeovers to workpieces of different sizes
- > Automatic adjustment per one-hand operation both for right-handed and left-handed use
- > Good access to the workpiece thanks to the slim dimensions of head and joint area and flush joint bolt
- > Self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- > Gripping surfaces with special hardened teeth, teeth hardness approx.
 61 HRC: high wear resistance and stable gripping
- > Box-joint design for high stability due to double guide
- > Pinch guard prevents operators' fingers being pinched
- > Locking lever for space saving transport with reliable closed handles
- > Chrome vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 8976



85 01 250

Adjustment to suit the workpiece is automatic with the KNIPEX SmartGrip[®]!

Place the outer jaw on the workpiece, squeeze the handles – turn!



	EAN	∢ →					EO	EO	\Box	52
Article No.	4003773-	mm		Pliers	Head	Handles	Ø Inch	Ømm	mm	g
85 01 250	061304	250	PATENTED	grey atramentized	polished	with non-slip plastic coating	1 1/4	32	36	370

KNIPEX Cobra® XS

- Optimum access in the narrowest spaces: an especially compact design with a very slim head
- Single-handed fine adjustment by sliding for optimal fitting to various workpiece sizes
- ► Long-lasting secure grip ensured by high wear resistance
- > Gripping capacity Ø 28 mm, width across flats up to 24 mm at only 100 mm length
- > Box joint: high quality and durability provided by dual guide
- > Gripping surfaces with specially hardened teeth, hardness approx.
 60 HRC
- > Self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- > Pinch guard prevents operators' fingers being pinched
- > Fine adjustment with 11 adjustment positions
- > DIN ISO 8976



87 00 100



Self-locking and durable – all part of genuine KNIPEX water pump pliers



Naked truth: The grips are not coated to keep them as slim as possible. To ensure good grip, they are texturised on the outside



	EAN	∢ —▶					EO	C]	\Box	Adjustment	52
Article No.	4003773-	mm		Pliers	Head	Handles	Ø Inch	mm	mm	positions	g
87 00 100	085836	100	PATENTED	grey atramentized	polished	embossed, rough surface	1	28	24	11	62

KNIPEX Cobra®

Hightech Water Pump Pliers

- > Push the button for adjustment on the workpiece
- > Fine adjustment for optimum adaptation to different sizes of workpieces and a comfortable handle width
- > Self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- > Gripping surfaces with special hardened teeth, teeth hardness approx.
 61 HRC: high wear resistance and stable gripping
- > Box-joint design for high stability due to double guide
- > Reliable catching of the hinge bolt: no unintentional shifting
- > Pinch guard prevents operators' fingers being pinched
- > Chrome vanadium electric steel, forged, multi stage oil-hardened > DIN ISO 8976

87 02 250 / 87 02 250 T / 87 05 250

> With slim multi-component grips without collar for better handling and easier transport

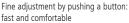
87 02 180 T / 87 02 250 T / 87 02 300 T*

> Pliers with tether attachment point for mounting a fall protection

KNIPEX Cobra[®] – the Hightech Water Pump Pliers.

No more time-consuming presetting of the required opening size. Just position the upper jaw to the workpiece, push button and move close the lower jaw, ingeniously simple.











Fast and firm adjustment directly on the workpiece











87 01 250



87 02 180





87 03 250



87 05 250



87 05 250





Teeth set against the direction of rotation have a self-locking effect and prevent slipping on the workpiece.



Article No.	EAN 4003773-	∢ → mm		Pliers	Head	Handles	Ø Inch	Ømm		Adjustment positions	۵ ^۲ ۵ g
87 01 125	069935	125		grey atramentized	polished	with non-slip plastic coating	1	27	27	13	85
87 01 150	060116	150		grey atramentized	polished	with non-slip plastic coating	1 1/4	32	30	11	145
87 01 180	022015	180		grey atramentized	polished	with non-slip plastic coating	1 1/2	42	36	18	170
87 01 250	022022	250		grey atramentized	polished	with non-slip plastic coating	2	50	46	25	335
87 01 300	034087	300		grey atramentized	polished	with non-slip plastic coating	2 3/4	70	60	30	530
87 02 180	042396	180		grey atramentized	polished	with multi-component grips	1 1/2	42	36	18	196
87 02 180 T	080145	180		grey atramentized	polished	with multi-component grips, with integrated tether attachment point for a tool tether	1 1/2	42	36	18	200
87 02 250	040316	250		grey atramentized	polished	with slim multi-component grips	2	50	46	25	366
87 02 250 T	080152	250		grey atramentized	polished	with multi-component grips, with integrated tether attachment point for a tool tether	2	50	46	25	370
87 02 300	029144	300		grey atramentized	polished	with multi-component grips	2 3/4	70	60	30	580
87 02 300 T	080169	300		grey atramentized	polished	with multi-component grips, with integrated tether attachment point for a tool tether	2 3/4	70	60	30	600
87 03 125	073949	125		verchromt	verchromt	with non-slip plastic coating	1	25	27	13	85
87 03 180	005667	180		verchromt	verchromt	with non-slip plastic coating	1 1/2	42	36	18	175
87 03 250	043805	250		verchromt	verchromt	with non-slip plastic coating	2	50	46	25	335
87 03 300	041382	300		verchromt	verchromt	with non-slip plastic coating	2 3/4	70	60	30	530
87 05 250	005681	250		verchromt	verchromt	with slim multi-component grips	2	50	46	25	366
87 05 300	014126	300		grey atramentized	polished	with multi-component grips	2 3/4	70	60	30	580
87 09 125	074151	Assort	ment of	spare parts for adjustn	nent for 86 / 87	/-125					
87 09 150	074168			spare parts for adjustn							
87 09 180	034360			e parts adjustment for a							

KNIPEX Cobra® XL / XXL

Water Pump Pliers

- > Greater gripping capacity but much lower weight than comparable pipe wrenches
- > Fast push-button adjustment directly on the workpiece, no unintentional slipping of the joint
- > Fine adjustment for optimum adaptation to different sizes of workpieces and a comfortable handle width
- > Self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- > Gripping surfaces with special hardened teeth, teeth hardness approx.
 61 HRC: high wear resistance and stable gripping
- > Box-joint design for high stability due to double guide
- > Pinch guard prevents operators' fingers being pinched
- > Chrome vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 8976



KNIPEX Cobra® XL length 400 mm – weight 1195 g







gripping the 2" union nut exceeds the capacity of a 2" pipe wrench; no confident working conditions

Article No.	EAN 4003773-	∢→ mm		Pliers	Head	Handles	Ø Inch	O] Ømm	mm	Adjustment positions	۵ ^۲ ۵ g	
87 01 400	005636	400		grey atramentized	polished	plastic coated	3 1/2	90	95	27	1195	
87 01 560	044321	560		grey atramentized	polished	plastic coated	4 1/2	115	120	20	2780	
87 09 400	034391	Range	je of spare parts adjustment for 87 400									
87 09 560	049845	Range	nge of spare parts adjustment for 87 560									

KNIPEX Cobra® Set

5-piece

- > High-quality roll-up bag made from durable polyester fabric
- > With hook-and-loop fastener
- > Equipped with KNIPEX Cobra® high-tech water pump pliers in five different lengths from 125 to 300 mm
- > Dimensions, open (L x H): 430 x 325 mm



00 19 55 S5

Article No.	EAN 4003773-				Quantity	۲ <mark>۵</mark>
00 19 55 S5	082613		Cobra® Set, 5	5-piece		1575
			87 01 125		1	
			87 01 150		1	
			87 01 180	KNIPEX Cobra®, Hightech Water Pump Pliers	1	
			87 01 250		1	
			87 01 300		1	
00 19 55 S5 LE	082620	Roll-up case for	pliers wrenche	s, empty		260

KNIPEX Cobra[®]...matic

Water Pump Pliers

- > All features of the KNIPEX Cobra® 87 01 250
- > Automatic adjustment at the touch of a button directly on the workpiece
- > The sheltered positioned spring ensures that the pliers close automatically once the push-button is activated (one-hand operation!)
- > Chrome vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 8976



87 11 250



Article No.	EAN 4003773-	∢→ mm		Pliers	Head	Handles	O] Ø Inch	O] Ømm	mm mm	Adjustment positions	۵ ^۲ ۵ g
87 11 250	035473	250		grey atramentized	polished	with non-slip plastic coating	2	50	46	25	335
87 19 250	022640	Spare sp	pring for 87 1	1 250							

KNIPEX Cobra® QuickSet

Hightech Water Pump Pliers

- ▶ Fully open, push, grab!
- Additional fast adjustment on the workpiece by sliding the pliers handle
- > Combines the proven, reliable locking of the hinge bolt with an additional push function which makes it easier to work in very confined and inaccessible areas
- > The adjustment directly on the workpiece is possible by simply sliding the pliers handle
- > Reliable locking of the hinge bolt with the first workload. The gripping width of the pliers is then fixed and can only be adjusted by pressing the button
- > To re-activate the sliding function, the hinge bolt must be released by pressing the push button and the pliers must be completely opened again
- > Chrome vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 8976



87 21 250



87 22 250

The KNIPEX Cobra[®] QuickSet combines all proven properties of the KNIPEX Cobra[®] with an additional push on function which makes it easier to work in very confined and inaccessible areas.

Adjustment directly on the workpiece is possible by simply sliding the pliers handle. The hinge bolt locks itself with the first workload. The gripping width of the pliers is then fixed and can only be adjusted by pressing the button. The hinge bolt must be released by pressing the button and the pliers must be completely opened once to activate the QuickSet function again.

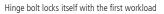


Press the button - open pliers completely



Position jaw - simply slide and close pliers









Article No.	EAN 4003773-	≺- ► mm		Pliers	Head	Handles	O] Ø Inch	O] Ø mm	mm mm	Adjustment positions	۵'ک g
87 21 250	072775	250		arey strongentized	polished	with pap slip plastic capting	2	50	46	25	335
87 21 300	078524	300		grey atramentized	polished	with non-slip plastic coating	2 3/4	70	60	25	530
87 22 250	077794	250		grey atramentized	polished	with slim multi-component grips	2	50	46	25	366
87 29 01	079002	range of	charo	parts for 97 Dy 250							
87 29 300	084570	range of	inge of spare parts for 87 21 300								

KNIPEX Cobra® VDE

Hightech Water Pump Pliers, insulated

- > Adjustment by shifting one jaw directly on to the workpiece: fast, reliable and comfortable handling
- > Fine adjustment: allows optimum adjustment to differently sized workpieces and comfortable handle position
- > Good access to the workpiece due to slim size of head and joint area
- > Self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- > Gripping surfaces with special hardened teeth, teeth hardness approx.
 61 HRC: high wear resistance and stable gripping
- > Box-joint design for high stability due to double guide
- > Pinch guard prevents operators' fingers being pinched
- > Chrome vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 8976, DIN EN 60900, IEC 60900

87 26 250 T*

> Pliers with tether attachment point for mounting a fall protection



87 26 250 T

The adjustment action to adapt to the workpiece is easy and reliable with the KNIPEX Cobra[®] VDE: place the upper gripping jaw of the opened pliers on the workpiece, push pliers to close, done!

Article No.	EAN 4003773-	∢→ mm		Pliers	Head	Handles	O] Ø Inch	O] Ø mm	∑] mm	Adjustment positions	۵'ک g
87 26 250	071495	250	I000 V ∰	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	2	50	46	24	340
87 26 250 T	081517	250	≖≣≣	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested with integrated insulated tether attachment point for a tool tether	2	50	46	24	400

87 29 01 079002 range of spare parts for 87 2x-250

KNIPEX Cobra® ES

Water Pump Pliers extra-slim

- > Ideal for service, maintenance and equipment repair, in automotive and general industry
- > Long, narrow jaws
- > Particularly good access to the workpiece due to very slim construction of head and joint area
- > Firm grip also on flat material due to three-point rest
- > Push the button for adjustment on the workpiece
- > Fine adjustment for optimum adaptation to different sizes of workpieces and a comfortable handle width
- > Self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- > Box-joint design for high stability due to double guide
- > Reliable catching of the hinge bolt: no unintentional shifting
- > Favourable lever action: optimum transmission of force
- > Pinch guard prevents operators' fingers being pinched
- > Chrome vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 8976



87 51 250

	10
19	AC

Grips nuts up to 34 mm (1 5/8") across flats



Optimum access to the workpiece. Ideal for service, maintenance and equipment repair, in automotive and general industry





Very slim design in the complete head and joint area (compared to conventional water pump pliers)

Article No.	EAN 4003773-	∢→ mm	Pliers	Head	Handles	O] Ø Inch	O]; Ømm		max. parallel	max. gripping depth	Adjustment positions	5
AILICIC NO.	1005775		T IICI 3	ncau	Thanfaics	Dinch	0 mm		opening width	ucptii	positions	g
87 51 250	061267	250	grey atramentized	polished	with non-slip plastic coating	1 1/4	32	34	37	42	19	328

KNIPEX Alligator®

Water Pump Pliers

- Good access to the workpiece due to slim size of head and joint area
- More output and comfort compared to conventional water pump pliers of the same length: 9-notch adjustment positioning for 30 % more gripping capacity
- > Self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- > Gripping surfaces with special hardened teeth, teeth hardness approx. 61 HRC: high wear resistance and stable gripping
- > Box-joint design for high stability due to double guide
- > Robust construction, insensitive to dirt; particularly suitable for outdoor work
- > Pinch guard prevents operators' fingers being pinched
- > Chrome vanadium electric steel, forged, multi stage oil-hardened > DIN ISO 8976

88 02 250 / 88 02 250 T / 88 05 250

> With slim multi-component grips without collar for better handling and easier transport

88 02 250 T / 88 02 300 T*

> Pliers with tether attachment point for mounting a fall protection







88 02 250



88 02 250 T



88 02 300



88 02 300 T



88 03 250











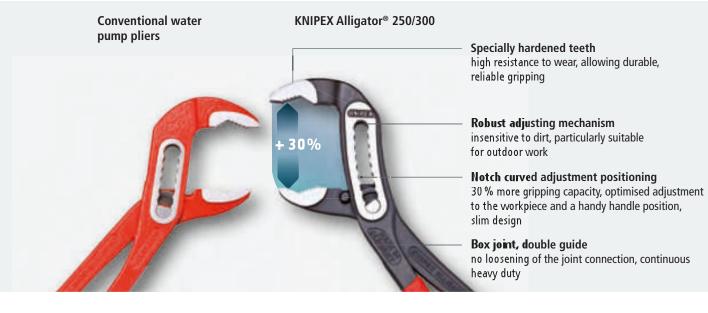








Self-locking on pipes and nuts: no slipping on the workpiece; the complete actuating force can be used to turn the workpieces; not having to squeeze the pliers handles reduces the required effort



Article No.	EAN 4003773-	∢→ mm		Pliers	Head	Handles	O]; Ø Inch	O]; Ømm	mm	Adjustment positions	۵ ^۲ ۵ g
88 01 180	035480	180					1 1/2	42	36	9	180
88 01 250	022992	250		black atramentized	polished	with non-slip plastic coating	2	50	46	9	331
88 01 300	034094	300	_				2 3/4	70	60	9	511
88 02 180	044222	180		black atramentized	nalished	with multi component arise	1 1/2	42	36	9	210
88 02 300	029151	300		DIACK atramentized	polished	with multi-component grips	2 3/4	70	60	9	565
88 02 300 T	080183	300		black atramentized	polished	with multi-component grips, with integrated tether attachment point for a tool tether	2 3/4	70	60	9	595
88 02 250	019282	250		black atramentized	polished	with slim multi-component grips	2	50	46	9	347
88 02 250 T	080176	250		black atramentized	polished	with slim multi-component grips, with integrated tether attachment point for a tool tether	2	50	46	9	370
88 03 180	042860	180					1 1/2	42	36	9	181
88 03 250	005742	250		chrome plated	chrome plated	with non-slip plastic coating	2	50	46	9	319
88 03 300	019312	300					2 3/4	70	60	9	499
88 05 180	060130	180		chrome plated	chrome plated	with multi-component grips	1 1/2	42	36	9	210
88 05 300	042389	300		chrome plated	chiome plated	with multi-component grips	2 3/4	70	60	9	560
88 05 250	035497	250		chrome plated	chrome plated	with slim multi-component grips	2	50	46	9	344
88 06 250	039303	250	∭	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	2	50	46	9	374
88 07 250	019343	250		chromo plated	chromo plated	with dispod inculation VDE tasted	2	50	46	9	420
88 07 300	022350	300		chrome plated	chrome plated	with dipped insulation, VDE-tested	2 3/4	70	60	9	661

KNIPEX Alligator® XL

Water Pump Pliers

- ▶ The classic model, now also in 400 mm length
- Robust construction, insensitive to dirt; particularly suitable for outdoor work
- > Good access to the workpiece due to slim size of head and joint area
- > Pinch guard prevents operators' fingers being pinched
- > Gripping surfaces with special hardened teeth, teeth hardness approx.
 61 HRC: high wear resistance and stable gripping
- > Self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- > Box-joint design for high stability due to double guide
- > Robust adjustment mechanism, insensitive to dirt, easy to clean; particularly suitable for outdoor work
- > 11-notch adjustment positioning with a gripping capacity up to 3 1/2", optimised adjustment to the workpiece and user-friendly handle position
- > Chrome vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 8976

Robust pliers for very hard applications

Gripping surfaces with special hardened teeth, teeth hardness approx. 61 HRC: low wear and stable gripping

Self-locking on pipes and nuts: no slipping on the workpiece and low handforce required

Box-joint design: high stability because of the double guide

Robust adjustment mechanism, insensitive to dirt, easy to clean; particularly suitable for outdoor work

11-notch adjustment for a gripping capacity up to 3 $^{1\!/}_{2}$ ", optimised adjustment to the workpiece and a comfortable handle position



88 01 400

The KNIPEX Alligator[®] XL offers the performance and comfort of a water pump pliers while being 50 % lighter in weight and having a greater gripping capacity ($3 \frac{1}{2}$ ") than comparable pipe wrenches. With their handy length of 400 mm, there is a place for KNIPEX Alligator[®] XL in every tool box.





	EAN	∢ >				EO	C]	\bigcirc		52
Article No.	4003773-	mm	Pliers	Head	Handles	Ø Inch	Ømm	mm	Adjustment positions	g
88 01 400	075844	400	black atramentized	polished	with non-slip plastic coating	3 1/2	90.0	95.0	11	1190

Water Pump Pliers

with groove joint

- > Self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- >Non-slip joint
- > Jaw profile designed to fit screws and nuts
- > Joint design reduces strain of the centre bolt, hence no wear on pivot
- > Pinch guard prevents operators' fingers being pinched
- > Gripping surfaces with special hardened teeth, teeth hardness approx.
 61 HRC for tool length 250 mm: high wear resistance and stable gripping
- > Chrome vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 8976





89 05 250

	EAN	∢ →				ĘO	EO	\Box	52
Article No.	4003773-	mm	Pliers	Head	Handles	Ø Inch	Ømm	mm	g
89 01 250	023067	250	black atramentized	polished	plastic coated	1 5/16	34	36	325
89 03 250	043829	250	chrome plated	chrome plated	plastic coated	1 5/16	34	36	325
89 05 250	043836	250	chrome plated	chrome plated	with multi-component grips	1 5/16	34	36	371

Mini Water Pump Pliers

with groove joint

- > Easy, convenient engagement in 4 different positions
- > Non-slip joint
- > Joint design reduces strain of the centre bolt, hence no wear on pivot
- > Chrome vanadium electric steel, forged, oil-hardened
- > DIN ISO 8976



Article No.	EAN 4003773-	∢→ mm	Pliers	Head	Handles	O] Ø Inch	Ø mm		۵'ک g
90 01 125	035503	125	black atramentized	polished	plastic coated	11/16	17	14	103
90 03 125	050490	125	chrome plated	chrome plated	plastic coated	11/16	17	14	105

Pipe Wrenches 90°

- > Swedish pattern
- > 90° angled jaws
- > Jaws with offset teeth in opposite direction
- > Teeth additionally induction-hardened
- > I-beam handle design
- > Captive adjusting nut
- > Red powder-coated, jaws bright ground
- > Chrome vanadium electric steel, forged, multi stage oil-hardened
- > DIN 5234



83 10 015



	EAN	>			C]	C]		52
Article No.	4003773-	mm		Pliers	Ø Inch	Ømm	Inch	g
83 10 010	014188	310			1 5/8	42	1	779
83 10 015	014195	420			2 3/8	60	1 1/2	1415
83 10 020	014201	560	₩ <u>9</u> 0°	red powder-coated	2 3/4	70	2	2600
83 10 030	022329	650			4 3/8	110	3	3433
83 10 040	022336	750			5 1/8	130	4	4921

Pipe Wrenches 45°

- > Swedish pattern
- >45° angled jaws
- > Jaws with offset teeth in opposite direction
- > Teeth additionally induction-hardened
- > I-beam handle design
- > Captive adjusting nut
- > Red powder-coated, jaws bright ground
- > Chrome vanadium electric steel, forged, multi stage oil-hardened
- >DIN 5234



83 20 015



Article No.	EAN 4003773-	← ► mm		Pliers	O] Ø Inch	O]; Ø mm	O: Inch	۵۵ g
83 20 010	014218	320			1 5/8	42	1	817
83 20 015	014225	430	₫ <u>1</u>] <u>∡</u> 45°	red powder-coated	2 3/8	60	1 1/2	1408
83 20 020	014232	570			2 3/4	70	2	2596

Pipe Wrenches S-Type

> Slim, S-type jaw

- > Jaws with offset teeth in opposite direction
- > Teeth additionally induction-hardened
- > Three-point contact on pipes, self-locking
- > I-beam handle design
- > Captive adjusting nut
- > Red powder-coated, jaws bright ground
- > Chrome vanadium electric steel, forged,
- multi stage oil-hardened
- > DIN 5234



83 30 015

	EAN	∢ —▶		£O	EO		52
Article No.	4003773-	mm	Pliers	Ø Inch	Ømm	Inch	g
83 30 005	025221	245		1 1/2	35	1/2	472
83 30 010	014249	320		1 5/8	42	1	836
83 30 015	014256	420	red powder-coated	2 3/8	60	1 1/2	1540
83 30 020	014263	540		2 3/4	70	2	2669
83 30 030	014164	680		4 3/4	120	3	4366

Pipe Wrenches S-Type

with fast adjustment

- > Pinch guard prevents operators' fingers being pinched
- > Time-saving, precise adjustment of the gripping width directly on the workpiece at the push of a button
- > Less effort required due to self-locking action
- > No unintentional shifting of the pliers handles
- > High wear resistance due to the additionally hardened teeth
- > Maximum load capability thanks to completely hardened handles
- > Chrome vanadium electric steel, forged, multi stage oil-hardened



83 60 010



83 61 010

Article No.	EAN 4003773-	∢→ mm	Pliers	Handles	Ø Inch	Ø mm	D: Inch	۵'ک g
83 60 010	075424	330			1 5/8	42	1	955
83 60 015	075677	420	red powder-coated		2 3/8	60	1 1/2	1470
83 60 020	078838	560			2 3/4	70	2	2420
83 61 010	077602	330			1 5/8	42	1	955
83 61 015	077619	420	grey powder-coated	plastic coated	2 3/8	60	1 1/2	1470
83 61 020	078876	560			2 3/4	70	2	2480



Siphon and Connector Pliers

for traps, tube fittings and connectors

- ▶ Fine adjustment for ideal adjustment to diverse diameters
- ▹ For siphons, oil filters, plastic pipes and connectors up to 80 mm diameter
- Robust, heavy duty
- > Ideal for tightening and loosening siphon screw connections, plastic pipe fittings and round union nuts
- > For connectors and couplings with screw connection, such as Cannon circular connectors
- > For gentle loosening of hoses on nozzles and filter cartridges
- > Optimum adhestion on dirt-, oil- and fat free surfaces
- > 25 adjustment positions, box-joint design
- > Ergonomic handle geometry
- > Chrome vanadium electric steel, forged, oil-hardened
- > DIN ISO 8976

81 01 250 / 81 03 250

> With serrated gripping jaws; up to \emptyset 80 mm

81 11 250 / 81 13 250

> With exchangeable plastic jaws for sensitive surfaces; up to Ø 75 mm



81 13 250





Article No.	EAN 4003773-	∢ ► mm	Pliers	Head	Handles	Working Capacity Ø mm	Adjustment positions	۵۵ g
81 01 250	078463	250	black atramentized	polished	with non-slip plastic coating	25 - 80	25	355
81 03 250	078487	250	chrome plated	polished	with non-slip plastic coating	25 - 80	25	355
81 11 250	078470	250	black atramentized	polished	with non-slip plastic coating	10 - 75	25	355
81 13 250	078494	250	chrome plated	chrome plated	with non-slip plastic coating	10 - 75	25	355
01 15 250	076494	250	chiome plated	chiome plated	with non-silp plastic coating	10-75	25	

Special Pliers and Control Cabinet Keys

Ear Clamp Pliers	126
KNIPEX TwistCut® – Corrugated pipe cutters	127
KNIPEX TubiX [®] Pipe Cutter	128
Anvil Shears	129
KNIPEX PlastiCut $^{\circ}$ – Cutter for flexible hoses and plastic conduit pipes	129
Pipe cutters for multilayer and pneumatic hoses	130
Pipe cutters for plastic composite pipes	130
Cutter for ribbon cable	131
Mitre Shears for plastic and rubber sections	131
Vinyl Shears	132
Shears for KEVLAR® fibres	132
Combination Shears	133
Pipe Cutter for composite pipes and protective tubes	133
Pipe Cutter for composite and plastic pipes	134
Pipe Cutter for plastic conduit pipes	134
Punch Lock Riveters	135
Sheet Metal Nibbler	135
Notching Pliers	136
Cycle Pliers	136
Spring Hose Clamp Pliers	137
Hose Clamp Pliers for Click clamps	138
Revolving Punch Pliers	139
Tile Nibbling Pincer	139
Upholstery Pliers	140
Tile Breaking Pliers	140
Pliers for working on glass	141
Halogen Bulb Exchange Pliers	142
Magnetic LED Lamp	142
Material catcher	142
KNIPEX TwinKey® – Control Cabinet Keys	143
Control Cabinet Keys	143



Ear Clamp Pliers

Suitable for universal use, for 1-ear and 2-ear clamps

- > For the simple and reliable mounting of 1-ear and 2-ear clamps (Oetiker system or similar)
- > No damage to press points on the ear clamps
- > The slim head permits good accessibility in confined areas
- > Versatile use for clamps on CV boots, cooler and fuel lines,
- air pressure systems, compressors
- > Durable and strong
- > High-grade special tool steel, forged, oil-hardened

10 99 1220

> Especially suitable for universal use thanks to the additional side jaw







10 99 1220



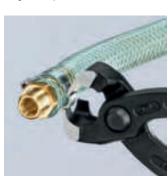




Sealing the fluid hose on the connecting piece using the side press nib



Using the front press nib



Sealing the pneumatic hose on the quick action coupling



	EAN	∢ >				52
Article No.	4003773-	mm	Pliers	Head	Handles	g
10 98 1220	080749	220	black atramentized	polished	plastic coated	363
10 99 1220	080756	220	black atramentized	polished	plastic coated	345

KNIPEX TwistCut®

Corrugated pipe cutters

- > For corrugated plastic pipes from Ø 13 32 mm and a ridge width of up to 2.7 mm
- > For cutting empty or ready-assembled corrugated pipes to length
- > Application in the electrical and construction trades and for plumbing work
- > Recessed blades prevent injuries
- > Exact, flush cut, without damaging the internal cables
- > Cut on the outside of fluting no sharp raw edge inside the corrugated pipe
- > Fast and reliable work
- > Simple insertion of the corrugated pipe for reliable and simple cutting: no waste
- > In the case of thick-walled corrugated pipes, reapply after the circular cut just behind the cut, and break off the corrugated pipe
- > Slim and ergonomically shaped for work in poorly accessible areas
- > Double-sided guide for a precise cut
- > For corrugated pipes with \emptyset of 13 32 mm
- > Body made of stable polyamide compound plastic



90 22 01 SB



90 22 02 SB



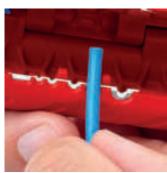
Convenient handling due to fastener with locking device and opening by means of internal spring



Also for protective pipes on aluminium composite pipes in plumbing, up to a diameter of 32 mm



Easy to use: press KNIPEX TwistCut[®] together, turn with slight pressure, done



90 22 02 SB: Practical locator simplifies the insertion of single conductors for stripping



Clean cutting edge with no damage to internal cables as the cut is always at the top of the corrugation



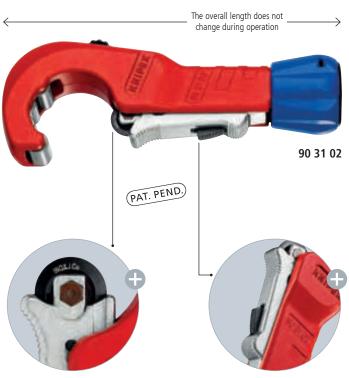
90 22 02 SB: Injection moulded length scale for consistent stripping to a uniform length, legible for left and right handed users

Article No.	EAN 4003773-	∢→ mm		Cutting capacities Ø mm	Wire stripping value for conductors and strands Ø mm	۵'۵ g
90 22 01 SB	082286	100	MM (PAT. PEND)	13 - 32		47
90 22 02 SB	082293	100	MM (PAT. PEND.)	13 - 32	0.2 - 4	47

KNIPEX TubiX® Pipe Cutter

With one hand only: cuts copper, brass or stainless steel quickly and easily

- QuickLock single-handed quick adjustment: slide on, cut – finished!
- Easy one-handed pushing for quick adjustment to different tube sizes
- Comfortable and easy working thanks to high-quality needle bearings in the cutting wheel and the guide rolls
- > Cuts pipes from Ø 6 35 mm (1/4"-1 3/8") with wall thickness up to 2 mm
- > Cutting wheel made of high-grade ball-bearing steel
- > Practical quick replace system for the cutting wheel with spare wheel stored under the feeding barrel
- > With precision-ground deburring tool, easy to remove
- > Light and durable metal enclosure of magnesium



The needle-beared and spring-loaded cutting wheel made of high-quality ball bearing steel is easily exchangeable

The spring-loaded cutting wheel can be pushed and fixed on the diameter of the pipe with the single-handed quick adjustment



Speed in everyday operation: the QuickLock single-handed quick adjustment enables the cutting wheel to slide onto any pipe diameter with a single press of the thumb



High-quality needle bearings enable the cutting wheel and the four guide rollers to operate virtually without any friction during the cutting – cuts stainless steel pipes with particular ease

Four steps to success – how the KNIPEX TubiX® pipe cutter helps you in your work



Cutting now made easy: position the opened KNIPEX TubiX[®]...



Push the cutting wheel against the pipe with the QuickLock single hand quick adjustment: fastest adjustment to different pipe diameters



Tighten and cut with a swift twist and then readjust using the ergonomic blue feeding barrel...



and you're done! If necessary, have the edge smoothed out using the fold-out deburring tool – with surprisingly little effort

Article No.	EAN 4003773-	∢— ► mm	Ømm	Ø Inch	ے م			
90 31 02 SB	084686	260	6 - 35	1/4" - 1 3/8"	375			
90 31 02 BK	084907	260	6 - 35	1/4" - 1 3/8"	375			
90 39 02 V01	90 39 02 V01 085874 Cutting wheel INOX Cu for KNIPEX TubiX [®] 90 31 02							
90 39 02 V02	085881	Deburring tool	burring tool for KNIPEX TubiX [®] 90 31 02					

Anvil Shears

- > Drawing cut against firm surface for cutting soft materials without damage, e.g. rubber profiles, PVC, leather, wood, hoses etc.
- > Cuts flat material with a max. width of 40 mm and height of 7.5 mm
- > Cutting capacity for round material up to Ø 25 mm
- > Strong, replaceable blade
- > With opening spring and locking device
- > Tool body: tool steel, rolled, oil-hardened



Article No. 94 55 200	EAN 4003773- 080763	→ mm 200	MM	Tool chrome plated	Handles with plastic grips	Blade length mm 40	۵۵ g 290	
94 59 200 01 080916 Spare blade for 94 55 200								

KNIPEX PlastiCut®

Cutter for flexible hoses and plastic conduit pipes

- > For cutting thin walled plastic pipes (conduit plastic pipes) and flexible hoses, also with fabric reinforcement, of plastic and rubber up to 25.0 mm / 1" exterior dia.
- > Not suitable for cutting cables
- > With opening spring and locking device
- > Blades: special tool steel, oil-hardened, interchangeable
- > Tool body: plastic, fibreglass-reinforced





52 EAN Cutting capacities **∢**--> Article No. 4003773mm Ømm g 90 20 185 067122 MM 25 172 185 90 29 185 067139 Spare blade for 90 20 185

Pipe cutters for multilayer and pneumatic hoses

- ▶ Ideal for all liquid, multilayer and pneumatic hoses/pipes commonly available on the market in the wide application range from Ø 4 - 20 mm
- ▶ With universal support for right-angled positioning
- Easy on the hands even in continuous use thanks to low force required and automatic opening thanks to the spring mechanism
- > Exchangeable blade
- > With opening spring and locking device
- > Ergonomically designed glass-fibre reinforced plastic handles
- > Not suitable for cutting cables
- > Blade made of high-strength special grade steel, oil-hardened and tempered







Article No. 90 10 185	EAN 4003773- 084846	←→ mm 185	Cutting capacities Ø mm 4 - 20	۵۵ g 175
90 29 01	031932	Spare b	lade for 90 25 20 / 90 10 185 / 9	90 25 185

Pipe cutters for plastic composite pipes

- ▶ For cutting composite pipes from Ø 12 25 mm
- Clean, smooth and burr-free cut surfaces
- ► Easily exchangeable blades
- > With opening spring and locking device
- > Ergonomically designed glass-fibre reinforced plastic handles
- > Not suitable for cutting cables
- > Blade made of high-strength special grade steel, oil-hardened and tempered







	Article No. 90 25 185	EAN 4003773- 084839	→ mm 185	Cutting capacities Ø mm 12 - 25	۵۵ g 175			
90 29 01 031932 Spare blade for 90 25 20 / 90 10 185 / 90 25 185								

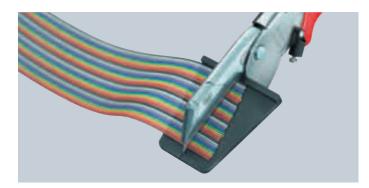
Cutter

for ribbon cable

- > For crush-free cutting of ribbon cable up to 56 mm width
- > Exchangeable cutting base with try square for rectangular cuts
- > With opening spring and locking device
- > Blade: standard trapezoidal blade, replaceable
- > Tool body: tool steel, rolled, oil-hardened



94 15 215



Article No. 94 15 215	EAN 4003773- 046011	 ◄→ mm 215 		Tool chrome plated	Handles with plastic grips	Blade length mm 56	۵۵ g 346		
94 19 02	052333	Blade s	upport for 94 15	215					
94 19 215	046219	Set wit	ith 10 spare blades for 94 15 215 / 94 35 215						

Mitre Shears

for plastic and rubber sections

- > For crush-free cutting of plastic, rubber and soft timber sections; also for ribbon cable
- > Exchangeable cutting base with try square for 45°-cuts and markings for 60°-, 75°-, and 90°-cuts
- > With opening spring and locking device
- > Blade: standard trapezoidal blade, replaceable
- > Tool body: special tool steel, rolled, oil-hardened





	EAN	∢ →				Blade length	52
Article No.	4003773-	mm		Tool	Handles	mm	g
94 35 215	046028	215		chrome plated	with plastic grips	56	397
94 19 215	046219	Set wit	h 10 spare blade	s for 94 15 215 / 94 3	5 215		

Vinyl Shears

also for cable ducts

- > For cutting and shortening cable ducts, also for plastic material
- > Special lever transmission
- > Very effective blade geometry
- > Blade: special tool steel, oil-hardened
- > Tool body: high-grade chrome vanadium
- electric steel, oil-hardened





Blade length 110 mm for cutting wide cable ducts

Article No.	EAN 4003773-	⊲→ mm		Tool	Handles	Cutting capacities mm	Blade length mm	۵'ک g
95 02 21	052128	275	MM (PATENTED)	burnished	with multi-component grips	max. 4	110	665

Shears

for KEVLAR® fibres

- > Only for cutting fibres of KEVLAR[®] in optical fibre cables, not recommended for other materials
- > Precisely ground blades with serration prevent the fibres from slipping and guarantee a clean cut
- > Riveted precision joint, for low-friction movement and smooth and even cutting of the thin KEVLAR $^{\otimes}$ fibres
- > Hard-chrome plated, ground surface
- > Shears body: chrome vanadium electric steel, oil-hardened
- > User-friendly handles: plastic, impact-proof





 $\mathsf{KEVLAR}^{\circledast}$ is a registered trademark of E. I. du Pont de Nemours and Company

	EAN	4▶			52
Article No.	4003773-	mm	Shears	Handles	g
95 03 160 SB	043362	160	chrome plated	plastic coated	85

Combination Shears

- > For cutting cardboard, plastics, aluminium, brass and copper foils
- > Not suitable for steel wire or iron sheets
- > Precision-ground, hardened blades
- > With opening spring and locking device
- > Pinch guard prevents operators' fingers being pinched
- > Adjustable bolted joint
- > Shears body: surgical steel, stainless, vacuum-hardened
- > Handles: plastic, impact-proof

95 05 185

> Angled shape - for easy execution of long cuttings; ergonomically shaped plastic handles







95 05 190

	EAN	∢ →				52
Article No.	4003773-	mm		Head	Handles	g
95 05 140	019589	140	MM	polished	plastic coated	67
95 05 185	060277	185	<u>∡4</u> 0° MM	polished	plastic coated	115
95 05 190	019602	190	MM	polished	plastic coated	116

Pipe Cutter

for composite pipes and protective tubes

- > For cutting composite pipes with diameters from 12.0 to 25.0 mm and for cutting flexible protective tubes with a diameter of 18.0 - 35.0 mm without damaging a potential pipe inside
- > A calibration arbor can be fitted, for example for Geberit composite pipes with 11.5 and 15.0 mm dia.
- > Blades: special tool steel, oil-hardened, interchangeable
- > Tool body: high-grade chrome vanadium electric steel, oil-hardened





Clean cut of protective tubes 18 - 35 mm Composite pipes of 12 - 25 mm dia. are cut cleanly and without deformation

Article No.	EAN 4003773-	←→ mm		Tool	Handles	Cutting capacities composite pipes Ø mm	Cutting capacities protective tubes Ø mm	Blade length mm	۵'ک g		
90 25 20	046004	210	MM (PATENTED)	galvanized	with multi-component grips	12 - 25	18 - 35	25	332		
90 29 01	031932	Spare	blade for 9	90 25 20 / 90	0 10 185 / 90 25 185						
90 29 02	031949	1 pair	air of spare blades for 90 25 20 (protective pipes)								
90 29 15	031956	956 Calibration arbor for 90 25 20 (Geberit pipes)									

diameter

Pipe Cutter

for composite and plastic pipes

- > For cutting thick walled plastic and composite pipes with diameters
- > Cuts pipes using the ratchet principle in several strokes
- > Self-adapting pipe support positions pipes of various diameters correctly for a rectangular cut
- > Blades: special tool steel, oil-hardened, interchangeable
- > Tool body: high-grade chrome vanadium electric steel, oil-hardened





Clean cut of thick walled plastic and composite pipes

Store of the second sec

Not suitable for thin-walled plastic pipes. Please use article number 90 20 185 or 94 10 185 for these



Article No.	EAN 4003773-	←→ mm		Tool	Handles	Cutting capacities Ø mm	Cutting edge length mm	۵'ک g
90 25 40	045182	210	M PATENTED	galvanized	with multi-component grips	26 - 40	40	500
90 29 40	045199	Spare bla	ade for 90 25 40					

Pipe Cutter

for plastic conduit pipes

(electrical installation work)

- > For clean cutting of thin-walled plastic pipes (e.g. plastic conduit pipes) with \emptyset 6.0 35.0 mm
- > Not suitable for cutting cables
- > Blade is replaceable and can be retracted from any position
- > Low force requirement due to special blade geometry and optimum transmission
- > Minimum operator fatigue due to ergonomic handle design and incremental ratchet blade feed
- > Blade: special tool steel, oil-hardened
- > Housing: die-cast aluminium, red lacquered



Article No. 94 10 185	EAN 4003773- 047025	→ mm 185	MM	Body die-cast aluminium body, red lacquered	Cutting capacities Ø mm 6 - 35	Cutting edge length mm 35	۵ ^۲ ۵ g 583				
94 19 185	047032	Spare bl	lade for 94 10 185								
94 19 02	052333	Blade su	support for 94 15 215								

Punch Lock Riveters

- > To join metal section sheets used in dry walling for dividing walls and drop ceilings, without needing screws or rivets
- > For U- and C-shaped sections with max 1.2 mm metal (2 x 0.6 mm)
- > Minimum handforce required due to optimum lever transmission
- > Pliers body: special tool steel, rolled, oil-hardened

90 42 250

> For one-hand operation



90 42 340



The punching tool is squeezed through the metal section sheets



	EAN	∢ →					52			
Article No.	4003773-	mm		Pliers	Handles	Capacity	g			
90 42 250	047865	250	MM	burnished	with multi-component grips	max. 1.2 (2 x 0.6)	676			
90 42 340	071884	340		burnished	with multi-component grips	max. 1.2 (2 x 0.6)	901			
90 49 340	028079	Spare	punch for 90 42 340							
90 49 340 M	028499	Spare	are die for 90 42 340							

Sheet Metal Nibbler

> For cutting iron, copper or aluminium sheet metal up to max.1.2 mm thickness, plastic up to max.2.0 mm thickness

- > Materials are cut without deformation
- > Clean cut edges no trimming activities needed
- > With chip breaker
- > Easy handling
- > Cutting width: 2.7 mm
- > Blades: special tool steel, oil-hardened, interchangeable
- > Tool body: special tool steel, rolled, oil-hardened





X

	EAN	∢ ►				52
Article No.	4003773-	mm		Tool	Handles	g
90 55 280	026730	280	MM	nickel plated	with multi-component grips	461

90 59 280 027355 Spare blade for 90 55 280

Notching and chip breaking in a single pass

Notching without chip breaking

Notching Pliers

- > Special pliers for notching recesses into plastic ledges and plastic casings for electric and sanitary installation
- > Notches can be enlarged by initial and final cut
- > Clean cut edges no trimming activities needed
- > Easy handling
- > With opening spring, opening limiter and locking lever
- > Pliers body: special tool steel, rolled, oil-hardened







The KNIPEX Notching Pliers produces the most common notches in plastic ledges and cable ducts in a simple, fast and clean way. No time-consuming sawing out or nibbling and no additional work required.

	EAN	∢ →					52
Article No.	4003773-	mm		Pliers	Handles	Capacity	g
90 61 16	051947	250	MM	humished	with plastic grins	16 x 32 mm	403
90 61 20	051954	250	PATENTED	burnished	with plastic grips	20 x 29 mm	414

Cycle Pliers

> For very narrow screw connections> Special tool steel, forged, oil-hardened

84 11 200

> Straight head



84 11 200



Article No.	EAN 4003773-	←→ mm		Pliers	Head	Handles	Recess Ø mm	Head thickness mm	۵'۵ g
84 11 200	052265	200		black atramentized	polished	plastic coated	10	3.5	180
84 21 200	051930	200	IIII <u>∡</u> 20°	black atramentized	polished	plastic coated	10	3.5	182

Spring Hose Clamp Pliers

- > Rotating, universal grip inserts for reliably gripping the clamps in all positions
- > Jaw inserts can also be rotated under load
- > Extremely good leverage which allows clamps to be opened easily without great effort
- > Slim head design; narrow head width, rotating grip inserts make this an ideal tool, especially in confined areas
- > Additional function: detach hoses gently using the serrated jaw
- > Chrome vanadium electric steel, forged, oil-hardened

85 51 250 AF

> The locking device enables simple and secure work on clamps under tension without effort



85 51 180 A



85 51 250 A



85 51 250 AF







A single pair of pliers for various sizes of clamps and spring band clamps. Rotating jaw inserts enable them to adapt to any position while still guaranteeing that clamps are securely positioned in the pliers.

APPLICATION AREAS CARS/TRUCKSAir suction, cooling, charge air, water return, thermostat, fuel, heating

The proven features of the Cobra® also apply to the KNIPEX Spring Hose Clamp Pliers

- > Less effort required due to extremely good transmission ratio
- > First class guard to prevent fingers being pinched
- > Reliable gripping with hand-friendly handle position
- > Fine adjustment ensures a precise fit to suit the most diverse clamp sizes
- > Opens at the touch of a button
- > Box-joint design: high stability due to the double guidance

Article No. 40	AN ←→ 003773- mm	Pliers	Handles	Capacity	Adjustment positions	g g
85 51 180 A 08	81159 180	grey atramentized	with non-slip plastic coating	max. 50 mm	15	190
85 51 250 A 07	77329 250	grey atramentized	with non-slip plastic coating	max. 70 mm	25	345
85 51 250 AF 07	78623 250	grey atramentized	with non-slip plastic coating	max. 70 mm	19	350

85 59 250 A 077336 Spare parts assortment grip inserts, for 85 51 250 A / 85 51 250 AF

Hose Clamp Pliers

for Click clamps

- ▶ To open and close Click clamps
- > Rotating jaw inserts for the safe actuation of clamps in any position
- > Good leverage which allows clamps to be opened and closed again comfortably and easily without a great deal of effort
- > For easy working on fuel hoses, vacuum pipes and suction nozzles and many other applications
- > Additional function: detach hoses gently using the serrated jaw
- > Slim head design; narrow head width, rotating grip inserts make this an ideal tool, especially in confined areas
- > Chrome vanadium electric steel, forged, oil-hardened



85 51 180 C



85 51 250 C

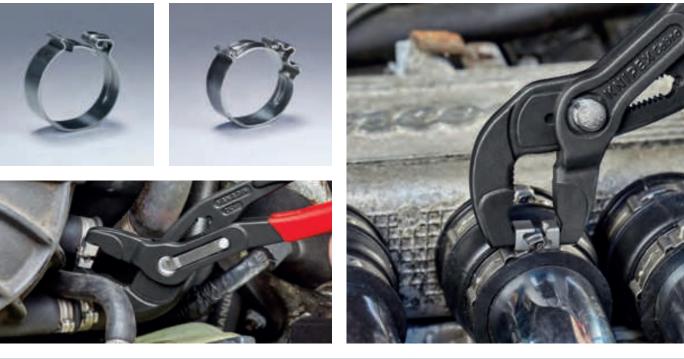




Serrated gripping jaws for easy loosening of tight hoses

The proven advantages of the Cobra®also apply to this KNIPEX Hose Clamp Pliers

- > Guard prevents operators' fingers being pinched
- > Reliable gripping with hand-friendly handle position
- > Box-joint design for high stability due to double guide



	EAN	-			52
Article No.	4003773-	mm	Pliers	Handles	g
85 51 180 C	081166	180	arey stroppontized	with non-slip plastic costing	170
85 51 250 C	078517	250	grey atramentized	with non-slip plastic coating	345
85 59 250 C	078999	Spare par	ts assortment grip inserts, for 85	51 180 C / 85 51 250 C	

Revolving Punch Pliers

- > To punch holes into leather, textiles and plastic material
- > With six interchangeable punches: 2.0 / 2.5 / 3.0 / 3.5 / 4.0 / 5.0 mm dia.
- > With opening spring and locking device
- > Powder-coated for reliable protection against rust
- > Pliers body and punches: special tool steel, oil-hardened



90 70 220



Interchangeable punches

	EAN				5
Article No.	4003773-	mm		Pliers	g
90 70 220	019411	220	MM	red powder-coated	251

Tile Nibbling Pincer

Parrot Beak Pincer

> Enlarges holes in tiles and forms tile edges> Special tool steel, forged, oil-hardened



91 00 200



	EAN	← ▶			55
Article No.	4003773-	mm	Pliers	Head	g
91 00 200	013754	200	black atramentized	polished	158

Upholstery Pliers

- > For the professional fixing of seat covers on profiled seats to the seat frame with all popular upholstery clips
- > Securely insert upholstery clips, guide and hold: the special groove fixes the upholstery clips in the correct position
- > Easy positioning of the upholstery clips: a closing spring holds the pliers closed, the clip can be securely positioned and pressed
- > User-friendly operation thanks to multi-component grips
- > Upholstery clips can be easily pressed together due to a good transmission ratio of the pliers
- > Durable and strong
- > Special tool steel, forged, oil-hardened

Article No	EAN 4003773-	∢ ► mm	Pliers	Handles	Δ̈́Δ
91 92 180	080725	185	mirror polished	with multi-component grips	195





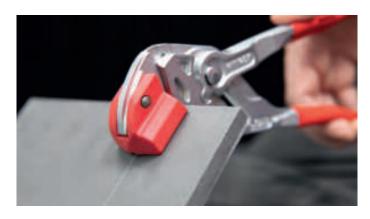


Work without cutting-off machine, particularly for fine strips. For less mess, dust, noise and effort.

- ► For the precise cutting (breaking) of tiles and porcelain stoneware after scoring with a tile cutter
- Ideal for long and thick tiles
- > Ideal protection of tiles against damage: replaceable positioning jaw made from soft, stable plastic
- > Great crushing force thanks to 10-fold increase of manual force
- > Easily adjusted to the required tile thickness at the press of a button
- > Chrome vanadium electric steel, forged, oil-hardened



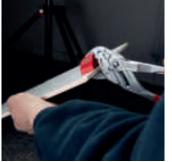
91 13 250













	EAN	↔			5
Article No.	4003773-	mm	Pliers	Handles	g
91 13 250	079538	250	chrome plated	plastic coated	560
91 19 250 01	079545	Spare jaw for 91 13 250			

Glass Breaking Pincer

> For breaking glass to a scored line> Special tool steel, forged, oil-hardened

91 31 180

					1		
	EAN	4-				Jaw width	52
Article No.	4003773-	mm	Pliers	Head	Handles	mm	g
91 31 180	069744	180	black atramentized	polished	plastic coated	24	245

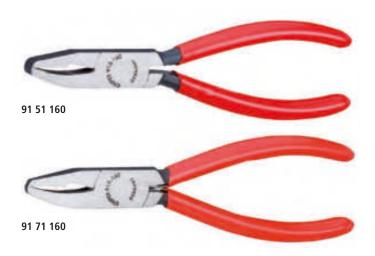
Glass Nibbling Pincers

> For breaking off narrow strips of glass to a scored line

- > For finishing off glass edges to required profile
- > Special tool steel, forged, oil-hardened

91 71 160

> Narrow version, with opening spring



Article No.	EAN 4003773-	∢→ mm		Pliers	Head	Handles	Jaw width mm	۵۵ g
91 51 160	014355	160		black atramentized	polished	plastic coated	9.5	148
91 71 160	019565	160	I I I I I I I I I I I I I I I I I I I	black atramentized	polished	plastic coated	4.0	141

Flat Nose Grozing Pliers

> With soft gripping jaws

> For trimming glass edges, e. g. when making leaded glass windows

> Special tool steel, forged



Article No.	EAN 4003773-	∢→ mm	Pliers	Head	Handles	Jaw width mm	۵ ^۲ ۵
91 61 160	019527	160	black atramentized	polished	plastic coated	9.5	141

Halogen Bulb Exchange Pliers

- > For the installation of wedge base bulbs
- > Gripping surfaces plastic coated
- > Chrome vanadium electric steel, forged, oil-hardened





Article No.	EAN 4003773-	⊲− ► mm	Pliers	Head	Handles	ΔΔ g
30 41 160	048480	160	black atramentized	polished	plastic coated	120

Magnetic LED Lamp

- > For illuminating dark working areas
- > Attachment to tool by means of strong magnets
- > Very compact dimensions
- > Approx. 24 hours of lighting, with 2 replaceable button cells (CR1220)
- > Snap-hook fastening

Article No.

00 11 V50

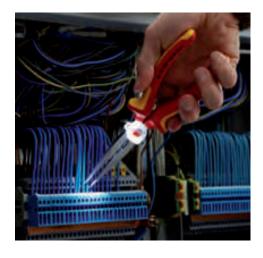
> Impact-resistant plastic housing



5

g

8



EAN

4003773-

075387

Material catcher

for 79 02 / 22 125 ESD

- > Material catcher for Electronics Diagonal Cutters: reliably prevents cut material from falling down
- > For particular safety, e.g. in the aerospace industry, in order to avoid FOD (Foreign Object Damage)





00 11 V50



...the detached workpiece remains safely in the material catcher

Also suitable for the following pliers:



79 22 125 ESD

Easy attachment: the material catcher is easily attached and fastens securely to the pliers head



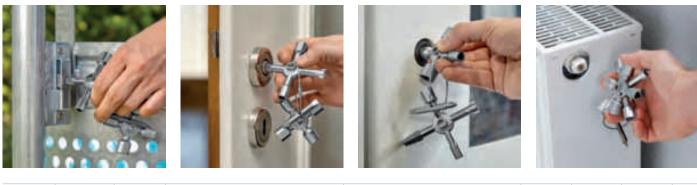
	EAN	52
Article No.	4003773-	g
00 11 V79	083443	20

KNIPEX TwinKey®

for all standard cabinets and shut-off systems

- ▶ 10 profiles. 2 crosses. 1 key.
- ► All common locking systems
- > Multifunctional key for the actuation of locking systems from the areas of facilities engineering (heating and sanitation, air conditioning, electro technology), gas and water supply and shut-off-systems
- > 8-arm version: two 4-way spider keys connected in a space-saving way using magnets
- > Reversible bit: 1,0 x 7 mm slot and PH2 cross slot
- > Key and reversible bit joined by stable stainless steel wire
- > Weight-optimised zinc die-cast design





	EAN	4- >	O3		-0-1	O]		52
Article No.	4003773-	mm	Ømm	Ø mm	Ømm	Ømm	Ømm	g
00 11 01	074670	92	5 / 6 - 7 / 8 - 9 / 10 - 11	7 - 8 / 9 - 10 / 11 - 12	3 - 5	6	6 - 9	135

Control Cabinet Keys

for all standard cabinets and shut-off systems

- > For control cabinets and shut-off systems in the supply of gas, water and electricity
- > For technical installations in buildings, e.g. air conditioning and ventilation systems, shut-off valves, mains switchboards, etc.
- > With bit insert: slot 1.0 x 7 mm and cross recess PH2
- > With adapter for 1/4" bits chained to key
- > Additional bit adapter for 1/4" bits inside one profile
- > Zinc die-casted

00 11 02

> Short version, total length 44 mm

00 11 03

> Long execution, total length 76 mm



00 11 03

Article No.	EAN 4003773-	⊲→ mm	O ∃ Ø mm	⊘ ⊒ Ø mm	Ø mm	۵ ^۲ ۵ g
00 11 02	048947	44	6 / 8	9	3 - 5	65
00 11 03	041658	76	5/6/8	9	3 - 5	88

Profi-Key

for all standard shut-off systems

- > Key for heating, air conditioning, sanitary and building technology, e.g. for door and window handles or for radiator-bleeding
- >With bit insert: slot 1.0 x 7 mm and cross recess PH2
- > With adapter for 1/4" bits chained to key
- > Additional bit adapter for 1/4" bits inside one profile
- > Total length: 90 mm
- > Zinc die-casted



00 11 04

Article No.	EAN 4003773-	≺→ mm	O∃ Ømm	Ø mm	Ø mm	۵'۵ g
00 11 04	048954	90	5 / 7 / 8	9 - 10	6/7/8/9	86

Universal Key

for all standard cabinets and shut-off systems

- > For locking systems in electrical engineering, the supply of gas and water, air conditioning and ventilation systems, industry, technical installations in buildings, etc.
- > 9 different die-cast zinc key-profiles in 1 tool
- > With detachable chain and snap hook
- > Total length: 90 mm
- > Zinc die-casted



00 11 06

	EAN	-	03	()]	- O -7	QI	52
Article No.	4003773-	mm	Ømm	Ømm	Ømm	Ømm	g
00 11 06	071334	90	5/6/7-8/9-10	7 / 8 - 9 / 10 - 11	3 - 5	6	220

Universal Key "Construction"

for all standard cabinets and shut-off systems

- > For locking systems in electrical engineering, the supply of gas and water, air conditioning and ventilation systems, industry, technical installations in buildings, etc.
- > 9 different die-cast zinc key-profiles in 1 tool
- > With detachable chain and snap hook
- > Construction version with plug-in, magnetically held support: catch for locks with profile cylinder hole and male square in steps
- > With bit adapter for 1/4" bits with magnet
- > Total length: 157 / 95 mm
- > Zinc die-casted



00 11 06 V01

	EAN		O]		- O -I	₽∃	52
Article No.	4003773-	mm	Ømm	Ø mm	Ømm	Ømm	g
00 11 06 V01	075394	90	5/6/7-8/9-10	7 / 8 - 9 / 10 - 11	3 - 5	6	255

Control Cabinet Key "DoubleJoint"

- > For locking systems in electrical engineering, the supply of gas and water, air conditioning and ventilation systems, industry, technical installations in buildings, etc.
- >With bit adapter for 1/4" bits with magnet
- > Four different zinc die-cast key profiles in a single key
- > Total length: 97 mm
- > Plastic body, varnished



00 11 06 V03



	EAN	← ▶	O]		- O E	5
Article No.	4003773-	mm	Ømm	Ømm	Ømm	g
00 11 06 V03	083085	62	5 - 8	5 / 7 - 9	3 - 5	107

Pen-Style Control Cabinet Key

for all standard cabinets and shut-off systems

- > Easy to carry pen-style control cabinet key with fastening clip
- > Four different key profiles can be utilised by swivelling the key holder
 > For control cabinets and shut-off systems in the supply of gas, water
- and electricity > For technical installations in buildings, e.g. air conditioning and
- ventilation systems, shut-off valves, mains switchboards, etc.
- > Universal 1/4" bit adapter for standard bits (permanent magnet for retaining)
- > Additional bit adapter for 1/4" bits inside one key profile
- > With 2 reversible bits: cross recess PH / slot $\,$ 7.0 x 1.2 mm and TX20 / TX25 $\,$
- > Tool body: plastic, fibreglass-reinforced
- > Key profiles: zinc die-casted



	EAN	4 ->	O∋		- O -1	52
Article No.	4003773-	mm	Ømm	Ømm	Ømm	g
00 11 07	063018	145	5/6/8	9	3 - 5	95

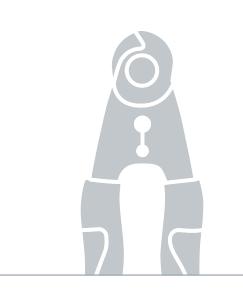
Cable and Wire Rope Shears

95 62 190

CrV

6103

KNIPEX StepCut	149
Cable Shears	150
Cable Shears with twin cutting edge	151
Wire Rope Cutters	152
Electricians Shears	153
ACSR Cable Cutter	155
Cable Cutters (ratchet action)	156
Bowden Cable Cutter	160
Wire Rope and ACSR-Cable Cutters	161



KNIPEX StepCut

Additionally hardened blades, precision-ground: lighter, cleaner cut without crushing

KNIPEX

KNIPEX StepCut

Cable cutting made easy: innovative step cutting separates wires one by one to save energy

- Small, light, strong: comfortable cutting without crushing and just 160 mm in size
- Noticeably less effort: the gradations cut wires one after the other; cutting is up to 40 % easier than with standard cable shears of the same length!
- Ergonomic handle design: optimal cutting feel even for larger cable diameters
- > Cuts multi-core stranded copper and aluminium cables up to Ø 15 mm (50 mm²)
- > Cuts solid copper and aluminium cables up to 5 x 4 mm^2
- > Cuts without crushing
- > Bolted joint: precise, effortless, durable
- > Pinch guard fitted for safe work
- > Not suitable for steel wire and hard drawn copper conductors
- > Long lifetime: high-grade special tool steel, forged, oil-hardened, cutting additionally induction-hardened









						Cutting o	apacities		
	EAN	∢ —▶				•	•		5
Article No.	4003773-	mm		Tool	Handles	Ømm	mm ²	AWG	g
95 11 160	085904	165		burnished	plastic coated	15.0	50	1/0	180
95 11 160 SB	085911	165		burnished	plastic coated	15.0	50	1/0	205
95 12 160	085928	165		burnished	with multi-component grips	15.0	50	1/0	220
95 12 160 SB	085935	165		burnished	with multi-component grips	15.0	50	1/0	245
95 16 160	085966	165	≙ 1000 V 🖄 🚰	chrome plated	insulated with multi-component grips, VDE-tested	15.0	50	1/0	225
95 16 160 SB	085898	165	≙ 1000 V 🖄 🚰	chrome plated	insulated with multi-component grips, VDE-tested	15.0	50	1/0	250

Cable Shears

- > For cutting copper and aluminium single conductors as well as multiple stranded cables
- > Clean and smooth cut without crushing and deformation
- > Not suitable for steel wire and hard drawn copper conductors
- > Precision-ground, hardened blades
- > Easy cutting with one-hand operation
- >With guard
- > Adjustable bolted joint, self-retaining screw
- > High-grade special tool steel, forged, oil-hardened

Style 2

> Internal opening spring, protected and captive

Style 4

> Multifunctional tool for working on NYM cable from 3 x 1.5 mm² to 5 x 2.5 mm² (cutting and stripping); universal stripping area for both solid conductor cross-sections; reliable alignment of the cable in the stripping area due to V-shaped blade geometry

95 12 165 T / 95 16 165 T*

> Pliers with tether attachment point for mounting a fall protection



Cut performed with a Cable Shear: easy, clean cut without any deformation of the cable



95 26 165: Catch locks shears to the opening spring inside



95 41 165: with stripping function

							Cutting o	apacities		
	EAN	-					•	•		52
Article No.	4003773-	mm		Style	Tool	Handles	Ømm	mm ²	AWG	g
95 11 165	040323	165		1	burnished	plastic coated	15	50	1/0	215
95 12 165	029182	165		1	burnished	with multi-component grips	15	50	1/0	250
95 12 165 T	080190	165		1	burnished	with multi-component grips and integrated tether attachment point	15	50	1/0	255
95 16 165	039648	165	≙ 1000 V 🖄 🚰	1	chrome plated	insulated with multi-component grips, VDE-tested	15	50	1/0	262
95 16 165 T	081524	165	会 1000 V @ €	1	chrome plated	insulated with multi-component grips with integrated insulated tether attachment point, VDE tested	15	50	1/0	260
95 21 165	069805	165	MM	2	burnished	plastic coated	15	50	1/0	215
95 22 165	069812	165	MM	2	burnished	with multi-component grips	15	50	1/0	254
95 26 165	069980	165	≜1000V @€ MM	2	chrome plated	insulated with multi-component grips, VDE-tested	15	50	1/0	275
95 41 165	078609	165	MM	4	burnished	plastic coated	12	35	1/0	220

95 22 165

*Other tools with tethering can be found from page 266

Cable Shears

with twin cutting edge

- > For cutting copper and aluminium cables
- > Not suitable for steel wire and hard drawn copper conductors
- > Precision-ground, hardened blades
- > Clean and smooth cut without crushing and deformation
- > By dividing the cutting actions into initial cut (insulating sheath in the front cutting area) and final cut (conductor in the back cutting area), cables up to \emptyset 20 mm can be cut in one-hand operation
- > Low handforce required due to favourable lever ratio and special blade geometry
- > Pinch guard prevents operators' fingers being pinched
- > Adjustable bolted joint, self-retaining screw
- > High-grade special tool steel, forged, oil-hardened



Initial cut: using the front cutting edge to cut the insulating sheath on larger cable diameters leaves an ergonomic handle opening width.



Final cut: after cutting the sheath in the front profile the conductors in the rear part are cut. Initial cut in the front profile, final cut in the rear profile - to keep it as easy as possible.



95 11 200



95 12 200





The twin cutting edge allows a comfortable handle position in all cutting situations within the specified cutting capacity.

						Cutting c	apacities		
	EAN	4-				•	•		52
Article No.	4003773-	mm		Tool	Handles	Ømm	mm ²	AWG	g
95 11 200	043928	200	PATENTED	burnished	plastic coated	20	70	2/0	283
95 12 200	047834	200	PATENTED	burnished	with multi-component grips	20	70	2/0	324
95 16 200	026761	200	A 1000 V A PATENTED	chrome plated	insulated with multi-component grips, VDE-tested	20	70	2/0	340
95 17 200	026952	200	A 1000 V	chrome plated	with dipped insulation, VDE-tested	20	70	2/0	360

Wire Rope Cutters

also for high-strength wire rope

- > Compact, light and powerful
- > Up to 30 % less physical effort compared to wire rope cutters of the same length
- > Double-mounted box joint design for high level of stability
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC
- > Convenient work thanks to opening spring
- > Secured by locking device during transport
- > Ball bearing steel

95 62 160

> For wire rope with Ø 4.00 / 1960 $\rm Nmm^2$

95 62 160 TC

> Specially optimised for precise cutting of tyre cord, wire ropes up to \emptyset 2 mm and cables up to \emptyset 2 mm; Ergonomic efficiency thanks to lightweight design and practical opening restriction



95 62 160 TC



Double-bearing joint



For cutting high-strength wire ropes (1960 N/ mm2) with a diameter of up to 4 mm $\,$



Compact at 160 mm but nevertheless more powerful than many larger wire rope cutters



						Cutting capacities		
	EAN	- >				•	\diamond	52
Article No.	4003773-	mm		Head	Handles	Ømm	mm ²	g
95 62 160	082354	160	MM	burnished	with multi-component grips	6.0	4.0	175
95 62 160 TC	082422	160	MM	burnished	with multi-component grips	2.0	2.0	175

Cable Shears

handles extrusion plastic-coated

- > Not suitable for steel wire and hard drawn copper conductors
- > Precision-ground, hardened blades
- > No crushing, slight deformation of the cable only
- > Pinch guard prevents operators' fingers being pinched
- > Adjustable bolted joint
- > Shears body: surgical steel, stainless, vacuum-hardened
- > Handles: plastic, impact-proof

95 05 165

> Cuts cables up to 10 mm dia. / 24 mm²; with opening spring and locking device; blades made of stainless steel; oil-hardened and tempered

95 06 230

> For copper single conductors up to 16 mm², multiple stranded wires up to 50 mm², fine stranded up to 70 mm² and aluminium conductors multiple stranded wires up to 70 mm²; easy cutting with one-hand operation due to high transmission ratio; stainless – special grade – steel, oil-hardened and tempered



						Cutting capacities			
	EAN	-				•	•		52
Article No.	4003773-	mm		Head	Handles	Ømm	mm ²	AWG	g
95 05 165	019596	165	MM	polished	plastic coated	10	24	3	111
95 06 230	006305	230	🚖 1000 V 🖄 🚭	polished	plastic insulated, VDE-tested	16	50	1/0	274

Electricians' Shears

- Precisely ground blades with fine serration for a clean, non-slip cut
- Cutting edge with integrated cable cutter
- ▶ With plastic belt pouch
- > Universal shears for electricians
- > Handles with multi-component grips, fibreglass-reinforced
- > Cutting edges made from stainless steel, hardness of cutting edges 56 HRC





No slipping thanks to micro-serration



Integrated cable cutter



95 05 10 SB: Fast, easy crimping

Safely stored and ready to hand at all times

Article No.	EAN 4003773-	←→ mm	۵ ^۲ ۵ g
95 05 10 SB	082125	160	135
95 05 155 SB	077725	155	170

Cable Shears

for two-handed use, short construction

- ▶ Short design, length only 500 mm
- ► Low weigth, high leverage
- > For cutting copper and aluminium single conductors as well as multiple stranded cables
- > Not suitable for steel wire and wire ropes
- > Precision-ground, hardened blades
- > Clean and smooth cut without crushing and deformation
- > Low handforce required due to favourable lever ratio and special blade geometry
- > Pinch guard prevents operators' fingers being pinched
- > Adjustable bolted joint
- > Cutter head: vanadium electric steel, forged, oil-hardened
- > Handles: aluminium tube, high-strength



Large cutting capacity: max. 27 mm dia. / 150 mm²

deformation ver ratio and special blade	
g pinched	95 17 500
oil-hardened	

						Cutting capacities			
	EAN	∢ →				•	•		52
Article No.	4003773-	mm		Head	Handles	Ømm	mm ²	AWG	g
95 12 500	069966	500		burnished	with multi-component grips	27	150	5/0	1090
95 17 500	026785	500	<u> </u>	polished	with dipped insulation, VDE-tested	27	150	5/0	1477

95 12 500

Cable Shears

for two-hand operation

- > For cutting copper and aluminium single conductors as well as multiple stranded cables
- > Not suitable for steel wire and wire ropes
- > Precision-ground, hardened blades
- > Clean and smooth cut without crushing and deformation
- > Favourable lever ratio due to toggle lever
- > Pinch guard prevents operators' fingers being pinched
- > Adjustable bolted joint
- > Bolted cutter head, replaceable
- > Handles: steel tube
- > Cutter head: high-grade chrome vanadium electric steel, forged, oil-hardened



						Cutting capacities			
	EAN	~				•	•		52
Article No.	4003773-	mm		Head	Handles	Ømm	mm ²	AWG	g
95 21 600	025252	600		polished	with plastic grips	27	150	5/0	1862
95 27 600	021797	600	会 1000 V ᢙ €	polished	with dipped insulation, VDE-tested	27	150	5/0	2262
95 29 600	021803	Spare of	utter head for 95	21 600 / 95 27 600					

ACSR Cable Cutter

(ratchet action)

for cables with a steel core

- ► Handy. Compact. Sturdy.
- Extremely robust design.
- > Cuts through aluminium conductor cable with steel core up to a diameter of 32 mm in one or two-handed operation
- > Cutters with precision cut and induction-hardened cutting edge
- > Two-stage ratchet drive for easy cutting
- > Less physical effort due to very high transmission ratio
- > Fixed handle with support area for putting down the pliers when cutting
- > Locking mechanism for transporting with safely closed handles
- > Special high grade tool steel, multi stage oil-hardened



95 32 340 SR



Enormous power with a weight of just 1300 $\ensuremath{\mathsf{g}}$



The strong "flange" on the handle can be used as a practical support surface when cutting larger diameters

	EAN	-						5
Article No.	4003773-	mm		Handles	Ømm	Ø inch	MCM	g
95 32 340 SR	081241	340	MM	with multi-component grips	32	1	477	1310
95 39 340 01	081340	81340 Pivot cutter repair kit for 95 32 340 SR						



Cable Cutters

(ratchet action)

- > For cutting copper and aluminium single conductors as well as multiple stranded cables
- > Not suitable for steel wire and wire ropes
- > Precision-ground, hardened blades
- > Clean and smooth cut without crushing and deformation
- > One-hand operation using ratchet principle
- > Little handforce required due to very high transmission ratio
- > Two-stage ratchet drive for easy cutting
- > Simple handling as a result of low weight and compact design can be used even in confined areas
- > Pinch guard prevents operators' fingers being pinched
- > High-grade special tool steel, forged, oil-hardened

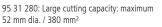
95 31 280 / 95 36 280

> Suitable for aluminium sector cable up to $4 \times 150 \text{ mm}^2$





Ratchet principle and two-stage ratchet drive for easier cutting





95 31 250



95 31 280



95 36 250



95 36 280



95 31 250/280: fixed handle with support area as an aid to position the cutters on a flat surface

						Cutting of	apacities					
	EAN	-				•	•		52			
Article No.	4003773-	mm		Tool	Handles	Ømm	mm ²	MCM	g			
95 31 250	043935	250	MM	black lacquered	with multi-component grips	32	240	500	676			
95 31 280	043942	280	MM	black lacquered	with multi-component grips	52	380	750	860			
95 36 250	026884	250	£1000 V 🖄 🖨 MM	black lacquered	insulated with multi-component grips, VDE-tested	32	240	500	652			
95 36 280	026891	280	£1000 V @ € \\\\	black lacquered	insulated with multi-component grips, VDE-tested	52	380	750	835			
95 39 04	039167	Feed pa	wl 95 3 250/280									
95 39 250	022244	Movabl	e spare blade for 95 31 2	50 / 95 36 250								
95 39 08	039204	Barrel s	pring for 95 31 250/280									
95 39 280	025283	Movabl	e spare blade for 95 31 2	80 / 95 36 280								
95 39 08 S	039211	Tension	spring set for lateral mounting 95 36 25/28									

Cable Cutters

(ratchet principle, 3-stage)

- Sturdy. Easy to use. Stable.
- ▶ Innovative ratchet-drive.
- ▶ For cable up to 60 mm diameter.
- > Fixed handle with support area for putting down the pliers when cutting
- > Easy handling due to low weight (825 g) and compact construction (320 mm length) also usable in confined areas
- > Cutting through copper and aluminium cables with diameters of up to 60 mm in one-hand and two-hand operation
- > Hardened cutting edges, precisely ground, cut smoothly and neatly without crushing
- > For cutting copper and aluminium single conductors as well as multiple stranded cables (not suitable for steel wire and wire ropes)
- > Innovative three-stage ratchet-drive with high leverage for easy cutting in one-hand and two-hand operation
- > High-grade special tool steel, forged, oil-hardened



95 32 320



95 36 320

The innovative three gear drive permits three operating modes

- > Fast working with full lift of handles and one-handed operation when cutting through insulation material
- > Powerfully sliding the sickle knife forward when cutting through the stranded conductor with two hand through use of the central lifting area (handling opening of between 1/3 and 2/3)
- > Powerfully pushing the sickle knife forward with one hand to cut through the stranded conductor through use of the first third of the handle lift with one or two hands

First manual ratchet-action cable cutter for one-hand and two-hand operation for cutting copper and aluminium cables with diameters of up to 60 mm!







							Cutting ca	pacities			
	EAN	-					•			52	
Article No.	4003773-	mm		Tool	Head	Handles	Ømm	mm ²	MCM	g	
95 32 320	075172	320	MM	black atramentized	polished	with multi-component grips	60	600	1200	825	
95 36 320	075189	320	≙ 1000 V ≧ € MW	black atramentized	polished	insulated with multi-component grips, VDE-tested	60	600	1200	830	
95 39 320 01	075714	5714 Pivot cutter repair kit for 95 32 320 and 95 36 320									
95 39 320 02	075721	Fixed o	ed cutter repair kit for 95 32 320 and 95 36 320								

Cable Cutters

(ratchet action)

for steel wire armoured cables (SWA cable)

- Cuts through steel wire armoured cables with a diameter of up to 45 mm / 380 mm² (e.g. 4 x 95 mm²) using one or two-handed operation
- ▶ Sturdy. Easy to use. Stable.
- > Simple handling due to low weight (800 g) and compact design (315 mm length) – can also be used in confined areas
- > Precision-ground blades and induction-hardened cutting edges cut smoothly and neatly without crushing
- > Innovative high leverage three-stage ratchet-drive
- > Support area for putting down the pliers when cutting
- > Not suitable for cutting ACSR cable and wire rope!
- > Cutter head: special high-grade tool steel, forged, oil-hardened



95 32 315 A



95 36 315 A



						Cutting capa			
	EAN					•	•		52
Article No.	4003773-	mm		Tool	Handles	Ømm	mm ²	MCM	g
95 32 315 A	078562	315	MM	black lacquered	with multi-component grips	45	380	750	800
95 36 315 A	078579	315	≙ 1000 V≙€ MM	black lacquered	insulated with multi-component grips, VDE-tested	45	380	750	800
05 30 345 404	070506	D' (22.245.4					
95 39 315 A01	078586 Pivot cutter repair kit for 95 32 315 A and 95 36 315 A								

Cable Shears

(ratchet action)

with telescopic handles

- Cable shears with adjustable telescopic handles allowing angular positioning
- > For cable diameters up to 38 mm, handles can be positioned at an angle to set the optimum handle width, which makes the shear also suitable for work in confined areas
- > Comfortable work thanks to ratchet action and low weight
- > Heavy duty telescopic handles made of oval aluminium tubing; extendable up to 770 mm for maximum leverage on large cable diameters; retractable down to 570 mm for minimum space requirements during transport
- > Replaceable cutting head
- > Extensive cutting range up to max. Ø 38 mm or max. 280 mm² (e.g. 4 x 70 mm² NYY) in copper and aluminium cables
- > Easier, neater cut due to optimised cutting edge geometry
- > Adjustable bolted joint
- > Handles: high-strength oval aluminium tubing
- > Cutting head: special quality high-grade tool steel, oil-hardened



95 32 038



Handles adjustable in length and angular position for easier work: set the handle length to the optimum lever for powerful cutting; put the handles at an angle for a comfortable gripping position

					Cutting o	Cutting capacities		
Article No.	EAN 4003773-	←→ mm	Head	Handles	Ø mm	mm ²	MCM	۵'ک g
95 32 038	071556	570	burnished	with multi-component grips	38	280	550	1980

95 39 038 073260 Spare cutter head for 95 32 038

Cable Cutters

(ratchet action)

with telescopic handles

- > For copper and aluminium single conductors as well as multiple stranded cables – also with hard rubber or plastic sheath
- > Not suitable for steel wire and wire ropes
- > Also suitable for cables with iron sheath reinforcement
- > Little hand force required for cutting due to optimum transmission ratio
- > High cutting capacity due to two-hand operation and ratchet action
- > The blade can be opened in any cutting position
- > Handle length with multiple position adjustment from 400 610 mm (short transport length, individual adaptation to working conditions)
- > Blade: special-quality high-grade tool steel, oil-hardened
- > Handles: high-strength oval aluminium tubing

95 32 100

> Tool length: 650 - 860 mm; weight only 4980 g

95 32 060

> Tool in length: 630 to 830 mm; weight only approx. 3820 g



95 32 060



					Cutting c	apacities			
Article No.	EAN 4003773-		Head	Handles	Ømm		МСМ	52	
ATTICIE NO.	4003773-	mm	неац	Hanules	Ømm	mm ²	IVICIVI	g	
95 32 060	071563	630	burnished	with multi-component grips	60	740	1400	3820	
95 32 100	071570	680	burnisheu	with multi-component grips	100	960	1900	4980	
95 39 720	025290	Movabl	vable spare blade for 95 31 720 / 95 32 060						
95 39 870	025306	Movabl	ovable spare blade for 95 31 870 / 95 32 100						

Wire Rope Cutters

forged

Double function: neat cutting, precise crimping

- > With two crimping dies for end caps on Bowden cable sheaths and end ferrules for traction cables
- > Comfortable work thanks to handy, slim design and internal opening spring
- > Bolted joint for precise blade guidance, re-adjustable
- > High leverage for reduced effort
- > Cutting edge hardness approx. 64 HRC
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened

95 62 190 T*

> Pliers with tether attachment point for mounting a fall protection





Internal opening spring

Crimping of the end caps on the Bowden cable sheath

						Cutting capacities						
	EAN	∢ —▶				•	$\langle \circ \rangle$			52		
Article No.	4003773-	mm		Head	Handles	Ømm	Ømm	Ømm	Ømm	g		
95 61 190	040651	190	MM	polished	plastic coated	7.0	5.0	4.0	2.5	310		
95 62 190	071976	190	MM	burnished	with multi-component grips	7.0	5.0	4.0	2.5	314		
95 62 190 T	080206	190	MM	burnished	with multi-component grips and integrated tether attachment point	7.0	5.0	4.0	2.5	345		

Bowden Cable Cutter

- > For Bowden cables and soft wire rope up to 3.0 mm dia. (also V2A)
- > Smooth and clean cutting due to special shape of the cutting edges
- > Sickle shape cutting edges surround the material and prevent the wire rope fanning out
- > Little handforce required due to very high transmission ratio
- > With opening spring and locking device
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened





			1	K	5
	/		4	-1	2
-	-20	5		30	80
-	-				

							Cutting capacities	
	EAN	-					A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	52
Article No	4003773-	mm		Shears	Head	Handles	Ømm	g
95 61 15	0 065197	150	MW	black atramentized	polished	plastic coated	3.0	205



95 61 190

95 62 190



95 62 190 T

Cuts all wire ropes without splaying, including those that are extremely strong

Wire Rope and ACSR-Cable Cutters

Handles: aluminium, high-strength

- > For wire ropes and steel rods, copper and aluminium cables
- > Suitable for cutting overhead cables with strain relief wire (ACSR-cables)
- > Angular cutting blades allow cutting of single rope wire
- > Optimum transmission ratio for high cutting performance
- > Bolted cutter head, replaceable
- >Low weight
- > Handles: aluminium, high-strength
- > Cutter head: high-grade special tool steel, multi stage oil-hardened

95 81 600

> With reinforced cutter head for higher performance, also cuts piano wire





95 81 600

							Cutting capacities					
	EAN						\bigcirc				52	
Article No.	4003773-	mm		Head	Handles	mm ²	Ømm	Ømm	Ømm	AWG	g	
95 71 445	014522	445		polished	plastic coated	95	10,0	7,0		3 / 0	1083	
95 71 600	014539	600		polished	plastic coated	150	14,0	9,0		5/0	1716	
95 77 600	025313	600	≙ 1000 V 🖄 🚰	polished	dipped insulation	150	14,0	9,0		5/0	2359	
95 81 600	025344	600		polished	plastic coated	150	16,0	10,0	4,5	5/0	2256	
95 79 445	025320	Spare	cutter head for 95 71	445								
95 79 600	025337	Spare	cutter head for 95 7	1 600 / 95 77 6	00							
95 89 600	025351	Spare	pare cutter head for 95 81 600									

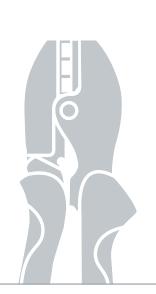
Crimping Pliers and Crimp Assortments

0.5

C

0

Crimping Pliers	164
Insertion tool	165
KNIPEX MultiCrimp® – Crimping Pliers with changer magazine	166
Crimp System Pliers	168
KNIPEX eCrimp – Electromechanical Crimp System Pliers	169
Crimping Dies	170
Locators	171
Tool Case for Photovoltaics	172
Set of Mounting Tools for solar cable connectors MC4 (Multi-Contact)	173
Compression Tool	173
Crimping Pliers for Scotchlok [™] connectors	173
Crimping Pliers for Western plugs	174
Crimping Pliers short design	174
Crimping Pliers also for two-hand operation	175
KNIPEX PreciForce [®] – Crimping Pliers	176
Four-Mandrel Crimping Pliers for turned contacts	178
Self-Adjusting Crimping Pliers for wire ferrules with lateral access	180
KNIPEX Twistor16 [®] – Self-Adjusting Crimping Pliers for wire ferrules	181
Self-Adjusting Crimping Pliers for wire ferrules with front loading	182
Crimping Pliers for micro plugs	183
Crimping Pliers for wire ferrules	183
Crimp Assortments	186
Assortment Boxes	192
F-compression connector	193



Crimping Pliers

- > For cutting cables, stripping wire and crimping insulated and non-insulated terminals, connectors and plug type connectors
- > With threaded holes for cutting copper and brass screws threaded M 2.6 / M 3 / M 3.5 / M 4 and M 5
- > Bolted joint for higher stability and even movement
- > Special steel, high-strength







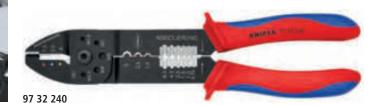




97 21 215 C



97 22 240



Article No.	EAN 4003773-	∢→ mm			Pliers	Handles	Applications	Capacity mm ²	AWG	۵'ک g
97 21 215	019688	230	A -	U	black lacquered	with multi-component grips	insulated terminals + cable connectors	0.5 - 6	20 - 10	290
97 21 215 B	019695	230	-	<u>~</u>	black lacquered	with multi-component grips	non-insulated open plug-type connectors (plug width 6.3 mm)	0.5 - 2.5	20 - 13	290
97 21 215 C	019701	230	a se	V	black lacquered	with multi-component grips	non-insulated terminals + cable connectors	0.5 - 6	20 - 10	290
97 22 240	070726	240	A -		black lacguered	with multi-component	insulated terminals + cable connectors/ non-insulated open plug-type connectors (plug width 6.3 mm)	0.5 - 6	20 - 10	270
			and a second	<u>~</u>	lacquereu	grips	non-insulated open plug-type connectors (plug width 6.3 mm)	0.5 - 2.5	20 - 13	
97 32 240	079491	240	<i>~</i> ~		black	with multi-component	insulated terminals + cable connectors/ non-insulated terminals + cable connectors	0.5 - 6	20 - 10	300
			and the second s	V	lacquered	grips	non-insulated terminals + cable connectors	0.5 - 6	20 - 10	

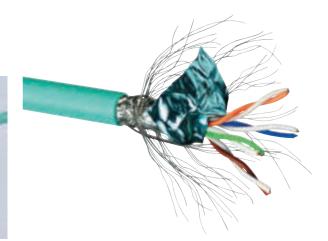
Insertion tool

for LSA-Plus and identical construction design

- > Tool for putting on boards, sockets and fields
- > Pushing down and cutting in one operation
- > For UTP and STP cables, conductor 0.4 0.8 mm dia.
- > With integrated pulling hook and release blade
- > Housing: plastic, impact-proof



97 40 10





With integrated pulling hook

Inserts and cuts cables in one operation

	EAN	∢ >			Capacity	52
Article No.	4003773-	mm	Head	Applications	Ømm	g
97 40 10	044895	175	burnished	UTP- and STP-cables, LSA-Plus and identical	0.4 - 0.8	100



KNIPEX MultiCrimp®

Crimping Pliers with changer magazine

- > Just one tool for the most common crimping applications
- > Crimping dies changed quickly and easily without any additional tool
 > Sorted and protected storage of the interchangeable dies in a round magazine
- > Comfortable, powerful crimping pliers in professional quality
- > Same reliable crimping results as with fixed crimping dies
- > Consistently high crimping quality thanks to precision dies and forced locking mechanism (unlockable)
- > Chrome vanadium electric steel in special quality, oil-hardened
- > Round magazine: plastic, fibreglass-reinforced

97 33 01

> Crimping pliers with round magazine and three interchangeable crimping dies for non-insulated open plug type connectors (4.8 + 6.3 mm width) from 0.5 - 6.0 mm²; for insulated terminals, plug connectors and butt connectors from 0.5 - 6.0 mm² and for insulated and non-insulated wire end sleeves from 0.25 - 6.0 mm²

97 33 02

> Crimping pliers with round magazine and five interchangeable dies for non-insulated open plug type connectors (plug width 4.8 + 6.3 mm) from 0.5 - 6 mm²; for insulated terminals, plug connectors and butt connectors from 0.5 - 6 mm²; for insulated and non-insulated end sleeves (ferrules) from 0.25 - 6 mm²; for insulated and non-insulated wire end sleeves with 10 / 16 / 25 mm² and for non-insulated crimp terminals. tube and compression cable lugs in accordance with DIN 46234 and DIN 46235 and non-insulated crimp, butt and press connectors in accordance with DIN 46341 and DIN 46267



97 33 02

Compact, inexpensive and light-weight crimping pliers for fitting and repairs. The electrician needs only one tool now instead of five as before.



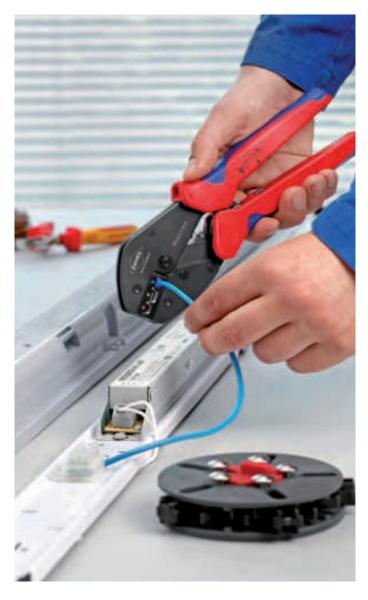
Changing position: service lever opens out for parallel jaw positioning



Changing the crimping dies: unlock the magazine position, take out the set of dies which the pliers have been pushed on



Fold in the service lever and press the pliers - ready for use again





Magazine for crimping dies can be carried on a belt



Clearly visible marking on the crimping dies with pictograms

Article No.	EAN 4003773-	∢→ mm			Applications	Capacity mm²	AWG	۵ ^۲ ۵ g			
97 33 01	066927	250	Seale .		non-insulated open plug type connectors (plug width $4.8 + 6.3 \text{ mm}$)	0.5 - 6	20 - 10	770			
			<i>~</i>		insulated terminals, plug connectors + butt connectors	0.5 - 6	20 - 10				
			<i>i</i>		Wire ferrules	0.25 - 6	23 - 10				
97 33 02	066934	250	Ser ala		non-insulated open plug type connectors (plug width 4.8 + 6.3 mm)	0.5 - 6	20 - 10	870			
			<i>~</i> ~		insulated terminals, plug connectors + butt connectors	0.5 - 6	20 - 10				
					Wire ferrules	0.5 - 6	23 - 10				
						10 / 16 / 25	7/5/3				
			18	MM	non-insulated crimp terminals, tube and compression cable lugs in accordance with DIN 46234 and DIN 46235 and non-insulated crimp, butt and press connectors in accordance with DIN 46341 and DIN 46267	0.5 - 10	20 - 7				
97 39 05	070078	Crimr	oing dies for non-ins	ulated open plug t	ype connectors (plug width 4.8 + 6.3 mm)	1					
97 39 09	077763		ping dies for insulate	1 1 3							
97 39 13 A		Crimp	ping dies for non-ins	ulated crimp termi	nals, tube and compression cable lugs in accordance with DIN 46234 Inectors in accordance with DIN 46341 and DIN 46267	and DIN 46235					
97 39 06	070085				connectors and butt connectors						
97 39 08	070092	Crimp	ping dies for insulate	d and non-insulate	ed wire ferrules						
97 39 13	070108	Crimp and r	oing dies for non-ins ion-insulated crimp,	ing dies for non-insulated crimp terminals, tube and compression cable lugs in accordance with DIN 46234 and DIN 46235 on-insulated crimp, butt and press connectors in accordance with DIN 46341 and DIN 46267							
97 39 90	070061	Chan	ger magazine empty								

Crimp System Pliers

for exchangeable crimping dies

- > Just one tool for almost 1000 crimping applications
- > Almost parallel crimping motion
- > Consistently high crimping quality thanks to precision dies and forced locking mechanism (unlockable)
- > Crimping pressure has been set precisely (calibrated) in the factory, re-adjustable
- > Optimum transmission of force due to lever action for fatigue-reduced operation
- > Ergonomically designed handles
- > Different locators for precise positioning of the connectors
- > Crimping dies for applications not covered in the range offered here, may be available on request
- > Chrome vanadium electric steel in special quality, oil-hardened

97 43 05

> With attached crimping dies for non-insulated open plug-type connectors (4.8 and 6.3 mm connector width)

97 43 06

> With attached crimping dies for insulated terminals and plug connectors

97 43 200

> Comes in a plastic case; foam insert with recesses for crimping dies and locators; with service tool (Allen key), screws and nuts; without crimping dies

97 43 200 A

> Pliers without crimping dies, without case





97 43 200 A



97 43 05



97 43 06

With the possibility of crimping almost all currently available crimping connections with just one tool and state-of-the-art crimping pliers technology, the crimp system pliers solves almost all tasks in mobile and stationary crimping technology and is an <u>excellent tool for professionals to use for</u> standard crimping.



97 43 200 with crimping dies 97 49 06 for insulated terminals, plug connectors and butt connectors



97 43 200 with crimping dies 97 49 09 for wire ferrules



97 43 400 with crimping dies 97 49 24 and locator 97 49 93 for D-Sub plugs

Article No.	EAN 4003773-	∢→ mm			Pliers	Handles	Applications	Capacity mm ²	AWG	۵ ^۲ ۵ g
97 43 200	030812	200		MM	burnished	with multi-component grips	see crimping dies table			988
97 43 200 A	071587	200		MM	burnished	with multi-component grips	see crimping dies table			574
97 43 05	031031	200	-	~	burnished	with multi-component grips	Crimp System Pliers for non-insulated open plug-type connectors (4.8 and 6.3 mm connector width)	0.5 - 6	20 - 10	618
97 43 06	031048	200			burnished	with multi-component grips	Crimp System Pliers for insulated terminals and plug connectors	0.5 - 6	20 - 10	610

KNIPEX eCrimp

Electromechanical Crimp System Pliers for exchangeable crimping dies

- > Strong electromechanical drive, no hydraulic components, no leakages
- > Possible use of over 40 KNIPEX crimping dies and locators as well as more than 1000 special crimping dies from the proven Crimp System Pliers (97 43 200)
- > Ergonomically optimised, user-friendly working height during workshop operation
- > LED working light for targeted illumination of the crimping area
- >Low noise level
- > Long servicing intervals (up to 25,000 crimping actions)! The KNIPEX eCrimp is designed to only require servicing after 25,000 crimping actions. This means the intervals between servicing the electromechanical crimping pliers is 2.5 : 1 in relation to conventionally actuated crimping pliers. The pliers are therefore available for crimping use for considerably longer. They do not need to be sent away frequently for servicing. High availability without downtimes while being serviced.
- > Powerful li-ion rechargeable battery (12 V; 1.5 Ah; 18 Wh); charge time approx. 30 min; no memory effect
- > Tether attachment point to prevent falling during field work
- > Max. pressing force of the jaws approx. 11 kN
- > Approx. 170 operating cycles for plug-in connectors with 10 mm² nominal size with a single battery charge

97 43 E > With euro plug

97 43 E AUS

> With plug adapter for AS/NSZ 3112 (AUS+NZ)

97 43 E UK

> With plug adapter for BS 5733 (GB)

97 43 E US

> With plug NEMA 1-15P (USA / Canada / Mexico)





The KNIPEX eCrimp is the first electromechanically actuated model of crimping pliers in the world. The possible use of over 40 KNIPEX crimping dies and locators as well as more than 1,000 special crimping dies from the proven Crimp System Pliers (97 43 200). Its universal application range makes it an essential tool in the workshop and for rough field work.











	EAN			5
Article No.	4003773-	Mains voltage/frequency	Connector socket	g
97 43 E	076858	230 V / 50 Hz	CEE 7/16	1960
97 43 E UK	076865	230 V / 50 Hz	BS 5733	1960
97 43 E AUS	076872	230 V / 50 Hz	AS/NSZ 3112	1960
97 43 E US	077008	120 V / 60 Hz	NEMA 1-15P	1960

Crimping Dies

for KNIPEX Crimp System Pliers Art. No.: 97 43 XX

> Up to 250 different die profiles available; special profiles on request

Article No.	EAN 4003773-			Applications	Capacity mm²	AWG	Capacity SW mm	Sleeves Ø mm
97 49 04	030850		/	non-insulated open plug type connectors (plug width $2.8 + 4.8$ mm)	0.1 - 2.5	27 - 13		
97 49 05	030867	- Carl	٨	non-insulated open plug type connectors (plug width 4.8 + 6.3 mm)	0.5 - 6	20 - 10		
97 49 06	030836	2		insulated terminals, plug connectors + butt connectors	0.5 - 6	20 - 10		
97 49 07	077749	-	J	heat shrinkeable sleeve connectors	0.5 - 6	20 - 10		
97 49 08	030874		V	insulated and non-insulated wire ferrules	0.25 - 6	23 - 10		
97 49 09	030881		V	insulated and non-insulated wire ferrules	10 / 16 / 25	7 / 5 / 3		
97 49 10	076896		V	non-insulated tubular cable lugs and crimp terminals in accordance with DIN 46237 and non-insulated butt and crimp connectors in accordance with DIN 46341	0.25 - 0.75 / 1 - 1.5 / 2.5	13 / 15 - 17 / 19 - 20		
97 49 11	076902	of-	~	non-insulated crimp terminals, tube and compres- sion cable lugs in accordance with DIN 46234 and DIN 46235 and non-insulated crimp, butt and press connectors in accordance with DIN 46341 and DIN 46267	4 / 6 / 10	11 / 10 / 7		
97 49 14	077756	_	~	for non-insulated crimp terminals, tube and com- pression cable lugs in accordance with DIN 46234 and DIN 46235 and non-insulated crimp, butt and press connectors in accordance with DIN 46341 and DIN 46267	0.5 - 10	20 - 7		
97 49 15	043164	and a second	۸	for plug connectors and angled spade connectors according to DIN 46346 Form A (1.5 - 2.5 mm ²)/ for non-insulated, open lug connectors (straight version) according to DIN 46247 (2.5 – 6 mm ²)	1.25 - 2.5 / 3 - 6			
97 49 16	040675	2	^	insulated terminals + cable connectors	10 - 16	7 / 5		
97 49 18	063186		V	Twin wire ferrules for two flexible conductors	6 / 10 / 16			
97 49 19	030898	2	V	insulated and non-insulated wire ferrules	35 - 50	2 / 0		
97 49 20	045069	650		F-connectors for TV and satellite connections			7.0 / 8.4 / 8.1	7.7 / 9.5 / 9.5
7 49 23	052135	S	V	non-insulated terminals + cable connectors	16 / 25	5/3		
97 49 24	030911		^	D Sub; HD 20; HDE plug	0.03 - 0.56	32 - 20		
97 49 25	079798	ر الم	-^-	for crimping connectors from the Micro-Fit™ series from Molex LLC		30 - 26 / 24 - 22 / 20		
97 49 26	079804	-080	-^-	for crimping connectors in the Mini-Fit® series from Molex LLC		24 - 20 / 18 / 16		
97 49 27	079811	-	~	MQS connectors	0.25 / 0.35 / 0.5	24 / 22 / 20		
97 49 28	083757	مرم المحصر	<u>~</u>	connectors of the AMP Superseal 1.5 series from Tyco Electronics	0.35 - 0.5 / 0.75 / 1 / 1.5	32 - 20		
97 49 30	030904	_		non-insulated crimp connectors in accordance with DIN 46267	1.5 - 4 6 / 10	15 - 7 10 / 7		
97 49 35	034315	1	^	spark plug connectors and distributors	1	17		
97 49 40	030959	SP.		Coax connectors RG 58, 59, 62, 71, 223			5.4 / 6.48 / 1.72	6.4 / 7.6 / 2.1

Article No.	EAN 4003773-			Applications	Capacity mm ²	AWG	Capacity SW mm	Sleeves Ø mm
97 49 44	041443	and the second	/	PCB plug connector, type Phoenix-Contact module connector MCC-MT	0.14 / 1.5			
97 49 50	030966	S		Coax connectors/ car phone RG 58, 74, 188, 316			3.25 / 4.52 / 5.4 / 1.72 / 1.07 / 0.72	3.9 / 5.4 / 6.4 / 2.1 / 1.3 / 0.95
97 49 54	041450	on the	٨	TE Timer Contact System / Junior Power Timer / Receptacle Contacts (length 18.8 mm)	0.5 - 2.5			
97 49 59	073734		•	solar cable connectors Helios H4 (Amphenol)	2.5 / 4 / 6	13 - 10		
97 49 60	030928			turned contacts (HTS + Harting)	0.14 - 4	26 - 11		
97 49 61	045137			turned contacts	1.5 / 2.5 / 4 / 6	10 / 11 / 13 / 15		
97 49 62	063179		▲●	solar cable connectors (Huber + Suhner)	2.5 / 4	13 / 11		
97 49 63	066675			solar cable connectors (Huber + Suhner)	4 / 6	11 / 10		
97 49 64	044055			ABS connectors in motor vehicles	1 / 6	17 - 10		
97 49 65	066682	-	•	solar cable connectors MC3 (Multi-Contact)	2.5 - 6	13 / 10		
97 49 66	066699		/	solar cable connectors MC4 (Multi-Contact)	2.5 - 6	13 / 10		
97 49 66 4	072096	e de la	٨	solar cable connectors MC4 (Multi-Contact) cutting – stripping – crimping	4	11		
97 49 66 6	072102		٨	solar cable connectors MC4 (Multi-Contact) cutting – stripping – crimping	6	10		
97 49 67	066705	6-5-5	٨	solar cable connectors (Hirschmann)	2.5 - 6	13 - 10		
97 49 68	066712		+	solar cable connectors (Tyco)	1.5 - 6	15 - 10		
97 49 69 1	072119		•	solar cable connectors gesis® solar PST 40 (Wieland)	0.14 - 4	26 - 11		
97 49 69 2	072126		•	solar cable connectors gesis [®] solar PST 40 (Wieland)	4 - 10	11 - 7		
97 49 70	030942		آ س ا	solar cable connectors MC4 (Multi-Contact)	4 - 10			
97 49 71	075066	contr	^	solar cable connectors MC4 (Multi-Contact)	4 - 10	11 - 7		
97 49 72	076957	-	•	solar cable connectors MC3 (Multi-Contact)	4 / 6 / 10	7 / 10 / 11		
97 49 74	044062	-	Ì í	unshielded Molex plugs				
97 49 76	047513	1	`	shielded Stewart plugs				
97 49 81	042778	_		fibre optic connectors, e.g. Harting			3.0 / 4.95 / 6.5	3.5 / 6.0 / 7.5
97 49 82	042785	_		fibre optic connectors, e.g. Telegärtner			3.25 / 3.65 / 4.52	3.6 / 4.0 / 5.4
97 49 83	044079	- M		fibre optic connectors, e.g. FSMA-;ST-; SC- + STSC-/K-connectors			3.65 / 4.2 / 5.0	4.3 / 5.4 / 6.0
97 49 84	042792			fibre optic conncetors, e.g. Huber/Suhner			3.8 / 4.3 / 4.95	4.5 / 5.2 / 6.0
97 49 87	043331			fibre optic connectors, e.g. FSMA-;ST- and MIC-connectors			8.7	9.5
97 49 94	030997	Locator	for S	7 49 04				
97 49 95	031000	Locator	for S	7 49 05				
97 49 93	047926			97 49 24 (DSubplugs)				
97 49 28 1	083764			opper for 97 49 28				
97 49 59 1	073741			7 49 59 (solar cable connectors Helios H4)				
97 49 90	031017			07 49 60 (HTS+Harting)				
97 49 65 1	066729			07 49 65 (solar cable connectors MC3)				
97 49 66 1	066736			07 49 66 (solar cable connectors MC4)				
97 49 68 1	066743			07 49 68 (solar cable connectors Solarlok)				
97 49 69 11				07 49 69 1 and 97 49 69 2				
97 49 71 1	075073	Locator	tor S	07 49 71 (solar cable connectors MC4)				

Tool Case for Photovoltaics

- > With tools for photovoltaics
- > Without crimping dies please order separately (see ref. 97 49...) for individual assortment
- > With service tools (hexagonal key) for the change of crimping dies
- > Shock-resistant plastic case
- > Foam insert with recesses for tools, crimping dies and locators
- > Dimensions, exterior (W x H x D): 345 x 80 x 280 mm



Article No.	EAN 4003773-				Quantity	۵'۵ g
97 91 01	070351		Tool Case for I	Photovoltaics		1964
	062998	MM (PATENTED)	12 12 11	Precision Insulation Stripper with adapted blades	1	
	039648	A 1000 V 🖄 🚰 🤂	95 16 165	Cable Shears	1	
	030812	MM	97 43 200	Crimp System Pliers for exchangeable crimping dies	1	

Set of Mounting Tools

for solar cable connectors MC4 (Multi-Contact)

- > Set of two mounting tools
- > To loosen and tighten cable glands of MC4 solar plugs
- > To open the locking of MC4 housings (even in case of
- mounted lock clip)
- > Tool: plastic, fibreglass-reinforced



97 49 66 2

Article No.	EAN 4003773-	-→ mm	۵'ک g
97 49 66 2	074106	115	18
97 49 66 1	066736	Locator for 97 49 66 (solar cable connectors MC	(4)
97 49 66 4	072096	Crimping dies	
97 49 66 6	072102	Crimping dies	



for coax connectors

- ► For crimping F, BNC and RCA connectors
- ▶ Robust design
- > Suitable for RG 59 / 6 / 11 cable
- > Rotatable head for different cable sizes
- > Adjusting screw for various connector lengths
- > Applicable among others for compression connectors Kathrein EMK 12; Cablecon F-56 CX3 5.1; Astro FKS 06



97 40 20 SB



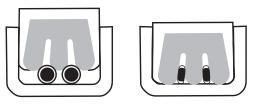
Article No.	EAN 4003773-	∢→ mm	Applications	۵'ک g
97 40 20 SB	077626	175	for F, BNC and RCA connectors	430

Crimping Pliers for Scotchlok™ connectors

with side cutter

- > For crimping plastic-insulated telecommunication or signal cables using the U-contact principle in single Scotchlok™ connectors
- > No stripping necessary, U-shaped elements establish the connection
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 59 - 62 HRC
- > With opening spring
- > Vanadium electric steel; forged, oil-hardened





Article No.	EAN 4003773-	∢→ mm		Head	Handles	Applications	Capacity Ø mm	۵۵ g
97 50 01	028239	155	MM	polished	plastic coated	Scotchlok™ single connector	0.4 - 1.1	135

Crimping Pliers for Western plugs

- > Professional tool for cutting and stripping unshielded ribbon telephone cables
- > For crimping 6- and 8-pole Western plugs type RJ 11/12 (9.65 mm width) and type RJ 45 (11.68 mm width)
- > Precise crimping process thanks to parallel crimping
- > Repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- > With length cutter and stripping knife for ribbon cables 6 and 12 mm length
- > With additional stripping device for round cables
- > Optimum transmission of force due to lever action for fatigue-reduced operation
- > For Western plug type RJ 10 (7.65 mm wide), RJ 11/12 (9.65 mm wide) and RJ 45 (11.68 mm wide)
- > Head burnished, two-colour dual component handles
- > Chrome vanadium electric steel in special quality, oil-hardened





Article No.	EAN 4003773-	∢→ mm			Handles	Capacity	۵ ^۲ ۵ g
97 51 10	043171	190		· ///	with multi-component grips	RJ 11/12 (6-poles) 9.65 mm RJ 45 (8-poles) 11.68 mm	340
97 51 12	043188	200		🛏	with multi-component grips	RJ 10 (4-poles) 7.65 mm RJ 11/12 (6-poles) 9.65 mm RJ 45 (8-poles) 11.68 mm	533
97 59 06	029700	4 spare	blades for 97 51 1	0			

Crimping Pliers

short design

97 59 12

- > Consistently high crimping quality thanks to precision dies and forced locking mechanism (unlockable)
- > Crimping pressure has been set precisely (calibrated) in the factory, re-adjustable

069997 3 spare blades for 97 51 12

- > Optimum transmission of force thanks to toggle lever for fatiguereduced operation
- > Good handling due to 20° angled head, low weight and short design
- > Optimum transmission of force due to lever action for fatigue-reduced operation
- > Chrome vanadium electric steel in special quality, oil-hardened

97 52 14

> Available as accessory: locator for non-insulated open plug-type connectors



Article No.	EAN 4003773-	←→ mm			Handles	Applications	Capacity mm ²	AWG	۵'۵ g
97 52 14	026808	195	and the second s		with multi- component grips	non-insulated open plug type connectors (plug width 2.8 + 4.8 mm)	0.1 - 1.5	27 - 16	387
97 52 20	026853	195	S		with multi-com- ponent grips	Coax-, BNC- and TNC-connectors RG 58/59/62/71/223			380
97 59 14	026976	Locato	or for 97 5	52 14					

Crimping Pliers

also for two-hand operation

- > For solder-free electrical connections
- > The ingenious lever transmission reduces the handforce up to 30 %compared with regular crimping pliers
- > Consistently high crimping quality thanks to precision dies and forced locking mechanism (unlockable)
- > Crimping pressure has been set precisely (calibrated) in the factory, re-adjustable
- > Two-hand operation for easy crimping of large conductor diameters
- > Easy handling as a result of well balanced centre of gravity, angled head and ergnomically shaped handles
- > Chrome vanadium electric steel in special quality, oil-hardened



97 52 05

97 52 06



First step: move the handle with two fingers only until both jaws touch the connector to be crimped





Second step: now use the whole hand for further crimping procedure

Third step: when greater hand force is required, such as e.g. when crimping insulated connectors 6.0 mm², two-hand operation is possible by the longer handles



97 52 08

97 52 10

97 52 09



97 52 13



97 52 19

Article No.	EAN 4003773-	∢→ mm			Applications	Capacity mm ²	AWG	۵۵ g
97 52 04	025450	250	and a	M MM	non-insulated open plug type connectors (plug width 2.8 + 4.8 mm)	0,1 - 2,5	27 - 13	562
97 52 05	025467	250			non-insulated open plug type connectors (plug width 2.8 + 4.8 mm)	0,5 - 6	20 - 10	572
97 52 06	025474	250	🧈 🥟		insulated terminals, plug connectors and butt connectors	0,5 - 6	20 - 10	565
97 52 08	025481	250			insulated and non-insulated end sleeves (ferrules)	0,25 - 6	23 - 10	565
97 52 09	025498	250		~ MM	insulated and non-insulated end sleeves (ferrules)	10 / 16 / 25	7 / 5 / 3	571
97 52 10	023678	250	S	MW	Coax-, BNC- and TNC-connectors			577
97 52 13	048084	250	18	~ MM	non-insulated crimp terminals, tube and compression cable lugs in accord- ance with DIN 46234 and DIN 46235 and non-insulated crimp, butt and press connectors in accordance with DIN 46341 and DIN 46267	0,5 - 10	20 - 7	558
97 52 19	052142	250	<i>i</i> i i i i i i i i i i i i i i i i i i	M WW	insulated and non-insulated end sleeves (ferrules)	35 - 50	2 / 0	567
97 52 23	052159	250	er-		non-insulated terminals + cable connectors	16 / 25	5/3	565
97 52 18	026839	250	<i>"</i>	~ MM	Twin end sleeves (ferrules) 2 x 6 / 2 x 10 / 2 x 16 mm ²		2 x 10 / 2 x 7 / 2 x 5	571
97 49 94	030997	Locat	or for 97 49 04 /	97 52 04 / 9	97 52 34			
97 49 95	031000	Locat	or for 97 49 05 /	97 52 05 / 9	97 52 35			

KNIPEX PreciForce[®]

Crimping Pliers

- > Consistently high crimping quality thanks to precision dies and forced locking mechanism (unlockable)
- > Crimping pressure has been set precisely (calibrated) in the factory, re-adjustable
- > Optimum transmission of force thanks to toggle lever for fatiguereduced operation
- > Good handling thanks to favourable handle position, low weight, compact design and ergonomically shaped handles
- > Chrome vanadium electric steel in special quality, oil-hardened

For daily crimping applications, the specialist likes crimping pliers that work precisely and reliably.

In addition, they should be light, comfortable to use, robust and reasonably priced: KNIPEX PreciForce®.



97 52 36







97 52 30



97 52 33



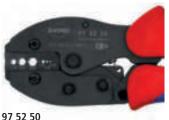
97 52 34



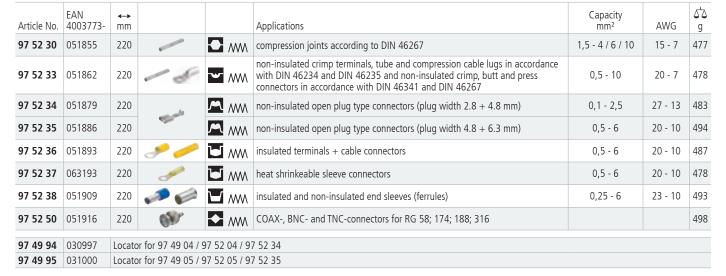
97 52 35

97 52 36











Four-Mandrel Crimping Pliers for turned contacts

> For crimping turned contacts

- > Four-mandrel crimping for top-quality crimping connections
- > Mandrel gauge to check the basic setting
- > Repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- > Optimum transmission of force due to highly effective lever action for fatigue-reduced operation
- > High operation comfort thanks to handy shape
- > Chrome vanadium electric steel in special guality, oil-hardened

97 52 63

> Fine adjustment of pressure depending on the conductor's diameter by means of adjusting wheel. Pliers in a plastic case with foam insert and standard locator for precise positioning of the contacts

97 52 63 DG

> Crimping capacity can be adjusted in increments of 0.01 mm; With digital display of the preset crimping capacities and possibility of re-calibration via RESET function with electronic wear monitoring; Adjustment in mm, inches or comparable selection positions according to MIL; Pliers in a plastic case with foam insert and standard locator for precise positioning of the contacts

97 52 64

> Pressure adjustment depending on the conductor's diameter by means of adjusting wheel in 4 different positions; Locator for positioning the contacts

97 52 65

> Fine adjustment of pressure depending on the conductor's diameter by means of adjusting wheel; Locator for positioning the contacts; With table for calculating the settings; Pliers in a plastic case with foam insert

97 52 65 A

> Fine adjustment of pressure depending on the conductor's diameter by means of adjusting wheel; With table for calculating the settings; Pliers in a plastic case with foam insert

97 52 65 DG

> Crimping capacity can be adjusted in increments of 0.01 mm; With digital display of the preset crimping capacities and possibility of re-calibration via RESET function with electronic wear monitoring; Adjustment in mm, inches or comparable selection positions according to MIL; With table for calculating the settings; Pliers in a plastic case with foam insert and standard locator for precise positioning of the contacts

97 52 65 DG A

> Crimping capacity can be adjusted in increments of 0.01 mm; With digital display of the preset crimping capacities and possibility of re-calibration via RESET function with electronic wear monitoring; Adjustment in mm, inches or comparable selection positions according to MIL; With table for calculating the settings; Pliers in a plastic case with foam insert; Without locator

97 59 65 2

> Locator for holding turned contacts for crimping; Precisely adjustable to the length (20 - 45 mm) and diameter (1 - 8 mm) of the crimping connector; Locator that is universally adjustable (in length and diameter) for the repeatable exact alignment of turned contacts in crimping pliers; can be set to all commercially available turned contacts in the four-mandrel crimping pliers' capacity range







97 52 63 DG

97 52 64







97 52 65 DG



97 52 65 DG A



97 59 65 2 Universal Locator

Turned contacts are used for particularly demanding plugtype connections, e.g. in medical industry and aeronautics. Extremely reliable crimping connections can be achieved only with pliers that work with absolute precision and maintain the required crimping depth in the 1/100 mm range.



Standard locator



Multi-functional digital display, adjustment in mm, inch or comparable selection positions according to MIL



										1
Article No.	EAN 4003773-	∢ → mm			Pliers	Handles	Applications	Capacity mm ²	AWG	۵۵ g
97 52 63	050148	180			chrome plated	with multi-component grips	turned contacts	0.08 - 2.5	28 - 13	388
97 52 63 DG	063209	195			chrome plated	with multi-component grips	turned contacts	0.08 - 2.5	28 - 13	388
97 52 64	044093	180		XX MM	chrome plated	with multi-component grips	turned contacts	0.08 - 2.5	28 - 13	424
97 52 65	045236	230			chrome plated	with multi-component grips	turned contacts (Harting; Ilme; Phoenix; Amphenol; Walther; HTS; Contact; Weidmüller)	0.14 - 6	25 - 10	676
97 52 65 A	071594	250			chrome plated	with multi-component grips	turned contacts (Harting; Ilme; Phoenix; Amphenol; Walther; HTS; Contact; Weidmüller)	0.14 - 6	25 - 10	604
97 52 65 DG	063216	250			chrome plated	with multi-component grips	turned contacts (Harting; Ilme; Phoenix; Amphenol; Walther; HTS; Contact; Weidmüller)	0.14 - 6	25 - 10	633
97 52 65 DG A	071990	250	_	PATENTED	chrome plated	with multi-component grips	turned contacts (Harting; Ilme; Phoenix; Amphenol; Walther; HTS; Contact; Weidmüller)	0.14 - 6	25 - 10	633
97 59 14	026976	Locat	or for 97 !	52 14						
07 50 65 3	071000	11.1		(07 F2 CF	107 F2 65 A 107					

97 59 65 2 071600 Universal Locator for 97 52 65 / 97 52 65 A / 97 52 65 DG / 97 52 65 DG A

Self-Adjusting Crimping Pliers for wire ferrules

with lateral access

Narrow handle width and improved ergonomics

- > For crimping wire ferrules according to DIN 46228 parts 1 + 4
- > Self-adjustment to the size of wire ferrules required
- > Repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- > Tools have been set precisely (calibrated) in the factory
- > Optimum transmission of force thanks to toggle lever for fatiguereduced operation
- > Handy shape and low weight provide high operation comfort
- > Chrome vanadium electric steel in special quality, oil-hardened





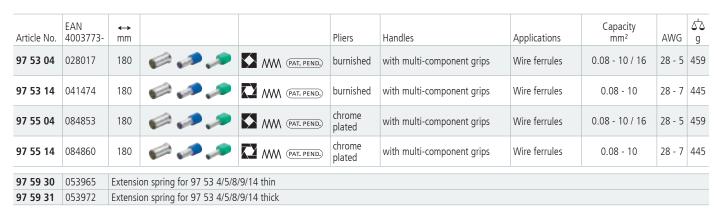
Crimping capacity can be switched over simply





The small crimping pliers for wire end sleeves with two major advantages for the user:

- > Automatic adjustment to the end sleeves used: This makes work easier for the professional and offers reliable and fast crimping
- > Expanded range of applications



(NIPEX 97 53 04 0.08-16 mm²/AWG 28-3 97 53 04



97 53 14



97 55 04



97 55 14

from 10 mm² to 16 mm².

KNIPEX Twistor16®

Self-Adjusting Crimping Pliers for wire ferrules

with rotatable die head

- $\!\!\!\!\!>$ Self-adjusting crimping pliers for wire ferrules with rotatable crimp head
- > Crimp head can be freely rotated 360°, with 8 locking positions
- > Square crimp profile, high capacity range from 0.14 to 16 mm^2

- > Crimp opening accessible from both sides, extra-long wire ferrules can be fed in
- > Crimping of Twin wire ferrules up to 2 x 6 mm^2 possible
- > Repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- > Light and handy tool, manual force reinforced by toggle lever mechanism
- > Chrome vanadium electric steel in special quality, oil-hardened





Crimp head can be rotated 360° for optimal accessibility, even in confined spaces



97 90 13

All-round care-free solution: KNIPEX Twistor16® with accessories in the practical TANOS MINI-systainer®



Twin wire ferrules up to 2 x 6 mm² can be crimped without adjustment



Uniquely flexible: connectors can be inserted in the rotatable crimp head from almost any position



Article No.	EAN 4003773-	←→ mm			Pliers	Handles	Applications	Capacity mm ²	AWG	۵'ک g
97 53 18	082729	240	<i>i i i i i i i i i i i i i i i i i i i </i>	• MM	chrome plated	with multi-component grips	Wire ferrules	0.14 - 16	26 - 5	478

Self-Adjusting Crimping Pliers for wire ferrules

with front loading

- > For crimping wire ferrules according to DIN 46228 parts 1 + 4
- > Self-adjusting adaptation to the desired wire ferrule size: no wrong crimps caused by using the wrong die
- > Frontal insertion of the wire ferrules into the pliers
- > Repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- > Crimping pressure has been set precisely (calibrated) in the factory, re-adjustable
- > Optimum transmission of force thanks to toggle lever for fatiguereduced operation
- > Handy shape and low weight provide high operation comfort
- > Chrome vanadium electric steel in special quality, oil-hardened

97 53 08

> Compression from 0.08 - 10.0 mm² in one profile; wire end sleeves up to 2.5 mm² can also be loaded parallely from the side; suitable in particular for all twin wire end sleeves up to 2 x 4 mm² or 2 x AWG 10

97 53 09

> Compression from 0.08 - 10.0 and 16.0 mm² in one profile; with selector lever for setting the crimping area either to 0.08 - 10 mm² or 16 mm²; suitable in particular for all twin wire end sleeves up to $2 \times 6 \text{ mm}^2 \text{ or } 2 \times AWG 8$







97 53 08: lateral loading of wire ferrules up to 2.5 mm² parallely from the side e.g. in confined areas



Front loading of wire ferrules e.g. in switchboards



Square-Crimp

The crimping pliers for end sleeves (ferrules) with three great advantages for the user:

- > Automatic self-adjustment to the wire end sleeve used: this allows the specialist to work with less strain and enables secure, reliable and quick crimping.
- > Range of applications also for large cross-sections: square crimping 0.08 to 10 + 16 mm²
- > Front loading: very helpful under difficult working conditions in confined areas.

Article No.	EAN 4003773-	↔ mm			Pliers	Handles	Applications	Capacity mm ²	AWG	۵ ^۲ ۵ g			
97 53 08	040187	190	<i>i a a</i>		burnished	with multi-component grips	Wire ferrules	0.8 - 10	28 - 7	477			
97 53 09	044550	190	<i>i i i i i i i i i i i i i i i i i i i </i>	M (PATENTED)	burnished	with multi-component grips	Wire ferrules	0.08 - 10 / 16	28 - 5	486			
97 59 30	053965	Extens	sion spring for 97 53 4 / 5 / 8 / 9 / 14 thin										
97 59 31	053972	Extens	ension spring for 97 53 4 / 5 / 8 / 9 / 14 thick										

Crimping Pliers for micro plugs

parallel crimping

- > Parallel crimping performance to satisfy the particularly high standards of small connectors
- > Consistently high crimping quality thanks to precision dies and forced locking mechanism (unlockable)
- > Crimping pressure has been set precisely (calibrated) in the factory, re-adjustable
- > Optimum transmission of force thanks to toggle lever for fatiguereduced operation
- > Crimping pliers for other mini plugs such as HD 22, Modu IV, Micro Timer, MQS ... on request
- > Chrome vanadium electric steel in special quality, oil-hardened









Article No.	EAN 4003773-	∢ → mm			Pliers	Handles	Applications	Capacity mm²	AWG	۵ ^۲ ۵ g
97 54 24	060215	190	- CAL	^ MM	burnished	with multi-component grips	D Sub; HD 20; HDE plug	0.03 - 0.56	32 - 20	305
97 54 25	079859	190	- CEL	^	burnished	with multi-component grips	for crimping connectors from the Micro-Fit™ series from Molex LLC		30 - 26 / 24 - 22 / 20	305
97 54 26	079866	190	- CAL	^ MM	burnished	with multi-component grips	for crimping connectors in the Mini-Fit [®] series from Molex LLC		16 / 18 / 20 - 24	305
97 54 27	079873	190	C. S. S.	^ MM	burnished	with multi-component grips	MQS connectors	0.25 / 0.35 / 0.5		305

Crimping Pliers for wire ferrules

with trapezoid crimp

- > For crimping wire ferrules according to DIN 46228 parts 1 + 4 in the range from 0.25 $\,$ up to 2.5 $\,mm^2$
- > Crimping in marked trapezoidal dies for reliable connections between the sleeve and the conductor
- > Vanadium electric steel; forged, oil-hardened



Article No.	EAN 4003773-	←→ mm			Head	Handles	Capacity mm ²	AWG	۵ ^۲ ۵ g
97 61 145 A	035558	145	<i>i</i> i i i i i i i i i i i i i i i i i i	$\mathbf{\nabla}$	polished	plastic coated	0.25 - 2.5	23 - 13	140
97 61 145 F	043980	145	<i>i i</i>	M www	polished	plastic coated	0.25 - 2.5	23 - 13	140
97 62 145 A	060154	145	<i>i</i>		polished	with multi-component grips	0.25 - 2.5	23 - 13	170
97 68 145 A	071754	145	<i>i</i> i i i i i i i i i i i i i i i i i i	₩ <u>₹</u> 1000 V 🖄 🚭	polished	insulated with multi-component grips, VDE-tested	0.25 - 2.5	23 - 13	175

Crimping Pliers for wire ferrules

with mandrel crimp

- ► Light and slim design
- ► Also as VDE version
- ▶ Easy crimping due to optimised transmission ratio
- > For crimping wire ferrules according to DIN 46228 parts 1 + 4 from 0.25 to 16 \mbox{mm}^2
- > Crimping in marked half-round dies for reliable connections between the sleeve and the conductor
- > 9 particularly deep dies with conical side faces
- > Special tool steel, forged, oil-hardened







Article No.	EAN 4003773-	←→ mm		Head	Handles	Applications	Capacity mm ²	AWG	۵۵ g
97 71 180	040668	180	Y	polished	plastic coated	Wire ferrules	0.25 - 16	23 - 5	205
97 72 180	060185	180	V	polished	with multi-component grips	Wire ferrules	0.25 - 16	23 - 5	242
97 78 180	072003	180	⊻ ≙1000∨ €	polished	insulated with multi-component grips, VDE-tested	Wire ferrules	0.25 - 16	23 - 5	254
97 78 180 T	081531	180	⊻ ≜1000∨ മ്ള	polished	insulated with multi-component grips, with integrated insulated tether attachment point, VDE tested	Wire ferrules	0.25 - 16	23 - 5	260

Crimping Pliers for wire ferrules

with front loading

- > For crimping wire ferrules according to DIN 46228 parts 1 + 4 in the range 0.5 to 6 mm^2
- > Ideal for work in confined areas, e.g. in narrow
- and deep switch boxes
- > Special tool steel, forged, oil-hardened





Article No.	EAN 4003773-	←→ mm		Head	Handles	Applications	Capacity mm ²	AWG	۲۵ g
97 81 180	019794	180	\sim	polished	plastic coated	Wire ferrules	0.5 - 6	20 - 10	209



Crimp Assortments

for non-insulated wire ferrules

- > In a TANOS MINI-systainer® (solid plastic box)
- > T-Loc fastener for one-handed operation: open or close the systainer® with one turn and connect to a second systainer®
- > Opening when connected: fast and simple access to content without disconnecting
- > Two stackable plastic inserts with 6 trays each for connectors
- > With an assortment of wire ferrules with/without collar

97 90 05

> With Crimping Pliers for end sleeves 97 71 180; Wire end sleeves without collar

97 90 17

> With crimping pliers for wire ferrules 97 53 09 and self-adjusting insulation stripper 12 42 195

97 90 23

> With Crimping Pliers PreciForce[®] for wire end sleeves 97 52 38

97 90 24

> With Self-Adapting Universal Insulation Stripper Multistrip 10, 12 42 195; With Self-Adjusting Crimping Pliers for wire end sleeves 97 53 08

97 90 06

> With Crimping Pliers for end sleeves 97 71 180; Wire end sleeves with collar

97 90 09

> With Self-Adjusting Crimping Pliers for wire end sleeves 97 53 04

97 90 10

> With Self-Adjusting Insulation Stripper 12 40 200; With Self-Adjusting Crimping Pliers for wire end sleeves 97 53 04

97 90 12

> With Self-Adjusting Insulation Stripper 12 40 200; With Self-Adjusting Crimping Pliers for wire end sleeves 97 53 08

97 90 13

> With KNIPEX Twistor16[®] 97 53 18 crimping pliers for wire ferrules

97 90 14

 > With crimping pliers for wire ferrules KNIPEX Twistor16[®]
 97 53 18 and automatic insulation stripper KNIPEX PreciStrip16 12 52 195

97 90 15

> With crimping pliers for wire ferrules 97 53 09 and automatic insulation stripper KNIPEX PreciStrip16 12 52 195

97 90 16

> With crimping pliers for wire ferrules 97 53 09 and selfadjusting insulation stripper 12 40 200



-





97 90 23



Several boxes can be connected with each other

Article No.	EAN 4003773-		Pliers	200 x mm ²	150 x mm ²	100 x mm²	75 x mm²	50 x mm²	40 x mm²	۵'۵ g
97 90 05	025535	<i>i</i> i i i i i i i i i i i i i i i i i i	97 71 180	0,5 / 0,75 / 1 / 1,5 / 2,5	4 / 6			10 / 16		930
97 90 06	025542	<i>i i</i>	97 71 180	0,5 / 0,75 / 1 / 1,5	2,5		6	10	16	1000
97 90 09	028574	<i>i i i i i i i i i i i i i i i i i i i </i>	97 53 04	0,5 / 0,75 / 1 / 1,5 / 2,5		4 / 6		10		1420
97 90 10	046202	<i>i al </i>	12 40 200 97 53 04	0,5 / 0,75 / 1 / 1,5 / 2,5		4 / 6		10		1353
97 90 12	048916	<i>i al </i>	12 40 200 97 53 08	0,5 / 0,75 / 1 / 1,5 / 2,5		4 / 6		10		1427
97 90 13	083474	<i>i i i i i i i i i i i i i i i i i i i </i>	97 53 18	0,5 / 0,75 / 1 / 1,5	2,5		6	10	16	1270
97 90 14	084884	<i>i i i i i i i i i i i i i i i i i i i </i>	97 53 18 12 52 195	0,5 / 0,75 / 1 / 1,5	2,5		6	10	16	1450
97 90 15	084877	<i>i al </i>	97 53 09 12 52 195			1,5 / 2,5		6	4	1450
97 90 16	086024	<i>i i i i i i i i i i i i i i i i i i i </i>	12 40 200 97 53 09	0,5 / 0,75 / 1 / 1,5 / 2,5		4 / 6		10		1450
97 90 17	086031	<i>i i i i i i i i i i i i i i i i i i i </i>	97 53 09	0,5 / 0,75 / 1 / 1,5 / 2,5		4 / 6		10		1450
97 90 23	062158	<i>i i</i>	97 52 38	0,5 / 0,75 / 1 / 1,5 / 2,5		4 / 6				1226
97 90 24	062394	<i>i al </i>	97 53 08	0,5 / 0,75 / 1 / 1,5 / 2,5		4 / 6		10		1348
97 90 00 LE	054009	TANOS MINI-systainer®	empty	1						900

Crimp Assortments

for cable connectors

> In a TANOS MINI-systainer[®] (solid plastic box)

- > T-Loc fastener for one-handed operation: open or close the systainer® with one turn and connect to a second systainer®
- > Opening when connected: fast and simple access to content without disconnecting

97 90 25

97 90 26

> With crimping pliers 97 22 240

> With crimping pliers 97 32 240

- > Two stackable plastic inserts with 6 trays each for connectors
- > With an assortment of standard cable connectors

97 90 21

> With Crimping Pliers KNIPEX PreciForce[®] 97 52 36 (for insulated terminals and plug connectors)

97 90 22

> With Self-Adapting Universal Insulation Stripper KNIPEX Multistrip 10, 12 42 195; with Crimping Pliers KNIPEX PreciForce[®] 97 52 36 (for insulated terminals and plug connectors)





97 90 21





97 90 26

	EAN			Cable Conn	ectors	I	52
Article No.	4003773-		Pliers		Quantity	Cable mm ²	g
97 90 21	062134		97 52 36		25	0,5 - 1	1416
97 90 21	062134		57 52 50	Blade Terminal Sockets, 6.3 x 0.8 mm	25	1,5 - 2,5	
					25	0,5 - 1	_
				Round Sockets, Ø 4 mm	25	0,5 - 1	
		10		Cable Connectors and time Of 4 mm	25	4 - 6	
		_		Cable Connectors, eye type, Ø 4 mm	25	4 - 6	
				Cable Connectors, eye type, Ø 5 mm	25	1,5 - 2,5	
				Cable Connectors, eye type, b 5 mm	25	1,5 - 2,5	
				Cable Connectors, eye type, Ø 6 mm	25	1,5 - 2,5	
				Butt Connectors, insulated, red	25	0,5 - 1	
				Butt Connectors, insulated, blue	25	4 - 6	
				Round Pin Plugs, Ø 4 mm	25	1,5 - 2,5	
97 90 22	062141		97 52 36	Blade Terminal Sockets, 6.3 x 0.8 mm	25	0,5 - 1	1527
<i></i>	002141			blade ferminal sockets, 0.5 x 0.6 mm	25	1,5 - 2,5	
			12 42 195	Cable Connectors, eye type, Ø 4 mm	25	0,5 - 1	
				Cable Connectors, eye type, Ø 5 mm	25	0,5 - 1	
				Cable Connectors, eye type, Ø 6 mm	25	1,5 - 2,5	
				Cable Connectors, eye type, Ø 8 mm	25	1,5 - 2,5	
				Cable Connectors, eye type, Ø 4 mm	25	1,5 - 2,5	
				Cable Connectors, eye type, Ø 5 mm	25	4 - 6	
				Cable Connectors, eye type, Ø 6 mm	25	4 - 6	
				Butt Connectors, insulated, red	25	0,5 - 1	
				Butt Connectors, insulated, blue	25	1,5 - 2,5	
				Butt Connectors, insulated, yellow	25	4 - 6	
7 90 25	076971		97 22 240	Blade Terminal Sockets, 6.3 x 0.8 mm	25	0,5 - 1,5	1150
	0/05/1			,	25	1 - 2,5	
				Cable Connectors, eye type, Ø 4 mm	25	0,5 - 1	_
		N. A.		Cable Connectors, eye type, Ø 5 mm	25	1,5 - 2,5	_
		and the second s		Cable Connectors, eye type, Ø 4 mm	25	4 - 6	
				Cable Connectors, eye type, Ø 5 mm	25	0,5 - 1	_
		<u>_</u>		Cable Connectors, eye type, Ø 6 mm	25	1,5 - 2,5	
					25	0,5 - 1	
				Cable Connectors, eye type, Ø 8 mm	25	1,5 - 2,5	_
				Butt Connectors, insulated, red	25	0,5 - 1	_
				Butt Connectors, insulated, blue	25	1,5 - 2,5	_
				Butt Connectors, insulated, yellow	25	4 - 6	
97 90 26	079521		97 32 240	Non-insulated Blade Terminal Sockets	25	1,5 - 2,5	1420
				6.3 x 0.8 mm	25	4 - 6	_
				Blade Terminal Sockets	25	0,5 - 1	_
		Cont.		6.3 x 0.8 mm	25	0,5 - 1	_
					25	1,5 - 2,5	_
				Blade Terminal Plugs	25	1,5 - 2,5	_
				6.3 x 0.8 mm	25	4 - 6	_
				Cable Connectors, eye type \emptyset 4 mm	25	4 - 6	_
					25	0,5 - 1	_
				Butt Connectors, insulated, red	25	1,5 - 2,5	_
				Butt Connectors, insulated, blue	25	0,5 - 1	
				Butt Connectors, insulated, yellow	25	0,5 - 1	-

Blade Terminal Sockets

insulated

Article No.	EAN 4003773-		Width x Thickness mm ²	Cable mm²	AWG	Colour	ß
97 99 001	075882	Blade Terminal Sockets insulated	2.8 x 0.5	0.5 - 1	20 - 17		100
97 99 010	075899	Blade Terminal Sockets insulated	4.8 x 0.8	0.5 - 1	20 - 17	Red	100
97 99 020	075912	Blade Terminal Sockets insulated	6.3 x 0.8	0.5 - 1	20 - 17		100
97 99 011	075905	Blade Terminal Sockets insulated	4.8 x 0.8	1.5 - 2.5	15 - 13		100
97 99 021	075929	Blade Terminal Sockets insulated	6.3 x 0.8	1.5 - 2.5	15 - 13	Blue	100
97 99 030	075943	Blade Terminal Sockets insulated	7.7 x 0.8	1.5 - 2.5	15 - 13		100
97 99 022	075936	Blade Terminal Sockets insulated	6.3 x 0.8	4 - 6	11 - 10	Yellow	100



97 99 022

Plug Connectors

non-insulated

Article No.	EAN 4003773-		Width x Thickness mm ²	Cable mm²	AWG	ł
97 99 050	075950	Plug connector non-insulated	2.8 x 0.8	0.5 - 1	20 - 17	100
97 99 060	075967	Plug connector non-insulated	4.8 x 0.8	1.5 - 2.5	16 - 14	100
97 99 070	075974	Plug connector non-insulated	6.3 x 0.8	0.5 - 1.5	20 - 15	100
97 99 071	075981	Plug connector non-insulated	6.3 x 0.8	1 - 2.5	17 - 14	100



97 99 050

Flat Pin Accessory Distributors

insulated

Article No.	EAN 4003773-		Width x Thickness mm ²	Cable mm²	AWG	Colour	
97 99 090	075998	Flat Pin Accessory Distributors insulated	6.3 x 0.8	0.5 - 1	20 - 17	Red	100
97 99 091	076001	Flat Pin Accessory Distributors insulated	6.3 x 0.8	1.5 - 2.5	15 - 13	Blue	100
97 99 092	076018	Flat Pin Accessory Distributors insulated	6.3 x 0.8	4 - 6	11 - 10	Yellow	100



97 99 091

Blade Terminal Plugs

insulated

Article No.	EAN 4003773-		Width x Thickness mm ²	Cable mm²	AWG	Colour	ł
97 99 110	076025	Blade Terminal Plug insulated	6.3 x 0.8	0.5 - 1	20 - 17	Red	100
97 99 111	076032	Blade Terminal Plug insulated	6.3 x 0.8	1.5 - 2.5	15 - 13	Blue	100
97 99 112	076049	Blade Terminal Plug insulated	6.3 x 0.8	4 - 6	11 - 10	Yellow	100



97 99 111

Round Sockets

insulated

Article No.	EAN 4003773-		Plug Ø mm	Cable mm²	AWG	Colour	Æ
97 99 130	076056	Round Sockets insulated	4.0	0.5 - 1	20 - 17	Red	100
97 99 131	076063	Round Sockets insulated	5.0	1.5 - 2.5	15 - 13	Blue	100



Round Pin Plugs

insulated

Article No.	EAN 4003773-		Plug Ø mm	Cable mm²	AWG	Colour	E
97 99 150	076070	Round Pin Plug insulated	4.0	0.5 - 1	20 - 17	Red	100
97 99 151	076087	Round Pin Plug insulated	5.0	1.5 - 2.5	15 - 13	Blue	100

Cable Connectors, eye type

insulated

>DIN 46237

EAN Screws Cable Article No. 4003773-Ømm mm² AWG Colour 97 99 170 076094 Cable Connectors, eye type insulated 3.0 0.5 - 1 20 - 17 200 97 99 171 076100 Cable Connectors, eye type insulated 4.0 0.5 - 1 20 - 17 Red 200 Cable Connectors, eye type insulated **97 99 172** 076117 5.0 0.5 - 1 20 - 17 200 4.0 1.5 - 2.5 15 - 13 100 97 99 173 076124 Cable Connectors, eye type insulated 97 99 174 076131 5.0 1.5 - 2.5 15 - 13 100 Cable Connectors, eye type insulated Blue 97 99 175 076148 1.5 - 2.5 15 - 13 100 Cable Connectors, eye type insulated 6.0 100 97 99 176 076155 Cable Connectors, eye type insulated 8.0 1.5 - 2.5 15 - 13 97 99 177 076162 Cable Connectors, eye type insulated 5.0 4 - 6 11 - 10 100 **97 99 178** 076179 Cable Connectors, eye type insulated 6.0 4 - 6 11 - 10 100 Yellow 97 99 179 076186 8.0 4 - 6 11 - 10 100 Cable Connectors, eye type insulated 97 99 180 076193 10.0 4 - 6 100 Cable Connectors, eye type insulated 11 - 10

Non-insulated Solderless Terminals

> DIN 46234

Article No.	EAN 4003773-		Screws Ø mm	Cable mm²	AWG	F
97 99 210	076209	Non-insulated Solderless Terminals	3.0	0.5 - 1	20 - 17	200
97 99 211	076216	Non-insulated Solderless Terminals	4.0	0.5 - 1	20 - 17	200
97 99 212	076223	Non-insulated Solderless Terminals	5.0	0.5 - 1	20 - 17	200
97 99 213	076230	Non-insulated Solderless Terminals	4.0	1.5 - 2.5	15 - 13	100
97 99 214	076247	Non-insulated Solderless Terminals	5.0	1.5 - 2.5	15 - 13	100
97 99 215	076254	Non-insulated Solderless Terminals	6.0	1.5 - 2.5	15 - 13	100
97 99 216	076261	Non-insulated Solderless Terminals	8.0	1.5 - 2.5	15 - 13	100
97 99 217	076278	Non-insulated Solderless Terminals	5.0	4 - 6	11 - 10	100
97 99 218	076285	Non-insulated Solderless Terminals	6.0	4 - 6	11 - 10	100
97 99 219	076292	Non-insulated Solderless Terminals	8.0	4 - 6	11 - 10	100
97 99 220	076308	Non-insulated Solderless Terminals	10.0	4 - 6	11 - 10	100

Heat Shrinkable Butt Connectors

Article No.	EAN 4003773-		Cable mm²	AWG	Colour	
97 99 250	076315	Heat Shrinkable Butt Connectors	0.75 - 1	20 - 18	Red	100
97 99 251	076322	Heat Shrinkable Butt Connectors	1.5 - 2.5	15 - 13	Blue	100
97 99 252	076339	Heat Shrinkable Butt Connectors	4 - 6	11 - 10	Yellow	100

-	Contraction of the local division of the loc
	Comments of the second



97 99 210





97 99 151

Butt Connectors, insulated

Article No.	EAN 4003773-		Cable mm²	AWG	Colour	
97 99 270	076346	Butt Connectors, insulated	0.75 - 1	20 - 18	Red	100
97 99 271	076353	Butt Connectors, insulated	1.5 - 2.5	15 - 13	Blue	100
97 99 272	076360	Butt Connectors, insulated	4 - 6	11 - 10	Yellow	100



97 99 272

Butt Connectors, non-insulated

> DIN 46341-B

Article No.	EAN 4003773-		Cable mm²	AWG	ľ
97 99 290	076377	Butt Connectors, non-insulated	0.75 - 1	20 - 18	200
97 99 291	076384	Butt Connectors, non-insulated	1.5 - 2.5	15 - 13	200
97 99 292	076391	Butt Connectors, non-insulated	4 - 6	11 - 10	100
97 99 293	076407	Butt Connectors, non-insulated	10	7	100



97 99 290

Wire ferrules with plastic collar

Article No.	EAN 4003773		←→ mm	Cable mm²	AWG	Colour	ł
97 99 330	076414	Wire ferrules with plastic collar	14.0	0.5	20	white	200
97 99 331	076421	Wire ferrules with plastic collar	14.0	0.75	18	grey	200
97 99 335	076469	Wire ferrules with plastic collar	17.0	4	11	grey	200
97 99 332	076438	Wire ferrules with plastic collar	14.0	1	17	Red	200
97 99 333	076445	Wire ferrules with plastic collar	14.0	1.5	15	black	200
97 99 334	076452	Wire ferrules with plastic collar	14.0	2.5	13	Blue	200
97 99 336	076476	Wire ferrules with plastic collar	20.0	6	10	Yellow	100
97 99 337	076483	Wire ferrules with plastic collar	22.0	10	7	Red	100
97 99 338	076490	Wire ferrules with plastic collar	24.0	16	5	Blue	100
97 99 339	076506	Wire ferrules with plastic collar	30.0	25	3	Yellow	50
97 99 350	076513	Wire ferrules with plastic collar	16.0	0.5	20	white	200
97 99 351	076520	Wire ferrules with plastic collar	16.0	0.75	18	grey	200
97 99 352	076537	Wire ferrules with plastic collar	16.0	1	17	Red	200
97 99 353	076544	Wire ferrules with plastic collar	16.0	1.5	15	black	200
97 99 354	076551	Wire ferrules with plastic collar	16.0	2.5	13	Blue	200
97 99 355	076568	Wire ferrules with plastic collar	20.0	4	11	grey	200
97 99 356	076575	Wire ferrules with plastic collar	26.0	6	10	Yellow	100
97 99 357	076582	Wire ferrules with plastic collar	28.0	10	7	Red	100
97 99 358	076599	Wire ferrules with plastic collar	28.0	16	5	Blue	100
97 99 359	076605	Wire ferrules with plastic collar	32.0	25	3	Yellow	50



97 99 353



Twin wire ferrules

with plastic collar

Article No.	EAN 4003773		←→ mm	Cable mm²	AWG	Colour	F
97 99 370	076612	Twin wire ferrules with plastic collar	15.0	2 x 0.5	2 x 20	white	200
97 99 371	076629	Twin wire ferrules with plastic collar	16.0	2 x 0.75	2 x 18	grey	200
97 99 372	076636	Twin wire ferrules with plastic collar	15.0	2 x 1	2 x 17	Red	200
97 99 373	076643	Twin wire ferrules with plastic collar	18.0	2 x 1.5	2 x 15	black	200
97 99 374	076650	Twin wire ferrules with plastic collar	18.0	2 x 2.5	2 x 13	Blue	100
97 99 375	076667	Twin wire ferrules with plastic collar	23.0	2 x 4	2 x 11	grey	100
97 99 376	076674	Twin wire ferrules with plastic collar	26.0	2 x 6	2 x 10	Yellow	50
97 99 377	076681	Twin wire ferrules with plastic collar	24.0	2 x 10	2 x 7	Red	50
97 99 378	076698	Twin wire ferrules with plastic collar	29.0	2 x 16	2 x 5	Blue	25



97 99 374

Non-insulated wire ferrules

> DIN 46228-1

Article No.	EAN 4003773		←→ mm	Cable mm²	AWG	F
97 99 390	076704	Non-insulated wire ferrules	6.0	0.5	20	200
97 99 391	076711	Non-insulated wire ferrules	6.0	0.75	18	200
97 99 392	076728	Non-insulated wire ferrules	6.0	1	17	200
97 99 393	076735	Non-insulated wire ferrules	7.0	1.5	15	200
97 99 394	076742	Non-insulated wire ferrules	7.0	2.5	13	200
97 99 395	076759	Non-insulated wire ferrules	9.0	4	11	200
97 99 396	076766	Non-insulated wire ferrules	12.0	6	10	100
97 99 397	076773	Non-insulated wire ferrules	12.0	10	7	100
97 99 398	076780	Non-insulated wire ferrules	12.0	16	5	100
97 99 399	076797	Non-insulated wire ferrules	12.0	25	3	50



Assortment Boxes

▶ Practical dispenser box, stackable and reclosable

- > Handy, transparent dispenser box
- > Rotating lid with opening to remove individual wire ferrules
- > Format: Ø 90 mm, height 44 mm



97 99 910

Article No.	EAN 4003773-	Quantitu	Cable mm ²	AWG	Length of crimp	-	Colour	Size	۵'ک g
	ed wire ferrules, v	Quantity			area	mm	Colour	SIZe	9
7 99 905	082446	with insulated w	ire terrules by D	IN COLOUR COO	2				70
1/ 99 905	082446	30	0.25	24	6.0	10.0		Ø 90 x 44	70
		30		24	6.0				
		30	0.34	22	8.0	10.0		Ø 90 x 44 Ø 90 x 44	
							white		
		30 30	0.75	18 17	8.0	14.0	grey	Ø 90 x 44	
07.00.000	002452	30	1	17	8.0	14.0	red	Ø 90 x 44	05
97 99 906	082453	50	0.5	20	0.0	11.0	1.5	C 00 11	95
		50	0.5	20	8.0	14.0	white	Ø 90 x 44	
		100	0.75	18	8.0	14.0	grey	Ø 90 x 44	
		100	1	17	8.0	14.0	red	Ø 90 x 44	
		100	1.5	15	8.0	14.0	black	Ø 90 x 44	
		50	2.5	13	8.0	14.0	blue	Ø 90 x 44	
97 99 907	082460								90
		50	4	11	10.0	17.0	grey	Ø 90 x 44	
		20	6	10	12.0	20.0	yellow	Ø 90 x 44	
		20	10	7	12.0	22.0	red	Ø 90 x 44	
		10	16	5	12.0	24.0	blue	Ø 90 x 44	
Nith Twin wi	re ferrules, with	insulated wire for	errules by DIN co	lour code					
97 99 908	082477								95
		50	2 x 0.75	2 x 18	8.0	16.0	grey	Ø 90 x 44	
		50	2 x 1	2 x 17	8.0	15.0	red	Ø 90 x 44	
		50	2 x 1.5	2 x 15	10.0	18.0	black	Ø 90 x 44	
		50	2 x 2.5	2 x 13	9.0	18.0	blue	Ø 90 x 44	
97 99 909	082484								85
		20	4	2 x 11	12.0	23.0	grey	Ø 90 x 44	
		10	2 x 6	2 x 10	12.0	24.0	vellow	Ø 90 x 44	
		10	2 x 10	2 x 7	12.0	24.0	red	Ø 90 x 44	
		5	2 x 16	2 x 5	16.0	29.0	blue	Ø 90 x 44	
Nith non-ins	ulated wire ferru				dual wire ferrules	25.0	blue	0 30 4 4	
97 99 910	082491	iles, rotating nu	with opening to	remove marv	idual wire ferfules				145
57 55 510	002451	500	0.5	20		6.0		Ø 90 x 44	145
		500	0.75	18		6.0		Ø 90 x 44	
		400	1	17		6.0		Ø 90 x 44 Ø 90 x 44	
		300	1.5	17		7.0		Ø 90 x 44 Ø 90 x 44	
			2.5	13					
7 00 044	000507	200	2.5	13		7.0		Ø 90 x 44	1.40
97 99 911	082507	450				0.0		C 00 11	140
		150	4	11		9.0		Ø 90 x 44	
		75	6	10		12.0		Ø 90 x 44	
		75	10	7		12.0		Ø 90 x 44	
		50	16	5		12.0		Ø 90 x 44	

F-compression connector

- > Suitable for coax cable with outer diameter of 7 mm and dielectric from 4.7 mm diameter (all standard coax cable with Ø 1.1 mm inner conductor)
- > Nitin-6[™] coating ensures excellent protection against environmental influences
- > Waterproof (8 h /at a depth of 30 m), ideal for connection to LNB and external antennae
- > Suitable for KNIPEX 97 40 20 compression tool
- > 10 Cablecon F-compression connectors in a blister pack



97 99 500

Article No.	EAN 4003773-	6
97 99 500	082378	10



Pliers	198
Precision Tweezers	212
Cable Shears	212
Cable Cutters	215
Wire Rope and ACSR-Cable Cutters	217
Crimping Pliers	218
Wrenches	219
Screwdrivers	222
Sockets with Torx drive	226
T-handle	226
Reversible Ratchets	226
Hexagon Sockets	227
Torque Wrenches	229
Cable Knives	230
Stripping Knives	230
Insulated Pliers of plastic	231
Insulating Clamp from plastic	232
Plastic Slip-On Caps	232
Self-Clamping Slip-On Caps	232
Electricians' Gloves	232
Insulating Mats	233
Stand Mats	233
PUK [®] Junior Hacksaw	233
Tool Kits	234





160 Jonosin

2 1000 4

Insulated tools are a matter of trust

Professionals trust their tools. This trust is vital when working on electrical installations. In this case, the electrician holding the pliers is also holding his life in his hands. Our insulated tools therefore not only meet statutory requirements, but also offer the greatest possible safety, reliability and performance.









Regulated by standards

Only trained professionals are allowed to work on live installations. Such work is subject to strict occupational health and safety standards such as the German DIN VDE 0105 and the international EN 50110 and IEC 60364. In each case they must deploy special tools that have been specifically manufactured and tested for this work. Which requirements have to be met by tools used in live work is determined by DIN EN / IEC 60900. KNIPEX tools which bear the special mark $\clubsuit 1000 V$ are approved for work up to 1000 V AC.

Guaranteed individually checked

Every insulated tool undergoes, one by one, a dielectric strength at 10,000 V AC before we sell it. This means that work in the area up to 1,000 V AC has a safety buffer of ten times the permitted maximum limit. Other procedures check the reliability of the insulation towards heat, cold, tensile and impact force. In addition to the KNIPEX quality assurance team, external institutes and test centres such as the VDE guarantee that all VDE criteria have been satisfied. We go through this effort to safeguard the user. He trusts his well-being with our pliers, day in and day out. In return we want to give him the best possible safety at all times. We stand by this responsibility with our name on the insulation of KNIPEX tools.

Strong beneath the insulation

The insulation provides safety when handling electrical installations, but it does not cut, grip or crimp. The mechanical properties of the basic tool, such as cutting performance, precision and stability, therefore style part of the overall quality of insulated tools.

With our insulated pliers, users can depend on the quality and durability of products from KNIPEX production.For assembly tools insulated by us, we use basic tools from tried and tested suppliers whose quality we subject to regular, stringent checks. The expert can rely on this double dependability of tool and insulation.

Always comply with the currently valid regulations and observe the SAFETY INSTRUCTIONS given below:

- Insulated tools must be transported in a manner that will prevent any damage to the insulation.
- > Check before every use whether the insulation is damaged in any way, defective tools must be discarded.
- > Always keep your insulated tools clean and dry.
- > Wear protective goggles when working with cutting nippers or working overhead.
- > Always wear goggles or a facial mask when working on live equipment.

> Make sure the workplace is clean and orderly, particularly when you are working on live installations.

- >Wear protective clothing and use SAFETY equipment (e.g. insulating gloves, insulating mats, protective covers) especially in confined working spaces.
- > Use only a tool with suitable dimensions. That will prevent slipping on the workpiece and unintentional contact with non-insulated parts.
- >Make sure that detached parts or cut-off ends of conductors do not fall onto live parts.

Combination Pliers

Chrome Vanadium

- > For heavy duty
- > With gripping zones for flat and round material, suitable for versatile use
- > With cutting edges for soft, hard and piano wire
- > Long cutting edges for thicker cables
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC
- > Particularly wear resistant gripping jaws; hardness of the gripping jaws approx. 53 HRC
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened
- > DIN ISO 5746, DIN EN 60900, IEC 60900



								Cutting o	apacities	5	
	EAN	-							•	•	52
Article No.	4003773	mm		Pliers	Head	Handles	Ømm	Ømm	Ømm	mm ²	g
01 06 160	040729	160		shrama plated	chrome	insulated with multi-component grips,	2.0	1.5	10.0	16	220
01 06 190	040415	190	🛧 1000 V 🖄 🚰	chrome plated	plated	VDE-tested	2.5	2.0	13.0	25	320

High Leverage Combination Pliers

- 35 % less effort required than with conventional combination pliers
- ▶ With cutting edges (hardness approx. 63 HRC) for heavy duty
- > Easier work due to optimised leverage
- > Easier cutting, powerful gripping, bending and pulling
- > Long cutting edges for thicker cables
- > With gripping zones for flat and round material, suitable for versatile use
- > Cutter head: special high-grade tool steel, forged, oil-hardened
- > DIN ISO 5746, DIN EN 60900, IEC 60900



								Cutting o	apacities	5	
	EAN	∢ →							•	•	52
Article No.	4003773	mm		Pliers	Head	Handles	Ømm	Ømm	Ømm	mm ²	g
02 06 180	010012	180					2.5	2.0	11.5	16	247
02 06 200	010029	200	₩₩₩ ₩ 1000 V @ ♣	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	2.8	2.2	13.0	25	343
02 06 225	010036	225				VDL tested	3.0	2.5	14.0	25	425
02 07 200	022299	200		chromo plated	chrome plated	with dipped insulation, VDE-tested	2.8	2.2	13.0	25	380
02 07 225	022305	225	≙ 1000 V 🖄 🚭	v 🚓 chrome plated chi		with upped insulation, VDE-tested	3.0	2.5	14.0	25	486

Combination Pliers

- > With gripping zones for flat and round material, suitable for versatile use
- > With cutting edges for soft and hard wire
- > Long cutting edges for thicker cables
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 60 HRC
- > Special tool steel, forged, multi stage oil-hardened
- > DIN ISO 5746, DIN EN 60900, IEC 60900

03 06 180 T*



								Cutting o	capacities	5	
Article No.	EAN 4003773			Pliers	llood	Handles		Ømm		•	5
Afficie No.	4003773	mm		Pliers	Head	Handles	Ømm	Ømm	Ømm	mm ²	g
03 06 160	021902	160					3.1	2.0	10.0	16	228
03 06 180	021926	180	A 1000 V 🖄 🛃	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	3.4	2.2	12.0	16	264
03 06 200	033776	200					3.8	2.5	13.0	16	355
03 06 180 T	081395	180	ЩЩ ▶ 4 ≙ 1000 V @ €	chrome plated	chrome plated	insulated with multi-component grips with integrated insulated tether attachment point, VDE tested	3.4	2.2	12.0	16	270
03 07 160	015307	160					3.1	2.0	10.0	16	254
03 07 180	015314	180				with discord insulation VDE tooted	3.4	2.2	12.0	16	285
03 07 200	015321	200	🚖 1000 V 🖄 🚭	chrome plated	chrome plated	with dipped insulation, VDE-tested	3.8	2.5	13.0	16	339
03 07 250	015345	250					3.8	2.5	15.0	25	597



Needle-Nose Combination Pliers

Small High Leverage Combination Pliers with pointed jaw. For all common installation and repair work.

- Handy use when working in confined areas thanks to slim head design and pointed jaws (anti-twist)
- Gripping surfaces with special convex contour on one side for secure gripping of flat parts
- Milled groove in the gripping area permits small parts such as nails, pins and bolts to be held and pulled
- > The reliable and diverse combination pliers when out and about
- > Easy cutting thanks to the high leverage joint
- > With cutting edges for soft, medium-hard and hard wire
- > Long service life and stable tips
- > Forged from special high grade tool steel, manifold oil-hardened
- > DIN ISO 5746, DIN EN 60900, IEC 60900

08 26 145 T*

> Pliers with tether attachment point for mounting a fall protection



								Cutting o	apacities	5	
	EAN						\bigcirc		•	€	52
Article No.	4003773	mm		Pliers	Head	Handles	Ømm	Ømm	Ømm	mm ²	g
08 26 145	079361	145	≝∰ ≜1000V @ €	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	3.0	2.0	8.0	16	145
08 26 145 T	081401	145	₩₩ 1000 V@@	chrome plated	chrome plated	insulated with multi-component grips with integrated insulated tether attachment point, VDE tested	3.0	2.0	8.0	16	155

Insulation Strippers

universal

- > For single, multiple and fine stranded conductors with plastic or rubber insulation up to 5.0 mm dia. or 10 mm² cable cross-section
- > Easy adjustment to the required diameter of solid or stranded wire with knurled screw and lock nut
- > Special tool steel, forged, oil-hardened
- > DIN EN 60900, IEC 60900

11 06 160 T



	EAN	-→					Stripping capa	cities		52
Article No.	4003773-	mm		Pliers	Head	Handles	Ømm	mm ²	AWG	g
11 06 160	021933	160	≙ 1000 V ≧ € MM	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	5.0	10	7	200
11 06 160 T	081418	160	≙ 1000 V ﷺ ₩₩	chrome plated	chrome plated	insulated with multi-component grips with integrated insulated tether attachment point, VDE tested	5.0	10	7	180
11 07 160	015499	160	≙ 1000 V ≙ € MM	chrome plated	chrome plated	with dipped insulation, VDE-tested	5.0	10	7	180
11 17 160	015505	160	会 1000 V @ €	chrome plated	chrome plated	with dipped insulation, VDE-tested	5.0	10	7	181
11 09 01	052326	Set of	spare parts (screw	/ and nut) f	or 11 160					

KNIPEX StriX®

Insulation strippers with Cable Shears – two essential electrical installation tools in one pair of pliers

- > Integrated Cable Shears for the clean cutting of Cu and Al cables without crushing
- > Universal adjustment of the wire stripping blades by means of a knurled screw
- > Slim design for good accessibility
- > For stripping single, multiple and fine stranded conductors with plastic and rubber insulation up to a max. Ø 5 mm or resp. 10 mm2 conductor cross-section
- > Graduated jaw provides a visual orientation aid when stripping wire in standard lengths (11 mm and 16 mm)
- > Special high grade tool steel that has been oil-hardened in multiple stages

13 66 180 T*





Induction hardened precision blade



Length marking: visual markings provide support during repeated stripping of wire in standard lengths (11 and 16 mm)



Induction hardened shear blade with precisely ground cutting edges for crushing-free cutting of copper cables up to Ø 15 mm (5 x 2.5 mm2)



Lock nut prevents any unintentional adjustment



						Cutting o	apacities	Stripping	capacities	
	EAN	∢ →					•			52
Article No.	4003773-	mm	Pliers	Head	Handles	Ømm	mm ²	Ømm	mm ²	g
13 62 180	081302	180	black atramentized	polished	with multi-component grips	15	50	5.0	10	210
13 66 180	081319	180	chrome plated		insulated with multi-component grips, VDE-tested	15	50	5.0	10	210



Stripping Pliers

Multifunctional – cutting and stripping with one pair of pliers

- ► For time-saving stripping of all round sheathed and dampproof installation cables (e.g. NYM cable)
- Simplified access especially into deep mounted junction boxes thanks to slim head design and optimally angled cable sheath cutter
- Strip cables easily and without damage thanks to circular cutting edge with depth limiter
- > Suitable for universal use: precision wire stripping holes for conductors from 1.5 and 2.5 $\rm mm^2$
- > With side cutters for cutting and trimming conductors, wires, small screws and nails
- > All cutters additionally induction-hardened to approx. 61 HRC for high wear resistance
- > 30 % lighter than comparable pliers
- > Vanadium electric steel, forged, multi stage oil-hardened
- > DIN EN 60900, IEC 60900











Article No.	EAN 4003773-	∢- ► mm		Pliers	Head	Handles	Cable stripping values Ø mm	Stripping capacities mm ²	Ø mm	Ø mm	۵۵ g
13 46 165	079699	165	▲ 1000 V @@	chrome plated	chrome plated	insulated with multi-com- ponent grips, VDE-tested	8.0 - 13.0	0.75 - 1.5 / 2.5	3.2	2.2	190

Diagonal Insulation Strippers

- ► With long cutter
- ▶ High cutting capacity due to high leverage joint
- > Precision stripping holes for single conductors of 1.5 and 2.5 mm²
- > Convenient cutting of NYM cables up to 5 x 2.5 mm²
- > Long tips for ultra fine cutting work also in confined areas
- > Induction-hardened precision blades, cutting edge hardness approx. 60 HRC
- > Vanadium electric steel, forged, multi stage oil-hardened
- > DIN EN 60900, IEC 60900







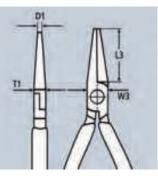
									Cutting c	apacities	
Article No.	EAN 4003773-	∢- ► mm		Pliers	Head	Handles	Stripping capacities mm ²	AWG	O Ø mm	Ø mm	۵۵ g
14 26 160	040279	160	<mark>∕</mark> 1000 V @ €	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	1.5 / 2.5	15 / 13	2.5	1.5	216

Round Nose Pliers

> For bending wire loops

- > Round, short jaws; finely ground
- > Smooth tips
- > Special tool steel, forged, oil-hardened
- > DIN ISO 5745, DIN EN 60900, IEC 60900







							Dimer	nsions		
	EAN	>				L3	W3	D1	T1	52
Article No.	4003773-	mm	Pliers	Head	Handles	mm	mm	mm	mm	g
22 06 160	033790	160	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	30.0	18.0	3.0	9.5	175

Pliers for Electrical Installation

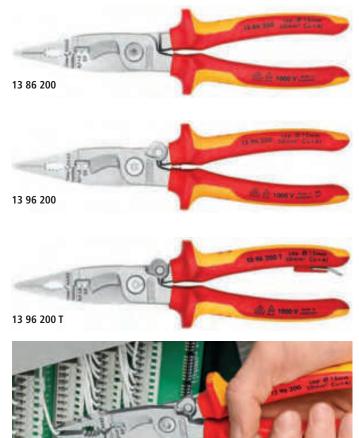
The all-rounder for professionals

- ▶ 6 functions in one pair of pliers
- Multifunctional pliers for the electrical installation; to grip flat and round material, for bending, deburring, cutting cable, stripping and crimping wire ferrules
- > Smooth surfaces near the tips grip single cores without damaging them; serrated gripping surfaces and pipe grip for gripping flat and round material
- > Clear-cut outside edge on the jaw for working on flush-mounted junction boxes and deburring feed-through holes
- > Stripping holes for conductors of 0.75 1.5 mm² and 2.5 mm²
- > Crimping die for wire ferrules 0.5 2.5 mm²
- > Cable shears with (induction-hardened) precision cutting edges for copper and aluminium cables up to 5 x 2.5 mm² / dia. 15 mm
- > Slim dimensions for easy access
- > Bolted joint: precise, zero backlash operation of pliers
- > High-grade special tool steel, forged, multi stage oil-hardened
- > DIN EN 60900, IEC 60900

13 96 200

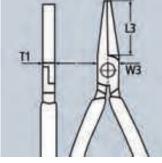
In case of models with opening spring integrated in the joint, the activated locking lever keeps the cutting edges closed while other functions remain active; the intelligent latching mechanism enables you to "grip" without opening the pliers. The cutting edge remains closed and protected

13 96 200 T*



Article No.	EAN 4003773-	⊲- ► mm		Pliers	Head	Handles	Cutting c Ø mm	apacities mm ²	Stripping capacity for cross-sections mm ²	Crimping capacities mm ²	۵ ^۲ ۵ g
13 86 200	075097	200	<u></u> £ 1000 V 	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	15.0	50	0.75 - 1.5 / 2.5	0.5 - 2.5	280
13 96 200	075110	200	<u></u> £ 1000 V 	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	15.0	50	0.75 - 1.5 / 2.5	0.5 - 2.5	280
13 96 200 T	081425	200	会 1000 V @∰	chrome plated	chrome plated	insulated with multi-component grips with integrated insulated tether attachment point, VDE tested	15.0	50	0.75 - 1.5 / 2.5	0.5 - 2.5	275



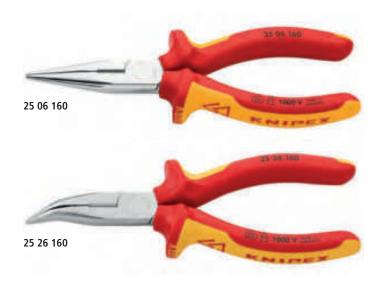


								Dimensions		<u> </u>
	EAN	-+					L3	W3	T1	52
Article No.	4003773-	mm		Pliers	Head	Handles	mm	mm	mm	g
20 06 160	033783	160	₩₩ <u>A</u> 1000 V A	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	30.0	17.0	9.5	176

Snipe Nose Side Cutting Pliers

Radio Pliers

- > Suitable for finer gripping and cutting work
- > Half-round, long, tapered jaws
- > Knurled gripping surfaces
- >With cutting edges for soft, medium-hard and hard wire
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 61 HRC
- > Vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 5745, DIN EN 60900, IEC 60900







							Cutting o	apacities	
Article No.	EAN 4003773-	∢→ mm		Pliers	Head	Handles	Ø mm	Ø mm	۵۵ g
25 06 160	033806	160	I000 V <u>A</u> A 1000 V A A A A A A A A A A A A A A A A A A	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	2.5	1.6	146
25 06 160 T	081432	160	I000 V <u>A</u> ∎ €	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested, with integrated insulated tether attachment point for a tool tether	2.5	1.6	155
25 26 160	052111	160	IOOO V <u>À</u> 1000 V ™ → ↓40°	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	2.5	1.6	144

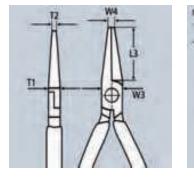
Snipe Nose Side Cutting Pliers

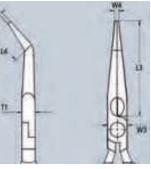
Stork Beak Pliers

- Elastic tips: dimensionally stable even when twisted
- > Distortion-tolerant, elastic precision tips
- > Half-round, long, tapered jaws
- > With cutting edges (hardness approx. 61 HRC) for soft, medium-hard and hard wire
- > Vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 5745, DIN EN 60900, IEC 60900

26 16 200 T / 26 26 200 T*









				Cutting capaciti			apacities			Dimer	nsions				
Article No.	EAN 4003773-	∢- ► mm		Pliers	Head	Handles	Ø mm	Ømm	L3 mm	L4 mm	W3 mm	T1 mm	W4 mm	T2 mm	۵۵ g
26 16 200	022831	200	≝≣ ► ≜ 1000 V @@ ⊖	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	3.2	2.2	73.0		18.0	9.5	3.0	2.5	206
26 16 200 T	081449	200	≝∰ ▶¶ ≜ 1000 V @€ ⊖	chrome plated	chrome plated	insulated with multi-component grips with integrated insulated tether attachment point, VDE tested	3.2	2.2	73.0		18.0	9.5	3.0	2.5	215
26 17 200	016069	200	≝∰ ▶ ≜1000 V ≧ €	chrome plated	chrome plated	with dipped insulation, VDE-tested	3.2	2.2	73.0		18.0	9.5	3.0	2.5	212
26 26 200	022855	200	▲ 1000 V ▲ € ⊖	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	3.2	2.2	73.0	23.0	18.0	9.5	3.0	2.5	204
26 26 200 T	081456	200	▲ 1000 V ▲ 주 ⊖ ★40°	chrome plated	chrome plated	with multi-component grips and integrated tether attachment point	3.2	2.2	73.0	23.0	18.0	9.5	3.0	2.5	215
26 27 200	016090	200	₩₩ <u>A</u> 1000 V ▲ C <u>√</u> 40°	chrome plated	chrome plated	with dipped insulation, VDE-tested	3.2	2.2	73.0	23.0	18.0	9.5	3.0	2.5	220

Long Nose Pliers

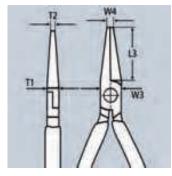
- > Heavy duty and wear resisting
- > Different jaw styles
- > Chrome vanadium electric steel, forged, oil-hardened
- > DIN ISO 5745, DIN EN 60900, IEC 60900

Style 1 > Long, trapezoidal jaws; knurled gripping surfaces

Style 3

> Long, round jaws; smooth gripping surfaces





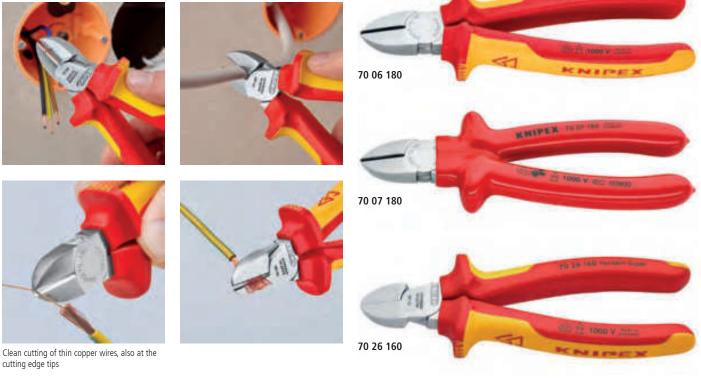
									D	imensior	ns		
	EAN	∢ →						L3	W3	T1	W4	T2	52
Article No.	4003773-	mm		Style	Pliers	Head	Handles	mm	mm	mm	mm	mm	g
30 16 160	001904	160	■1000 V @@	1	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	46.5	16.5	9.5	3.0	5.0	150
30 36 160	002123	160	C 2 2 1000 V A 1000 V A 1000 V	3	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	41.0	16.5	9.5	5.0	2.5	141

Diagonal Cutters

- > The indispensable diagonal cutter for all-round use
- > High-quality material and precise workmanship for long service life
- > Precision cutting edges for soft and hard wire
- > Clean cutting of thin copper wires, also at the cutting edge tips
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 62 HRC
- > Narrow head style for use in confined areas
- > Vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 5749, DIN EN 60900, IEC 60900

70 06 160 T / 70 06 180 T*





							Cu	tting capaci	ties	
Article No.	EAN 4003773-	∢→ mm		Pliers	Head	Handles	Ø mm	Ø mm	Ø mm	۵'ک g
70 06 125	018124	125	▶ २ 1000 V 🕸 🚭	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	3.0	2.3	1.5	121
70 06 140	040293	140	▶ २ 1000 V 🖄 🚭	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	4.0	2.5	1.8	160
70 06 160	021995	160	▶ २ 8 1000 V 🕸 🛃	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	4.0	3.0	2.0	216
70 06 160 T	081463	160	🎮 🏦 1000 V 🖄 🛃	chrome plated	chrome plated	insulated with multi-component grips with integrated insulated tether attachment point, VDE tested	4.0	3.0	2.0	230
70 06 180	033813	180	▶ २ 1000 V 🕸 🥰	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	4.0	3.0	2.5	254
70 06 180 T	081470	180	▶ ९ ≵1000 V 🖄 🖨	chrome plated	chrome plated	insulated with multi-component grips with integrated insulated tether attachment point, VDE tested	4.0	3.0	2.5	270
70 07 160	018155	160	▶ २ 8 1000 V 🕸 🛃	chrome plated	chrome plated	with dipped insulation, VDE-tested	4.0	3.0	2.0	227
70 07 180	018179	180	▶ २ 1000 V 🕸 🛃	chrome plated	chrome plated	with dipped insulation, VDE-tested	4.0	3.0	2.5	269
70 26 160	018223	160	📂 👌 1000 V 🖄 🚭	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	4.0			216

KNIPEX X-Cut®

Compact Diagonal Cutters

high lever transmission

- Cuts finest strands as well as multi-core cables and piano wires
- ▶ Powerful, light and universal
- > High cutting performance with minimum effort due to optimum co-ordination of the cutting edge angle and transmission ratio
- > Box-joint design: highest stability with low weight
- > Doubly supported joint axis for heavy duty
- > Large opening width for thicker cables
- > Cuts precisely, even through fine copper wires
- > Compact, low-weight construction
- > Universally usable, in the assembly, maintenance and production
- >40 % less force required compared with standard diagonal cutters of the same length
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened
- > DIN ISO 5749, DIN EN 60900, IEC 60900

73 06 160 T*

> Pliers with tether attachment point for mounting a fall protection



40% less effort

required compared to diagonal cutters of the same length. With double mounted hinged joint.

							Cutting capacities					
Autiala Nia	EAN			Diana	llaad	Usedlar	Ø	Ø	Ø	Ø	Ø	5
Article No.	4003773-	mm		Pliers	Head	Handles	mm	mm	mm	mm	mm	g
73 06 160	075141	160	🏓 🛧 1000 V 🖄 🚅	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	4.8	3.8	2.7	2.2	12.0	175
73 06 160 T	081487	160	🏓 🛧 1000 V 🕸 🚰	chrome plated	chrome plated	insulated with multi-component grips with integrated insulated tether attachment point, VDE tested	4.8	3.8	2.7	2.2	12.0	185

High Leverage Diagonal Cutters

> For very tough, continuous use

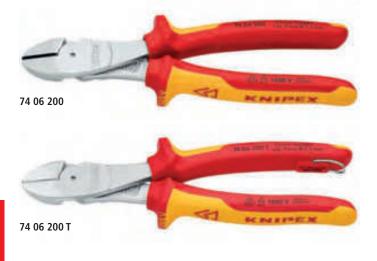
- > High cutting performance with minimum effort due to optimum co-ordination of the cutting edge angle and transmission ratio
- > Precision cutting edges additionally induction-hardened (cutting edge hardness approx. 64 HRC), for all sorts of wire including piano wire
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened
- > DIN ISO 5749, DIN EN 60900, IEC 60900

74 06 250 T*

> Pliers with tether attachment point for mounting a fall protection

20% less effort

Required compared to high-leverage diagonal cutters of the same length. With integrated forged joint axle.



							Cut	ting capac	ities	
	EAN	-→								52
Article No.	4003773-	mm		Pliers	Head	Handles	Ømm	Ømm	Ømm	g
74 06 160	040705	160					3.4	2.5	2.0	215
74 06 180	022985	180	▶ 🗧 🏡 1000 V 🖄 🛃	chrome	chrome	insulated with multi-component grips, VDE-tested	3.8	2.7	2.2	280
74 06 200	033820	200		plated	plated	insulated with multi-component grips, v DE-tested	4.2	3.0	2.5	304
74 06 250	041955	250					4.6	3.5	3.0	453
74 06 200 T	081494	200	▶ 🕈 1000 V 🖄 🛃	chrome	chrome	insulated with multi-component grips with integrated	4.2	3.0	2.5	305
74 06 250 T	081500	250		plated	plated	insulated tether attachment point, VDE tested	4.6	3.5	3.0	465
74 07 200	018414	200	▶ 1000 V 🍂	chrome	chrome	with dipped insulation, VDE-tested	4.2	3.0	2.5	328
74 07 250	018421	250		plated plated	plated	with upped insulation, vDE-tested	4.6	3.5	3.0	510

Pliers Wrenches

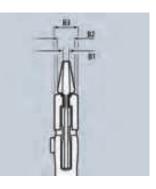
Pliers and a wrench in a single tool

- ▶ Replaces the need for sets of metric and imperial spanners
- Smooth jaws for damage free installation of plated fittings working directly on chrome!
- Practical adjustment scale: A laser-cut (metric and imperial) enables pre-setting to the width across flats
- > Also excellent for gripping, holding, pressing and bending workpieces
- >Zero backlash jaw pressure prevents damage to edges of sensitive components
- > Fast adjustment by pushing a button directly on the workpiece
- > No unintentional shift of the gripping jaws and no slipping of the joint
- > Parallel jaws give a more solid grip; its design allows flexible adjustment of all widths up to the specified maximum size
- > The ratchet type principle allows quick and easy tightening and release of all bolted connections
- > Lever transmission greater than 10 : 1 for strong gripping power
- > Chrome vanadium electric steel, forged, oil-hardened
- > DIN EN 60900, IEC 60900



86 06 250





									Di	mensic	ons	
	EAN	∢ →				\bigcirc	\bigcirc	Adjustment	B1	B2	B3	52
Article No.	4003773-	mm		Pliers	Handles	Inch	mm	positions	mm	mm	mm	g
86 06 250	082408	250	 ≵1000 V @€	chrome plated	insulated with multi-component grips, VDE-tested	2	52.0	19	8.0	8.0	14.0	525

KNIPEX Alligator®

Water Pump Pliers

- Good access to the workpiece due to slim size of head and joint area
- More output and comfort compared to conventional water pump pliers of the same length: 9-notch adjustment positioning for 30 % more gripping capacity
- > Self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- > Gripping surfaces with special hardened teeth, teeth hardness approx. 61 HRC: high wear resistance and stable gripping
- > Box-joint design for high stability due to double guide
- > Robust construction, insensitive to dirt; particularly suitable for outdoor work
- > Pinch guard prevents operators' fingers being pinched
- > Chrome vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 8976, DIN EN 60900, IEC 60900







Article No.	EAN 4003773-	∢ → mm		Pliers	Head	Handles	O] Ø Inch	O]; Ø mm	∑ mm	Adjustment positions	۵ ^۲ ۵ g
88 06 250	039303	250	∭ <u>A</u> 1000 V 🎪 💕	chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	2	50.0	46.0	9	374
88 07 250	019343	250	□□□□] <u>&</u> 1000 V @ _€	chrome	chrome	with dipped insulation, VDE-tested	2	50.0	46.0	9	420
88 07 300	022350	300		plated	plated	with apped insulation, VDE-tested	2 3/4	70.0	60.0	9	661

KNIPEX Cobra® VDE

Hightech Water Pump Pliers, insulated

- > Adjustment by shifting one jaw directly on to the workpiece: fast, reliable and comfortable handling
- > Fine adjustment: allows optimum adjustment to differently sized workpieces and comfortable handle position
- > Good access to the workpiece due to slim size of head and joint area
- > Self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- > Gripping surfaces with special hardened teeth, teeth hardness approx.
 61 HRC: high wear resistance and stable gripping
- > Box-joint design for high stability due to double guide
- > Pinch guard prevents operators' fingers being pinched
- > Chrome vanadium electric steel, forged, multi stage oil-hardened
- > DIN ISO 8976, DIN EN 60900, IEC 60900

87 26 250 T*

> Pliers with tether attachment point for mounting a fall protection



87 26 250 T

The adjustment action to adapt to the workpiece is easy and reliable with the KNIPEX Cobra® VDE: place the upper gripping jaw of the opened pliers on the workpiece, push pliers to close, done!





Quick setting without using a push-button



Just push the pliers handle to adjust!

Article No.	EAN 4003773-	⊶→ mm		Pliers	Head	Handles	O] Ø Inch	O] Ø mm	mm mm	Adjustment positions	۵'۵ g
87 26 250	071495	250		chrome plated	chrome plated	insulated with multi-component grips, VDE-tested	2	50.0	46.0	24	340
87 26 250 T	081517	250	ᲚᲚ ∯ 1000 V @∰	chrome plated		insulated with multi-component grips, VDE-tested with integrated insulated tether attachment point for a tool tether	2	50.0	46.0	24	400

87 29 01 079002 range of spare parts for 87 2x-250

Precision Tweezers

insulated

> With dipped insulation

- > Spring steel, high-strength
- > DIN EN 60900, IEC 60900

92 27 61

> For ultra fine mounting work; extra fine tips; straight pattern; gripping surfaces matt finished for optimum grip

92 27 62

> Straight pattern; gripping surfaces with fine transverse serration

92 37 64

> Angled tips; gripping surfaces with fine transverse serration

92 67 63

> Straight pattern; knurled gripping surfaces





92 67 63

	EAN	<->			5
Article No.	4003773-	mm		Finish	g
92 27 61	054757	130		with dipped insulation	30
92 27 62	054764	150	□□□□	with dipped insulation	35
92 37 64	054856	150	Щ∭ ≙1000V ∡4 5°	with dipped insulation	34
92 67 63	054931	145	□□□□	with dipped insulation	40

Cable Shears

handles extrusion plastic-coated

- > Not suitable for steel wire and hard drawn copper conductors
- > Precision-ground, hardened blades
- > No crushing, slight deformation of the cable only
- > Adjustable bolted joint
- > Shears body: surgical steel, stainless, vacuum-hardened
- > Handles: plastic, impact-proof
- > DIN EN 60900, IEC 60900



						Cutting capacities			
Article No.	EAN 4003773-	∢→ mm		Head	Handles	Ømm	mm ²	AWG	44
95 06 230	006305	230	<u> </u>	polished	plastic insulated, VDE-tested	16.0	50	1/0	274

Cable Shears

- > For cutting copper and aluminium single conductors as well as multiple stranded cables
- > Clean and smooth cut without crushing and deformation
- > Not suitable for steel wire and hard drawn copper conductors
- > Precision-ground, hardened blades
- > Easy cutting with one-hand operation
- >With guard
- > Adjustable bolted joint, self-retaining screw
- > High-grade special tool steel, forged, oil-hardened
- > DIN EN 60900, IEC 60900

95 16 165 T*

> Pliers with tether attachment point for mounting a fall protection



Cutting a cable with a conventional wire cutter. High force is required, and the cable is squeezed and deformed.



Cut performed with a Cable Shear: easy, clean cut without any deformation of the cable





95 26 165: Catch locks shears to the opening spring inside



							g capacities		
	EAN	∢ →							52
Article No.	4003773-	mm		Tool	Handles	Ømm	mm ²	AWG	g
95 16 165	039648	165	☆ 1000 V 🖄 🚅	chrome plated	insulated with multi-component grips, VDE-tested	15.0	50	1/0	262
95 16 165 T	081524	165	≙1000V @	chrome plated	insulated with multi-component grips with integrated insulated tether attachment point, VDE tested	15.0	50	1 / 0	260
95 26 165	069980	165	<u> </u>	chrome plated	insulated with multi-component grips, VDE-tested	15.0	50	1/0	275

Cable Shears

with twin cutting edge

- > For cutting copper and aluminium cables
- > Not suitable for steel wire and hard drawn copper conductors
- > Precision-ground, hardened blades
- > Clean and smooth cut without crushing and deformation
- > Adjustable bolted joint, self-retaining screw
- > Low handforce required due to favourable lever ratio and special blade geometry
- > Pinch guard prevents operators' fingers being pinched
- > By dividing the cutting actions into initial cut (insulating sheath in the front cutting area) and final cut (conductor in the back cutting area), cables up to \emptyset 20 mm can be cut in one-hand operation
- > High-grade special tool steel, forged, oil-hardened
- > DIN EN 60900, IEC 60900





Initial cut: using the front cutting edge to cut the insulating sheath on larger cable diameters leaves an ergonomic handle opening width.



Final cut: after cutting the sheath in the front profile the conductors in the rear part are cut. Initial cut in the front profile, final cut in the rear profile – to keep it as easy as possible.

						Cutting o	apacities		
	EAN	-				•	•		52
Article No.	4003773-	mm		Tool	Handles	Ømm	mm ²	AWG	g
95 16 200	026761	200	A 1000 V ▲ PATENTED	chrome plated	insulated with multi-component grips, VDE-tested	20.0	70	2/0	340
95 17 200	026952	200	A 1000 V ▲ PATENTED	chrome plated	with dipped insulation, VDE-tested	20.0	70	2/0	360

Cable Shears

for two-handed use, short construction

- ▶ Short design, length only 500 mm
- ► Low weigth, high leverage
- > For cutting copper and aluminium single conductors as well as multiple stranded cables
- > Not suitable for steel wire and wire ropes
- > Precision-ground, hardened blades
- > Clean and smooth cut without crushing and deformation
- > Low handforce required due to favourable lever ratio and special blade geometry
- > Pinch guard prevents operators' fingers being pinched
- > Adjustable bolted joint
- > Cutter head: vanadium electric steel, forged, oil-hardened
- > Handles: aluminium tube, high-strength
- > DIN EN 60900, IEC 60900



Large cutting capacity: max. 27 mm dia. / 150 mm²

						Cutting capacities			
	EAN	>				•			52
Article No.	4003773-	mm		Head	Handles	Ømm	mm ²	AWG	g
95 17 500	026785	500	≙ 1000 V 🖄 🚅	polished	with dipped insulation, VDE-tested	27.0	150	5/0	1477

Cable Shears

for two-hand operation

- > For cutting copper and aluminium single conductors as well as multiple stranded cables
- > Not suitable for steel wire and wire ropes
- > Precision-ground, hardened blades
- > Clean and smooth cut without crushing and deformation
- > Favourable lever ratio due to toggle lever
- > Pinch guard prevents operators' fingers being pinched
- > Adjustable bolted joint
- > Bolted cutter head, replaceable
- > Handles: steel tube
- > Cutter head: high-grade chrome vanadium electric steel, forged, oil-hardened
- > DIN EN 60900, IEC 60900



95 27 600

						Cutting capacities			
Article No.	EAN 4003773-	←→ mm		Head	Handles	Ø mm	mm ²	AWG	۲۵ d
95 27 600	021797	600	<u> </u>	polished	with dipped insulation, VDE-tested	27.0	150	5/0	2262
95 29 600	021803	Spare of	utter head for 95 21	600 / 95 27 600					

Cable Cutters

(ratchet action)

- > For cutting copper and aluminium single conductors as well as multiple stranded cables
- > Not suitable for steel wire and wire ropes
- > Precision-ground, hardened blades
- > Clean and smooth cut without crushing and deformation
- > One-hand operation using ratchet principle
- > Little handforce required due to very high transmission ratio
- > Two-stage ratchet drive for easy cutting
- > Pinch guard prevents operators' fingers being pinched
- > High-grade special tool steel, forged, oil-hardened
- > DIN EN 60900, IEC 60900

95 36 280

> Suitable for aluminium sector cable up to 4 x 150 mm²



95 36 250



95 36 280



Ratchet principle and two-stage ratchet drive for easier cutting



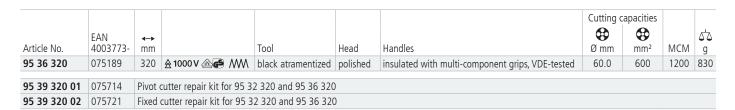


						Cutting of	apacities		
Article No.	EAN 4003773-	←→ mm		Tool	Handles	Ø mm	mm ²	MCM	۵ ^۲ ۵ g
95 36 250	026884	250	£ 1000 V @ € MM			32.0	240	500	652
95 36 280	026891	280	≙1000V മാ€ MM	black lacquered	insulated with multi-component grips, VDE-tested	52.0	380	750	835
95 39 04	039167	Feed pav	vl 95 3 250/280						
95 39 08 S	039211	Tension :	spring set for lateral mou	nting 95 36 25/28					
95 39 250	022244	Movable	spare blade for 95 31 25	50 / 95 36 250					
95 39 280	025283	Movable	spare blade for 95 31 28	30 / 95 36 280					

Cable Cutters

(ratchet principle, 3-stage)

- Sturdy. Easy to use. Stable.
- ► Innovative ratchet-drive.
- ▶ For cable up to 60 mm diameter.
- > Fixed handle with support area for putting down the pliers when cutting
- > Easy handling due to low weight (825 g) and compact construction (320 mm length) – also usable in confined areas
- > Cutting through copper and aluminium cables with diameters of up to 60 mm in one-hand and two-hand operation
- > Hardened cutting edges, precisely ground, cut smoothly and neatly without crushing
- > For cutting copper and aluminium single conductors as well as multiple stranded cables (not suitable for steel wire and wire ropes)
- > Innovative three-stage ratchet-drive with high leverage for easy cutting in one-hand and two-hand operation
- > High-grade special tool steel, forged, oil-hardened
- > DIN EN 60900, IEC 60900



Cable Cutters

(ratchet action)

for steel wire armoured cables (SWA cable)

- Cuts through steel wire armoured cables with a diameter of up to 45 mm / 380 mm² (e.g. 4 x 95 mm²) using one or two-handed operation
- Sturdy. Easy to use. Stable.
- > Simple handling due to low weight (800 g) and compact design (315 mm length) – can also be used in confined areas
- > Precision-ground blades and induction-hardened cutting edges cut smoothly and neatly without crushing
- > Innovative high leverage three-stage ratchet-drive
- > Support area for putting down the pliers when cutting
- > Not suitable for cutting ACSR cable and wire rope!
- > Cutter head: special high-grade tool steel, forged, oil-hardened
- > IEC 60900, DIN EN 60900



95 36 315 A



						Cutting o	apacities		
	EAN	∢ →				۲	۲		52
Article No.	4003773-	mm		Tool	Handles	Ømm	mm ²	MCM	g
95 36 315 A	078579	315	£1000 V @€ \\\\	black lacquered	insulated with multi-component grips, VDE-tested	45.0	380	750	800
95 39 315 A01	078586	Pivot c	utter repair kit for 95 32 31	15 A and 95 36 315	δA				



95 36 320

Wire Rope and ACSR-Cable Cutters

Handles: aluminium, high-strength

- > Suitable for cutting overhead cables with strain relief wire (ACSR-cables)
- > Angular cutting blades allow cutting of single rope wire
- > Optimum transmission ratio for high cutting performance
- > Bolted cutter head, replaceable
- >Low weight
- > Handles: aluminium, high-strength
- > Cutter head: high-grade special tool steel, multi stage oil-hardened
- > DIN EN 60900, IEC 60900





						Cutting capacities					
Article No.	EAN 4003773-	∢→ mm		Head	Handles	mm ²	Ø mm	Ø mm	AWG	۵ ^۲ ۵ g	
95 77 600	025313	600	<u> </u>	polished	with dipped insulation	150	14.0	9.0	5/0	2359	
95 79 600	025337	Spare cut	e cutter head for 95 71 600 / 95 77 600								

Crimping Pliers for wire ferrules

with trapezoid crimp

- > For crimping wire ferrules according to DIN 46228 parts 1 + 4 in the range from 0.25 $\,$ up to 2.5 $\,mm^2$
- > Crimping in marked trapezoidal dies for reliable connections between the sleeve and the conductor
- > Vanadium electric steel; forged, oil-hardened
- > DIN EN 60900, IEC 60900



Article No.	EAN 4003773-	∢ → mm			Head	Handles	Capacity mm ²	AWG	۵'ک g
97 68 145 A	071754	145	<i>P</i>	£ 1000 V 🎪 🚰	polished	insulated with multi-component grips, VDE-tested	0.25 - 2.5	23 - 13	175

Crimping Pliers for wire ferrules

with mandrel crimp

- Light and slim design
- ▶ Easy crimping due to optimised transmission ratio
- > For crimping wire ferrules according to DIN 46228 parts 1 + 4 from 0.25 to 16 $\rm mm^2$
- > Crimping in marked half-round dies for reliable connections between the sleeve and the conductor
- > 9 particularly deep dies with conical side faces
- > Special tool steel, forged, oil-hardened
- > DIN EN 60900, IEC 60900

97 78 180 T*







Article No.	EAN 4003773-	∢→ mm		Head	Handles	Applications	Capacity mm ²	AWG	۵'۵ g
97 78 180	072003	180	£1000 V 🏤 🗗	polished	insulated with multi-component grips, VDE-tested	Wire ferrules	0.25 - 16	23 - 5	254
97 78 180 T	081531	180	£1000 V @€ 🔽	polished	insulated with multi-component grips, VDE-tested with inte- grated insulated tether attachment point for a tool tether	Wire ferrules	0,25 - 16	23 - 5	260

Open-end wrenches

- > Jaw 15° angled> Basic tool chrome plated
- > Chrome vanadium steel, forged, oil-hardened
- > DIN EN 60900, IEC 60900



98 00 14



Article No.	EAN 4003773-		Width across flats S mm	Width across flats S Inch	Length l max. mm	Head width b max. mm mm	Head thickness a max. mm	۲۵ g
98 00 07	019824		7.0		105.0	20.0	4.0	15
98 00 08	019831		8.0		105.0	22.0	4.0	31
98 00 09	019848		9.0		105.0	24.0	4.0	29
98 00 10	019893		10.0		105.0	27.0	5.0	46
98 00 11	019909		11.0		120.0	30.0	5.5	45
98 00 12	019923		12.0		125.0	32.0	5.5	70
98 00 13	019930		13.0		130.0	34.0	6.5	68
98 00 14	019947		14.0		135.0	35.0	6.5	86
98 00 15	019954		15.0		145.0	37.0	7.0	80
98 00 16	019961		16.0		155.0	38.0	7.0	112
98 00 17	019978		17.0		155.0	42.0	8.0	119
98 00 18	019985	4 10001/	18.0		160.0	44.0	8.0	149
98 00 19	019992	<u></u> £ 1000 V	19.0		165.0	47.0	9.0	154
98 00 22	020004		22.0		190.0	52.0	9.0	216
98 00 24	020011		24.0		210.0	56.0	9.0	290
98 00 27	020028		27.0	1	215.0	63.0	9.0	307
98 00 1/4"	019886			1/4	108.0	20.0	4.0	32
98 00 5/16"	020073			5/16	108.0	22.0	4.0	36
98 00 3/8"	020042			3/8	108.0	27.0	5.0	37
98 00 7/16"	020097			7/16	120.7	30.0	5.5	53
98 00 1/2"	019879			1/2	139.7	34.0	6.5	70
98 00 9/16"	020110			9/16	152.4	35.0	6.5	102
98 00 5/8"	020080			5/8	165.1	38.0	7.0	124
98 00 3/4"	020035			3/4	190.5	47.0	9.0	164



Adjustable Wrench

- > Parallel smooth gripping jaws
- > Variable gripping width
- > With scaling for presetting the width apart from the workpiece
- > Chrome Vanadium steel
- > DIN EN 60900, IEC 60900



98 07 250



	EAN	4-			\Box	£()	Jaw width	Head	Width	Depth	5
Article No.	4003773	mm	Tool	Handle	mm	Inch	mm	width mm	mm	mm	g
98 07 250	071518	260	chrome plated	with dipped insulation	34.0	1 1/8	8.0	16.0	57.0	20.0	590

Box Wrenches

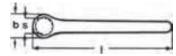
- > Cranked
- > Basic tool chrome plated
- > Chrome vanadium steel, forged, oil-hardened
- > DIN EN 60900, IEC 60900



A RULEX STATE



98 01 14



<u> </u>	-	h	
-	-	-	

	EAN		Width across flats S	Length I max.	Head width b max. mm	Head thickness a max.	Depth of crank h max.	52
Article No.	4003773-		mm	mm	mm	mm	mm	g
98 01 07	020134		7.0	150.0	12.0	7.0	18.0	55
98 01 08	020141		8.0	155.0	14.0	7.0	19.0	68
98 01 09	020158		9.0	165.0	15.5	8.0	19.0	78
98 01 10	020196		10.0	160.0	17.0	9.0	20.0	75
98 01 11	020202		11.0	165.0	18.5	10.0	21.0	93
98 01 12	020226		12.0	185.0	18.5	10.0	23.0	118
98 01 13	020233		13.0	185.0	21.5	11.0	23.0	125
98 01 14	020240	<u></u>	14.0	195.0	23.0	12.0	24.0	147
98 01 15	020257		15.0	200.0	24.0	12.0	24.0	143
98 01 16	020264		16.0	200.0	26.0	12.0	26.0	172
98 01 17	020271		17.0	205.0	27.0	13.0	26.0	184
98 01 18	020288		18.0	210.0	29.0	13.0	28.0	210
98 01 19	020295		19.0	225.0	30.0	14.0	28.0	245
98 01 22	020301		22.0	225.0	35.0	15.0	30.0	278
98 01 24	020318		24.0	265.0	38.0	16.0	30.0	415

Nut Drivers

with screwdriver handle

- > Ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force
- > Handle design prevents rolling
- > Chrome vanadium molybdenum steel
- > DIN EN 60900, IEC 60900



Article No.	EAN 4003773-	∢ → mm	Tip	Handle	Width across flats S mm	Blade length mm	Handle length mm	Head dia. mm	۲۵ g
98 03 04	071679	230			4.0	125.0	107.0	9.0	70
98 03 05	071686	230			5.0	125.0	107.0	10.0	70
98 03 055	026082	232			5.5	125.0	107.0	11.0	87
98 03 06	026099	232			6.0	125.0	107.0	12.0	88
98 03 07	026105	237		insulating	7.0	125.0	112.0	14.0	123
98 03 08	024095	237	 burnished	multi-component	8.0	125.0	112.0	15.0	125
98 03 09	026112	237		handle, VDE-tested	9.0	125.0	112.0	16.0	129
98 03 10	026129	237			10.0	125.0	112.0	17.0	118
98 03 11	026136	237			11.0	125.0	112.0	19.0	148
98 03 12	026143	237			12.0	125.0	112.0	20.0	150
98 03 13	026150	237			13.0	125.0	112.0	21.0	152

Nut Drivers

with T-handle

> Special tool steel, oil-hardened> DIN EN 60900, IEC 60900



	EAN	← ►		Width across flats S	Handle length	Head dia.	5
Article No.	4003773-	mm		mm	mm	mm	g
98 04 08	071341	200		8.0	90.0	15.0	344
98 04 10	026167	200		10.0	155.0	19.5	324
98 04 13	026198	200	A 1000 V 🖄 🗲	13.0	155.0	23.5	344
98 04 17	026211	200		17.0	155.0	28.5	426
98 04 19	020424	200		19.0	155.0	31.0	525
98 04 22	026228	200	_	22.0	155.0	34.5	560
98 05 13	026273	300		13.0	155.0	23.5	409
98 05 17	026297	300	🚖 1000 V 🖄 🗬	17.0	155.0	28.5	544
98 05 19	026303	300		19.0	155.0	31.0	674

Screwdrivers for hexagon socket screws

- > Ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force
- > Handle design prevents rolling
- > Chrome vanadium molybdenum steel
- > DIN EN 60900, IEC 60900

	RHIPER C
	98 13 30
98 13 30	

Article No.	EAN 4003773-	←→ mm		Тір	Handle	Width across flats S mm	Blade length mm	Length of non-insulated blade mm	Handle length mm	۵'ک g
98 13 20	071693	175				2.0	75.0	15.0	102.0	40
98 13 25	026334	177			insulating	2.5	75.0	15.0	102.0	32
98 13 30	026341	182	<u></u> £ 1000 V	burnished	multi-component	3.0	75.0	15.0	107.0	49
98 13 40	026358	182	∞€	burnished	handle,	4.0	75.0	15.0	107.0	55
98 13 50	026365	187			VDE-tested	5.0	75.0	15.0	112.0	82
98 13 60	026372	212				6.0	100.0	15.0	112.0	98

Screwdrivers for hexagon socket screws

with T-handle

> Special tool steel, oil-hardened > DIN EN 60900, IEC 60900



Article No.	EAN 4003773-	⊲ → mm		Width across flats S mm	Length of non-insulated blade \pm 2 mm	T-Handle length mm	۲۵ g
98 14 05	020431	120		5.0	9.0	90.0	220
98 14 06	020448	120	<u></u> £ 1000 V	6.0	10.0	90.0	208
98 14 08	020455	120		8.0	11.0	90.0	286
98 15 05	020479	250		5.0	9.0	90.0	363
98 15 06	020486	250	会 1000 V	6.0	10.0	90.0	452
98 15 08	020493	250		8.0	11.0	90.0	359

Screwdriver for slotted screws

- > Ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force
- > Handle design prevents rolling
- > Chrome vanadium molybdenum steel
- > DIN EN 60900, IEC 60900



98 21 45

98 20 65 SL

Article No.	EAN 4003773-	∢→ mm		Тір	Handle	Blade width mm	Blade thickness mm	Blade length mm	Length of non-insulated blade mm	Handle length mm	۵۵ g
98 20 10	026396	320				10.0	1.6	200.0	15.0	120.0	184
98 20 25	062325	177				2.5	0.4	75.0	15.0	102.0	32
98 20 30	062332	202				3.0	0.5	100.0	15.0	102.0	35
98 20 35	024217	202	1		insulating	3.5	0.6	100.0	15.0	102.0	35
98 20 40	026402	202	A 1000 V Aria G	burnished	multi-compo- nent handle.	4.0	0.8	100.0	15.0	102.0	38
98 20 55	024224	232			VDE-tested	5.5	1.0	125.0	15.0	107.0	69
98 20 65	026419	262				6.5	1.2	150.0	15.0	112.0	105
98 20 80	024231	295				8.0	1.2	175.0	15.0	120.0	152
98 21 45	026426	287				4.5	0.8	180.0	15.0	107.0	66

Screwdrivers (Slim) for slotted screws

- > Reduced blade isolation diameter for recessed spring and screw elements
- > Ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force
- > Handle design prevents rolling
- > Chrome vanadium molybdenum steel
- > DIN EN 60900, IEC 60900

	EAN	-→				Blade width	Blade thickness	Blade length	Length of non-insulated blade	Handle length	52
Article No.	4003773-	mm		Tip	Handle	mm	mm	mm	mm	mm	g
98 20 35 SL	079712	202			insulating	3.5	0.6	100.0	15.0	102.0	35
98 20 40 SL	079729	202	<u></u> £ 1000 V	burnished	multi-compo-	4.0	0.8	100.0	15.0	102.0	38
98 20 55 SL	079736	232	æ e	burnisned	nent handle,	5.5	1.0	125.0	15.0	107.0	69
98 20 65 SL	079743	262			VDE-tested	6.5	1.2	150.0	15.0	112.0	105

Screwdrivers for cross-recessed screws

Phillips[®]

- > Ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force
- > Handle design prevents rolling
- > Chrome vanadium molybdenum steel
- > DIN EN 60900, IEC 60900



Article No.	EAN 4003773-	∢ ⊸► mm		Тір	Handle	Size	Blade length mm	Length of non-insulated blade mm	Handle length mm	۲۵ g
98 24 00	026433	162				PH0	60.0	15.0	102.0	32
98 24 01	026440	187			insulating mul-	PH1	80.0	15.0	107.0	58
98 24 02	026457	212	A 1000 V A C	burnished	ti-component handle,	PH2	100.0	18.0	112.0	94
98 24 03	026464	270			VDE-tested	PH3	150.0	18.0	120.0	165
98 24 04	026471	320				PH4	200.0	18.0	120.0	244



Screwdrivers (Slim) for cross-recessed screws

Phillips[®]

- > Reduced blade isolation diameter for recessed spring and screw elements
- > Ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force
- > Handle design prevents rolling
- > Chrome vanadium molybdenum steel
- > DIN EN 60900, IEC 60900

Article No.	EAN 4003773-	∢→ mm		Тір	Handle	Size	Blade length mm	Length of non-insulated blade mm	Handle length mm	۵'۵ g
98 24 01 SL	079750	187	<u> </u>	humiched	insulating multi-component	PH1	80.0	15.0	107.0	58
98 24 02 SL	079767	212	æ	burnished	handle, VDE-tested	PH2	100.0	18.0	112.0	94

98 24 02 SL

Screwdrivers (Slim) Plus/Minus

Phillips[®]

- > Driving tips for PlusMinus profile screws
- > Use with electronics installation components, e.g. automatic circuit breakers
- > Reduced blade isolation diameter for recessed spring and screw elements
- > Ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force
- > Handle design prevents rolling
- > Chrome vanadium molybdenum steel
- > DIN EN 60900, IEC 60900

	KN.	PER O
98 24 01 SLS		No. 01 183

Article No.	EAN 4003773-	∢→ mm		Тір	Handle	Size	Blade length mm	Length of non-insulated blade mm	Handle length mm	۵'ک g
98 24 01 SLS	081036	187	<u> </u>	humiched	insulating multi-component	PH/S 1	80.0	15.0	107.0	56
98 24 02 SLS	081043	212	æ	burnished	handle, VDE-tested	PH/S 2	100.0	18.0	112.0	90

Screwdrivers for cross-recessed screws

Pozidriv[®]

- > Ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force
- > Handle design prevents rolling
- > Chrome vanadium molybdenum steel
- > DIN EN 60900, IEC 60900

	and the second se
e	
98 25 03	

FΔN Handle length 5 **∢**—▶ Blade length Length of non-insulated blade Article No. 4003773-Handle Size mm Tip mm mm mm g **98 25 00** 062370 60.0 15.0 102.0 162 PZ0 32 98 25 01 031260 187 80.0 15.0 107.0 58 PZ1 insulating mul-<u></u> £ 1000 V 212 **98 25 02** 031277 burnished ti-component handle, PZ2 100.0 18.0 112.0 90 <u>کو کی</u> VDE-tested 270 98 25 03 031284 PZ3 150.0 18.0 120.0 167 **98 25 04** 062387 320 PZ4 200.0 18.0 120.0 245



Screwdrivers (Slim) for cross-recessed screws

Pozidriv[®]

- > Reduced blade isolation diameter for recessed spring and screw elements
- > Ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force
- > Handle design prevents rolling
- > Chrome vanadium molybdenum steel
- > DIN EN 60900, IEC 60900

Article No.	EAN 4003773-	∢→ mm		Тір	Handle	Size	Blade length mm	Length of non-insulated blade mm	Handle length mm	۵'۵ g
98 25 01 SL	079774	187	<u> </u>	humiched	insulating multi-component	PZ1	80.0	15.0	107.0	56
98 25 02 SL	079781	212	æ	burnished	handle, VDE-tested	PZ2	100.0	18.0	112.0	90

98 25 02 SL

Screwdrivers for Torx® screws

- > Ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force
- > Handle design prevents rolling
- > Chrome vanadium molybdenum steel
- > DIN EN 60900, IEC 60900



Article No.	EAN 4003773-	⊶ → mm		Тір	Handle	Size	Blade length mm	Length of non-insulated blade mm	Handle length mm	۵ ^۲ ۵ g
98 26 10	071709	160		1000V	insulating multi-component handle, VDE-tested	TX10	60.0	15.0	102.0	32
98 26 15	071716	185	A 400014			TX15	80.0	15.0	107.0	58
98 26 20	071723	185	∦ 1000 V			TX20	80.0	15.0	107.0	58
98 26 25	071730	185			Indituie, VDL-lesteu	TX25	80.0	15.0	107.0	58
98 26 30	071747	210				TX30	100.0	18.0	112.0	94

Sockets with Torx drive

3/8"

> DIN EN 60900, IEC 60900

EAN



Article No. 4003773-Size mm g 98 29 25 084600 123 TX25 58 **☆ 1000 V** 98 29 27 084617 123 TX27 58 **会 1000 V** 98 29 30 084624 123 TX30 59 <u></u> £ 1000 V 98 29 40 084631 123 59 TX40 **☆ 1000 V** 98 29 45 084648 TX45 109 117 **A** 1000 V 98 29 50 084655 \Lambda 1000 V TX50 111 117



5

T-handle

with driving square 3/8" or 1/2"

- > For use with sockets
- > Quick, easy and reliable locking of attached sockets thanks to spring-loaded ball
- > Basic tool chrome plated
- > High-grade special tool steel, forged, oil-hardened
- > DIN EN 60900, IEC 60900

Article No.	EAN 4003773-	←→ mm		T-Handle Drive mm	Square drive Inch	۵ ^۲ ۵ g
98 30	026488	200	<u> 会</u> 1000 V	165.0	3/8	447
98 40	026501	200	<u> </u>	165.0	1/2	631



Reversible Ratchets

with driving square 3/8" or 1/2"

- > For use with sockets
- > Reversible for clockwise and anti-clockwise directions
- > Extremely smooth action
- > Quick, easy and reliable locking of attached sockets thanks to spring-loaded ball
- > Chrome vanadium steel, forged
- > DIN EN 60900, IEC 60900





Article No.	EAN 4003773-	←→ mm		Square drive Inch	۵'۵ g
98 31	026495	190	<u> </u>	3/8	324
98 41	026518	265	<u> </u>	1/2	625

Extension Bars

with internal and driving square 3/8" or 1/2"

- > For use with sockets
- > With internal and external square
- > Quick, easy and reliable locking of attached sockets thanks to spring-loaded ball
- > Chrome vanadium steel, forged
- > DIN EN 60900, IEC 60900



98 35 125

	A CASE LANS ACCOUNTS OF	 and the second second
	KALFER MALE	
0		

98 45 250

Article No.	EAN 4003773-	←→ mm		Square drive Inch	۵'ک g
98 35 125	020530	125	A 1000V	3/8	149
98 35 250	020547	250	<u> </u>	3/8	294
98 45 125	020813	125	A 1000V	1/2	258
98 45 250	020820	250	<u> </u>	1/2	490

Hexagon Sockets for hexagonal socket screws

for internal square 3/8" or 1/2"

- > For metric and imperial hexagonal head screws
- > Basic tool chrome plated
- > Chrome Vanadium steel
- > DIN EN 60900, IEC 60900



98 37 17



98 47 17

Article No.	EAN 4003773-	←→ mm		Width across flats S mm	dia. of effective tool side d max. mm	Square drive Inch	۵۵ g
98 37 10	020578	42		10.0	18.7	3/8	32
98 37 11	020585	43		11.0	20.0	3/8	32
98 37 12	020608	44		12.0	21.2	3/8	33
98 37 13	020615	45	A 40001/	13.0	22.5	3/8	33
98 37 14	020622	46	<u> </u>	14.0	23.7	3/8	39
98 37 16	027263	46		16.0	26.2	3/8	53
98 37 17	020639	46		17.0	27.5	3/8	61
98 37 19	020646	49		19.0	30.0	3/8	73
98 47 10	020882	54		10.0	19.5	1/2	63
98 47 11	020899	54		11.0	20.7	1/2	61
98 47 12	020912	55		12.0	23.0	1/2	64
98 47 13	020929	55		13.0	23.2	1/2	64
98 47 14	020943	55		14.0	24.5	1/2	67
98 47 16	027287	55	A 10001/	16.0	26.9	1/2	69
98 47 17	020967	55	<u> </u>	17.0	28.2	1/2	75
98 47 18	027294	55		18.0	29.0	1/2	81
98 47 19	020974	54		19.0	30.7	1/2	99
98 47 22	020981	58		22.0	34.5	1/2	125
98 47 24	020998	61		24.0	37.0	1/2	151
98 47 27	021001	63		27.0	41.0	1/2	183

12-Point Sockets

for internal square 3/8" or 1/2"

> For imperial hexagonal head screws

- > Basic tool chrome plated
- > With double-hex
- > Chrome Vanadium steel
- > DIN EN 60900, IEC 60900



98 47 1

8 47 1/2 A 1000 V



98 47 17

Article No.	EAN 4003773-	←→ mm		Width across flats S Inch	dia. of effective tool side d max. mm	Square drive Inch	ے م
98 37 5/16"	020684	42		5/16	16.2	3/8	30
98 37 3/8"	020677	42		3/8	18.7	3/8	31
98 37 7/16"	020707	43		7/16	20.0	3/8	31
98 37 1/2"	020554	45	<u></u> £ 1000 V	1/2	22.5	3/8	33
98 37 9/16"	020721	47		9/16	23.7	3/8	39
98 37 5/8"	020691	46		5/8	26.2	3/8	51
98 37 3/4"	020660	49		3/4	30.0	3/8	71
98 47 1/2"	020875	55		1/2	23.2	1/2	67
98 47 9/16"	021094	55		9/16	24.5	1/2	64
98 47 5/8"	021063	55		5/8	26.9	1/2	72
98 47 11/16"	020905	55	<u> 会</u> 1000 V	11/16	28.2	1/2	88
98 47 3/4"	021018	55		3/4	30.7	1/2	97
98 47 7/8"	021087	58		7/8	34.5	1/2	124
98 47 1"	020868	61		1	41.0	1/2	167

Hexagon Sockets for hexagonal socket screws

for internal square 3/8" or 1/2"

> For metric internal hexagonal head screws

- > Basic tool chrome plated
- > Special tool steel
- > DIN 7422, DIN EN 60900, IEC 60900



Article No.	EAN 4003773-	∢→ mm		Width across flats S mm	Length of non-insulated blade \pm 2 $$\rm mm$	Square drive Inch	۵'ک g
98 39 05	020776	75		5.0	9.0	3/8	59
98 39 06	020783	75	<u> </u>	6.0	10.0	3/8	58
98 39 08	020790	75		8.0	11.0	3/8	71
98 49 05	021155	75		5.0	9.0	1/2	68
98 49 06	021162	75	<u> </u>	6.0	10.0	1/2	72
98 49 08	021179	75		8.0	11.0	1/2	87

Reversible Ratchet

with driving square 1/2"

- > Reversible for clockwise and anti-clockwise directions
- > Very reliable retention of the actuating tools ensured by mechanically locked retaining system
- > Chrome Vanadium steel
- > ISO 3315, DIN EN 60900, IEC 60900



98 42

Article No.	EAN 4003773-	←→ mm		Square drive Inch	۵'ک g
98 42	026525	265	<u> </u>	1/2	599

Torque Wrenches

with driving square, reversible

- > Reversible for tightening of lefthanded threads
- > Lockable torque adjustment
- > Easy and secure locking of attached sockets due to screw lock
- > Calibration certificate included
- > Transparent insulated scale range 5 50 Nm
- > Adjustable in steps of 0.25 Nm
- > Chrome Vanadium steel
- > ISO 3315, DIN EN 60900, IEC 60900



98 33 25



98 33 50



98 43 50

Article No.	EAN 4003773-	⊶→ mm		Square drive Inch	۵ ^۲ ۵ g
98 33 25	072676	290	A 1000 V @ €	3/8	1230
98 33 50	071761	385		3/8	1230
98 43 50	071778	385	<u>A</u> 1000 V ≧	1/2	1230

Cable Knives

- > Ergonomically designed handle shape with comfortable slip guard
- > Particularly confident grip thanks to slip-proof soft components
- > Thumb recess and "finger hook" at the end of the handle ensure a good transmission of force when the blade is pulled
- > Solid, fixed straight blade
- > Transparent protective cap
- > Blade: special tool steel, oil-hardened
- > DIN EN 60900, IEC 60900

98 54

> Back of the blade plastic coated to avoid short circuits



Article No.	EAN 4003773-	⊲→ mm		Handle	Blade length mm	۵'ک g
98 52	035565	190	£ 1000 V 🖄 🚰	insulating multi-component handle, VDE-tested	50.0	67
98 54	026563	190	£ 1000 V 🖄 🚰	insulating multi-component handle, VDE-tested	50.0	68

Stripping Knives

with guide shoe

- > Ergonomically designed handle shape with comfortable slip guard
- > Particularly confident grip thanks to slip-proof soft components
- > Thumb recess and "finger hook" at the end of the handle ensure a good transmission of force when the blade is pulled
- > Transparent protective cap
- > DIN EN 60900, IEC 60900

98 53 03

> Solid, fixed hook blade; suitable for round cables; blade: special tool steel, oil-hardened

98 53 13

> Narrow, fixed hook blade, sickle shaped; suitable for sector cables; blade: special tool steel, oil-hardened

98 55

> Solid, fixed hook blade, sickle shaped; with guide shoe at the blade point; no damage of the conductor insulation; blade: surgical steel, stainless, vacuum-hardened



98 55



Guide shoe 98 55

Article No.	EAN 4003773-	∢→ mm		Handle	Blade length mm	Radius mm	۵'۵ g
98 53 03	026549	170	会 1000 V @	insulating multi-component handle, VDE-tested	28.0	7.0	64
98 53 13	026556	190	会 1000 V 🖄 🚭	insulating multi-component handle, VDE-tested	50.0	40.0	64
98 55	022558	180	☆1000 V ﷺ	insulating multi-component handle, VDE-tested	38.0	23.5	68

Cable Knives

with replaceable blade

- > Straight blade with special sharpening; replaceable
- > With hinged blade guard, integrated in the handle, captive
- > Back of the blade plastic coated to avoid short circuits
- > Ergonomically shaped insulating handle
- > Blade: surgical steel, stainless, vacuum-hardened
- > DIN EN 60900, IEC 60900



Article No.	EAN 4003773-	←→ mm		Blade length mm	۲۵ g
98 56	026570	190	会 1000 V @	50.0	64
98 56 09	030829	Spare blade for 98 56			

Plastic Flat Nose Pliers

insulating

- > Fully insulating to reduce risk of short circuit
- > For meter assembly and meter blocking
- > Class C; range of use up to -40°C
- > Plastic material, fibreglass-reinforced
- > Handles with soft plastic zone for better grip
- > DIN EN 60900, IEC 60900





Article No.	EAN 4003773-	∢ → mm		52 a
00 63 04	072056	100		120
98 62 01	0/3956	180	💷 🕅 🎘 1000 V 🖄 🛋 🦳	120

Plastic Snipe Nose Pliers

insulating

- > Fully insulating to reduce risk of short circuit
- > Class C; range of use up to -40°C
- > Plastic material, fibreglass-reinforced
- > Handles with soft plastic zone for better grip
- > DIN EN 60900, IEC 60900





Article No.	EAN 4003773-	-→ mm		۵'ک g
98 62 02	073963	220	ᲚᲚୗ ଛ 1000 V 🏝 🖨 🖯	130

KNIPEX presents high-quality and sturdy plastic pliers featuring protection against bridging for working on live parts up to AC 1000V and DC 1500V. These solid plastic pliers do not act on magnetic fields either and they are fully spark-free. They are also excellent for use in chemically aggressive environments.

Insulating clamps

plastic

- > For holding insulating mats in place
- > With integrated spring
- > Fully insulated to avoid short circuits
- > Solid plastic, fibreglass-reinforced
- > DIN VDE 0680-1



	EAN	← ►			44
Article No.	4003773-	mm		Clamping capacity	g
98 64 02	021193	150	£1000V MM	15.0	61

Plastic Slip-On Caps

conical

> To cover bare live cable ends (max. 10 mm dia.) > Plastic

Self-Clamping Slip-On Caps

> To cover bare live cable ends

> Plastic

98 66 20





98 65 03



98 66 50

Article No.	EAN 4003773-	←→ mm		Conductor key	۵'۵ g
98 65 01	021209	80		1	7
98 65 02	021216	80	<u></u>	2	8
98 65 03	021223	80		3	8

	EAN	∢ —▶		Inside dia.	52
Article No.	4003773-	mm		mm	g
98 66 10	084181	80		10.0	10
98 66 20	084198	100		20.0	35
98 66 30	084204	110		30.0	50
98 66 40	083498	135	<u> </u>	40.0	75
98 66 45	083382	130		45.0	90
98 66 50	083504	135		50.0	95
98 66 60	084419	140		60.0	120

Electricians' Gloves

> For added protection when working live or close to live parts > DIN EN 60903, IEC 60903



98 65 40

	EAN			5
Article No.	4003773-		Size	g
98 65 40	021285		9	281
98 65 41	021292	<u></u>	10	290
98 65 42	077862		11	290

Insulating Mats

from rubber



Article No.	EAN 4003773-		Dimensions mm	Thickness mm	۵'۵ g
98 67 05	026600		500 x 500 x 1 mm	1.0	301
98 67 10	026617	<u>À</u> 1000 V ▲	1000 x 1000 x 1 mm	1.0	820
98 67 15	077831		10000 x 1000 x 1 mm	1.0	12000

Stand Mats

from rubber



52 EAN Thickness Dimensions 4003773-Article No. mm mm g 98 67 20 077848 1000 x 1000 x 3 mm 3.0 3150 🛧 1000 V 🖄 🗲 10000 x 1000 x 3 mm 40000 98 67 25 077855 3.0

PUK[®] Junior Hacksaw

- > Saw blade for metal and wood with 25 teeth per inch, exchangeable
- > DIN EN 60900, IEC 60900



Article No.	EAN 4003773-	←→ mm		Saw blade length	۵'ک g
98 90	028321	240	<u> </u>	150.0	174
98 90 01	084358	Saw blades for PUK [®] saw 98	3 90		

Compact Tool Case

17 parts

- ▶ With insulated tools for works on electrical installations
- > Shock-resistant plastic case
- > Foam insert with precise recesses for holding the pliers
- > Equipped with a range of customary insulated KNIPEX tools for work on electrical systems
- > All tools are tested one by one and meet the requirements of IEC 60900
- > Dimensions, exterior (W x H x D): 380 x 85 x 260 mm
- > DIN EN 60900, IEC 60900



98 99 11

Article No.	EAN 4003773-				Quantity	۲۵ g
98 99 11	026624		Compact To	ol Case 17 parts		3675
		£ 1000 V @ 🚰 💷 🕨	03 07 200	Combination Pliers	1	
		🛧 1000 V 🖄 🚰 🗲 🕇	70 07 160	Diagonal Cutter	1	
			98 20 35		1	
		🛧 1000 V 🖄 🖨 🖨	98 20 40	Screwdrivers for slotted screws	1	
			98 20 55		1	
		A 1000 V 🖄 🖨 🗘	98 24 00	Screwdriver for cross recessed screws, Phillips®	1	
		A 1000 V № 9	98 42	Reversible Ratchet, with driving square 1/2"	1	
			98 45 125	Future in Draw with intermediation of any set of the	1	
		- <u>余</u> 1000 V 1⁄2 1⁄2	98 45 250	Extension Bar, with internal/external square 1/2"	1	
			98 47 10		1	
		_	98 47 11		1	
			98 47 12		1	
		<u></u> £ 1000 V 🔿 🕲	98 47 13	Hexagon Socket for hexagonal screws, with internal square 1/2"	1	
			98 47 14		1	
			98 47 17		1	
			98 47 19		1	
		∱ 1000 V 🆄 💕	98 52	Cable Knife	1	

Compact Tool Case

26 parts

- With insulated tools for works on electrical installations
- > Shock-resistant plastic case
- > Foam insert with precise recesses for holding the pliers
- > Equipped with a range of customary insulated KNIPEX tools for work on electrical systems
- > Fixable partition wall
- > Dimensions, exterior (W x H x D): 440 x 105 x 385 mm



98 99 12

Article No.	EAN 4003773-				Quantity	۵'ک g
98 99 12	026631		Standard To	ool Case 26 parts		5533
		🚖 1000 V 🖄 🖨 💷 🕅 🕨 🖣	03 07 200	Combination Pliers	1	
		🛧 1000 V 🖄 🚰 🕨 🗨	70 07 160	Diagonal Cutter	1	
			98 00 10		1	
			98 00 11		1	
			98 00 12		1	
		≙ 1000 V ()	98 00 13	Open End Wrench	1	
			98 00 14		1	
			98 00 17		1	
			98 00 19		1	
		☆ 1000 V 🖄 🚰	98 53 03	Dismantling Knife for round cables	1	
			98 20 25		1	
		A 10001/ A -	98 20 35	Consudations for eletteric ensure	1	
		1000 V @ € ●	98 20 40	Screwdrivers for slotted screws	1	
			98 20 55		1	
			98 24 00		1	
		🚖 1000 V 🖄 🖨 🗘	98 24 01	Screwdriver for cross recessed screws, Phillips®	1	
			98 24 02		1	
		<u></u> £ 1000 V 1∕2	98 40	T-Handle Drive, with driving square 1/2"	1	
			98 47 10		1	
			98 47 11		1	
			98 47 12		1	
		<u></u> £ 1000 V Ο ⊠	98 47 13	Hexagon Socket for hexagonal screws, with internal square 1/2"	1	
			98 47 14		1	
			98 47 17		1	
			98 47 19		1	
		A 1000 V @	98 52	Cable Knife	1	

Tool Box "RED" Electro Set 1

Versatile use: the small four-piece VDE tool range in a handy case

> High quality, versatile, shock-resistant plastic case
 > Foam insert with honeycomb structure for variable equipment
 > Dimensions, exterior (W x H x D): 340 x 56 x 275 mm

00 20 15

> Pliers VDE-tested according to DIN EN/IEC 60900 1000V

00 21 15 LE

> Box without tools



Article No.	EAN 4003773-				Number	۵ ^۲ ۵ g
00 20 15	024804		Tool Box "RE	ED" Electro-Set 1, 4 parts		1430
		🛧 1000 V 🖄 🚰 💷 🚺 ► 🗨	03 06 180	Combination Pliers	1	
		£ 1000 V @₽ MM	11 06 160	Insulation Stripper	1	
			26 16 200	Snipe Nose Side Cutting Pliers (Stork Beak Pliers)	1	
		🛧 1000 V 🖄 🚰 🕨 🗨	70 06 160	Diagonal Cutter	1	
00 21 15 LE	045175		Tool Box "RE	D", empty		530

Tool Box "RED" Electro Set 2

All you need, safely stored: seven-piece VDE tool set for electrical installation

> High quality, versatile, shock-resistant plastic case

> Foam insert with honeycomb structure for variable equipment

> Dimensions, exterior (W x H x D): 340 x 56 x 275 mm

00 21 15

> All pliers and screwdrivers except Water Pump Pliers VDE-tested according to DIN EN/IEC 60900

00 21 15 LE

> Box without tools



00 21 15

Article No.	EAN 4003773-					Number	Nominal size	۵۵ g
00 21 15	042853		Tool Box "RE	D" Electro-Set 2, 7 parts				1520
		🛧 1000 V 🖄 🚭 💷 🕪 🗨	03 06 180	Combination Pliers		1	180 mm	
		≙ 1000 V @ 🚱 ⊖ 💷 🕅 🕨 ◄	26 16 200	Snipe Nose Side Cutting Pliers (Stork Beak Pliers)	KNIPEX	1	200 mm	
		🛧 1000 V 🖄 🚭 🕨 🗨	70 06 160	Diagonal Cutter		1	160 mm	
			88 03 180	KNIPEX Alligator [®] , Water Pump Pliers		1	180 mm	
		♠ 1000 V 준 ●		Screwdrivers for slotted screws, 160i		1	0.4 x 2.5 x 80 mm	
				screwarivers for slotted screws, roof	Wera	1	0.8 x 4.0 x 100 mm	
		£ 1000 V 🖄 🚭 🗘		Screwdrivers for cross recessed Phillips® screws, 162i PH	I	1	PH1 x 80 mm	
00 21 15 LE	045175		Tool Box "RE	D", empty				530

Tool Roll

Essential for work on electrical systems: 15-piece basic tool kit in practical roll-up bag

- > Tool roll made of hard-wearing polyester fabric
- > With practical, adjustable quick release fastener
- > Equipped with a range of insulated KNIPEX tools for works on electrical installations
- > Dimensions, open (L x H): 830 x 310 mm



98 99 13

Article No.	EAN 4003773-				Number	۲۵ g
98 99 13	026648		Tool Roll, 15	parts		2455
		🛧 1000 V 🖄 🚰 💷 🗖 🖊	03 07 200	Combination Pliers	1	
		<u></u> £ 1000 V ≙ 🖨 ΛΛΛ	11 07 160	Insulation Stripper	1	
		$\Theta \blacksquare \blacksquare$	26 17 200	Snipe Nose Side Cutting Pliers (Stork Beak Pliers)	1	
			70 07 160	Diagonal Cutter	1	
			95 17 200	Cable Shears with twin cutting edge	1	
			98 00 10		1	
			98 00 13		1	
		<u></u> 2 1000 V Ο	98 00 14	Open-end wrench	1	
			98 00 17		1	
			98 00 19			
			98 20 25		1	
			98 20 40		1	
		<u> </u>	98 20 55	Screwdrivers for slotted screws	1	
			98 20 65		1	
		会 1000 V @	98 52	Cable Knife	1	
98 99 13 LE	028888	Tool Roll, empty				325

Electronics pliers and Precision Tweezers

Electronic Super Knips [®] / ESD	240
Electronic Super Knips® XL / ESD	242
Precision Electronics Diagonal Cutters / ESD	244
Electronics Diagonal Cutters / ESD	246
Electronics Diagonal Cutters with carbide metal cutting edges	249
Electronics End Cutting Nippers / ESD	250
Electronics Oblique Cutting Nipper	251
Precision Electronics Gripping Pliers / ESD	252
- with precision laser cut cross-shaping	252
Electronics Pliers / ESD	253
Electronics Mounting Pliers	255
Electronics Pliers Sets	256
Precision Tweezers	257



Electronic Super Knips®

- > Precision pliers for ultra fine cutting work, e. g. in electronics and fine mechanics
- > Ground, very sharp cutting edges without bevel
- > Precision shaped tips cut wires flush to a surface from \emptyset 0.2 mm.
- > Shear cut with controlled micro cutting edge misalignment for the most precise cutting of even the thinnest of wires and for a long service life
- > Joint with stainless steel rivet
- > Extremely smooth movement for minimum operator fatigue
- > With opening spring and opening limiter
- > Electrically discharging handles dissipative
- > DIN ISO 9654

78 03 125/ESD / 78 23 125

> INOX tool steel; cutting edge hardness approx. 54 HRC

78 13 125/ESD

> INOX tool steel; cutting edge hardness approx. 54 HRC; with lead catcher – no uncontrolled loss of cut wire ends

78 31 125

> Cutting edges additionally induction-hardened, cutting edge hardness approx. 60 HRC; with narrow head; special tool steel, burnished

78 41 125

> With lead catcher - no uncontrolled loss of cut wire ends; with narrow head; cutting edges additionally induction-hardened, cutting edge hardness approx. 60 HRC; special tool steel, burnished

78 61 125/ESD

 > Also suitable for cutting glass fibre cables (fibre optics); cutting edges additionally induction-hardened, cutting edge hardness approx.
 64 HRC; Special tool steel, oil hardened in multiple stages

78 71 125/ESD

 > With lead catcher – no uncontrolled loss of cut wire ends; cutting edges additionally induction-hardened, cutting edge hardness approx.
 64 HRC; special tool steel, burnished



Models also for hard wire

78 81 125

> Precision-ground cutting edges with very small bevel suitable also for hard wire; cutting edges additionally inductionhardened, cutting edge hardness approx. 64 HRC; special tool steel, burnished

78 91 125

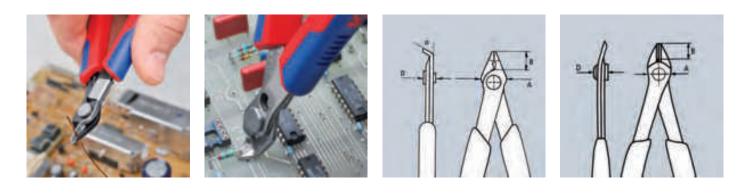
> Precision-ground cutting edges with very small bevel suitable also for hard wire; with lead catcher – no uncontrolled loss of cut wire ends; cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC; special tool steel, burnished

ESD pliers (electrostatic discharge)

Electrostatic energy is discharged through the handles in a gradual and controlled manner. Which protects components endangered by electrostatic discharge. In accordance with applicable standards, e.g. IEC TR 61 340-5, DIN EN 61 340-5, SP Method 2472







							Cutti	ng capa	cities	D	imensio	ns	
	EAN	- >					Ø	Ø	Ø	В	A	D	52
Article No.	4003773-	mm		Pliers	Head	Handles	mm	mm	mm	mm	mm	mm	g
78 03 125	035381	125	MM 🗾		polished	with multi-component grips	1.6	1.0		9.0	13.5	7.5	56
78 03 125 ESD	025146	125	🔼 WW 🖉		polished	with multi-component grips	1.6	1.0		9.0	13.5	7.5	55
78 06 125	084099	125	MM		polished	insulated with multi-component grips, VDE-tested	1.6	1.0		9.0	13.5	7.5	60
78 13 125	035398	125	🖊 WW >>		polished	with multi-component grips	1.6	1.0		9.0	13.5	7.5	57
78 13 125 ESD	025153	125	🔨 MM 🔊 🔊		polished	with multi-component grips	1.6	1.0		9.0	13.5	7.5	57
78 23 125	043096	125	/ ★60° MM		polished	with multi-component grips	1.0	0.6		5.5	13.5	7.5	55
78 31 125	039778	125	MM 🗾	burnished	burnished	with multi-component grips	1.0			9.0	12.5	7.5	55
78 41 125	040767	125	MM >>	burnished	burnished	with multi-component grips	1.0			9.0	12.5	7.5	57
78 61 125	035404	125	MM 🔨	burnished	burnished	with multi-component grips	1.6	1.2		9.0	13.5	7.5	56
78 61 125 ESD	025184	125	🔼 MM	burnished	burnished	with multi-component grips	1.6	1.2		9.0	13.5	7.5	56
78 71 125	043799	125	MM >>	burnished	burnished	with multi-component grips	1.6	1.2		9.0	13.5	7.5	57
78 71 125 ESD	025191	125	🔨 MM 🙆 🤝	burnished	burnished	with multi-component grips	1.6	1.2		9.0	13.5	7.5	57
78 81 125	065074	125	/ MM	burnished	burnished	with multi-component grips	1.6	1.2	0.6	9.0	13.5	7.5	57
78 91 125	065081	125	MM >>	burnished	burnished	with multi-component grips	1.6	1.2	0.6	9.0	13.5	7.5	57

Electronic Super Knips® XL

- > For ultra fine cutting work, e.g. in electronics and fine mechanics
- > In particular for cutting cable ties to length
- > Ground, very sharp cutting edges without bevel
- > Shear cut with controlled micro cutting edge misalignment for the most precise cutting of even the thinnest of wires and for a long service life
- > Precision shaped tips cut wires flush to a surface from Ø 0.2 mm
- > Joint with stainless steel rivet
- > Extremely smooth movement for minimum operator fatigue
- > With opening spring and opening limiter
- > DIN ISO 9654

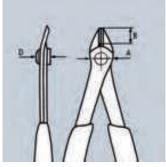




For flush cutting, e.g. for shortening cable ties



Shear cut with controlled micro cutting edge misalignment for the most precise cutting of even the thinnest of wires and for a long service life



							Cutting c	apacities	D	imensior	ns	
	EAN	>					\bullet		В	A	D	5
Article No.	4003773-	mm		Pliers	Head	Handles	Ømm	Ømm	mm	mm	mm	g
78 03 140	081647	140	MW 🗾		polished	with multi-component grips	0.2 - 2.1	1.2	12.3	15.7	9.2	85
78 61 140	081685	140	MM 🗾	burnished	burnished	with multi-component grips	0.2 - 2.1	1.4	12.3	15.7	9.2	85

Electronic Super Knips® XL ESD

- > For ultra fine cutting work, e.g. in electronics and fine mechanics
- > Ground, very sharp cutting edges without bevel
- > Precision shaped tips cut wires flush to a surface from \emptyset 0.2 mm.
- > Shear cut with controlled micro cutting edge misalignment for the most precise cutting of even the thinnest of wires and for a long service life value to the service of the service
- > Joint with stainless steel rivet
- > Extremely smooth movement for minimum operator fatigue
- > With opening spring and opening limiter
- > DIN ISO 9654, DIN EN 61 340-5

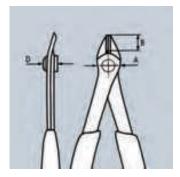
78 61 140 ESD

> Cutting edge hardness approx. 64 HRC; cutting edges additionally induction-hardened; Special tool steel, oil hardened in multiple stages

78 03 140 ESD

> Cutting edge hardness approx. 54 HRC; INOX tool steel





ESD pliers (electrostatic discharge) Electrostatic energy is discharged through the handles in a gradual and controlled manner. Which protects components endangered by all

Which protects components endangered by electrostatic discharge. In accordance with applicable standards, e.g. IEC TR 61 340-5, DIN EN 61 340-5, SP Method 2472



							Cutting capacities		D			
	EAN	∢ —▶					\bullet		В	A	D	5
Article No.	4003773-	mm		Pliers	Head	Handles	Ømm	Ømm	mm	mm	mm	g
78 03 140 ESD	081661	140	🔼 MM		polished	with multi-component grips	0.2 - 2.1	1.2	12.3	15.7	9.2	77
78 61 140 ESD	081708	140	🔼 📈 🖉	burnished	burnished	with multi-component grips	0.2 - 2.1	1.4	12.3	15.7	9.2	85

Precision Electronics Diagonal Cutters

- > Precision pliers for ultra fine cutting work, e. g. in electronics and fine mechanics
- > Very precisely ground and sharp cutting edges with very small bevels for exact cutting on delicate electronic components; also available without bevel for flush cutting
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC
- > Approx. 20 % lighter than conventional electronics pliers
- > Bolted joint with carefully manufactured joint surfaces for even, low-friction movement throughout the entire opening range
- > Smooth-running double spring for a gentle and even opening
- > Ergonomically optimised multi-component handles
- > Ball bearing chrome steel, forged, multi stage oil-hardened
- > DIN ISO 9654

79 02 120 / 79 22 120

> Mini-head

79 12 125

> Specially for cutting through hard wire and piano wire

79 32 125 / 79 42 125

> Pointed head

79 42 125 Z

> For an optimised flush cutting result of soft materials

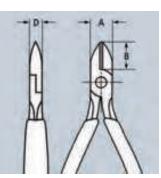
79 52 125 / 79 62 125

> Pointed head; with lead catcher – no uncontrolled loss of cut wire ends



Material catcher for 79 02 / 22 125 ESD see page 142





The subtle difference

KNIPEX precision electronics pliers are made of high-quality ball bearing steel and processed with the highest degree of care. Each opening movement is gentle and even without backlash. Each work step proceeds reliably and precisely. This makes work much easier for professionals.

Cutting conscition

Dimonsions

							Cutting capacities			וט	mensio	ns		
	EAN	-→									В	А	D	52
Article No.	4003773-	mm		Pliers	Head	Handles	Ømm	Ømm	Ømm	Ømm	mm	mm	mm	g
79 02 120	061403	120	///	burnished	polished	with multi-component grips	0.2 - 1.4	1.0	0.6		6.5	9.0	6.5	57
79 02 125	061281	125		burnished	polished	with multi-component grips	0.2 - 1.7	1.3	0.7		10.0	11.0	6.5	59
79 02 125 S1	071808	125		DUITIISTIEU	polisileu	with multi-component grips	0.2 - 1.7	1.3	0.7		10.0	11.0	6.5	59
79 12 125	071365	125	M	burnished	polished	with multi-component grips	0.3 - 1.7	1.3	1.0	0.6	10.0	11.0	6.5	59
79 22 120	061427	120	MM 🗾	burnished	polished	with multi-component grips	0.1 - 1.3	0.8			6.5	9.0	6.5	56
79 22 125	061342	125	MM 🗾	burnished	polished	with multi-component grips	0.1 - 1.7	1.0			10.0	11.0	6.5	60
79 32 125	061366	125	MW 🔽	burnished	polished	with multi-component grips	0.2 - 1.5	1.1	0.6		11.0	11.0	6.5	58
79 42 125	061380	125	MM 🗾	burnished	polished	with multi-component grips	0.1 - 1.5	0.8			11.0	11.0	6.5	58
79 42 125 Z	078449	125		burnished	polished	with multi-component grips	0.1 - 1.3				11.0	11.0	6.5	58
79 52 125	065135	125	M >	burnished	polished	with multi-component grips	0.2 - 1.3	0.9	0.5		11.0	11.0	6.5	58
79 62 125	065142	125	M >	burnished	polished	with multi-component grips	0.1 - 1.3	0.8			11.0	11.0	6.5	58

120 ESD

the St.4/hard max \$ 0.1

79 12 125 ESD

79 22 125 ESD

Precision Electronics Diagonal Cutters ESD

► Electrically discharging handles – dissipative

- > Precision pliers for ultra fine cutting work, e. g. in electronics and fine mechanics
- > Very precisely ground and sharp cutting edges with very small bevels for exact cutting on delicate electronic components; also available without bevel for flush cutting
- > Precision cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC
- > Approx. 20 % lighter than conventional electronics pliers
- > Bolted joint with carefully manufactured joint surfaces for even, low-friction movement throughout the entire opening range
- > Smooth-running double spring for a gentle and even opening
- > Ergonomically optimised multi-component handles
- > Ball bearing chrome steel, forged, multi stage oil-hardened
- > DIN ISO 9654, DIN EN 61 340-5

79 02 120 ESD / 79 22 120 ESD > Mini-head

79 02 125 ESD / 79 22 125 ESD > Round head

79 12 125 ESD > Specially for cutting through hard wire and piano wire

79 32 125 ESD / 79 42 125 ESD > Pointed head

ESD pliers (electrostatic discharge) Electrostatic energy is discharged through the

handles in a gradual and controlled manner. Which protects components endangered by electrostatic discharge. In accordance with applicable standards, e.g. IEC TR 61 340-5, DIN EN 61 340-5, SP Method 2472





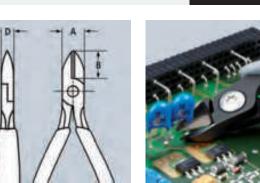
79 32 125 ESD

79 02 120 ESD

79 02 125 ESD

79 22 120 ESD





							Cutting capacities			Dir	nensio	ons		
	EAN	-					\bigcirc	\bigcirc			В	А	D	5
Article No.	4003773-	mm		Pliers	Head	Handles	Ømm	Ømm	Ømm	Ømm	mm	mm	mm	g
79 02 120 ESD	061595	120	MM A	burnished	polished	with multi-component grips	0.2 - 1.4	1.0	0.6		6.5	9.0	6.5	60
79 02 125 ESD	061519	125	🔼 WW 🖉	burnished	polished	with multi-component grips	0.2 - 1.7	1.3	0.7		10.0	11.0	6.5	61
79 12 125 ESD	071389	125	MM A	burnished	polished	with multi-component grips	0.3 - 1.7	1.3	1.0	0.6	10.0	11.0	6.5	61
79 22 120 ESD	061618	120	🗾 MM 🙆	burnished	polished	with multi-component grips	0.1 - 1.3	0.8			6.5	9.0	6.5	61
79 22 125 ESD	061533	125	🔼 MM	burnished	polished	with multi-component grips	0.1 - 1.7	1.0			10.0	11.0	6.5	61
79 32 125 ESD	061557	125	MM (2000)	burnished	polished	with multi-component grips	0.2 - 1.5	1.1	0.6		11.0	11.0	6.5	61
79 42 125 ESD	061571	125	🔼 MM	burnished	polished	with multi-component grips	0.1 - 1.5	0.8			11.0	11.0	6.5	58
79 42 125 Z ESD	078456	125	🗾 MM 🙆	burnished	polished	with multi-component grips	0.1 - 1.3				11.0	11.0	6.5	58
79 52 125 ESD	065159	125	MM 🔬 >>	burnished	polished	with multi-component grips	0.2 - 1.3	0.9	0.5		11.0	11.0	6.5	58
79 62 125 ESD	065166	125	🔼 🔊 MM	burnished	polished	with multi-component grips	0.1 - 1.3	0.8			11.0	11.0	6.5	58



Electronics Diagonal Cutters

- > Bolted joint for high precision and stress tolerance
- > For ultra fine cutting work, e.g. in electronics and fine mechanics
- > With sharp, ground cutting edges for soft and hard wire and piano wire
- > Cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC
- > Low-friction double spring for gentle and even opening
- > High-grade special tool steel, forged, multi stage oil-hardened > DIN ISO 9654

Style 0

> With bevel (outside bevel)

Style 2

> With small bevel

Style 5

> Particularly narrow head, with bevel





								Cutting o	apacities		Di	imensio	ns	
Article No.	EAN 4003773	∢→ mm		Style	Pliers	Handles	Ø mm	Ø mm	Ø mm	Ø mm	A mm	B mm	D mm	۵۵ g
75 02 125	043720	125		0	burnished	with plastic grips	0.2 - 1.3	1.0	0.6	0.4	10.5	14.0	6.5	80
75 12 125	040514	125	► MM ►	1	burnished	with plastic grips	0.2 - 1.3	1.0	0.6	0.4	10.5	14.0	6.5	80
75 22 125	040538	125	MW 🔼	2	burnished	with plastic grips	0.2 - 1.3	0.9	0.4	0.3	10.5	14.0	6.5	79
75 52 125	043737	125	MW ►	5	burnished	with plastic grips	0.2 - 0.8	0.5	0.3		10.5	14.0	6.5	75

Electronics Diagonal Cutters

with box joint

- > For fine cutting work, e.g. in electronics and fine mechanics
- > Load-optimised for a more direct feel when working
- > Low-friction double spring for gentle and even opening
- > The mirror polish together with a fine film of oil offer effective rust protection – no circuit faults caused by peeling chrome from plated tools
- > Cutters additionally laser hardened, cutter hardness at least 60 HRC
- > Narrow sleeves pulled up to the head of the pliers enable the tool to be guided securely and comfortably, also between thumb and index finger
- > Sturdy, zero-backlash box joint
- > Ball bearing chrome steel, oil-hardened
- > DIN ISO 9654

77 01 115 / 77 02 130

> Round head, with bevel; cutting edge hardness approx. 60 HRC

77 02 115 / 77 22 130

> Round head, with small bevel; cutting edge hardness approx. 60 HRC

77 11 115 / 77 12 115

> Round head, with bevel and lead catcher – no uncontrolled loss of cut wire ends; cutting edge hardness approx. 60 HRC

77 21 115

> Round head, without bevel; cutting edge hardness approx. 60 HRC

77 22 115

> Round head, without bevel; cutting edge hardness approx. 60 HRC

77 32 115

> Pointed head, with small bevel; cutting edge hardness approx. 60 HRC

77 42 115 / 77 42 130

> Pointed head, without bevel; cutting edge hardness approx. 60 HRC

77 52 115

> Pointed, flat head, with small bevel; cutting edge hardness approx. 60 HRC

77 72 115

> Pointed mini-head, with small bevel; cutting edge hardness approx. 60 HRC



						Cutting capaciti			D	imensior	ıs	
Article No.	EAN 4003773-	∢→ mm		Head	Handles	Ø mm	Ø mm	Ø mm	B mm	A mm	D mm	۵ ^۲ ۵ g
77 01 115	018568	115				0.3 - 1.6	1.2	0.6	14.0	11.0	7.5	50
77 01 130	018575	130	/ MM	mirror polished	plastic coated	0.3 - 2.0	1.5	0.8	18.0	15.0	9.5	108
77 02 115	039334	115	/// //	mirror polished	with multi-component grips	0.3 - 1.6	1.2	0.6	14.0	11.0	7.5	70
77 02 130	039341	130	MW 🗲	mirror polished	with multi-component grips	0.3 - 2.0	1.5	0.8	18.0	15.0	9.5	124
77 11 115	018629	115	< MM 🔁	mirror polished	with non-slip plastic coating	0.3 - 1.6	1.2	0.6	14.0	11.0	7.5	55
77 12 115	043768	115	< MM 🔁	mirror polished	with multi-component grips	0.3 - 1.6	1.2	0.6	14.0	11.0	7.5	70
77 21 115 N	082309	115		mirror poliched	plastic control	1.3	1.0			11.0		50
77 21 130	018667	130	MM 🔨	mirror polished	plastic coated	0.3 - 1.6	1.3		18.0	14.0	9.5	110
77 22 115	043782	115	//	mirror polished	with multi-component grips	0.3 - 1.3	1.0		14.0	11.0	7.0	70
77 22 130	040446	130	MM 🔼	mirror polished	with multi-component grips	0.3 - 2.0	1.5		18.0	15.0	9.0	124
77 32 115	044307	115	📂 М	mirror polished	with multi-component grips	0.3 - 1.3	1.0	0.5	14.0	11.0	7.5	65
77 41 115	082316	115	MW 🗾	mirror polished	with multi-component grips	1.3	0.8			11.0		50
77 42 115	039761	115		mirror poliched	with multi component arise	0.3 - 1.3	0.8		14.0	11.0	7.5	70
77 42 130	018773	130		mirror polished	with multi-component grips	0.3 - 1.6	1.3		18.0	15.0	9.5	122
77 52 115	040750	115	MM 🗾	mirror polished	with multi-component grips	0.3 - 1.0	0.8	0.5	14.0	11.0	7.5	65
77 72 115	040958	115	/	mirror polished	with multi-component grips	0.3 - 0.8			10.5	11.0	6.0	65

Electronics Diagonal Cutters ESD

- > For fine cutting work, e.g. in electronics and fine mechanics
- > Electrically discharging handles dissipative
- > Sturdy, zero-backlash box joint
- > Low-friction double spring for gentle and even opening
- > The mirror polish together with a fine film of oil offer effective rust protection – no circuit faults caused by peeling chrome from plated tools
- > Cutters additionally laser hardened, cutting edge hardness approx. 62 HRC
- > With two-colour dual component grips, black/grey
- > Ball bearing chrome steel, oil-hardened
- > DIN ISO 9654, DIN EN 61 340-5

77 02 115 ESD

> Round head, with small bevel

77 12 115 ESD

> Round head, with bevel and lead catcher – no uncontrolled loss of cut wire ends

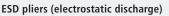
77 22 115 ESD > Round head, without bevel

77 32 115 ESD > Pointed head, with small bevel

77 42 115 ESD > Pointed head, without bevel

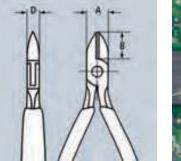
77 52 115 ESD > Pointed, flat head, with small bevel

77 72 115 ESD > Pointed mini-head, with small bevel



Electrostatic energy is discharged through the handles in a gradual and controlled manner. Which protects components endangered by electrostatic discharge. In accordance with applicable standards, e.g. IEC TR 61 340-5, DIN EN 61 340-5, SP Method 2472





248



						Cutting	capaciti	es	D	imensior	IS	
	EAN	∢ >				\bullet	\bullet		В	А	D	52
Article No.	4003773-	mm		Head	Handles	Ømm	Ømm	Ømm	mm	mm	mm	g
77 02 115 ESD	025092	115	📂 MM 🙆	mirror polished	with multi-component grips	0.3 - 1.6	1.2	0.6	14.0	11.0	7.5	70
77 12 115 ESD	025108	115	🔼 🔊 MM	mirror polished	with multi-component grips	0.3 - 1.6	1.2	0.6	14.0	11.0	7.5	70
77 22 115 ESD	025115	115	🔼 WW 🖉	mirror polished	with multi-component grips	0.3 - 1.3	1.0		14.0	11.0	7.5	70
77 32 115 ESD	025122	115	📂 MM 🙆	mirror polished	with multi-component grips	0.3 - 1.3	1.0	0.5	14.0	11.0	7.0	70
77 42 115 ESD	031901	115	🔼 WW 🖉	mirror polished	with multi-component grips	0.3 - 1.3	0.8		14.0	11.0	7.0	70
77 52 115 ESD	025139	115	📂 MM 🙆	mirror polished	with multi-component grips	0.3 - 1.0	0.8	0.5	14.0	11.0	7.0	70
77 72 115 ESD	024330	115	📂 MM 🖾	mirror polished	with multi-component grips	0.3 - 0.8			10.5	11.0	6.0	70















Electronics Diagonal Cutter

with inserted carbide metal cutting edges

- > For extreme demands on cutting pliers caused by hard or tough materials, e.g. piano, nickel, tungsten and diode wire, such as those used more frequently in the electronics and aerospace industries
- > Always the right cutting tool, even with the hardest material
- > Precision carbide metal cutting edges soldered into forged blanks
- > Sturdy, zero-backlash box joint
- > Hardness of the carbide cutting edges 80 83 HRC
- > Pliers with carbide metal cutting edges have a substantially longer service life than such with conventional cutting edges
- > Constantly reliable cutting results due to the avoidance of cutter deformations
- > High cost saving due to longer service life of the pliers
- > DIN ISO 9654

77 02 120 H / 77 02 135 H / ESD

> Round head, with bevel

77 32 120 H / ESD

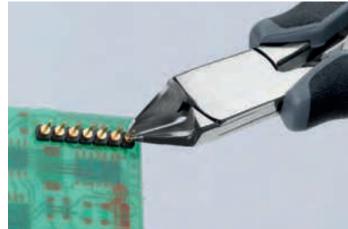
> Pointed head with chamfer; with small bevel





Inserted carbide cutting edge Precision carbide metal cutting edges soldered into forged blanks.





						(Cutting o	apacitie	S	D	imensior	าร	
	EAN	∢ →				\bullet	\bullet	•		В	А	D	5
Article No.	4003773-	mm		Head	Handles	Ømm	Ømm	Ømm	Ømm	mm	mm	mm	g
77 02 120 H	075783	120		mirror polished	with multi-component grips	2.0	1.4	1.0	0.6	14.0	11.0	7.5	85
77 02 135 H	075806	135	/////	minor polished	with multi-component grips	2.2	1.6	1.2	0.8	18.0	15.0	9.5	115
77 02 120 H ESD	075813	120	MW 🙆	mirror polished	with multi-component grips	2.0	1.4	1.0	0.6	14.0	11.0	7.5	85
77 02 135 H ESD	075837	135		minor polisited	with multi-component grips	2.2	1.6	1.2	0.8	18.0	15.0	9.5	115
77 32 120 H	075790	120	MM	mirror polished	with multi-component grips	1.6	1.0	0.6	0.2	14.0	11.0	7.5	80
77 32 120 H ESD	075820	120	📂 MM 🔼	mirror polished	with multi-component grips	1.6	1.0	0.6	0.2	14.0	11.0	7.0	80

Electronics End Cutting Nippers

- > Precision pliers for ultra fine cutting work, e. g. in electronics and fine mechanics
- > Sturdy, zero backlash box joint
- > Low-friction double spring for gentle and even opening
- > The mirror polish together with a fine film of oil offer effective rust protection — no circuit faults caused by peeling chrome from plated tools
- > Cutters additionally laser hardened, cutting edge hardness at least 56 HRC
- > Ball bearing chrome steel, oil-hardened
- > DIN ISO 9654

Style 0

> End Cutter, with small bevel

Style 2

> End Cutter, mini-blade with small bevel

Style 3

> Oblique End Cutter, short head, with small bevel, $\alpha = 15^{\circ}$

Style 4

>Óblique End Cutter, short head, with small bevel, $\alpha=27^\circ$

Style 5

> Oblique End Cutter, short head, without bevel, for flush cutting, $\alpha = 27^{\circ}$

Style 6

> Oblique End Cutter, mini-blade with small bevel, $\alpha = 65^{\circ}$

Style 7

> Óblique End Cutter, mini-blade with small bevel, head with recess, $\alpha = 35^{\circ}$

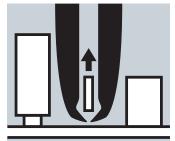
Style 1 / 64 11 115 > End Cutter, without bevel

Style 1 / 64 12 115 / ESD

> End Cutter, with small bevel

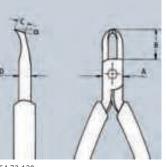




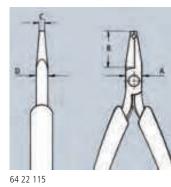


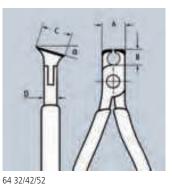


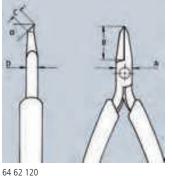
64 62 120

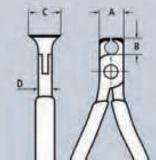


64 72 120







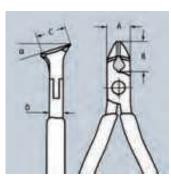


64 01/02/11/12

							Cutting capacit		cities		Dimer	nsions		
A -1 - 1 - 1	EAN	← ►		C 1						А	В	D	C	52
Article No.	4003773-	mm		Style	Head	Handles	Ømm	Ømm	Ømm	mm	mm	mm	mm	g
64 01 115	017745	115	MM 🗾	0	mirror polished	with non-slip plastic coating	2.0	1.0	0.6	11.0	6.0	7.5	16.0	55
64 02 115	035343	115	MW 🔼	0	mirror polished	with multi-component grips	2.0	1.0	0.6	11.0	6.0	7.5	16.0	70
64 02 115 ESD	082231	130	🔨 🗶 °° 🖉	0	mirror polished	with multi-component grips	2.0	1.0	0.6	11.0	6.0	7.5	16.0	70
64 11 115	017769	115	MW 🔨	1	mirror polished	plastic coated	1.4	0.8		11.0	12.0	7.0	16.0	50
64 12 115	040743	115	MW 🔨	1	mirror polished	with multi-component grips	1.4	0.8	0.5	11.0	6.0	7.0	16.0	70
64 12 115 ESD	024323	115	🔨 🖉 ° 🖉	1	mirror polished	with multi-component grips	1.4	0.8		11.0	6.0	7.0	16.0	70
64 22 115	017806	115	MM 🗾	2	mirror polished	with multi-component grips	0.8			11.0	20.0	6.0	3.0	70
64 22 115 ESD	025061	115	📂 MM 🙆	2	mirror polished	with multi-component grips	0.8			11.0	20.0	6.0	3.0	70
64 32 120	017820	120	✓15° MM	3	mirror polished	with multi-component grips	1.5	1.0	0.5	11.0	10.0	7.0	17.0	70
64 32 120 ESD	025078	120	📂 🖌 15° MM	3	mirror polished	with multi-component grips	1.5	1.0	0.5	11.0	10.0	7.0	17.0	70
64 42 115	017844	115	✓27° MM	4	mirror polished	with multi-component grips	1.5	1.0	0.5	11.0	10.0	7.0	12.0	70
64 52 115	040439	115	/ ₹27° MM	5	mirror polished	with multi-component grips	1.3			11.0	10.0	7.0	12.0	70
64 62 120	046998	120	<u> </u>	6	mirror polished	with multi-component grips	0.6			11.0	20.0	7.0	7.0	70
64 62 120 ESD	025085	120	📂 🖌 🖉 🖌 🗲	6	mirror polished	with multi-component grips	0.6			11.0	20.0	7.0	7.0	70
64 72 120	017882	120	<u> </u>	7	mirror polished	with multi-component grips	1.5			11.0	20.0	7.0	6.0	70

Electronics Oblique Cutting Nipper

- > With cutting edges for soft and medium hard wire
- > Without bevel, for flush cutting
- > Cutters additionally laser hardened, cutting edge hardness approx. 56 HRC
- > Low-friction double spring for gentle and even opening
- > Sturdy, zero backlash box joint
- > The mirror polish together with a fine film of oil offer effective rust protection — no circuit faults caused by peeling chrome from plated tools
- > Ball bearing chrome steel, oil-hardened
- > DIN ISO 9654





					Cutting of	capacities		Dimer	nsions		
	EAN	∢ →			\bullet		A	В	С	D	52
Article No.	4003773-	mm		Handles	Ømm	Ømm	mm	mm	mm	mm	g
62 12 120	048008	120	🚺 🖍 15° MM	with multi-component grips	0.3 - 1.0	0.7	11.0	10.0	17.0	7.5	70



Precision Electronics Gripping Pliers

- > The assortment for highest standard of performance and results
- > Precision pliers for fine assembly work, e g. in electronics and fine mechanics
- > For gripping, holding and bending
- > Bolted joint: precise, zero backlash operation of pliers
- > Precisely finished joint surfaces for smooth, low friction movement along the complete opening range
- > Low-friction double spring for gentle and even opening
- > Smooth ground gripping surfaces, edges carefully deburred
- > Non-reflective finish
- > Low weight
- > For very precise assembly work, e.g. in electronics and fine mechanics
- > Smoothly ground gripping surfaces, edges finely rounded
- > Approx. 20 % lighter than conventional electronics pliers
- > Bolted joint and carefully manufactured joint surfaces for even, low-friction movement throughout the entire opening range
- > Smooth-running double spring for a gentle and even opening
- > With precision laser cut cross-shaping
- > Ball bearing chrome steel, forged, multi stage oil-hardened
- > DIN ISO 9655

Style 1

> Flat, wide jaws

Style 2

> Half-round jaws

Style 3

> Round, pointed jaws

Style 4

> Flat, wide jaws, with precision laser cut cross-shaping

Style 5

> Half-round jaws, with precision laser cut cross-shaping







Cross-shaping: precision laser cut for a secure grip in ultra fine mounting work

						Dimensions					
	EAN	∢ —▶				В	Α	D	E	F	52
Article No.	4003773-	mm		Head	Handles	mm	mm	mm	mm	mm	g
34 12 130 ESD	061632	135		polished	with multi-component grips	21.9	11.2	6.5	1.4	3.5	62
34 12 130	061458	135	\square \square \square \square	polished	with multi-component grips	21.9	11.2	6.5	1.4	3.5	61
34 22 130	061472	135	$\Box \Theta WW$	polished	with multi-component grips	22.7	11.2	6.5	1.6	1.6	61
34 22 130 ESD	061656	135	🖾 0 MM 🖌	polished	with multi-component grips	22.7	11.2	6.5	1.6	1.6	65
34 32 130	061496	135	28 km	polished	with multi-component grips	23.7	11.2	6.5	2.0	1.0	59
34 32 130 ESD	061670	135	🖾 8 MM 🙆	polished	with multi-component grips	23.7	11.2	6.5	2.0	1.0	62
34 42 130	080282	130	™ === MM	polished	with multi-component grips	21.9	11.2	6.5	1.4	3.5	61
34 42 130 ESD	080299	130	🚳 🖂 MM 🛦	polished	with multi-component grips	21.9	11.2	6.5	1.4	3.5	61
34 52 130	080312	130	$\bowtie \ominus MM$	polished	with multi-component grips	22.7	11.2	6.5	1.6	1.6	61
34 52 130 ESD	080305	130	🗠 MM 🕀 📾	polished	with multi-component grips	22.7	11.2	6.5	1.6	1.6	61











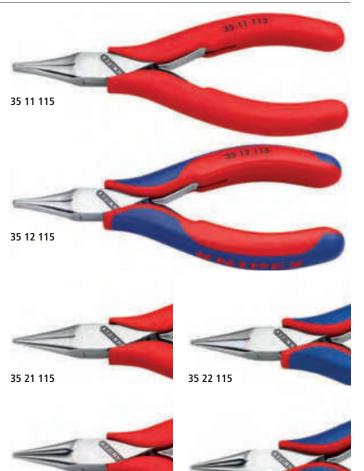




ELECTRONICS PLIERS

Electronics Pliers

- > Precision pliers for fine assembly work, e g. in electronics and fine mechanics
- > Load-optimised for a more direct feel when working
- > For gripping, holding and bending
- > Sturdy, zero backlash box joint
- > Smooth ground gripping surfaces
- > Soft transitions; no sharp edges
- > Low-friction double spring for gentle and even opening
- > The mirror polish together with a fine film of oil offer effective rust protection – no circuit faults caused by peeling chrome from plated tools
- > Narrow sleeves pulled up to the head of the pliers enable the tool to be guided securely and comfortably, also between thumb and index finger
- > Edges carefully deburred
- > Ball bearing chrome steel, oil-hardened
- > DIN ISO 9655





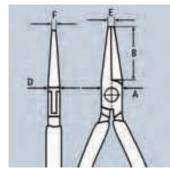


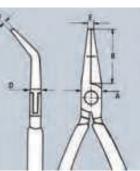


35 31 115



35 32 115





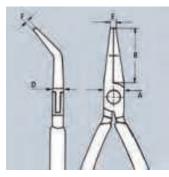
						Dimensions					
	EAN	->				В	A	D	E	F	52
Article No.	4003773-	mm		Head	Handles	mm	mm	mm	mm	mm	g
35 11 115	016694	115	\square \square \square \square	mirror polished	with non-slip plastic coating	22.5	11.0	6.5	2.0	4.0	55
35 12 115	035107	115	\square \square \square \square	mirror polished	with multi-component grips	22.5	11.0	6.5	2.0	4.0	70
35 21 115	016724	115	$\Box \Theta WM$	mirror polished	with non-slip plastic coating	22.5	11.0	6.5	2.0	1.5	55
35 22 115	035114	115	$\Box \Theta WM$	mirror polished	with multi-component grips	22.5	11.0	6.5	2.0	1.5	70
35 31 115	016762	115	8 MM	mirror polished	with non-slip plastic coating	22.5	11.0	6.5	2.0	1.0	61
35 32 115	035121	115	8 MM	mirror polished	with multi-component grips	22.5	11.0	6.5	2.0	1.0	70
35 41 115	082248	115	✓ <u>४</u> 45° MM	mirror polished	with multi-component grips	22.5	11.0	6.5	2.0	1.0	55
35 42 115	040736	115		mirror polished	with multi-component grips	22.5	11.0	6.5	2.0	1.5	70
35 52 145	039389	145	\square \square \square \square	mirror polished	with multi-component grips	40.0	12.0	7.5	1.5	4.0	102
35 62 145	039556	145	ΘMM	mirror polished	with multi-component grips	40.0	12.0	7.5	2.5	1.5	103
35 72 145	043607	145	8 MM	mirror polished	with multi-component grips	40.0	12.0	7.5	2.5	1.3	98
35 82 145	039396	145		mirror polished	with multi-component grips	35.0	12.0	7.5	2.5	1.0	102

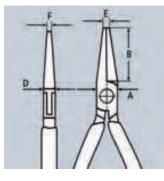


Electronics Pliers ESD

- > Precision pliers for fine assembly work, e g. in electronics and fine mechanics
- > For gripping, holding and bending
- > Electrically discharging handles dissipative
- > Sturdy, zero backlash box joint
- > Smooth ground gripping surfaces
- > Edges carefully deburred
- > Low-friction double spring for gentle and even opening
- > The mirror polish together with a fine film of oil offer effective rust protection – no circuit faults caused by peeling chrome from plated tools
- > With two-colour dual component grips, black/grey
- > Ball bearing chrome steel, oil-hardened
- > DIN ISO 9655, DIN EN 61 340-5







ESD pliers (electrostatic discharge) Electrostatic energy is discharged through the handles in a gradual and controlled manner. Which protects components endangered by electrostatic discharge. In accordance with applicable standards, e.g. IEC TR 61 340-5, DIN EN 61 340-5, SP Method 2472



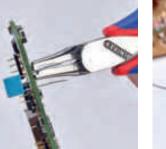
35 42 115 ESD

Dimensions 52 EAN В А D Ε F **∢**--> Article No. 4003773-Head Handles mm mm mm mm mm mm g 35 12 115 ESD 024835 115 mirror polished with multi-component grips 22.5 11.0 6.5 2.0 4.0 70 35 22 115 ESD 024842 115 🖾 Ə MM 🕰 mirror polished with multi-component grips 22.5 11.0 7.0 2.0 1.3 70 35 32 115 ESD 024859 115 8 MM & with multi-component grips 22.5 11.0 6.5 2.0 1.0 70 mirror polished 35 42 115 ESD 024866 115 ⊂ ⊖ 🔏 MM 🙆 22.5 11.0 2.0 1.5 70 mirror polished with multi-component grips 6.5

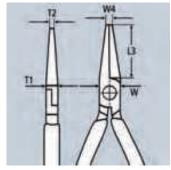
Electronics Mounting Pliers

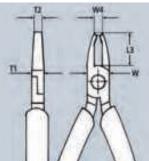
- > Precision pliers for very fine assembly and repair work in electronics
- > For bending and cutting off wire ends on components
- > Sturdy, zero backlash box joint
- > Smooth ground gripping surfaces
- > Edges carefully deburred
- > Low-friction double spring for gentle and even opening
- > The mirror polish together with a fine film of oil offer effective rust protection - no circuit faults caused by peeling chrome from plated tools
- > Ball bearing chrome steel, oil-hardened

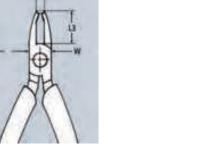




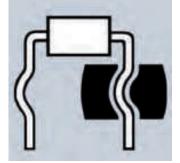




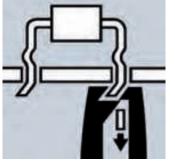




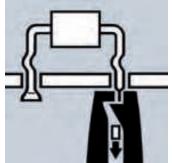
36 32 125



To bend wire in shape for the distance to the board



To bend and cut wire at 1.6 mm length below the board



To crunch and cut wire at 1.6 mm length below the board

						Cutting capacities		D	imensior	าร		
	EAN	∢ →				\bullet	L3	W	T1	W1	T2	52
Article No.	4003773-	mm		Head	Handles	Ømm	mm	mm	mm	mm	mm	g
36 12 130	016861	130	MM	mirror polished	with multi-component grips		18.0	11.0	7.0	5.5	4.0	70
36 22 125	046967	125	MM	mirror polished	with multi-component grips	1.2	18.0	11.0	7.0	7.5	4.0	94
36 32 125	016885	125	MM	mirror polished	with multi-component grips	1.0	18.0	11.0	7.0	7.5	3.0	108

Electronics Pliers Sets

with tools for work on electronic components

> Dimensions, closed (W x H x D): 215 x 160 x 50 mm

00 20 16

> 7 parts, contains 6 electronics pliers and one pair of precision tweezers; case made of hard-wearing polyester fabric, pliers are held by elastic band, zippered

00 20 16 P

> 6 parts, contains 6 precision electronics pliers; case made of hard-wearing polyester fabric, pliers are held by elastic band, zippered

00 20 16 P ESD

> 6 parts, contains 6 ESD precision electronics pliers, electrically discharging version; case made of hard-wearing polyester fabric, pliers are held by elastic band, zippered

00 20 17

> 6 parts, contains 6 ESD precision electronics pliers, electrically discharging version; case made of hard-wearing polyester fabric, pliers are held by elastic band, zippered

00 20 18

> 8 parts, contains 2 electronics pliers and 6 electronics screwdrivers; practical storage box, shock-resistant plastic, with foam insert

00 20 18 ESD

> 8 parts, contains 2 electronics pliers and 6 electronics screwdrivers, ESD electrically discharging version; practical storage box, shock-resistant plastic, with foam insert



00 20 16



00 20 16 P



00 20 16 P ESD



00 20 17



00 20 18

00 20 18 ESD

Article No.	EAN 4003773-	Contents	۲ ع
00 20 16	022619	35 12 115 / 35 22 115 / 35 32 115 / 64 32 120 / 77 02 115 / 77 42 115 / 92 34 36	720
00 20 16 P	063223	34 12 130 / 34 22 130 / 34 32 130 / 79 02 120 / 79 02 120 / 79 02 125 / 79 42 125	575
00 20 16 P ESD	063230	34 12 130 ESD / 34 22 130 ESD / 34 32 130 ESD / 79 02 120 ESD / 79 02 125 ESD / 79 42 125 ESD	585
00 20 17	031222	35 12 115 ESD / 35 22 115 ESD / 35 42 115 ESD / 64 32 120 ESD / 77 02 115 ESD / 77 32 115 ESD	695
00 20 18	033073	35 22 115 / 77 02 115 / screw drivers 0,4 x 2,5 / 0,5 x 3,0 / 0,6 x 3,5 / 0,8 x 4,0 / PH0 / PH1	460
00 20 18 ESD	051848	35 22 115 ESD / 77 02 115 ESD / screw drivers 0,4 x 2,5 / 0,5 x 3,0 / 0,6 x 3,5 / 0,8 x 4,0 / PH0 / PH1	465

Precision Tweezers

> Smooth gripping surfaces

> Non-reflective matt finish

92 02 53

> For SMD-technology*; angled tips, width approx. 1 mm; gripping surfaces matt finished for optimum grip; chrome nickel steel: stainless, anti-magnetic (18/10), very popular electronics quality

92 02 54

> For SMD-technology*; angled tips, width approx. 1 mm; with integrated profile for reliable gripping of cylindrical components of 0.6 mm dia.; gripping surfaces matt finished for optimum grip; chrome nickel steel: stainless, anti-magnetic (18/10), very popular electronics quality

92 02 55

> Gripping jaws 3.5 mm wide, for cylindrical components of 0.8 mm dia.; serrated handles; stainless, anti-magnetic and acid-proof

92 12 52

> Angled tips; extra strong tips; stainless, anti-magnetic





92 12 52

		- >			52
Article No.	EAN 4003773-	mm		Finish	g
92 02 53	054603	120		stainless, anti-magnetic	16
92 02 54	054610	120	<u> </u>	stainless, anti-magnetic	15
92 02 55	054627	115	\Box	stainless, anti-magnetic, acid-proof	16
92 12 52	054658	120	✓ <u>⊀</u> 85°	stainless, anti-magnetic	20

Precision Tweezers

pointed shape

- > For fine mounting work
- > Straight pattern
- > Smooth gripping surfaces
- > Particularly slim tips

92 22 04

> Non-reflective matt finish; gripping surfaces matt finished for optimum grip: chrome nickel steel: stainless, anti-magnetic (18/10), very popular electronics quality

92 22 06

> Non-reflective matt finish; gripping surfaces matt finished for optimum grip; chrome nickel steel: stainless, anti-magnetic (18/10), very popular electronics quality

92 22 07

> Non-reflective matt finish; stainless, anti-magnetic and acid-proof

92 23 05

> Titanium; electrically conductive; lightweight; non-reflective matt finish; stainless, anti-magnetic and acid-proof

92 24 01

> Spring steel, chrome plated



	EAN	<->			52
Article No.	4003773-	mm		Finish	g
92 22 04	054665	130	\Box	stainless, anti-magnetic	20
92 22 06	054672	120	\Box	stainless, anti-magnetic	15
92 22 07	054689	115	\Box	stainless, anti-magnetic, acid-proof	12
92 23 05	054726	120	\Box	Titanium, anti-magnetic, acid-proof, stainless	10
92 24 01	054733	120	\Box	spring steel, chrome plated	15

Precision Tweezers

needle-pointed shape

> For ultra fine mounting work

- > Extra fine tips
- > Smooth gripping surfaces
- > Stainless, anti-magnetic
- > Non-reflective matt finish

92 22 12

> Straight pattern

92 34 28

> Angled tips

92 22 13

> American shape, solid; straight pattern; stainless, anti-magnetic and acid-proof

92 32 29

> Sickle-shaped tips; Chrome nickel steel: stainless, anti-magnetic (18/10), very popular electronics quality; gripping surfaces matt finished for optimum grip



92 34 28

	EAN	← ►			52
Article No.	4003773-	mm		Finish	g
92 22 12	054696	105	\Box	stainless, anti-magnetic	13
92 22 13	054702	135	\Box	stainless, anti-magnetic, acid-proof	21
92 32 29	054818	120	<u> </u>	stainless, anti-magnetic	16
92 34 28	054825	105	<u>∠45°</u>	stainless, anti-magnetic	12

92 22 35

92 24 34

92 34 36

Precision Tweezers

with centering pin

pointed shape

- > Universally applicable
- > Narrow tips
- > Gripping surfaces with fine transverse serration
- > Serrated handles

92 34 37

> Angled tips; black non-reflective lacquered

92 24 36

> Angled tips; spring steel, chrome plated

92 24 34

> Straight pattern; spring steel, chrome plated

92 22 35

> Straight pattern; non-reflective matt finish; stainless, anti-magnetic and acid-proof

92 34 37 5 EAN **-**Finish Article No. 4003773- mm g 92 22 35 054719 155 💷 stainless, anti-magnetic, acid-proof 22 92 24 34 054740 155 💷 21 spring steel, chrome plated 155 III <u>∡</u>45° 23 **92 34 36** 054832 spring steel, chrome plated

Precision Tweezers

round slim shape

> Round tips, approx. 2 mm wide

> Smooth gripping surfaces

> Stainless, anti-magnetic and acid-proof

> Chrome nickel steel, stainless, anti-magnetic, acid-proof



92 52 23

	EAN	∢ →			52
Article No.	4003773-	mm		Finish	g
92 52 23	054894	120	\Box	stainless, anti-magnetic, acid-proof	17

PRECISION TWEEZERS

Precision Tweezers

blunt shape

- > Universally applicable
- > Straight pattern
- > Wide, round tips
- > Serrated handles

92 44 42

> Jewellers' tweezers; round tips, approx. 2 mm wide; gripping jaws with fine crosswise serration (cross-hatched); spring steel, chrome plated

92 64 43

> Round tips, approx. 3.0 mm wide; gripping surfaces with fine transverse serration; spring steel, chrome plated

92 64 44

> Round tips, approx. 3.5 mm wide, gripping surfaces with fine transverse serration

92 72 45

> Round tips, approx. 3.5 mm wide; knurled gripping surfaces; nonreflective matt finish; stainless, anti-magnetic and acid-proof

			Tot
92 44 42			
	-		H 0 📀
92 64 43			
			11 an
92 64 44			
			1111 ()
92 70 46			
		100	
92 72 45			

	EAN	∢ —▶			52
Article No.	4003773-	mm		Finish	g
92 44 42	054887	155	\otimes	spring steel, chrome plated	21
92 64 43	054917	120		spring steel, chrome plated	17
92 64 44	054924	145		spring steel, chrome plated	23
92 70 46	055075	145		black lacquered	26
92 72 45	054962	145		stainless, anti-magnetic, acid-proof	27

Plastic Tweezers

- > Solid plastic tweezers
- > Trapezoidal tips, approx. 3.5 mm wide
- > Knurled gripping surfaces
- > Serrated handles
- > Heat resistant up to approx. 130° C
- > Tweezers body: solid plastic, temperature-resistant up to 130°C

	EAN	- >		5
Article No.	4003773-	mm	Finish	g
92 69 84	054948	130	plastic	19

Precision Tweezers

rectangular blunt

- > Mounting tweezers
- > Rectangular tips, approx. 0.9 mm wide
- > Gripping surfaces with fine transverse serration
- > Nickel plated
- > Spring steel, high-strength

	EAN	4- >		5,7
Article No.	4003773-	mm	Finish	g
92 84 18	054986	125	spring steel, chrome plated	19



11111

259

92 69 84

Cross-Over Tweezers

- > For holding small parts without finger pressure
- > For efficient clamping
- > Nickel plated
- > Spring steel, high-strength

92 94 91

> Trapezoidal tips; straight pattern; gripping surfaces with fine transverse serration; serrated handles

92 95 89

> Narrow tips; straight pattern; gripping surfaces with fine transverse serration; handles with plastic attachment

92 95 90

> Narrow tips; angled tips; gripping surfaces with fine transverse serration; handles with plastic attachment



	EAN	->			55
Article No.	4003773-	mm		Finish	g
92 94 91	055006	160		spring steel, chrome plated	35
92 95 89	055013	160		spring steel, chrome plated	30
92 95 90	055020	160	₫ <u>1</u> <u>∡</u> 45°	spring steel, chrome plated	32

Precision Tweezers

insulated

> With dipped insulation

> Spring steel, high-strength

> DIN EN 60900, IEC 60900

92 27 61

> For ultra fine mounting work; extra fine tips; straight pattern; gripping surfaces matt finished for optimum grip

92 27 62

> Straight pattern; gripping surfaces with fine transverse serration

92 37 64

> Angled tips; gripping surfaces with fine transverse serration

92 67 63

> Straight pattern; knurled gripping surfaces



	EAN	->			22
Article No.	4003773-	mm		Finish	g
92 27 61	054757	130	☐ 1000 V	with dipped insulation	30
92 27 62	054764	150	□□□□	with dipped insulation	35
92 37 64	054856	150	IIII	with dipped insulation	34
92 67 63	054931	145	ЩЩ <u>A</u> 1000 V	with dipped insulation	40

92 67 63

Precision Tweezers ESD

- > Chrome nickel steel: stainless, anti-magnetic (18/10), very popular electronics quality
- > ESD coating: non-reflective black, with a surface resistance of approx. $10^5 \mbox{ Ohm}$
- > Tips non-reflective brushed
- > Gripping surfaces matt finished for optimum grip
- > Chrome nickel steel, stainless, anti-magnetic

92 08 78 ESD

> For SMD-technology*; angled tips; smooth gripping surfaces

92 08 79 ESD

> Shaped to grip horizontal cylindrical components of 1.0 mm dia.; smooth gripping surfaces; serrated handles

92 28 69 ESD

> Straight pattern; strong tip; smooth gripping surfaces

92 28 70 ESD

> Straight pattern; fine tip; smooth gripping surfaces

92 28 71 ESD

> Needle-pointed tips; straight pattern; smooth gripping surfaces

92 28 72 ESD

> American shape, solid; long tips; straight pattern; smooth gripping surfaces

92 38 75 ESD

> Sickle-shaped tips; smooth gripping surfaces

92 58 74 ESD

> Round tips, approx. 2 mm wide; straight pattern; smooth gripping surfaces

92 58 77 ESD

> Round tips, approx. 3.5 mm wide; straight pattern; knurled gripping surfaces; serrated handles

92 88 73 ESD

> Rectangular tips, approx. 0.9 mm wide; gripping surfaces with fine transverse serration



92 58 74 ESD

	EAN	4-			2,7
Article No.	4003773-	mm		Finish	g
92 08 78 ESD	054634	120		stainless, anti-magnetic, electrically dissipative	16
92 08 79 ESD	054641	120		stainless, anti-magnetic, electrically dissipative	16
92 28 69 ESD	054771	130		stainless, anti-magnetic, electrically dissipative	20
92 28 70 ESD	054788	110		stainless, anti-magnetic, electrically dissipative	13
92 28 71 ESD	054795	110		stainless, anti-magnetic, electrically dissipative	14
92 28 72 ESD	054801	135		stainless, anti-magnetic, electrically dissipative	22
92 38 75 ESD	054863	120		stainless, anti-magnetic, electrically dissipative	17
92 58 74 ESD	054900	120		stainless, anti-magnetic, electrically dissipative	19
92 78 77 ESD	054979	145	III 🛦	stainless, anti-magnetic, electrically dissipative	27
92 88 73 ESD	054993	130	III 🙆	stainless, anti-magnetic, electrically dissipative	20

Pliers with tether attachment point for mounting a fall protection

ima.

3178

onour

Pliers range with tether attachment point for mounting a fall protection







The tether attachment point for the range with multi-component handles

Tools can fall down when used on cherry pickers, scaffolding and ladders and when used by industrial climbers working with wire rope hoists.

KNIPEX offers a range of pliers and accessories that can reliably prevent the KNIPEX pliers from falling down.

There is a very stable tether on the inside of the handles which is welded tightly to the handle for attaching the tether or adapter strap. The lug enables the equipment to be attached and put down quickly. The sophisticated elements from our KNIPEX Tethered Tools Program offer several individual permutations for connection and use.





	Article No.	Designation	page		Article No.	Designation	page
	00 50 01 T BK	Tether		** K	13 66 180 T	KNIPEX StriX [®] Insulation strippers, with cable shears, insulated, with multi-component grips, VDE-tested, with integrated tether attachment point for a tool tether	35, 201
	00 50 02 T BK	Adapter Strap			13 82 200 T	Pliers for Electrical Installation, with multi-component grips, with integrated tether attachment	10
	00 50 03 T BK	Carabiner			1 3 96 200 T	point for a tool tether Pliers for Electrical Installation,	10,
IN S	00 50 04 T BK	Tethering System Set		~	5 50 200 1	insulated, with multi-component grips, VDE-tested, with integrated tether attachment point for a tool tether	204
	00 50 05 T BK	_			25 06 160 T	Snipe Nose Side Cutting Pliers (Radio Pliers), insulated, VDE-tested, with integrated tether attachment point for a tool tether, DIN ISO 5745	15, 205
					26 12 200 T	Snipe Nose Side Cutting Pliers (Stork Beak Pliers), with multi-com-	16
	00 50 06 T BK				26 15 200 T	ponent grips, with integrated tether attachment point for a tool tether, DIN ISO 5745	16
	02 02 225 T	High Leverage Combination Pliers, with multi-component grips, with integrated tether attachment point	5			Color Many Cide Cutting Diver	10
		for a tool tether, DIN ISO 5746			26 16 200 T	Snipe Nose Side Cutting Pliers (Stork Beak Pliers), insulated, with multi-component grips, VDE-tested, with integrated tether	16, 206
	03 06 180 T	Combination Pliers, insulated, with multi-component grips, VDE-tested, with integrated tether attachment point for a tool tether, DIN ISO	5, 199			attachment point for a tool tether, DIN ISO 5745	
	08 22 145 T	5746 Needle-Nose Combination Pliers,	6	~	26 22 200 T	Snipe Nose Side Cutting Pliers (Stork Beak Pliers), with multi- component grips, with integrated tether attachment point for a tool	16
	00 22 145 1	with multi-component grips, with integrated tether attachment point for a tool tether, DIN ISO 5746	0	~	26 25 200 T	tether, DIN ISO 5745	16
~~	08 26 145 T	Needle-Nose Combination Pliers, insulated, with multi-component grips, VDE-tested, with integrated tether attachment point for a tool	6, 200	~ K	26 26 200 T	Snipe Nose Side Cutting Pliers (Stork Beak Pliers), with multi- component grips, with integrated tether attachment point for a tool tether, DIN ISO 5745	16, 206
	09 02 240 T	tether, DIN ISO 5746 Lineman's Pliers, American style,	9		38 35 200 T	Mechanics' Pliers, with multi- component grips, with integrated	53
~	09 02 240 1	with multi-component grips, with integrated tether attachment point for a tool tether, DIN ISO 5746	9	~<		tether attachment point for a tool tether, DIN ISO 5745	
	09 12 240 T	Lineman's Pliers, American style, with slim multi-component grips,	9		70 05 180 T	Diagonal Cutter, with multi- component grips, with integrated tether attachment point for a tool tether, DIN ISO 5749	85
		with integrated tether attachment point for a tool tether, DIN ISO 5746			70 05 160 T		85
	11 06 160 T	Insulation Stripper with opening spring, insulated, with multi-com- ponent grips, VDE-tested, with integrated tether attachment point	20, 200		70 06 180 T	Diagonal Cutter, insulated, with multi-component grips,	85, 208
	12.05.160.7	for a tool tether	10			VDE-tested, with integrated tether attachment point for a tool tether, DIN ISO 5749	200
	13 05 160 T	Electricians' Pliers, with multi-component grips, with integrated tether attachment point for a tool tether	12		70 06 160 T		85, 208

PLIERS WITH TETHER ATTACHMENT POINT

	Article No.	Designation	page
•==	71 02 200 T	KNIPEX CoBolt [®] Compact Bolt Cutters, with slim multi-component grips, with integrated tether attach- ment point for a tool tether	94
-	71 22 200 T		95
•	71 32 200 T		95
	73 05 160 T	KNIPEX X-Cut [®] Compact Diagonal Cutter, with multi-component grips, with integrated tether attachment point for a tool tether, DIN ISO 5749	87
	73 06 160 T	KNIPEX X-Cut [®] Compact Diagonal Cutter, insulated, with multi-com- ponent grips, VDE-tested, with integrated tether attachment point for a tool tether, DIN ISO 5749	87, 209
	74 02 200 T	High Leverage Diagonal Cutter, with multi-component grips, with integrated tether attachment point	88
	74 02 250 T	for a tool tether, DIN ISO 5749	88
	74 06 200 T	High Leverage Diagonal Cutter, insulated, with multi-component grips, VDE-tested, with integrated tether attachment point for a tool tether, DIN ISO 5749	88, 209
-	74 06 250 T		88, 209
a r (74 22 200 T	High Leverage Diagonal Cutter, with multi-component grips, with integrated tether attachment point for a tool tether, DIN ISO 5749	88
e re	74 22 250 T		88
×=	86 05 180 T	Pliers Wrench, Pliers and a wrench in a single tool, with multi-compo- nent grips, with integrated tether attachment point for a tool tether	104
dite -	86 05 250 T		104
~	87 02 180 T	KNIPEX Cobra® Hightech Water Pump Pliers, with multi-component grips, with integrated tether attach- ment point for a tool tether, DIN ISO 8976	110
~	87 02 300 T	KNIPEX Cobra® Hightech Water Pump Pliers, with multi-component grips, with integrated tether attach- ment point for a tool tether,	110
	87 02 250 T	DIN ISO 8976	110
	87 26 250 T	KNIPEX Cobra® VDE Hightech Water Pump Pliers, insulated,	115, 211
		VDE-tested, with integrated tether attachment point for a tool tether, DIN ISO 8976	

	Article No.	Designation	page
×=	88 02 250 T	KNIPEX Alligator [®] Water Pump Pliers, with slim multi-component grips, with integrated tether attach- ment point for a tool tether, DIN ISO 8976	116
	88 02 300 T	KNIPEX Alligator [®] Water Pump Pliers, with multi-component grips, with integrated tether attachment point for a tool tether, DIN ISO 8976	116
	95 12 165 T	Cable Shears, with multi-compo- nent grips, with integrated tether attachment point for a tool tether	150
	95 16 165 T	Cable Shears, insulated, with multi-component grips, VDE-tested, with integrated tether attachment point for a tool tether	150, 213
	95 62 190 T	Wire Rope Cutter, forged, with multi-component grips, with integrated tether attachment point for a tool tether	160
	97 78 180 T	Crimping Pliers for wire ferrules, insulated, with multi-component grips, VDE-tested, with integrated tether attachment point for a tool tether	184, 260

Tool Assortment and Cases

1.112

Tool Roll	270
Set of pliers wrenches	271
KNIPEX Cobra® Set	271
Set of Circlip Pliers	272
Mini pliers sets	274
Case for Electronics Pliers	276
Pliers Sets	277
Precision Circlip Pliers Set	278
Set of Circlip Pliers	278
Extension sets Electro	279
Tool Kits	280
Tool Box "RED" Electro	284
Tool Box "SRZ" Precision Circlip Pliers	285
Tool Case "Basic"	286
Tool Case "BIG Basic Move"	288
Tool Case "BIG Basic Move" Electro	290
Tool Case "BIG Basic Move" Electro Plus	291
Tool Case "BIG Basic Move" Mechanics	292
Tool Case "BIG Basic Move" Sanitary	293
Tool Case "BIG Twin Move"	296
Tool Case "BIG Twin Move" Electro	297
Tool Case "BIG Twin"	294
Tool Case "BIG Twin" Electro	299
Tool Case "BIG Twin Move Red"	300
Tool Case "Robust"	302
Tool Case "Robust23" Electro	304
Tool Case "Robust34" Electro	306
Tool Case "Robust45 Move" Electro	308
Tool Case "Robust45 Move" Mechanics	310
Tool Case "Vision24" Electro	312
Tool Case "Vision27" Sanitary	313
Tool Case "Focus" Electro	314
KNIPEX L-BOXX®	315
KNIPEX L-BOXX [®] Electro	316
KNIPEX L-BOXX [®] Sanitary	317
Tool bag "Classic" Electro	318
Tool bag "Kompakt" Electric	319
Crimp Assortments	320
Tool Case for Photovoltaics	322
Compact Tool Case	324
Tool bags	326



Tool Roll

Essential for work on electrical systems: 15-piece basic tool kit in practical roll-up bag

- > Tool roll made of hard-wearing polyester fabric
- > With practical, adjustable quick release fastener
- > Equipped with a range of insulated KNIPEX tools for works on electrical installations
- > Dimensions, open (L x H): 830 x 310 mm



98 99 13

Article No.	EAN 4003773-				Number	۲۵ g
98 99 13	026648		Tool Roll, 15	parts		2455
		🛧 1000 V 🖄 🛃 💷 🚺 🗲	03 07 200	Combination Pliers	1	
		<u> </u>	11 07 160	Insulation Stripper	1	
		$\Theta \blacksquare \blacksquare \blacksquare$	26 17 200	Snipe Nose Side Cutting Pliers (Stork Beak Pliers)	1	
			70 07 160	Diagonal Cutter	1	
			95 17 200	Cable Shears with twin cutting edge	1	
			98 00 10		1	
			98 00 13		1	
		<u></u> £ 1000 V ○	98 00 14	Open-end wrench	1	
			98 00 17		1	
			98 00 19		1	
			98 20 25		1	
			98 20 40	Screwdrivers for slotted screws	1	
		<u> </u>	98 20 55	Screwdrivers for slotted screws	1	
			98 20 65		1	
	☆10	☆ 1000 V 🖄 🚅	98 52	Cable Knife	1	
98 99 13 LE	028888	Tool Roll, empty	-			325

Tool Roll

Handy, ideally equipped: 11-piece set of tools for telecommunications and electrical engineers

- > For telecommunications and electrical engineers
- > Tool roll made of hard-wearing polyester fabric
- > With practical, adjustable quick release fastener
- > Contains eight pliers and three scewdrivers
- > Pliers with chrome-plated heads and two-colour multi-component handles
- > Screwdrivers VDE-tested according to DIN EN/IEC 60900 1000V

> Dimensions, open (L x H): 450 x 290 mm



00 19 41

Article No.	EAN 4003773-				Number	۲ م
00 19 41	024729		Tool Roll, 11	parts		1620
			03 05 160	Combination Pliers	1	
		MM	11 05 160	Insulation Stripper	1	
		$\Theta \blacksquare \blacksquare$	25 05 160	Snipe Nose Side Cutting Pliers (Radio Pliers)	1	
		30 1	30 15 160	30 15 160 Long Nega Dilara	1	
		8	30 35 160	Long Nose Pliers	1	
			31 15 160	Flat Nose Pliers (Needle-Nose Pliers)	1	
			67 05 140	High Leverage End Cutting Nipper	1	
			70 05 140	Diagonal Cutter	1	
		A 10001/ @ 🛋 🗨	98 20 25	Screwdrivers for slotted screws	1	
		1000 V 🖄 🚭 🖨	98 20 40	Sciewarivers for slotted sciews	1	
		🛧 1000 V 🖄 🚭 🗘	98 24 01	Screwdrivers for cross-recessed screws, Phillips®	1	
00 19 41 LE	035930	Tool Roll, empty				205

Set of pliers wrenches

All-purpose tool in a set: five pliers wrenches in space-saving roll-up bag

- > Tool roll made of hard-wearing polyester fabric
- > With hook-and-loop fastener
- > Equipped with wrenches in five different lengths from 125 to 300 mm
- > Dimensions, open (L x H): 430 x 325 mm



00 19 55 S4

Article No.	EAN 4003773-			Numb	er g
00 19 55 S4	077817		Set of pliers	vrenches, 5 parts	2015
		\Box	86 03 125	1	
		\Box	86 03 150	1	
		\Box	86 03 180	Pliers Wrench, Pliers and a wrench in a single tool 1	_
		\Box	86 03 250	1	_
		\Box	86 03 300	1	
00 19 55 S4 LE	077824	Roll-up case for	pliers wrenche	s, empty	260

KNIPEX Cobra®Set

Gripping set for professionals: five KNIPEX Cobra® pliers in hard-wearing roll-up bag

- > High-quality roll-up bag made from durable polyester fabric
- > With hook-and-loop fastener
- > Equipped with KNIPEX Cobra® high-tech water pump pliers in five different lengths from 125 to 300 mm
- > Dimensions, open (L x H): 430 x 325 mm



Article No. 00 19 55 55	EAN 4003773- 082613		KNIPEX Cobr	a® Set, 5 parts	Number	۵ ^۲ ۵ g 1575
			87 01 125		1	
			87 01 150		1	
			87 01 180	KNIPEX Cobra® Hightech Water Pump Pliers	1	
			87 01 250		1	
			87 01 300		1	
00 19 55 S5 LE	082620	Tool Roll for KNI	PEX Cobra®, e	mpty		260

Set of Circlip Pliers

Compactly packed: four-piece circlip plier sets in practical roll-up bag



00 19 56



00 19 56 V01

- > Tool roll made of hard-wearing polyester fabric
- > With practical, adjustable quick release fastener
 - > Dimensions, open (L x H): 315 x 275 mm



00 19 57



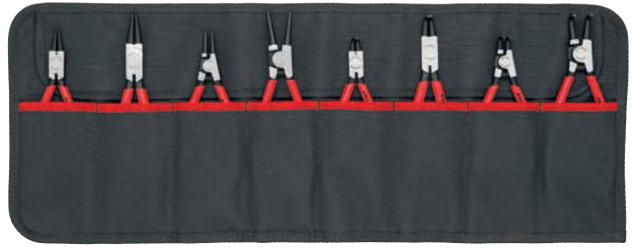
00 19 57 V01

	EAN					Capacity	Tips		52
Article No.	4003773-				Style	Ømm	Ømm	Number	g
00 19 56	030973		Circlip Pliers	Set, 4 parts					670
		C	44 11 J2	Circlip Pliers for internal circlips in	straight tips	19 - 60	1.8	1	
		() <u>⊀9</u> 0°	44 21 J21	bore holes	angled tips	19 - 60	1.8	1	
		0 MM O	46 11 A2	Circlip Pliers for external circlips	straight tips	19 - 60	1.8	1	
		<u>് ∡ഊ</u> MM	46 21 A21	on shafts	angled tips	19 - 60	1.8	1	
00 19 56 V01	081548		Circlip Pliers	Set, 4 parts					615
		C	44 11 J1	Circlip Pliers for internal circlips in		12 - 25	1.3	1	
		C	44 11 J2	bore holes		19 - 60	1.8	1	
		OWW	46 11 A1	Circlip Pliers for external circlips	straight tips	10 - 25	1.3	1	
		ÖMM	46 11 A2	on shafts		19 - 60	1.8	1	
00 19 57	050056		Precision Cir	clip Pliers Set, 4 parts					665
		دى 48 11 J1	48 11 J1	Precision Circlip Pliers for internal circlips in bore holes		12 - 25	1.3	1	
			48 11 J2		straight tips	19 - 60	1.8	1	
		25 4444	49 11 A1	Precision Circlip Pliers for external		10 - 25	1.3	1	
		ÖMM	49 11 A2	circlips on shafts		19 - 60	1.8	1	
00 19 57 V01	081555		Precision Cir	clip Pliers Set, 4 parts					871
		C	48 11 J2	Precision Circlip Pliers for internal	straight tips	19 - 60	1.3	1	
		() <u>⊀9</u> 0°	48 21 J21	circlips in bore holes	bent tips	19 - 60	1.8	1	
		ÖMM	49 11 A2	Precision Circlip Pliers for external	straight tips	19 - 60	1.3	1	
		© <u>∡</u> 9° MM	49 21 A21	circlips on shafts	bent tips	19 - 60	1.8	1	
00 19 56 LE	035954		Tool Roll, em	pty, 4 compartments					171

Set of Circlip Pliers

Handy storage: eight-piece range in space-saving roll-up bag

> Tool roll made of hard-wearing polyester fabric
 > With practical, adjustable quick release fastener
 > Dimensions, open (L x H): 610 x 240 mm



00 19 57 V01



Article No.	EAN 4003773-				Style	Capacity Ø mm	Tips Ø mm	Number	۲۵ g
00 19 58 V01	081562		Circlip Pliers	Set, 8 parts					1156
		C	44 11 J1	· · · · · · · · · · · · · · · · · · ·	sturt also the stars	12 - 25	1.3	1	
		C	44 11 J2	Circlip Pliers for internal	straight tips	19 - 60	1.8	1	
	ి∡9° 44 21	44 21 J11	circlips in bore holes	a se al a al Afra a	12 - 25	1.3	1		
		() <u>⊀9</u> 0°	44 21 J21		angled tips	19 - 60	1.8	1	
		0 MM	46 11 A1			10 - 25	1.3	1	
		ŐMM	46 11 A2	Circlip Pliers for external	straight tips	19 - 60	1.8	1	
		Ö <u>∡</u> 90° MM	46 21 A11	circlips on shafts	angled tips	10 - 25	1.3	1	
		© <u>∡</u> 9° MM	46 21 A21			19 - 60	1.8	1	
00 19 58 V02	081579		Precision Cir	clip Pliers Set, 8 parts					1357
		63	48 11 J1		and the stars	12 - 25	1.3	1	
		0	48 11 J2	Precision Circlip Pliers for	straight tips	19 - 60	1.8	1	
		C 3 (00%	48 21 J11	internal circlips in bore holes	1.1.2	12 - 25	1.3	1	-
		_ () <u>⊀</u> 90°	48 21 J21		angled tips	19 - 60	1.8	1	
		ÖMM	49 11 A1		straight ting	10 - 25	1.3	1	-
		0/////	49 11 A2	Precision Circlip Pliers for	straight tips	19 - 60	1.8	1	
		© ∡90° MM	49 21 A11	external circlips on shafts	angled tips	10 - 25	1.3	1	
			49 21 A21			19 - 60	1.8	1	
00 19 58 LE	081920		Tool Roll, em	pty, 8 compartments					281

Mini pliers sets

Small pliers for big jobs: mini pliers sets in practical tool belt pouch

 > Tool bag made from durable polyester fabric, with hook-and-loop fastener and belt clip
 > Dimensions (W x H x D): 75 x 180 x 55 mm



00 20 72 V01





00 20 72 V02



00 20 72 V04



00 20 72 V06



00 19 72 V01

Article No.	EAN 4003773-				Number	۲۵ g
00 20 72 V01	070832		Mini pliers set in	tool belt pouch, 2 parts		350
		\Box	86 03 150	Pliers Wrench	1	
			87 01 125	KNIPEX Cobra [®] , Hightech Water Pump Pliers	1	
00 20 72 V02	075851		Mini pliers set in	tool belt pouch, 2 parts		390
			74 01 160	High Leverage Diagonal Cutter	1	1
			87 01 150	KNIPEX Cobra [®] , Hightech Water Pump Pliers	1	1
00 20 72 V04	078920		Mini pliers set in	tool belt pouch, 2 parts		264
		\Box	86 03 125	Pliers Wrench	1	
			87 01 125	KNIPEX Cobra [®] , Hightech Water Pump Pliers	1	1
00 20 72 V06	081937		Mini pliers set in	tool belt pouch, 2 parts		355
			08 22 145	Needle-Nose Combination Pliers	1	1
			87 01 150	KNIPEX Cobra [®] , Hightech Water Pump Pliers	1	-
00 19 72 V01	070832		Cable tie cutting	set, 2 parts		350
			86 03 150 S02	Pliers Wrench	1	
		\Box	79 02 125 S1	Precision Electronics Diagonal Cutter	1	
00 19 72 LE	070191	Belt pouch f	or two pliers up to 1	60 mm length, empty		65

Mini pliers set

Our unbeatable duo, even when you're on the move: handy-sized cutting, gripping and screwing tools

- For gripping, holding and cutting tasks, both large and small
- > KNIPEX Mini Cobra[®]: the high tech water pump pliers adjustment directly on the workpiece at the press of a button; with fine adjustment for optimum adaptation to different workpiece sizes up to Ø 27 mm
- > Needle-nose combination pliers: ideal for working in hard-to-reach places thanks to the slender head shape with powerful, pointed jaws; with cutting edges for soft, medium hard and hard wire up to Ø 2 mm





KNIPEX Cobra[®]: with fine adjustment directly on the workpiece

Needle-Nose Combination Pliers: the convex gripping surface on one side makes this the ideal tool for gripping flat parts



00 20 72 V06

Article No.	EAN 4003773-				Number	۵'۵ g	
00 20 72 V06	081937		Mini pliers se	rs set in tool belt pouch, 2 parts			
			08 22 145	Needle-Nose Combination Pliers	1		
			87 01 150	KNIPEX Cobra®, Hightech Water Pump Pliers	1		
00 19 72 LE	070191	Belt pouch fo	uch for two pliers up to 160 mm length, empty				

Cable tie cutting set

Safety first: remove the cable tie without damaging the insulation

- For reliable removal of cable harnesses, e.g. in the aerospace industry
- > Pliers wrench with special laser shearing for a good hold: grip, compress or loosen the head of the cable tie, all without cutting it
- > Precision electronics diagonal cutter with rounded pliers head: for lowrisk cutting of cable ties in confined spaces or when the cable tie head cannot be held; also suitable for cutting hard wires up to \emptyset 0.7 mm



The cable tie can be safely gripped and compressed with the laser-tooled jaws



All edges on the pliers head are specially rounded – unintentional damage to the insulation is avoided



00 19 72 V01

Article No.	EAN 4003773-				Number	۲ <mark>۵</mark>		
00 19 72 V01	070832		Cable tie cutting	set, 2 parts		350		
			86 03 150 S02	Pliers Wrench	1			
		\Box	79 02 125 S1	Precision Electronics Diagonal Cutter	1			
00 19 72 LE	070191	Belt pouch	for two pliers up to 1	vo pliers up to 160 mm length, empty				

Case for Electronics Pliers

Ideal for precision mechanical work: precision tools in a practical bag

> Dimensions, closed (W x H x D): 215 x 160 x 50 mm

00 20 16

7 parts, contains 6 electronics pliers and one pair of precision tweezers; case made of hard-wearing polyester fabric, pliers are held by elastic band, zippered

00 20 16 P

6 parts, contains 6 precision electronics pliers; case made of hardwearing polyester fabric, pliers are held by elastic band, zippered

00 20 16 P ESD

6 parts, contains 6 ESD precision electronics pliers, electrically discharging version; case made of hard-wearing polyester fabric, pliers are held by elastic band, zippered

00 20 17

6 parts, contains 6 ESD electronics pliers, electrically discharging version; case made of hard-wearing polyester fabric, pliers are held by elastic band, zippered

00 20 18

8 parts, contains 2 electronics pliers and 6 electronics screwdrivers; practical storage box, shock-resistant plastic, with foam insert

00 20 18 ESD

8 parts, contains 2 electronics pliers and 6 electronics screwdrivers, ESD electrically discharging version; practical storage box, shockresistant plastic, with foam insert



00 20 16



00 20 16 P







00 20 17



00 20 18

00 20 18 ESD

Article No.	EAN 4003773-	Contents	ے'ک g
00 20 16	022619	35 12 115 / 35 22 115 / 35 32 115 / 64 32 120 / 77 02 115 / 77 42 115 / 92 34 36	720
00 20 16 P	063223	34 12 130 / 34 22 130 / 34 32 130 / 79 02 120 / 79 02 120 / 79 02 125 / 79 42 125	575
00 20 16 P ESD	063230	34 12 130 ESD / 34 22 130 ESD / 34 32 130 ESD / 79 02 120 ESD / 79 02 125 ESD / 79 42 125 ESD	585
00 20 17	031222	35 12 115 ESD / 35 22 115 ESD / 35 42 115 ESD / 64 32 120 ESD / 77 02 115 ESD / 77 32 115 ESD	695
00 20 18	033073	35 22 115 / 77 02 115 / screw drivers 0,4 x 2,5 / 0,5 x 3,0 / 0,6 x 3,5 / 0,8 x 4,0 / PH0 / PH1	460
00 20 18 ESD	051848	35 22 115 ESD / 77 02 115 ESD / screw drivers 0,4 x 2,5 / 0,5 x 3,0 / 0,6 x 3,5 / 0,8 x 4,0 / PH0 / PH1	465

Pliers Sets

Ideally stored and versatile: plier sets in matching foam insert for workbench and workshop trolley

- > In a foam tray for workbenches and tool trolleys
- > Clearly organised storage of tools
- > Precisely-sized recesses for holding the pliers
- > Foam tray dimensions (W x H x D): 335 x 165 x 33 mm
- > Material: two colour, closed pore foam



00 20 01 V09 Pliers Set "SRZ II"



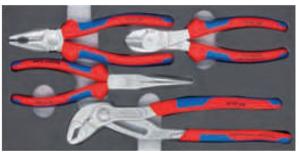
00 20 01 VO2 Pliers Set "SRZ"



00 20 01 V15 Pliers Set "Basic"



00 20 01 V16 Pliers Set "Automotive"



00 20 01 V17 Pliers Set "Basic Chrome"

Article No.	EAN 4003773-				Number	۲۵ g
00 20 01 V02	069652		Pliers Set "S	RZ", six precision circlip pliers in a foam tray		915
		C2	48 11 J1		1	
		0	48 11 J2	Precision Circlip Pliers for internal circlips in bore holes	1	
		() <u>⊀</u> 90°	48 21 J21		1	
		23 AAAA	49 11 A1		1	
		ÖMM	49 11 A2	Precision Circlip Pliers for external circlips on shafts	1	
		© MM <u>∡</u> 90°	49 21 A21		1	
00 20 01 V09	073291		Pliers Set "S	RZ II", four precision circlip pliers in a foam tray		820
		O	48 11 J2		1	
		() <u>⊀9</u> 0°	48 21 J21	Precision Circlip Pliers for internal circlips in bore holes	1	
		ÖMM	49 11 A2		1	
		Ö MM <u>∡</u> 90°	49 21 A21	Precision Circlip Pliers for external circlips on shafts	1	
00 20 01 V15	081586		Pliers Set "E	Basic", four pliers in a foam tray		1121
			03 02 180	Combination Pliers	1	
		$\Theta \blacksquare \blacksquare$	26 12 200	Snipe Nose Side Cutting Pliers (Stork Beak Pliers)	1	
			74 02 180	High Leverage Diagonal Cutter	1	
			87 01 250	KNIPEX Cobra®, Hightech Water Pump Pliers	1	
00 20 01 V16	081593		Pliers Set "A	utomotive", four pliers in a foam tray		850
			08 21 145	Needle-Nose Combination Pliers	1	1
			74 01 180	High Leverage Diagonal Cutter	1	
		Θ	28 71 280		1	1
		⊖ IIII ∡45°	28 81 280	Long Reach Needle Nose Pliers with transverse profiles	1]
00 20 01 V17	081944		Pliers Set "E	Basic Chrom", four pliers in a foam tray		1140
			03 05 180	Combination Pliers	1	
		$\Theta \blacksquare \blacksquare \blacksquare$	26 15 200	Snipe Nose Side Cutting Pliers (Stork Beak Pliers)	1	
		P1	74 05 180	High Leverage Diagonal Cutter	1	
			87 05 250	KNIPEX Cobra®, Hightech Water Pump Pliers	1	

Precision Circlip Pliers Set

- > Attractive sales packaging with Euro standard perforation
- > Contains common Precision Circlip Pliers for highest requirements
- > Sturdy plastic packaging, also suitable for storage of the pliers





00 20 03 SB

00 20 04 SB

Article No.	EAN 4003773-				Style	Capacity Ø mm	Tips Ø mm	Quantity	ے لے g
00 20 03 SB	050100		Precision C	irclip Pliers Set					685
		OFI	48 11 J1	Precision Circlip Pliers, for internal		12 - 25	1,3	1	
			48 11 J2	circlips in bore holes	stars in but size a	19 - 60	1,8	1	
			49 11 A1	Precision Circlip Pliers, for external	straight tips	10 - 25	1,3	1	
		ÖTIM	49 11 A2	circlips on shafts		19 - 60	1,8	1	
00 20 04 SB 062417	062417		Precision C	cision Circlip Pliers Set					127
		CNNNN	48 11 J1	Precision Circlip Pliers, for internal		12 - 25	1,3	1	
		OT	4 8 11 J2	circlips in bore holes	stus in bat time	19 - 60	1,8	1	
			49 11 A1	Precision Circlip Pliers, for external	straight tips	10 - 25	1,3	1	
		ÖTIM	49 11 A2	circlips on shafts		19 - 60	1,8	1	
			48 21 J11	Precision Circlip Pliers, for internal		12 - 25	1,3	1	
		♥ ♥♥ ₹90°	48 21 J21	circlips in bore holes	1.1.0	19 - 60	1,8	1	
	Ű ES MM	49 21 A11	Precision Circlip Pliers, for external	angled tips	12 - 25	1,3	1		
			49 21 A21	circlips on shafts		19 - 60	1,8	1	

Set of Circlip Pliers

- > Attractive sales packaging with Euro standard perforation
- > Contains common Circlip Pliers for internal and external circlips
- > Sturdy plastic packaging, also suitable for storage of the pliers





00 20 03 V02

00 20 04 V01

Article No.	EAN 4003773-				Style	Capacity Ø mm	Tips Ø mm	Quantity	۲ _۵ ع	
00 20 03 V02	077640		Set of Circl	ip Pliers						
		0	44 11 J1	Circlip Pliers, for internal		12 - 25	1,3	1		
		0	44 11 J2	circlips in bore holes		19 - 60	1,8	1		
		23	46 11 A1	Circlip Pliers, for external	straight tips	10 - 25	1,3	1		
		0	46 11 A2	circlips on shafts		19 - 60	1,8	1		
00 20 04 V01	077633		Set of Circl	ip Pliers	'	- <u>-</u>			890	
		0	44 11 J1	circlips in bore holes		12 - 25	1,3	1		
		0	44 11 J2			19 - 60	1,8	1		
		29	46 11 A1		straight tips	10 - 25	1,3	1		
		0	46 11 A2	circlips on shafts		19 - 60	1,8	1		
		(°) /00°	44 21 J11	Circlip Pliers, for internal		12 - 25	1,3	1		
		_⊖ <u>⊀</u> 90°	44 21 J21	circlips in bore holes		19 - 60	1,8	1		
		(h) /00%	46 21 A11	Circlip Pliers, for external	angled tips	10 - 25	1,3	1		
		Ö <u>∡9</u> 0°	46 21 A21	circlips on shafts		19 - 60	1,8	1		

Extension sets Electro

Extension set "Electro 1"

Amplify your tool range with 10 additional brand tools

KNIPEX

- > KNIPEX TwinKey®
- > VDE High Leverage Diagonal Cutter 200 mm
- > VDE Snipe Nose Side Cutting Pliers 160 mm, bent
- > VDE Cable shears 165 mm
- > KNIPEX Cobra® 180 mm
- > Universal Stripping Tool
- > VDE screwdrivers PlusMinus PZ/S #1
- > VDE screwdrivers PlusMinus PZ/S #2

Stabila

> Pocket Electric

Others

> Wooden folding rule 2 m

Extension set "Electro 2"

Amplify your tool range with 13 additional brand tools

KNIPEX

- > KNIPEX TwinKey®
- > VDE High Leverage Diagonal Cutter 200 mm
- > VDE Snipe Nose Side Cutting Pliers 160 mm, bent
- > VDE Cable shears 165 mm
- > KNIPEX Cobra® 180 mm
- > KNIPEX ErgoStrip $^{\mbox{\tiny (B)}}$ Universal Stripping Tool
- > VDE Electronic Super Knips®
- > Automatic Insulation Stripper
- > Crimping Pliers for wire ferrules
- > VDE screwdrivers PlusMinus PZ/S #1> VDE screwdrivers PlusMinus PZ/S #2
 - VDE SCIEWUIIVEIS FIUSIVIIIIUS FZ/3 #

Stabila

> Pocket Electric

Others

> Wooden folding rule 2 m



00 20 90 V01



00 20 90 V02

Artikel-Nr.	EAN 4003773-	۲۵ g	Artikel-Nr.	EAN 4003773-	۲ g
00 20 90 V01	084693	1415	00 20 90 V02	084709	1915

Tool Kits

- > Tools in a plastic deep-drawn tray with transparent lid
- > Attractive sales packaging with Euro standard perforation
- > Dimensions (W x H x D): 170 x 370 x 40 mm









00 20 09 V01 Bestseller-Set Pliers with polished heads; handles with non-slip plastic coating and with two-colour multi-component grips

	EAN						52
Article No.	4003773-				Quantity	Nominal size	g
00 20 09 V01	073994	Bestseller-Se	t				950
		03 02 180	Combination Pliers		1	180 mm	
		70 02 160	Diagonal Cutter	Knipex	1	160 mm	
		87 01 250	KNIPEX Cobra [®] , Hightech Water Pump Pliers		1	250 mm	

00 20 09 V02 Cobra® Set Pliers grey atramentized; handles with non-slip plastic coating

Article No.	EAN 4003773-				Quantity	Nominal size	۵ ^۲ ۵ g
00 20 09 V02	074793	Cobra® Set					1220
		87 01 180		Kniney	1	180 mm	
		87 01 250	KNIPEX Cobra®, Hightech Water Pump Pliers	Knipex	1	250 mm	
		87 01 300	nighteen water rump rifers		1	300 mm	

00 20 09 V03 Alligator® Set Pliers with polished heads;

handles with non-slip plastic coating

Article No.	EAN 4003773-					Quantity	Nominal size	۵ ^۲ ۵ g
00 20 09 V03	074809		Alligator® Se	et				1195
			88 01 180		Kniney	1	180 mm	
			88 01 250	KNIPEX Alligator [®] , Water Pump Pliers	Knipex	1	250 mm	
		_	88 01 300	water rump mers		1	300 mm	

00 20 10 Power Set Pliers with polished heads and plastic coated handles

Article No.	EAN 4003773-				Quantity	Nominal size	۲ <mark>۵</mark>
00 20 10	010388	Power Set					990
		02 01 180	High Leverage Combination Pliers		1	180 mm	
		74 01 160	High Leverage Diagonal Cutter	Knipex	1	160 mm	
		87 01 250	KNIPEX Cobra [®] , Hightech Water Pump Pliers		1	250 mm	







00 20 11 Assembly Set

Pliers with two-colour multi-component grips

Article No.	EAN 4003773-					Quantity	Nominal size	۵'۵ g
00 20 11	012405		Assembly Se	t				810
			03 02 180	Combination Pliers		1	180 mm	
		⊖■■►	26 12 200	Snipe Nose Side Cutting Pliers (Stork Beak Pliers)	Knipex	1	200 mm	
			70 02 160	Diagonal Cutter	1	1	160 mm	

00 20 11 V01 Assembly Set Pliers chrome-plated, with two-colour multi-component grips

Article No.	EAN 4003773-					Quantity	Nominal size	۲ <mark>۵</mark>
00 20 11 V01	064091		Assembly Se	t				874
			03 05 180	Combination Pliers		1	180 mm	
		⊖■₽	26 15 200	Snipe Nose Side Cutting Pliers (Stork Beak Pliers)	Knipex	1	200 mm	
			74 05 180	High Leverage Diagonal Cutter		1	160 mm	

00 20 12 Electro Set

Pliers VDE-tested in conformance with DIN EN/IEC 60900 1000V, pliers chrome-plated, handles with multi-component grips

Article No.	EAN 4003773-					Quantity	Nominal size	۵ ^۲ ۵ g
00 20 12	012412		Electro Set					960
		会 1000 V ⊘≧ ∰	03 06 180	Combination Pliers		1	180 mm	
		★ 1000 V ④ ← ■	26 16 200	Snipe Nose Side Cutting Pliers (Stork Beak Pliers)	Knipex	1	200 mm	
		<u></u> £ 1000 V . ▲	70 06 160	Diagonal Cutter		1	160 mm	



00 20 13 VDE Tool Set

Tools VDE-tested in conformance to DIN EN/IEC 60900 1000V, pliers chrome-plated, handles with multi-component covers; with 3 WERA screwdrivers

Article No.	EAN 4003773-					Quantity	Nominal size	۵'۵ g
00 20 13	043287		VDE Tool Set				850	
		≜ 1000 V @@ ⊖ আ∭ ►◀	26 16 200	Snipe Nose Side Cutting Pliers (Stork Beak Pliers)	Knipex	1	200 mm	
		桧 1000 V ℰℰ	70 06 160	Diagonal Cutter		1	160 mm	
		🚖 1000 V 🖄 🚰 🖨	006110	Screwdrivers for slotted		1	0,6 x 3,5 x 100 mm	
			006120 sc	screws, 160i	Wera	1	1,0 x 5,5 x 125 mm	
		£ 1000 V 🖄 🚭 🗘	006154	Screwdrivers for cross recessed Phillips [®] screws, 162i PH	vveld	1	PH2 x 100 mm	

Tool Kits

- > Tools in a plastic deep-drawn tray with transparent lid
- > Attractive sales packaging with Euro standard perforation
- > Dimensions (W x H x D): 170 x 370 x 40 mm



00 20 12 V01 VDE Screwdriver Set Tip burnished; insulating multi-component handle, VDE-tested

Article No.	EAN 4003773-					Quantity	Nominal size	۵'۵ g
00 20 12 V01	075523		VDE Screw	driver Set				610
			98 20 30	Screwdrivers for slotted screws	Knipex	1	3,0 mm	
		会 1000 V	98 20 40			1	4,0 mm	
		AA	98 20 55			1	5,5 x 125 mm	
			98 20 65			1	6,5 mm	
		<u> </u>	98 24 01	Screwdriver for cross recessed screws, Phillips®		1	PH1	
		@@ ♥	98 24 02 s			1	PH2	



00 20 12 V02 VDE Screwdriver Set Slotted / Phillips® Tip burnished; insulating multi-component handle,

VDE-tested

Article No.	EAN 4003773-					Quantity	Nominal size	۵ ^۲ ۵ g
00 20 12 V02	082538		VDE Screwdriv	er Set Slotted / Phillips®				550
			98 20 30	Screwdrivers for slotted screws		1	3,0 mm	
		<u></u> £ 1000 V	98 20 40 SL			1	4,0 mm	
		@€ ●	98 20 55 SL	Screwdriver (Slim) for slotted screws	Knipex	1	5,5 mm	
			98 20 65 SL	_		1	6,5 mm	
		A 1000 V	98 24 01 SL	Screwdriver (Slim) for cross-recessed		1	PH1	
		@ € ()	98 24 02 SL	screws, Phillips®		1	PH2	



Tip burnished; insulating multi-component handle, VDE-tested

Article No.	EAN 4003773-					Quantity	Nominal size	۲۵ g
00 20 12 V03	082545		VDE Screwdriv	VDE Screwdriver Set Phillips [®] / Pozidriv [®]				500
			98 24 00	Screwdriver for cross recessed screws, Phillips®		1	PH0	
		会 1000 V	98 24 01 SL		Knipex	1	PH1	
		@€ 0	98 24 02 SL			1	PH2	
		_	98 25 00	Screwdriver for cross recessed screws, Pozidriv®		1	PZO	
		<u></u> £ 1000 V	98 25 01 SL	Screwdriver (Slim) for cross-recessed screws, Pozidriv®		1	PZ1	
		@@ ≎	98 25 02 SL			1	PZ2	

52

g

510

Nominal

size

2,5 mm

4,0 mm

PH/S 1

PH/S 2

PZ/S 1

PZ/S 2

Quantity

1

1

1

1

1

1

Knipex



00 20 12 V04 VDE Screwdriver Set Slotted / Phillips [®] / Pozidriv [®]	
Tip burnished: insulating multi-component handle	

VDE-tested

00 20 12 V05 VDE Screwdriver Set PlusMinus / Slotted

≙ 1000 V ▲ 🗲 🗢

<u></u> £ 1000 V

`````

会1000 V

ā 🔁 🗘

Tip burnished; insulating multi-component handle,

EAN

4003773-

082569

VDE-tested

Article No.

00 20 12 V05

| Article No.  | EAN<br>4003773- |                                        |                                                     |                                                         |        | Quantity | Nominal<br>size | ے ا<br>g |
|--------------|-----------------|----------------------------------------|-----------------------------------------------------|---------------------------------------------------------|--------|----------|-----------------|----------|
| 00 20 12 V04 | 082552          | 082552<br><b>☆1000 V</b><br><b>☆</b> € | VDE Screwdriver Set Slotted / Phillips® / Pozidriv® |                                                         |        |          |                 | 50       |
|              |                 |                                        | 98 20 25                                            | Screwdrivers for slotted screws                         |        | 1        | 2,5 mm          |          |
|              |                 |                                        | 98 20 40 SL                                         | Screwdriver (Slim) for slotted screws                   |        | 1        | 4,0 mm          |          |
|              |                 | <u> </u>                               | 98 24 01 SL                                         | Screwdriver (Slim) for cross-recessed screws, Phillips® | Knipex | 1        | PH1             |          |
|              |                 | A 1000 V                               | 98 24 02 SL                                         | Screwdriver (Slim) for cross-recessed screws, Phillips® |        | 1        | PH2             |          |
|              |                 |                                        | 98 25 01 SL                                         | 01 SL Screwdriver (Slim) for cross-recessed             |        | 1        | PZ1             |          |
|              |                 | ▲ 🖨 🗘                                  | 98 25 02 SL                                         | screws, Pozidriv®                                       |        | 1        | PZ2             |          |



## **Pliers Sets**

00 31 20 V01 > With KNIPEX Cobra® 87 01 180 and 87 01 250

00 31 20 V02 > With KNIPEX Alligator® 88 01 180 and 88 01 250

00 31 20 V03 > With Pliers Wrench 86 03 180 and KNIPEX Cobra® 87 01 250





VDE Screwdriver Set PlusMinus / Slotted

Screwdrivers for slotted screws

Screwdriver (Slim) for slotted screws

(Slim) PlusMinus screwdriver, Phillips®

(Slim) PlusMinus screwdriver, Pozidriv®

98 20 25

98 20 40 SL

98 24 01 SLS

98 24 02 SLS

98 25 01 SLS

98 25 02 SLS



00 31 20 V01

00 31 20 V02

00 31 20 V03

|              | EAN      |        |           |                                                      |          | 55  |
|--------------|----------|--------|-----------|------------------------------------------------------|----------|-----|
| Article No.  | 4003773- |        |           |                                                      | Quantity | g   |
| 00 31 20 V01 | 077251   |        |           | Set of pliers                                        |          | 555 |
|              | 022015   |        | 87 01 180 | KNIPEX Cobra® Hightech Water Pump Pliers             | 1        | 170 |
|              | 022022   |        | 87 01 250 | KNIPEX Cobra <sup>®</sup> Hightech Water Pump Pliers | 1        | 335 |
| 00 31 20 V02 | 077268   |        |           | Set of pliers                                        |          | 535 |
|              | 035480   |        | 88 01 180 | KNIPEX Alligator® Water Pump Pliers                  | 1        | 180 |
|              | 022992   |        | 88 01 250 | KNIPEX Alligator® Water Pump Pliers                  | 1        | 331 |
| 00 31 20 V03 | 078104   |        |           | Set of pliers                                        |          | 620 |
|              | 035466   | $\Box$ | 86 03 180 | Pliers Wrench Pliers and a wrench in a single tool   | 1        | 230 |
|              | 022022   |        | 87 01 250 | KNIPEX Cobra® Hightech Water Pump Pliers             | 1        | 335 |

### 283

## Tool Box "RED" Electro Set 1

# Versatile use: the small four-piece VDE tool range in a handy case

> High quality, versatile, shock-resistant plastic case
 > Foam insert with honeycomb structure for variable equipment
 > Dimensions, exterior (W x H x D): 340 x 56 x 275 mm

### 00 20 15

Pliers VDE-tested according to DIN EN/IEC 60900 1000V

00 21 15 LE Box without tools



| Article No.            | EAN<br>4003773- |                      |                            |                                                    | Number | ۲ <mark>۵</mark> |
|------------------------|-----------------|----------------------|----------------------------|----------------------------------------------------|--------|------------------|
| <b>00 20 15</b> 024804 |                 | Tool Box "RE         | ED" Electro-Set 1, 4 parts |                                                    | 1430   |                  |
|                        |                 | 🛧 1000 V 🖄 🚰 💷 🚺 ► 🗨 | 03 06 180                  | Combination Pliers                                 | 1      |                  |
|                        |                 | £ 1000 V 🖄 🚰 MM      | 11 06 160                  | Insulation Stripper                                | 1      |                  |
|                        |                 |                      | 26 16 200                  | Snipe Nose Side Cutting Pliers (Stork Beak Pliers) | 1      |                  |
|                        |                 | 🛧 1000 V 🖄 🚭 🕨 🗨     | 70 06 160                  | Diagonal Cutter                                    | 1      |                  |
| 00 21 15 LE            | 045175          |                      | Tool Box "RE               | D", empty                                          |        | 530              |

# Tool Box "RED" Electro Set 2

# All you need, safely stored: seven-piece VDE tool set for electrical installation

> High quality, versatile, shock-resistant plastic case

> Foam insert with honeycomb structure for variable equipment

> Dimensions, exterior (W x H x D): 340 x 56 x 275 mm

### 00 21 15

All pliers and screwdrivers except Water Pump Pliers VDE-tested according to DIN EN/IEC 60900

00 21 15 LE Box without tools



00 21 15

|             | EAN                    |                              |                                                                 |                                       |      |             |                       | 52   |
|-------------|------------------------|------------------------------|-----------------------------------------------------------------|---------------------------------------|------|-------------|-----------------------|------|
| Article No. | 4003773-               |                              |                                                                 |                                       |      | Number      | Nominal size          | g    |
| 00 21 15    | 042853                 |                              | Tool Box "RE                                                    | D" Electro-Set 2, 7 parts             |      |             |                       | 1520 |
|             |                        | £ 1000 V 🏤 🗗 💌               | 03 06 180                                                       | Combination Pliers                    |      | 1           | 180 mm                |      |
|             |                        | <u>A</u> 1000 V 🏝 🖨 ⊖ আ∭ ► ◄ | 26 16 200 Snipe Nose Side Cutting Pliers<br>(Stork Beak Pliers) | KNIPEX                                | 1    | 200 mm      |                       |      |
|             | <u></u> 2 1000 V @ 🗲 🗩 | £ 1000 V @€ ▶٩               | 70 06 160                                                       | Diagonal Cutter                       |      | 1           | 160 mm                |      |
|             |                        |                              | 88 03 180 KNIPEX Alligator <sup>®</sup> , Water Pump Pliers     |                                       | 1    | 180 mm      |                       |      |
|             |                        | A 1000 V 🖄 🖨 🖨               |                                                                 | Screwdrivers for slotted screws. 160i |      | 1           | 0.4 x 2.5 x 80<br>mm  |      |
|             |                        |                              | screwarivers for slotted screws, four                           |                                       | Wera | 1           | 0.8 x 4.0 x 100<br>mm | _    |
|             |                        | 🚖 1000 V 🖄 🥌 🗘               | Screwdrivers for cross recessed Phillips® screws, 162i Ph       | Н                                     | 1    | PH1 x 80 mm |                       |      |
| 00 21 15 LE | 045175                 |                              | Tool Box "RE                                                    | D", empty                             |      |             |                       | 530  |

## Tool Box "SRZ" Precision Circlip Pliers

## Well fixed, safely transported: Extensive range in handy case

- > High-quality, impact-resistant plastic case
- > Contains common Precision Circlip Pliers for highest requirements
- > Precisely-sized recesses for holding the pliers
- > Clearly organised storage of tools
- > Dimensions, exterior (W x H x D): 260 x 80 x 210 mm



| Article No. | EAN<br>4003773- |                   |             |                                                             | Style         | Capacity<br>Ø mm | Tips<br>Ø mm | Number | ۲ <mark>۵</mark> |  |  |  |  |  |
|-------------|-----------------|-------------------|-------------|-------------------------------------------------------------|---------------|------------------|--------------|--------|------------------|--|--|--|--|--|
| 00 21 25    | 050131          |                   | Tool Box "S | Tool Box "SRZ", Precision Circlip Pliers                    |               |                  |              |        |                  |  |  |  |  |  |
|             |                 | C 3               | 48 11 J1    | Precision Circlip Pliers for internal                       |               | 12 - 25          | 1.3          | 1      |                  |  |  |  |  |  |
|             |                 | 0                 | 48 11 J2    | circlips in bore holes                                      | straight ting | 19 - 60          | 1.8          | 1      |                  |  |  |  |  |  |
|             |                 | C 1111            | 49 11 A1    | Precision Circlip Pliers for external                       | straight tips | 10 - 25          | 1.3          | 1      |                  |  |  |  |  |  |
|             | 0 MM            | 07000             | 49 11 A2    | circlips on shafts                                          |               | 19 - 60          | 1.8          | 1      |                  |  |  |  |  |  |
|             |                 | ల <u>⊀</u> 90°    | 48 21 J11   | Precision Circlip Pliers for external                       |               | 12 - 25          | 1.3          | 1      |                  |  |  |  |  |  |
|             |                 |                   | 48 21 J21   | circlips on shafts                                          | angled ting   | 19 - 60          | 1.8          | 1      |                  |  |  |  |  |  |
|             |                 | © MM <u>∡</u> 90° | 49 21 A11   | Precision Circlip Pliers for external<br>circlips on shafts | angled tips   | 10 - 25          | 1.3          | 1      |                  |  |  |  |  |  |
|             | OW              |                   | 49 21 A21   | circlips on shafts                                          |               | 19 - 60          | 1.8          | 1      |                  |  |  |  |  |  |



**"Basic"** Solid basis for tool equipment

KNIPEX

Tool boards made from dirt-repellent

PP twin-wall sheets

# Tool Case "Basic"

## A classic: everything well sorted

- Two metal flip locks and a three-digit combination lock for secure locking of the cover
- ► Label field with two stickers for individual labelling
- Max. payload: 15 kg
- ► Volume: 27 litres
- > Strong, ergonomic handle
- > Rugged design made of ABS material, black
- > Circumferential aluminium frame
- > Metal hinges
- > Document compartment in the cover
- > Two removable tool boards made from dirtrepellent PP twin-wall sheets with 20 tool pockets
- > Base tray, can be fixed by press button, height 50 mm, can be subdivided by flexible inserts; cover plate with 13 large compartments
- > With a total of 41 inserting options



Label field with two stickers for individual labelling

Two metal flip locks



00 21 05 LE Case supplied without tools

Base tray with separable inserts



|             | EAN      | Dimension exterior (interior) width mm | Dimension exterior (interior) height mm | Dimension exterior (interior) depth mm | 52   |
|-------------|----------|----------------------------------------|-----------------------------------------|----------------------------------------|------|
| Article No. | 4003773- | mm                                     | mm                                      | mm                                     | g    |
| 00 21 05 LE | 056904   | 465 (440)                              | 410 (350)                               | 200 (180)                              | 4000 |

**"BIG Basic Move"** Mobile companion when travelling

KNIPEN

Tool boards made from dirt-repellent

PP twin-wall sheets

# Tool Case "BIG Basic Move"

### Classic all-rounder with trolley function for working on the move

- ▶ Telescopic handle set in the base as well as two external, smooth-running skater wheels
- ▶ Two metal flip locks and a three-digit combination lock for secure locking of the cover
- Label field with two stickers for individual labelling
- Max. payload: 20 kg
- Volume: 33 litres
- > Strong, ergonomic handle
- > Rugged design made of ABS material, black
- > Circumferential aluminium frame
- > Metal hinges
- > Document compartment in the cover
- > Two removable tool boards made of dirt-repellent PP twin-wall sheets with 31 tool pockets
- First tool board with ten tool pockets and an elastic strap on the cover side and eleven narrow and one large tool pocket on the base side
- Second tool board with ten narrow tool pockets and an elastic strap on the base side and document compartment on the cover side
- > Base tray, can be fixed by press button, height 70 mm, can be subdivided by flexible inserts; cover plate with 14 large compartments
- > With a total of 54 inserting options



Base tray with separable inserts

telescopic handle

Extendable

Smooth-running skater wheels

00 21 06 LE Case supplied without tools

|             | EAN      | Dimension exterior (interior) width mm | Dimension exterior (interior) height mm | Dimension exterior (interior) depth mm | 52   |
|-------------|----------|----------------------------------------|-----------------------------------------|----------------------------------------|------|
| Article No. | 4003773- | mm                                     | mm                                      | mm                                     | g    |
| 00 21 06 LE | 057512   | 515 (480)                              | 430 (350)                               | 280 (200)                              | 6200 |

## Tool Case "BIG Basic Move" Electro

## The basic mobile tool kit for electricians

- Equipped with six KNIPEX tools, a total of 24 brand tools, partly VDE-tested according to DIN EN 60900
- > For further benefits of the case, see page 289



**Content overview** 

| 03 06 180<br>KNIPEX |   | 98 52<br>KNIPEX    | Rennsteig   | <br>Ruthe    |  |
|---------------------|---|--------------------|-------------|--------------|--|
| 25 06 160<br>KNIPEX | ~ | <b>8 x</b><br>Wera | <br>Stabila | <br>Ruthe    |  |
| 11 06 160<br>KNIPEX |   | Wera               | <br>Picard  | maurerfreund |  |
| 70 06 160<br>KNIPEX |   | Rennsteig          | Picard      | Haunstätter  |  |
| 16 20 165           |   |                    |             |              |  |

16 20 165 KNIPEX

| Article No.     | EAN<br>4003773- |                            |              |                                              |              | Number | Nominal size       | ۲۵<br>g |
|-----------------|-----------------|----------------------------|--------------|----------------------------------------------|--------------|--------|--------------------|---------|
| 00 21 06 HLS    | 052296          |                            | Tool Case "B | IG Basic Move" Electro, 24 parts             |              |        |                    | 9610    |
|                 |                 | 🚖 1000 V 🖄 🚭 💷 🕅 🕨 🗨       | 03 06 180    | Combination Pliers                           |              | 1      | 180 mm             |         |
|                 |                 | £ 1000 V @€ 💷 ► 🕇 ⊖        | 25 06 160    | Snipe Nose Side Cutting Pliers, Radio Pliers |              | 1      | 160 mm             |         |
|                 |                 | <b>≙ 1000 V ﷺ</b> ₩₩       | 11 06 160    | Insulation Stripper                          | KNIPEX       | 1      | 160 mm             |         |
|                 |                 | <b>☆ 1000 V 🖄 🚭 ► &lt;</b> | 70 06 160    | Diagonal Cutter                              | NIVIFEA      | 1      | 160 mm             |         |
|                 |                 | <b>☆ 1000 V 🖄 🚭 ► &lt;</b> | 16 20 165    | Dismantling Tool                             |              | 1      | 165 mm             |         |
|                 |                 | $\Box$                     | 98 52        | Cable Knife                                  |              | 1      | 185 mm             |         |
|                 |                 |                            |              |                                              |              | 1      | 0.4 x 2.5 x 80 mm  |         |
|                 |                 | A 1000 V 🖄 🖨 🖨             |              | Screwdrivers for slotted screws,             |              | 1      | 0.6 x 3.5 x 100 mm |         |
|                 |                 |                            |              | 1160i                                        |              | 1      | 1.0 x 5.5 x 125 mm |         |
|                 |                 |                            |              |                                              |              | 1      | 1.2 x 6.5 x 150 mm |         |
|                 |                 | A 1000 V 🖄 🖨 🗘             |              | Screwdrivers for cross recessed Phillips®    | Wera         | 1      | PH1 x 80 mm        |         |
|                 |                 |                            |              | screws, 1162i                                |              | 1      | PH2 x 100 mm       |         |
|                 |                 | 🛧 1000 V 🖄 🖨 🛟             |              | Screwdrivers for cross recessed Pozidriv®    |              | 1      | PZ1 x 80 mm        |         |
|                 |                 |                            |              | screws, 1165i                                |              | 1      | PZ2 x 100 mm       |         |
|                 |                 | •                          |              | Voltage detector, single-pole, 247           |              | 1      | 0.5 x 3.0 x 70 mm  |         |
|                 |                 |                            |              | Mason's Chisels                              | Poppetaig    | 1      | 250 mm             |         |
|                 |                 |                            |              | Electrician's Chisel                         | Rennsteig    | 1      | 250 x 10 mm        |         |
|                 |                 |                            |              | Carpenter's pencil                           | Stabila      | 1      |                    |         |
|                 |                 |                            |              | Plaster bowl                                 | Picard       | 1      | 127 x 94           |         |
| 00 21 06 HLS 0! |                 |                            |              | Flat brush                                   | FICALU       | 1      | 40 mm              |         |
|                 |                 |                            |              | Locksmith's hammer                           | Ruthe        | 1      | 300 g              |         |
|                 |                 |                            |              | Sledge hammer                                | Nutrie       | 1      | 1000 g             |         |
|                 |                 |                            |              | Painter's spatula, wood, high quality        | maurerfreund | 1      | 40 mm              |         |
|                 |                 |                            |              | PUK <sup>®</sup> Junior Hacksaw              | Haunstätter  | 1      | 150 x 240 mm       |         |
| 00 21 06 LE     | 057512          |                            | Tool Case "B | IG Basic Move", empty                        |              |        |                    | 6200    |

## Tool Case "BIG Basic Move" Electro Plus

# Premium equipment for professional electricians

- Equipped with 26 KNIPEX tools, a total of 68 brand tools, partly VDE-tested according to DIN EN 60900
- > For further benefits of the case, see page 289



|            | EAN<br>4003773- |                          |                                                              |                                                          |           | Number             | Nominal size       | ے<br>ا |
|------------|-----------------|--------------------------|--------------------------------------------------------------|----------------------------------------------------------|-----------|--------------------|--------------------|--------|
|            | 086260          |                          | Tool Case "BIG                                               | G Basic Move" Electro Plus, 68 parts                     |           |                    |                    | 106    |
|            |                 |                          | 00 11 01                                                     | KNIPEX TwinKey <sup>®</sup> , Control Cabinet Key        |           | 1                  |                    |        |
|            |                 |                          | 12 52 195                                                    | KNIPEX PreciStrip16                                      | -         | 1                  | 195 mm             |        |
|            |                 | MM                       | 16 95 01 SB                                                  | KNIPEX ErgoStrip <sup>®</sup> , Universal Stripping Tool | -         | 1                  | 135 mm             |        |
|            |                 | <u>≜</u> 1000 V @ € আ 1  | 08 26 145                                                    | Needle-Nose Combination Pliers                           | _         | 1                  | 145 mm             |        |
|            |                 | ▲ 1000 V ▲ 🖨 🤇 💷         | 13 86 200                                                    | Pliers for Electrical Installation                       | _         | 1                  | 200 mm             |        |
|            |                 |                          | 26 26 200                                                    | Snipe Nose Side Cutting Pliers                           |           | 1                  | 200 mm             | 1      |
|            |                 | <u> </u>                 | 70 06 160                                                    | Diagonal Cutter                                          | -         | 1                  | 160 mm             | -      |
|            |                 | <u></u> £ 1000 V @ € ► 4 | 74 06 200                                                    | High Leverage Diagonal Cutter                            | -         | 1                  | 200 mm             |        |
|            |                 | MM ★ 1000 V ▲            | 78 06 125                                                    | Electronic Super Knips <sup>®</sup> VDE                  |           | 1                  | 125 mm             |        |
|            |                 | 87 01 180                | KNIPEX Cobra®, Hightech Water Pump Pliers                    |                                                          | 1         | 180 mm             |                    |        |
|            | <b>™</b>        | 97 53 18                 | KNIPEX Twistor16 <sup>®</sup> Self-Adjusting Crimping Pliers |                                                          | 1         | 478 mm             |                    |        |
|            | 🛧 1000 V 🖄 🚰 🖨  | 98 20 25                 | Screwdrivers for slotted screws                              | KNIPEX                                                   | 1         | 2,5 mm             |                    |        |
|            |                 | 98 20 35 SL              |                                                              |                                                          | 1         | 0,6 x 3,5 x 100 mm |                    |        |
|            | 🚖 1000 V 🖄 🚭 🖨  | 98 20 40 SL              | Screwdriver (Slim) for slotted screws                        |                                                          | 1         | 0,8 x 4 x 100 mm   |                    |        |
|            |                 |                          | 98 20 55 SL                                                  |                                                          |           | 1                  | 1,0 x 5,5 x 125 mm | 1      |
|            |                 |                          | 98 24 01 SL                                                  |                                                          |           | 1                  | PH 1 x 80          |        |
|            |                 |                          | 98 24 02 SL                                                  |                                                          |           | 1                  | PH 2 x 100         |        |
|            |                 | 1000 V 🏤 🖨 🗘             | 98 25 01 SL                                                  | Screwdriver (Slim) for cross-recessed screws Phillips®   |           | 1                  | PZ 1 x 80          |        |
|            |                 |                          | 98 25 02 SL                                                  | -                                                        |           | 1                  | PZ 2 x 100         |        |
|            |                 |                          | 98 25 01 SLS                                                 |                                                          |           | 1                  | 187 mm             |        |
|            |                 | 🛧 1000 V 🖄 🖨 🛟           | 98 25 02 SLS                                                 | Screwdriver (Slim) PlusMinus Pozidriv®                   |           | 1                  | 212 mm             | 1      |
|            |                 |                          | 98 26 10                                                     |                                                          |           | 1                  | 160 mm TX 10       | 1      |
|            |                 | -                        | 98 26 15                                                     |                                                          |           | 1                  | 185 mm TX 15       | 1      |
|            |                 | A 1000 V 🖄 🖨 🗘           | 98 26 20                                                     | Screwdriver for Torx <sup>®</sup> screws                 |           | 1                  | 185 mm TX 20       | 1      |
|            |                 | -                        | 98 26 25                                                     |                                                          |           | 1                  | 185 mm TX 25       | 1      |
|            |                 |                          | 98 26 30                                                     |                                                          |           | 1                  | 210 mm TX 30       | 1      |
|            |                 |                          |                                                              | Folding ruler Stabila series 400                         |           |                    | 185 mm             | 1      |
|            |                 |                          |                                                              | Pocket Electric mini spirit level                        | Stabila   | 1                  | 430 mm             | -      |
|            |                 |                          |                                                              | Spirit level type 70 Electric                            |           | 1                  |                    |        |
|            |                 |                          |                                                              | Locksmith's hammer, 300 g                                | Picard    | 1                  | 290 mm             |        |
|            |                 |                          |                                                              | Electrician's Chisel                                     | Rennsteig | 1                  | 250 mm             | 1      |
|            |                 |                          |                                                              | 8100 SA 8 Zyklop set of metal ratchets, 28 parts         |           | 1                  |                    | 1      |
|            |                 |                          |                                                              | Set of hex key wrenches                                  | Wera      | 1                  | 1,5 - 10 mm        |        |
| 0 21 06 LE | 057512          |                          | Tool Case "Bl                                                | G Basic Move", empty                                     |           |                    |                    | 62     |

## Tool Case "BIG Basic Move" Mechanics

# All-round equipment for professional mechanics

- Equipped with 11 KNIPEX tools, a total of 79 brand tools, partly VDE-tested according to DIN EN 60900
- > For further benefits of the case, see page 289



| Article No. | EAN<br>4003773- |                                                            |               |                                                          |           | Number | Nominal<br>size | ے<br>ع |
|-------------|-----------------|------------------------------------------------------------|---------------|----------------------------------------------------------|-----------|--------|-----------------|--------|
| 00 21 06 M  | 086222          |                                                            | Tool Case "BI | G Basic Move" Mechanics, 79 parts                        |           |        |                 | 128    |
|             |                 |                                                            | 00 11 01      | KNIPEX TwinKey®, Control Cabinet Key                     |           | 1      |                 |        |
|             |                 |                                                            | 70 02 160     | Diagonal Cutter                                          |           | 1      | 160 mm          |        |
|             |                 |                                                            | 74 02 200     | High Leverage Diagonal Cutter                            |           | 1      | 200 mm          |        |
|             |                 |                                                            | 71 31 200     | KNIPEX CoBolt <sup>®</sup> Compact Bolt Cutters          |           | 1      | 200 mm          |        |
|             |                 | $\Theta$                                                   | 26 12 200     | Snipe Nose Side Cutting Pliers                           |           | 1      | 200 mm          |        |
|             |                 | $\ominus$ IIII $\blacktriangleright$ $\cancel{40^{\circ}}$ | 26 22 200     | Snipe Nose Side Cutting Pliers                           | KNIPEX    | 1      | 200 mm          |        |
|             |                 |                                                            | 78 61 140     | Electronic Super Knips® XL                               |           | 1      | 140 mm          |        |
|             |                 | MM                                                         | 16 95 01 SB   | KNIPEX ErgoStrip <sup>®</sup> , Universal Stripping Tool |           | 1      | 135 mm          |        |
|             |                 |                                                            | 16 20 50 SB   | Folding Knife for Electricians                           |           | 1      | 120 mm          |        |
|             |                 | $\Box$                                                     | 86 01 250     | Pliers Wrench                                            |           | 1      | 250 mm          |        |
|             |                 |                                                            | 87 01 250     | KNIPEX Cobra®, Hightech Water Pump Pliers                |           | 1      | 250 mm          |        |
|             |                 | 0                                                          |               | 350 PH Screwdriver for Phillips screws                   |           | 1      | PH1 x 80 mm     |        |
|             |                 | 0                                                          |               | 917 SPH Screwdriver for Phillips screws                  |           | 1      | PH2 x 100 mm    |        |
|             |                 | 0                                                          |               | 350 PH Screwdriver for Phillips screws                   |           | 1      | PH3 x 150 mm    |        |
|             |                 | 0                                                          |               | 355 PZ Screwdriver for Phillips screws                   |           | 1      | PZ1 x 80 mm     |        |
|             |                 | 0                                                          |               | 355 PZ Screwdriver for Phillips screws                   |           | 1      | PZ2 x 100 mm    |        |
|             |                 | 0                                                          |               | 355 PZ Screwdriver for Phillips screws                   |           | 1      | PZ3 x 150 mm    |        |
|             |                 | •                                                          |               | 335 Screwdriver for slotted screws                       |           | 1      | 3,5 x 100 mm    |        |
|             |                 | •                                                          |               | 335 Screwdriver for slotted screws                       |           | 1      | 4,0 x 100 mm    |        |
|             |                 | •                                                          |               | 932 A Screwdriver for slotted screws                     |           | 1      | 5,5 x 100 mm    |        |
|             |                 | $\mathbf{O} \bullet \mathbf{O}$                            |               | 932 A Screwdriver for slotted screws                     | Wera      | 1      | 7,0 x 125 mm    |        |
|             |                 | $\bigcirc \bigcirc \bigcirc \bigcirc$                      |               | 932 A Screwdriver for slotted screws                     | vvera     | 1      | 7,0 x 125 mm    |        |
|             |                 | 0                                                          |               | 367 Screwdriver for TORX <sup>®</sup> screws             |           | 1      | TX 10x80        |        |
|             |                 | 0                                                          |               | 367 Screwdriver for TORX <sup>®</sup> screws             |           | 1      | TX 15x80        | 1      |
|             |                 | 0                                                          |               | 367 Screwdriver for TORX <sup>®</sup> screws             |           | 1      | TX 20 x 100     |        |
|             |                 | 0                                                          |               | 367 Screwdriver for TORX <sup>®</sup> screws             |           | 1      | TX 25 x 100     |        |
|             |                 | 0                                                          |               | 367 Screwdriver for TORX <sup>®</sup> screws             |           | 1      | TX 30 x 115     |        |
|             |                 | 0                                                          |               | 2050 Screwdriver for Phillips screws                     |           | 1      | PH0 x 60 mm     |        |
|             |                 | 0                                                          |               | 2050 Screwdriver for Phillips screws                     |           | 1      | PH00 x 60 mm    |        |
|             |                 | •                                                          |               | 2035 Screwdriver for slotted screws                      |           | 1      | 1,5 x 60 mm     |        |
|             |                 | •                                                          |               | 2035 Screwdriver for slotted screws                      |           | 1      | 2,5 x 80 mm     |        |
|             |                 |                                                            |               | Locksmith's hammer                                       | Picard    | 1      | 300 g           |        |
|             |                 |                                                            |               | 8100 SA 8 Zyklop set of metal ratchets, 28 parts         |           | 1      | 1/4"            |        |
|             |                 |                                                            |               | Set of hex key wrenches                                  | Wera      | 1      | 1,5 - 10 mm     |        |
|             |                 |                                                            |               | Wooden folding rule                                      | KNIPEX    | 1      | 185 mm          |        |
|             |                 |                                                            |               | Spirit level type 70 Electric                            | Stabila   | 1      | 430 mm          |        |
|             |                 |                                                            |               | Combination wrench set                                   | Неусо     | 1      |                 |        |
|             |                 |                                                            |               | Set of parallel pin punches                              |           | 1      |                 |        |
|             |                 |                                                            |               | Automatic centre punch                                   | Rennsteig | 1      | 130 mm          |        |
| 00 21 06 LE | 057512          |                                                            | Tool Case "BI | G Basic Move", empty                                     |           |        |                 | (      |

## Tool Case "BIG Basic Move" Sanitary

# The basic mobile tool kit for sanitary, heating and air-conditioning professionals

- Equipped with four KNIPEX tools, a total of 31 brand tools, partly VDE-tested according to DIN EN 60900
- > For further benefits of the case, see page 289

**Content overview** 



00 21 06 HK S

### **2 x** Wera 70 06 160 Heyco Rennsteig KNIPEX 86 03 250 Ruthe Haunstätter Stabila ·O·H.--KNIPEX 88 01 250 Stabila Picard Неусо KNIPEX 0 --88 01 300 Picard Picard 9 parts KNIPEX Wera BUTTON & Nölle Picard Zenten 3 x Wera

| Article No.   | EAN<br>4003773- |                |                |                                                   |             | Number | Nominal size                | ۵'۵<br>g |
|---------------|-----------------|----------------|----------------|---------------------------------------------------|-------------|--------|-----------------------------|----------|
| 00 21 06 HK S | 070825          |                | Tool Case "Blo | G Basic Move" Sanitary, 31 parts                  |             |        |                             | 9800     |
|               |                 | <u> </u>       | 70 06 160      | Diagonal Cutter                                   |             | 1      | 160 mm                      |          |
|               |                 | $\Box$         | 86 03 250      | Pliers Wrench                                     | KNIPEX      | 1      | 250 mm                      |          |
|               |                 |                | 88 01 250      | KNIPEX Alligator <sup>®</sup> , Water Pump Pliers | KNIPEA      | 1      | 250 mm                      |          |
|               |                 |                | 88 01 300      | KNIFEA Alligator -, Water Fullip Fliers           |             | 1      | 300 mm                      |          |
|               |                 |                |                |                                                   |             | 1      | 0.6 x 3.5 x 100 mm          |          |
|               |                 | <u> </u>       |                | Screwdrivers for slotted screws,<br>1160i         |             | 1      | 1.0 x 5.5 x 125 mm          |          |
|               |                 |                |                | 11001                                             | Wera        | 1      | 1.2 x 6.5 x 150 mm          |          |
|               |                 | A 1000 V 🖄 🖨 🗘 |                | Screwdrivers for cross recessed Phillips®         | vvela       | 1      | PH1 x 80 mm                 |          |
|               |                 |                |                | screws, 1162i                                     |             | 1      | PH2 x 100 mm                |          |
|               |                 |                |                | Set of hex key wrenches                           |             | 9      | 1.5 - 10 mm                 |          |
|               |                 |                |                | Locksmith's hammer                                | Ruthe       | 1      | 300 g                       |          |
|               |                 |                |                | Flat brush                                        | Picard      | 1      | 40 mm                       |          |
|               |                 |                |                | Carpenter's pencil                                | FICAIU      | 1      | 24 cm                       |          |
|               |                 |                |                | Plasterer's bowl                                  | Nölle       | 1      | 125 x 90 mm                 |          |
|               |                 |                |                | Professional utility knife, zinc die casting      | Неусо       | 1      | 170 mm; 18 mm               |          |
|               |                 |                |                | Express key                                       | пеусо       | 1      | 17 x 19 mm; M 10            |          |
|               |                 |                |                | PUK <sup>®</sup> Junior Hacksaw                   | Haunstätter | 1      | 150 x 240 mm                |          |
|               |                 |                |                | Steel wire brush, 5-row                           | Picard      | 1      | 280 mm                      |          |
|               |                 |                |                | Painter's spatula                                 | Picaru      | 1      | 40 mm                       |          |
|               |                 |                |                | Electrician's Chisel                              | Rennsteig   | 1      | 250 x 10 mm                 |          |
|               |                 |                |                | Spirit level type 70                              | Stabila     | 1      | 30 cm                       |          |
|               |                 |                |                | Wooden folding rule type 607N                     | Stabila     | 1      | 2 m                         |          |
| 00 21 06 LE   |                 |                |                | Pipe cutter                                       | Zenten      | 1      | 3 - 35 mm / 1/8 - 1<br>1/2" |          |
| 00 21 06 LE   | 057512          |                | Tool Case "Bl  | G Basic Move", empty                              |             |        |                             | 6200     |

# **"BIG Twin"** Everything at a glance

-

9

# Can be opened on both sides, generous storage space with numerous tool pockets Three-digit combination lock Label field with two stickers for individual labelling Large KNIPEX logo on the cover Two metal flip locks OUT Two deposit recesses in the case cover "BIG Twin Move" additionally with trolley function Smooth-running Extendable telescopic skater wheels handle

The design for the "BIG Twin" series

### 295

## Tool Case "BIG Twin Move"

# For quick access: everything at a glance, even on the move

- Telescopic handle set in the base as well as two external, smooth-running skater wheels
- Free-standing in all opening positions thanks to snap-in cover holders with hinge mechanism on both sides, angle freely adjustable
- Can be opened from one or both sides; bottom and lid can be opened independently of each other
- Label field with two stickers for individual labelling
- Max. payload: 30 kg
- ► Volume: 44 litres
- > Rugged design made of ABS material, black
- > Circumferential aluminium frame with securely mounted, sturdy centre wall that can be fitted on both sides, with versatile inserting options due to elasticated loops and twelve small pockets
- > Metal hinges
- > Three-digit combination lock for secure locking of the case
- > Two metal flip locks each for fixing the cover and the base
- > Removable document compartment and removable tool boards made from dirt-repellent PP twin-wall sheets with 13 tool pockets
- > Base tray, can be fixed by press button, height 58 mm, can be subdivided by flexible inserts; cover plate with 13 large compartments
- > With a total of 95 inserting options

Everything at hand thanks to intelligent layout

**00 21 41 LE** Case supplied without tools





Smooth-running skater wheels



Base tray with handy, robust aluminium dividing bars



Extendable telescopic

handle

"BIG Twin Move RED" see page 300

|             | EAN      | Dimension exterior (interior) width mm | Dimension exterior (interior) height mm | Dimension exterior (interior) depth mm | 52   |
|-------------|----------|----------------------------------------|-----------------------------------------|----------------------------------------|------|
| Article No. | 4003773- | mm                                     | mm                                      | mm                                     | g    |
| 00 21 41 LE | 071549   | 520 (490)                              | 435 (370)                               | 290 (110/100)                          | 8600 |

### **Tool Case** "BIG Twin Move" Electro **Everything under control,** even when on the move: extensive range of tools for the professional electrician ▶ Equipped with 14 KNIPEX tools, a total of 63 brand tools, partly VDE-tested according to DIN EN 60900 00 21 41 > For further benefits of the case, see page 296 **Content overview** 00 11 01 26 26 200 97 53 04 Wera KNIPEX KNIPEX KNIPEX C and a second second second 98 52 KNIPEX 08 26 145 70 06 160 Picard KNIPEX KNIPEX **2 x** 98 2X XX SL 12 42 195 74 06 200 Rennsteig KNIPEX KNIPEX KNIPEX 13 86 200 86 03 180 16 parts Stabila KNIPEX KNIPEX Wera · · · · M 0 16 95 01 SB 87 01 180 28 parts Stabila -KNIPEX KNIPEX Wera

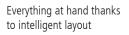
| Article No. | EAN<br>4003773- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |                                                             |           | Number | Nominal size          | ۵'ک<br>g |
|-------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------|-----------|--------|-----------------------|----------|
| 00 21 41    | 082118          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Tool Case "BIG | Twin Move" Electro, 63 parts                                |           |        |                       | 13250    |
|             |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 00 11 01       | KNIPEX TwinKey <sup>®</sup> , Control Cabinet Key           |           | 1      |                       |          |
|             |                 | A 1000 V A P I I I I I I I I I I I I I I I I I I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 08 26 145      | Needle-Nose Combination Pliers                              |           | 1      | 145 mm                |          |
|             |                 | MM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 12 42 195      | KNIPEX MultiStrip 10, Automatic Insulation Stripper         |           | 1      | 195 mm                |          |
|             |                 | ≜1000V @@ ⊂ □ আ≣<br>■                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 13 86 200      | 13 86 200 Pliers for Electrical Installation                |           | 1      | 200 mm                |          |
|             |                 | MM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 16 95 01 SB    | KNIPEX ErgoStrip <sup>®</sup> , Universal Stripping Tool    |           | 1      | 135 mm                |          |
|             |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 26 26 200      | Snipe Nose Side Cutting Pliers, (Stork Beak Pliers)         |           | 1      | 200 mm                |          |
|             |                 | 🛧 1000 V 🖄 🚰 🗲 🕇                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 70 06 160      | Diagonal Cutter                                             | KNIPEX    | 1      | 160 mm                |          |
|             |                 | A 1000 V 🖄 🚰 🗲                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 74 06 200      | High Leverage Diagonal Cutter                               |           | 1      | 200 mm                |          |
|             |                 | $\Box$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 86 03 180      | Pliers Wrench                                               |           | 1      | 180 mm                |          |
|             |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 87 01 180      | KNIPEX Cobra®, Hightech Water Pump Pliers                   |           | 1      | 180 mm                |          |
|             |                 | MM 🖾                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 97 53 04       | Self-Adjusting Crimping Pliers for wire end sleeves         |           | 1      | 180 mm                | _        |
|             |                 | £ 1000 V 🖄 🚰                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 98 52          | Cable Knife                                                 |           | 1      | 185 mm                |          |
|             |                 | <u> </u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 98 25 01 SL    | Screwdrivers (Slim) for cross-recessed screws,<br>Pozidriv® |           | 1      | PZ 1 x 80 mm          |          |
|             |                 | £ 1000 V 🏝 🖨 🖨                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 98 20 35 SL    | Screwdriver (Slim) for slotted screws                       |           | 1      | 0,6 x<br>3.5 x 100 mm |          |
|             |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                | Kraftform Kompakt VDE 16 extra slim 1, 16 parts             |           | 1      |                       |          |
|             |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                | Zyklop set of metal ratchets, 8100 SA 8, 28 parts           | Wera      | 1      | 1/4"                  |          |
|             |                 | 000       ▲ 1000 V ▲● □□□ ► 08         MM       12         ▲ 1000 V ▲● □□□ □□       13         □ ● □□       13         MM       16         ▲ 1000 V ▲● □□       26         ▲ 1000 V ▲● ● □□       70         ▲ 1000 V ▲● ● ●       70         ▲ 1000 V ▲● ● ●       74         □       ▲ 1000 V ▲● ●       74         □       ▲ 1000 V ▲● ●       98         ▲ 1000 V ▲● ●       98       ▲ 1000 V ▲● ●       98         ▲ 1000 V ▲● ●       98       ▲ 1000 V ▲● ●       98         ▲ 1000 V ▲● ●       98       ▲ 1000 V ▲● ●       98         ▲ 1000 V ▲● ●       ●       98       ▲ 1000 V ▲●       ● |                | Joker open-end wrench                                       |           | 1      | 10 x 13 mm            |          |
|             |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                | Locksmith's hammer                                          | Picard    | 1      | 300 g                 |          |
|             |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                | Electrician's Chisel                                        | Rennsteig | 1      | 250 x 10 mm           |          |
|             |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                | Spirit level type 70 Electric                               | Stabila   | 1      | 430 mm                |          |
| 00 21 41 LE |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                | Pocket Electric mini spirit level                           | Jiabila   | 1      | 68 mm                 |          |
| 00 21 41 LE | 071549          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Tool Case "BIG | Twin Move", empty                                           |           |        |                       | 8600     |

**TOOL CASES** 

# Tool Case "BIG Twin"

# For quick access: everything at a glance

- Free-standing in all opening positions thanks to snap-in cover holders with hinge mechanism on both sides, angle freely adjustable
- Can be opened from one or both sides; bottom and lid can be opened independently of each other
- Label field with two stickers for individual labelling
- Max. payload: 25 kg
- ► Volume: 44 litres
- > Rugged design made of ABS material, black
- > Circumferential aluminium frame with securely mounted, sturdy centre wall that can be fitted on both sides, with versatile inserting options due to elasticated loops and twelve small pockets
- > Metal hinges
- > Three-digit combination lock for secure locking of the case
- > Removable document compartment and removable tool boards made from dirt-repellent PP twin-wall sheets with 13 tool pockets
- > Base tray, can be fixed by press button, height 58 mm, can be subdivided by flexible inserts; cover plate with 13 large compartments
- > With a total of 95 inserting options



**00 21 42 LE** Case supplied without tools



Base tray with handy, robust aluminium dividing bars





|             | EAN      | Dimension exterior (interior) width mm | Dimension exterior (interior) height mm | Dimension exterior (interior) depth mm | 52   |
|-------------|----------|----------------------------------------|-----------------------------------------|----------------------------------------|------|
| Article No. | 4003773- | mm                                     | mm                                      | mm                                     | g    |
| 00 21 42 LE | 084211   | 520 (490)                              | 435 (370)                               | 250 (110/100)                          | 7200 |

## Tool Case "BIG Twin" Electro

# Always at hand: extensive range of tools for the professional electrician

- Equipped with 14 KNIPEX tools, a total of 63 brand tools, partly VDE-tested according to DIN EN 60900
- > For further benefits of the case, see page 298



### **Content overview**

| 00 11 01<br>KNIPEX    | 26 26 200<br>KNIPEX |     | 97 53 04<br>KNIPEX                  | Wera          | <b>&gt;</b> |
|-----------------------|---------------------|-----|-------------------------------------|---------------|-------------|
| 08 26 145<br>KNIPEX   | 70 06 160<br>KNIPEX |     | 98 52<br>KNIPEX                     | Picard        |             |
| 12 42 195<br>KNIPEX   | 74 06 200<br>KNIPEX |     | <b>2 x</b><br>98 2X XX SL<br>KNIPEX | <br>Rennsteig |             |
| 13 86 200<br>KNIPEX   | 86 03 180<br>KNIPEX | 118 | <b>16 parts</b><br>Wera             | Stabila       |             |
| 16 95 01 SB<br>KNIPEX | 87 01 180<br>KNIPEX |     | <b>28 parts</b><br>Wera             | Stabila       | 1           |

| Article No. | EAN<br>4003773- |                                        |                |                                                                      |           | Number | Nominal size          | ے<br>ا |
|-------------|-----------------|----------------------------------------|----------------|----------------------------------------------------------------------|-----------|--------|-----------------------|--------|
| 00 21 42    | 081968          |                                        | Tool Case "BIG | Twin" Electro, 63 parts                                              |           |        |                       | 114    |
|             |                 |                                        | 00 11 01       | KNIPEX TwinKey <sup>®</sup> , Control Cabinet Key                    |           | 1      |                       |        |
|             |                 | 🛧 1000 V 🖄 🚭 💷 🚺 ► 🗨                   | 08 26 145      | Needle-Nose Combination Pliers                                       |           | 1      | 145 mm                |        |
|             |                 | MM                                     | 12 42 195      | KNIPEX MultiStrip 10, Automatic Insulation Stripper                  |           | 1      | 195 mm                |        |
|             |                 | ≙1000 V @@ ⊂ ⊂ আ                       | 13 86 200      | Pliers for Electrical Installation                                   |           | 1      | 200 mm                |        |
|             |                 | MM                                     | 16 95 01 SB    | KNIPEX ErgoStrip <sup>®</sup> , Universal Stripping Tool             |           | 1      | 135 mm                |        |
|             |                 | A 1000 V A P                           | 26 26 200      | Snipe Nose Side Cutting Pliers, (Stork Beak Pliers)                  |           | 1      | 200 mm                |        |
|             |                 | 🛧 1000 V 🖄 🚭 🗲 💙                       | 70 06 160      | Diagonal Cutter                                                      | KNIPEX    | 1      | 160 mm                |        |
|             |                 | <b>☆ 1000 V 🖄 🚭 ▶ ◄</b>                | 74 06 200      | High Leverage Diagonal Cutter                                        |           | 1      | 200 mm                |        |
|             |                 | $\Box$                                 | 86 03 180      | Pliers Wrench                                                        |           | 1      | 180 mm                | -      |
|             |                 | /₩/\ ◘<br>☆ 1000 V @@<br>☆ 1000 V @@ ۞ | 87 01 180      | KNIPEX Cobra <sup>®</sup> , Hightech Water Pump Pliers               |           | 1      | 180 mm                |        |
|             |                 |                                        | 97 53 04       | Self-Adjusting Crimping Pliers for wire end sleeves                  |           | 1      | 180 mm                |        |
|             |                 |                                        | 98 52          | Cable Knife                                                          |           | 1      | 185 mm                |        |
|             |                 |                                        | 98 25 01 SL    | Screwdrivers (Slim) for cross-recessed screws, Pozidriv <sup>®</sup> |           | 1      | PZ 1 x 80 mm          |        |
|             |                 |                                        | 98 20 35 SL    | Screwdriver (Slim) for slotted screws                                |           | 1      | 0,6 x<br>3.5 x 100 mm |        |
|             |                 |                                        |                | Kraftform Kompakt VDE 16 extra slim 1, 16 parts                      |           | 1      |                       |        |
|             |                 |                                        |                | Zyklop set of metal ratchets, 8100 SA 8, 28 parts                    | Wera      | 1      | 1/4"                  |        |
|             |                 |                                        |                | Joker open-end wrench                                                |           | 1      | 10 x 13 mm            |        |
|             |                 |                                        |                | Locksmith's hammer                                                   | Picard    | 1      | 300 g                 |        |
|             |                 |                                        |                | Electrician's Chisel                                                 | Rennsteig | 1      | 250 x 10 mm           |        |
|             |                 |                                        |                | Spirit level type 70 Electric                                        | Stabila   | 1      | 430 mm                |        |
|             |                 |                                        |                | Pocket Electric mini spirit level                                    | Stabila   | 1      | 68 mm                 |        |
| 00 21 42 LE | 084211          |                                        | Tool Case "BIG | Twin", empty                                                         |           |        |                       | 72     |



## Tool Case "BIG Twin Move RED" Electro Competence

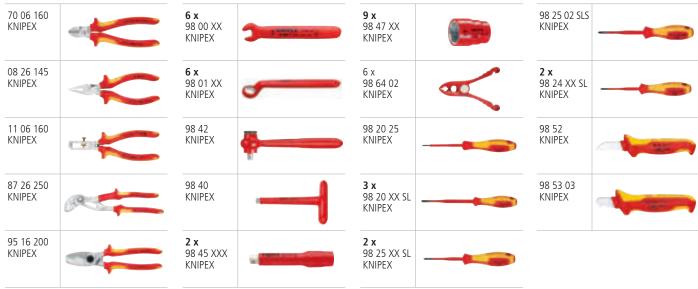
# Better safe than sorry: 47 insulated brand tools for work on electrical systems

- Hard-wearing ABS material construction, red; equipped with a range of KNIPEX tools for working on electrical systems, tested according to DIN EN/IEC 60900
- Telescopic handle set in the base as well as two external, smooth-running skater wheels
- Free-standing in all opening positions thanks to snap-in cover holders with hinge mechanism on both sides, angle freely adjustable
- Can be opened from one or both sides; bottom and lid can be opened independently of each other
- Max. payload: 30 kg
- ► Volume: 44 litres
- > Label field with two stickers for individual labelling
- > Circumferential aluminium frame with securely mounted, sturdy centre wall that can be fitted on both sides, with versatile inserting options due to elasticated loops and twelve small pockets
- > Metal hinges
- > Three-digit combination lock for secure locking of the case
- > Two metal flip locks each for fixing the cover and the base
- > Removable document compartment and removable tool boards made from dirt-repellent PP twin-wall sheets with 13 tool pockets
- > Base tray, can be fixed by press button, height 58 mm, can be subdivided by flexible inserts; cover plate with six large compartments
- > Dimensions, exterior (W x H x D): 520 x 435 x 290 mm Dimensions, interior (W x H x D): 490 x 370 x 110/100 mm
- > IEC 60900, DIN EN 60900
- > With a total of 95 inserting options





#### **Content overview**



| Article No.     | EAN<br>4003773- |                           |                        |                                                                  | Number | Nominal size                | ۵۵<br>g |
|-----------------|-----------------|---------------------------|------------------------|------------------------------------------------------------------|--------|-----------------------------|---------|
| 98 99 15        | 084341          |                           | Tool Case "BIG         | G Twin Move RED", 47 parts                                       |        |                             | 1545    |
|                 |                 | 🛧 1000 V 🖄 🚭 💷 🕪 🗨        | 08 26 145              | Needle-Nose Combination Pliers                                   | 1      | 145 mm                      |         |
|                 |                 | <b>会 1000 V @</b>         | 11 06 160              | Insulation Stripper                                              | 1      | 160 mm                      |         |
| Article No. 400 |                 | 🛧 1000 V 🖄 🚰 🗲            | 70 06 160              | Diagonal Cutter                                                  | 1      | 160 mm                      |         |
|                 |                 | <u> </u>                  | 87 26 250              | KNIPEX Cobra®, Hightech Water Pump Pliers                        | 1      | 250 mm                      |         |
|                 |                 | <b>会 1000 V @ 🚭 😵</b>     | 95 16 200              | Cable Shears with twin cutting edge                              | 1      | 200 mm                      |         |
|                 |                 |                           | 98 00 10               |                                                                  | 1      | 10 mm                       |         |
|                 |                 |                           | 98 00 13               |                                                                  | 1      | 13 mm                       |         |
|                 |                 | _                         | 98 00 14               |                                                                  | 1      | 14 mm                       | 1       |
|                 |                 |                           | 98 00 17               | Open-end wrench                                                  | 1      | 17 mm                       |         |
|                 |                 |                           | 98 00 19               | _                                                                | 1      | 19 mm                       |         |
|                 |                 |                           | 98 00 22               |                                                                  |        | 22 mm                       |         |
|                 |                 | <u></u> £ 1000 V <b>○</b> | 98 01 10               |                                                                  | 1      | 10 mm                       |         |
|                 |                 |                           | 98 01 13               | -                                                                | 1      | 13 mm                       |         |
|                 |                 |                           | 98 01 14               | Box Wrench                                                       | 1      | 14 mm                       |         |
|                 |                 |                           | 98 01 17               |                                                                  | 1      | 17 mm                       |         |
|                 |                 | _                         | 98 01 19               | _                                                                | 1      | 19 mm                       | -       |
|                 |                 | _                         | 98 01 22               |                                                                  |        | 22 mm                       |         |
|                 |                 |                           | 98 20 25               | Screwdrivers for slotted screws                                  | 1      | 0.4 x 2.5 x 75 mm           |         |
|                 |                 |                           | 98 20 40 SL            |                                                                  | 1      | 0.8 x 4.0 x 100 mm          |         |
|                 |                 | 🛧 1000 V 🖄 🚭 🖨            | 98 20 55 SL            | Screwdriver (Slim) for slotted screws                            | 1      | 1.0 x 5.5 x 125 mm          |         |
|                 |                 |                           | 98 20 65 SL            | Sector and the solution solution solutions                       | 1      | 1.2 x 6.5 x 150 mm          |         |
|                 |                 |                           | 98 25 01 SL            |                                                                  | 1      | PH1 x 80 mm                 | -       |
|                 |                 | 🛧 1000 V 🖄 🚭 🗘            | 98 25 07 SL            | Screwdrivers (Slim) for cross-recessed screws, Pozidriv®         |        | PH2 x 100 mm                | -       |
|                 |                 | <u>À</u> 1000 V 🆄 🗲 🛟     | 98 25 02 SLS           | Screwdrivers (Slim) Plus/Minus Pozidriv®                         | 1      | PZ/S 2 x 100                | -       |
|                 |                 |                           | 98 24 01 SL            | Screwarivers (Silm) Plus/Minus Poziariv®                         |        | PH1 x 80 mm                 | -       |
|                 |                 | 🚖 1000 V 🖄 🛃 🗘            | 98 24 01 SL            | Screwdrivers (Slim) for cross-recessed screws Phillips®          | 1      | PH2 x 100 mm                | -       |
|                 |                 | <u> </u>                  | 98 40                  | T-Handle Drive with driving square 1/2"                          | 1      | 165 mm                      | -       |
|                 |                 | <u>A</u> 1000 V 1⁄2       | 98 42                  | Reversible Ratchet with driving square 1/2"                      | 1      | 1/2"                        | -       |
|                 |                 | <u>X</u> 1000 V 72        | 98 45 125              | Reversible Ratchet with unving square 1/2                        | 1      | 1/2"                        |         |
|                 |                 | 🛧 1000 V 🌠 🕲              | 98 45 125<br>98 45 250 | Extension Bar with internal/external square 1/2"                 | 1      | 1/2                         | -       |
|                 |                 |                           | 98 47 10               |                                                                  | 1      | 1/2" / 10 mm                | -       |
|                 |                 |                           | 98 47 10               |                                                                  | 1      | 1/2 / 10 mm                 |         |
|                 |                 | _                         | 98 47 12               | _                                                                | 1      | 1/2" / 12 mm                | -       |
|                 |                 |                           | 98 47 12<br>98 47 13   |                                                                  | 1      | 1/2 / 12 mm<br>1/2" / 13 mm | -       |
|                 |                 | <b>≙ 1000 V ()</b> (3)    | 98 47 13<br>98 47 14   | Hexagon Socket for hexagonal screws<br>with internal square 1/2" | 1      | 1/2 / 13 mm                 | -       |
|                 |                 |                           | 98 47 14               | with internal square 1/2"                                        | 1      | 1/2 / 14 mm                 | -       |
|                 |                 |                           |                        | _                                                                |        |                             |         |
|                 |                 |                           | 98 47 19               |                                                                  | 1      | 1/2" / 19 mm                | -       |
|                 |                 |                           | 98 47 22               |                                                                  | 1      | 1/2" / 22 mm                | -       |
|                 |                 |                           | 98 47 24               |                                                                  | 1      | 1/2" / 24 mm                | -       |
|                 |                 | <b>会 1000 V @</b>         | 98 52                  | Cable Knife                                                      | 1      | 185 mm                      | _       |
|                 |                 |                           | 98 53 03               | Dismantling Knife for round cables                               | 1      | 155 mm                      | -       |
| 98 99 15 LE     | 084334          | \$1000V MM                | 98 64 02               | Insulating Clamp of plastic<br>Twin Move RED", empty             | 6      | 150 mm                      | 860     |

# **"Robust"** Optimum tool transport even under the toughest conditions

# Tool Case "Robust"

### The name says it all: ideal for outdoor use

- ► For the toughest conditions: Dust-tight, waterproof and temperature-resistant
- > Fit-to-fly case, made from impact-resistant polypropylene
- > Dustproof and watertight
- > Air pressure compensation valve
- > Temperature-resistant from -30°C until + 80°C
- > Padlock eyelets
- > Document compartment; tool boards made from dirt-repellent PP twin-wall sheets with tool pockets and straps
- > Lockable base tray can be individually divided using aluminium separator system
- > Ergonomic dual-component handle



Pressure valve for venting and name plate for individual labelling



Device for securing with a padlock (lock not included)



Document compartment



Aluminium separators for individual division of the base tray

#### The "Robust" cases compared:

|                                       |   | Number of inserting options | Litre<br>capacity | Max. payload<br>kg | Dimensions base<br>tray mm | Trolley<br>function |
|---------------------------------------|---|-----------------------------|-------------------|--------------------|----------------------------|---------------------|
| <b>"Robust23"</b><br>00 21 35 LE      |   | 49                          | 23                | 25                 | 470 x 370 x 190            | _                   |
| <b>"Robust34"</b><br>00 21 36 LE      | - | 93                          | 34                | 25                 | 510 x 419 x 215            | _                   |
| <b>"Robust45 Move"</b><br>00 21 37 LE |   | 147                         | 45                | 35                 | 609 x 428 x 263            | $\checkmark$        |



Also suitable as a standing or sitting aid



Case locking via robust flip locks



Secure fastening of the tool board prevents tools from falling out of the base

### Tool Case "Robust23" Electro

# Small and robust: handy case with tools for professional electricians

- Equipped with 25 brand tools, partly VDE-tested according to DIN EN 60900
- Max. payload: 25 kg
- ► Volume: 23 litres
- > Document compartment; tool boards made from dirt-repelling twin-wall PP sheets with space for 33 tool pockets and various tool straps
- > With a total of 49 inserting options
- > Base tray with aluminium separators
- > Dimensions, exterior (W x H x D): 470 x 370 x 190 mm Dimensions, interior (W x H x D): 437 x 307 x 172 mm

#### > For further benefits of the case, see page 303

**00 21 35 LE** Case supplied without tools



#### **Content overview**





With adjustable carrying strap and comfortable multi-component handle



00 21 35 LE – Case supplied without tools



| Article No. | EAN<br>4003773- |                                        |                |                                                        |         | Number | Nominal<br>size | ۲<br>ع |  |
|-------------|-----------------|----------------------------------------|----------------|--------------------------------------------------------|---------|--------|-----------------|--------|--|
| 00 21 35    | 084365          | Tool Case "Robust23" Electro, 25 parts |                |                                                        |         |        |                 |        |  |
|             |                 | MM                                     | 12 40 200      | Self-Adjusting Insulation Stripper                     |         | 1      | 200 mm          |        |  |
|             |                 |                                        | 13 86 200      | Pliers for Electrical Installation                     |         | 1      | 200 mm          |        |  |
|             |                 | MM                                     | 16 95 01 SB    | KNIPEX ErgoStrip <sup>®</sup> Universal Stripping Tool |         | 1      | 135 mm          |        |  |
|             |                 | <u>A</u> 1000 V A P ■                  |                | Diagonal Cutter                                        | KNIPEX  | 1      | 160 mm          |        |  |
|             |                 |                                        |                | KNIPEX Cobra <sup>®</sup> , Hightech Water Pump Pliers |         | 1      | 180 mm          |        |  |
|             |                 |                                        | 97 53 04       | Self-Adjusting Crimping Pliers for wire end sleeves    |         | 1      | 180 mm          |        |  |
|             |                 | <u> </u>                               | 98 52          | Cable Knife                                            |         | 1      | 190 mm          |        |  |
|             |                 |                                        |                | Kraftform Kompakt VDE 16 extra slim 1, 16 parts        | Wera    | 1      |                 |        |  |
|             |                 |                                        |                | Ruler Stabila Serie 400                                | Stabila | 1      | 185 mm          |        |  |
| 00 21 35 LE | 077596          |                                        | Tool Case "Rob | ust23", empty                                          |         |        |                 | 4800   |  |

### Tool Case "Robust34" Electro

# Medium-sized and robust: sturdy case with tools for professional electricians

- Equipped with 26 brand tools, partly VDE-tested according to DIN EN 60900
- Max. payload: 25 kg
- ► Volume: 34 litres
- > Document compartment; tool boards made from dirt-repelling twin-wall PP sheets with space for 38 tool pockets and various tool straps
- > With a total of 93 inserting options
- > Base tray with aluminium separators
- > Dimensions, exterior (W x H x D): 510 x 419 x 215 mm Dimensions, interior (W x H x D): 480 x 356 x 199 mm

#### > For further benefits of the case, see page 303

00 21 36 LE Case supplied without tools



#### **Content overview**

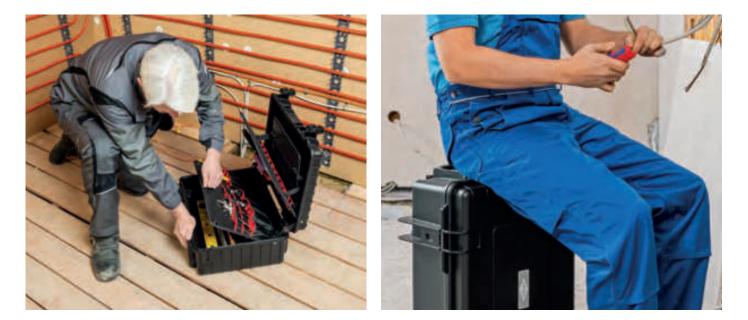




With adjustable carrying strap and comfortable multi-component handle



00 21 36 LE – Case supplied without tools



| Article No. | EAN<br>4003773- |                  |                |                                                                         |         | Number | Nominal<br>size | ۲۵<br>g |
|-------------|-----------------|------------------|----------------|-------------------------------------------------------------------------|---------|--------|-----------------|---------|
| 00 21 36    | 082583          |                  | Tool Case "Rob | oust34" Electro, 26 parts                                               |         |        |                 | 10000   |
|             |                 |                  | 00 11 01       | KNIPEX TwinKey <sup>®</sup> , Control Cabinet Key                       |         | 1      |                 |         |
|             |                 | ★ 1000 V ▲       | 08 26 145      | Needle-Nose Combination Pliers                                          |         | 1      | 145 mm          |         |
|             |                 | MM               | 12 40 200      | Self-Adjusting Insulation Stripper                                      |         | 1      | 200 mm          |         |
|             |                 | ★ 1000 V ▲       | 13 86 200      | Pliers for Electrical Installation                                      |         | 1      | 200 mm          |         |
|             |                 | MM               | 16 95 01 SB    | KNIPEX ErgoStrip <sup>®</sup> , Universal Stripping Tool                | KNIPEX  | 1      | 135 mm          |         |
|             |                 | 🚖 1000 V 🖄 🚭 🗲 🗨 | 70 06 160      | Diagonal Cutter                                                         |         | 1      | 160 mm          |         |
|             |                 |                  | 87 01 180      | KNIPEX Cobra <sup>®</sup> , Hightech Water Pump Pliers                  |         | 1      | 180 mm          | 1       |
|             |                 |                  | 97 53 04       | Self-Adjusting Crimping Pliers for wire end sleeves with lateral access |         | 1      | 180 mm          |         |
|             |                 | <u> </u>         | 98 52          | Cable Knife                                                             |         | 1      | 185 mm          |         |
|             |                 | £ 1000 V 🖄 🖨     |                | Kraftform Kompakt VDE 16 extra slim 1, 16 parts                         | Wera    | 1      |                 |         |
|             |                 |                  |                | Spirit level type 70 Electric                                           | Stabila | 1      | 430 mm          |         |
| 00 21 36 LE | 082576          |                  | Tool Case "Rob | pust34", empty                                                          |         |        |                 | 7100    |

## Tool Case "Robust45 Move" Electro

### Large and robust: travel case with a comprehensive range of tools for the mobile electrician

- Extensively equipped with 63 brand tools, partly VDE-tested according to DIN EN 60900
- Max. payload: 35 kg
- ► Volume: 45 litres
- > Gas pressure absorber in the hinge
- > Pneumatically cushioned lid
- > Document compartment; tool boards made from dirt-repelling twin-wall PP sheets with space for 46 tool pockets and various tool straps
- > With a total of 147 inserting options
- > Base tray with aluminium separators
- > Extendable telescopic handle for comfortable transport
- > Large smooth-running wheels
- > Dimensions, exterior (W x H x D): 609 x 428 x 263 mm Dimensions, interior (W x H x D): 540 x 364 x 229 mm
- > For further benefits of the case, see page 303

**00 21 37 LE** Case supplied without tools



With large smooth-running wheels

#### **Content overview**





Gas pressure absorber in the hinge: convenient opening of the lid, with no risk of injury from the case closing inadvertently



Extendable telescopic handle



Handles on left and right permit comfortable carrying with two people





With telescopic handle for comfortable transport - even on uneven terrain

| 002157 | LC - | Case | supplieu | without | LOOIS |
|--------|------|------|----------|---------|-------|
|        |      |      |          |         |       |

| Article No. | EAN<br>4003773- |                                    |                                 |                                                          |           | Number | Nominal<br>size       | ۵'۵<br>g |
|-------------|-----------------|------------------------------------|---------------------------------|----------------------------------------------------------|-----------|--------|-----------------------|----------|
| 00 21 37    | 082606          |                                    | Tool Case "Ro                   | bust45 Move" Electro, 63 parts                           |           |        |                       | 15000    |
|             |                 |                                    | 00 11 01                        | KNIPEX TwinKey <sup>®</sup> , Control Cabinet Key        |           | 1      |                       |          |
|             |                 | £ 1000 V @₽ 💷 ►                    | 08 26 145                       | Needle-Nose Combination Pliers                           |           | 1      | 145 mm                |          |
|             |                 | MM                                 | 12 42 195                       | KNIPEX MultiStrip 10, Automatic Insulation Stripper      |           | 1      | 195 mm                |          |
|             |                 | ≜1000 V @@ ⊂ □ আ<br>■ � = > ////   | 13 86 200                       | Pliers for Electrical Installation                       |           | 1      | 200 mm                |          |
|             |                 | MM                                 | 16 95 01 SB                     | KNIPEX ErgoStrip <sup>®</sup> , Universal Stripping Tool |           | 1      | 135 mm                | -        |
|             |                 | $\Theta \blacksquare \blacksquare$ | 26 26 200                       | Snipe Nose Side Cutting Pliers                           |           | 1      | 200 mm                |          |
|             |                 | 🛧 1000 V 🖄 🚰 🗲 🕇                   | 70 06 160                       | Diagonal Cutter                                          | KNIPEX    | 1      | 160 mm                |          |
|             |                 | 🛧 1000 V 🖄 🚭 🗲 💙                   | 74 06 200                       | High Leverage Diagonal Cutter                            | KINIPEA   | 1      | 200 mm                |          |
|             |                 | $\Box$                             | 86 03 180                       | Pliers Wrench                                            |           | 1      | 180 mm                |          |
|             |                 |                                    | 87 01 180                       | KNIPEX Cobra <sup>®</sup> , Hightech Water Pump Pliers   |           | 1      | 180 mm                |          |
|             |                 |                                    | 97 53 04                        | Self-Adjusting Crimping Pliers for wire end sleeves      |           | 1      | 180 mm                |          |
|             |                 | À 1000 V @ € €                     | 98 52                           | Cable Knife                                              |           | 1      | 190 mm                |          |
|             |                 |                                    | 98 25 01 SL                     | VDE-screwdriver PZ1                                      |           | 1      | PZ1x80mm              |          |
|             |                 |                                    | <b>★ 1000 V ﷺ ♦</b> 98 20 35 SL | VDE-screwdriver 3,5                                      |           | 1      | 0.6 x 3.5 x<br>100 mm |          |
|             |                 |                                    |                                 | Locksmith's hammer, 300g                                 | Picard    | 1      |                       |          |
|             |                 |                                    |                                 | Zyklop set of metal ratchets, 8100 SA 8, 28 parts        |           | 1      | 1/4"                  |          |
|             |                 |                                    |                                 | Joker open-end wrench                                    | Wera      | 1      | 10x13 mm              |          |
|             |                 | <b>₳ 1000 V 🕸 🖨</b>                |                                 | Kraftform Kompakt VDE 16 extra slim 1, 16 parts          |           | 1      |                       |          |
|             |                 |                                    |                                 | Pocket Electric spirit level                             | Stabila   | 1      | 68 mm                 |          |
|             |                 |                                    |                                 | Spirit level type 70 Electric                            | Stabild   | 1      | 430 mm                |          |
|             |                 |                                    |                                 | Electrician's Chisel                                     | Rennsteig | 1      | 250x10 mm             |          |
| 002137 LE   | 082590          |                                    | Tool Case "Ro                   | bust45 Move", empty                                      |           |        |                       | 10800    |

## Tool Case "Robust45 Move" Mechanics

# All-round equipment for professional mechanics

- Extensively equipped with 79 brand tools, partly VDE-tested according to DIN EN 60900
- Max. payload: 35 kg
- ► Volume: 45 litres
- >Gas pressure absorber in the hinge
- > Pneumatically cushioned lid
- > Document compartment; tool boards made from dirt-repelling twin-wall PP sheets with space for 46 tool pockets and various tool straps
- > With a total of 147 inserting options
- > Base tray with aluminium separators
- > Extendable telescopic handle for comfortable transport
- > Large smooth-running wheels
- > Dimensions, exterior (W x H x D): 609 x 428 x 263 mm Dimensions, interior (W x H x D): 540 x 364 x 229 mm
- > For further benefits of the case, see page 303

**00 21 37 LE** Case supplied without tools Gas pressure absorber in the hinge: convenient opening of the lid, with no risk of injury from the case closing inadvertently





Extendable telescopic handle



TANKA AAA

With large smooth-running wheels

#### **Content overview**



| 4003773- |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Nominal<br>size                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 086222   |                                                 | Tool Case "Ro                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | bust45 Move" Mechanics, 79 parts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|          |                                                 | 00 11 01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | KNIPEX TwinKey <sup>®</sup> , Control Cabinet Key                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|          |                                                 | 70 02 160                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Diagonal Cutter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 160 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          |                                                 | 74 02 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | High Leverage Diagonal Cutter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 200 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          |                                                 | 71 31 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | KNIPEX CoBolt <sup>®</sup> Compact Bolt Cutters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 200 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          | $\Theta \blacksquare \blacksquare \blacksquare$ | 26 12 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Snipe Nose Side Cutting Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 200 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          | ⊖ ▥▥ ▶◀ ∡₄⁰°                                    | 26 22 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Snipe Nose Side Cutting Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | KNIPEX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 200 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          |                                                 | 78 61 140                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Electronic Super Knips® XL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 140 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          | MM                                              | 16 95 01 SB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | KNIPEX ErgoStrip <sup>®</sup> , Universal Stripping Tool                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 135 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          |                                                 | 16 20 50 SB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Folding Knife for Electricians                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 120 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          | $\Box$                                          | 86 01 250                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Pliers Wrench                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 250 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          |                                                 | 87 01 250                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | KNIPEX Cobra <sup>®</sup> , Hightech Water Pump Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 250 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          | 0                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 350 PH Screwdriver for Phillips screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | PH1 x 80 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|          | 0                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 917 SPH Screwdriver for Phillips screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | PH2 x 100 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|          | 0                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 350 PH Screwdriver for Phillips screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | PH3 x 150 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|          | 0                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 355 PZ Screwdriver for Phillips screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | PZ1 x 80 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|          | 0                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 355 PZ Screwdriver for Phillips screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | PZ2 x 100 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|          | 0                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 355 PZ Screwdriver for Phillips screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | PZ3 x 150 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|          | •                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 335 Screwdriver for slotted screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3,5 x 100 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|          | •                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 335 Screwdriver for slotted screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4,0 x 100 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|          | •                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 932 A Screwdriver for slotted screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 5,5 x 100 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|          | $\mathbf{O} = \mathbf{O}$                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 932 A Screwdriver for slotted screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 14/                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 7,0 x 125 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|          | $\mathbf{O} = \mathbf{O}$                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 932 A Screwdriver for slotted screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | vvera                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 7,0 x 125 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|          | 0                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 367 Screwdriver for TORX <sup>®</sup> screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | TX 10x80                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|          | 0                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 367 Screwdriver for TORX <sup>®</sup> screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | TX 15x80                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|          | 0                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 367 Screwdriver for TORX <sup>®</sup> screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | TX 20 x 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|          | 0                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 367 Screwdriver for TORX <sup>®</sup> screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | TX 25 x 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|          | 0                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 367 Screwdriver for TORX <sup>®</sup> screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | TX 30 x 115                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|          | 0                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2050 Screwdriver for Phillips screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | PH0 x 60 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|          | 0                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2050 Screwdriver for Phillips screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | PH00 x 60 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|          | •                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2035 Screwdriver for slotted screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1,5 x 60 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|          | •                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2035 Screwdriver for slotted screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2,5 x 80 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|          |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Locksmith's hammer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Picard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 300 g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|          |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8100 SA 8 Zyklop set of metal ratchets, 28 parts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 14/                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1/4"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|          |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Set of hex key wrenches                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Wera                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1,5 - 10 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|          |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | KNIPEX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 185 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Spirit level type 70 Electric                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Stabila                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 430 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Combination wrench set                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Неусо                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|          |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Set of parallel pin punches                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|          |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Automatic centre punch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Kennsteig                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 130 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          |                                                 | 086222         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○         ○ | 086222       Tool Case "Registry of the constraint of the con | 086222       Tool Case "Robust45 Move" Mechanics, 79 parts         00 11 01       KNIPEX Twinkey", Control Cabinet Key         70 02 160       Diagonal Cutter         71 03 200       High Leverage Diagonal Cutter         71 31 200       KINPEX Coble% Compact Bolt Cutters         0 mm       26 12 200       Snipe Nose Side Cutting Pliers         0 mm       78 61 140       Electronic Super Knips® XL         MM       78 65 158       KNIPEX ErgoStrip®, Universal Stripping Tool         16 20 50 SB       Folding Knife for Electricians         0 mm       86 01 250       Pliers Wrench         mm       87 01 250       KNIPEX Cobra®, Hightech Water Pump Pliers         0 350 PH Screwdriver for Phillips screws       350 PH Screwdriver for Phillips screws         0 355 PZ Screwdriver for Phillips screws       355 PZ Screwdriver for Slotted screws         0 355 PZ Screwdriver for slotted screws       335 Screwdriver for slotted screws         0 335 Screwdriver for slotted screws       335 Screwdriver for slotted screws         0 335 Screwdriver for ToRX® screws       367 Screwdriver for ToRX® screws         0 367 Screwdriver for TORX® screws       367 Screwdriver for TORX® screws         0 367 Screwdriver for TORX® screws       367 Screwdriver for TORX® screws         0 367 Screwdriver for TORX® screws       367 Screwdriver | 086222       Tool Case "Robust45 Move" Mechanics, 79 parts         001101       KNIPEX Twinkey®, Control Cabinet Key         7002160       Diagonal Cutter         7402200       High Leverage Diagonal Cutters         0 mmm       26 12 200         8 mmm       26 12 200         9 mmm       26 12 200         9 mmm       26 22 200         9 mmm       26 20 200         9 mmm       26 200         9 mmm       26 200         9 mmm       27 200         9 mmm       28 20 200         9 20 200 200       355 P2 Screwdr | 086222         Tool Case "Robust45 Move" Mechanics, 79 parts         1           001101         KNIPEX Twinkey", Control Cabinet Key         1           74 02 200         High Levrage Diagonal Cutter         1           1         1         1           1         1         1           1         1         1           1         1         1           1         1         1           1         1         1           1         1         1           1         1         1           1         26 12 200         Snipe Nose Side Cutting Pliers           1         16 9 50 158         KNIPEX ErgoStrip*, Universal Stripping Tool           1         16 20 50 26         Pliers Wrench         1           1         1         1         1         1           1         1         1         1         1           1         1         1         1         1           1         1         1         1         1           1         1         1         1         1           1         1         1         1         1           1         1< |

## Tool Case "Vision24" Electro

# Well sorted and tidy: the standard tool case with versatile basic equipment

- ► Equipped with 20 brand tools, partly VDE-tested according to DIN EN 60900
- Max. payload: 20 kg
- Volume: 24 litres
- > Flexible options due to the individual partitioning of the inserts in the 60 mm deep base tray and its cover plate with six large tool compartments
- > Tough ratchet hinges hold the lid open where necessary despite the deadweight of the tools
- > Strong, ergonomic handle, snaps into place at a 90° angle
- > Removable tool board with 15 tool pockets on the base side and six tool pockets as well as a clamp compartment (400 mm wide) on the cover side, held by a push button
- > Two lockable steel flip locks protect the case contents from theft
- > With circumferential double aluminium frame
- > Rugged design made of ABS material, black
- > Cover and tool boards made from dirt-repellent PP twin-wall sheets
- > Dimensions, exterior (W x H x D): 480 x 380 x 180 mm Dimensions, interior (W x H x D): 460 x 310 x 170 mm





00 21 20 LE Case supplied without tools

| Article No. | EAN<br>4003773- |                                                                                        |                |                                                              |        | Number | Nominal size          | ۵'ک<br>g |
|-------------|-----------------|----------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------|--------|--------|-----------------------|----------|
| 00 21 20    | 052166          |                                                                                        | Tool Case "Vis | sion24" Electro, 20 parts                                    |        |        |                       | 7225     |
|             |                 | £ 1000 V @ 🚰 💷 🗖                                                                       | 03 06 180      | Combination Pliers                                           |        | 1      | 180 mm                |          |
|             |                 | - MM                                                                                   | 12 40 200      | Self-Adjusting Insulation Stripper                           |        | 1      | 200 mm                |          |
|             |                 | /٧٧٧\                                                                                  | 16 95 01 SB    | KNIPEX ErgoStrip <sup>®</sup> , Universal Stripping Tool     |        | 1      | 135 mm                |          |
|             |                 | £ 1000 V @ € ⊖ = 1000 V                                                                | 26 16 200      |                                                              |        | 1      | 200 mm                |          |
|             |                 | <u>A</u> 1000 V AGe ∡40° ⊖ আ∭                                                          | 26 26 200      | Snipe Nose Side Cutting Pliers (Stork Beak Pliers)           |        | 1      | 200 mm                |          |
|             |                 |                                                                                        | 70 06 160      | Diagonal Cutter                                              |        | 1      | 160 mm                |          |
|             |                 | 🛧 1000 V 🖄 🚰 🗲 🖣                                                                       | 74 06 200      | High Leverage Diagonal Cutter                                |        | 1      | 200 mm                |          |
|             |                 | $\Box$                                                                                 | 86 03 180      | Pliers Wrench                                                |        | 1      | 180 mm                |          |
|             |                 |                                                                                        | 87 03 250      | KNIPEX Cobra <sup>®</sup> ,<br>Hightech Water Pump Pliers    |        | 1      | 250 mm                |          |
|             |                 | <ul> <li>★ 1000 V ▲ € ♥ ♥ ♥</li> <li>★ 1000 V ▲ € ●</li> <li>★ 1000 V ▲ € ●</li> </ul> | 95 16 200      | Cable Shears with twin cutting edge                          |        | 1      | 200 mm                |          |
|             |                 |                                                                                        | 98 20 25       | Screwdrivers for slotted screws                              | KNIPEX | 1      | 0.6 x 3.5 x 100<br>mm |          |
|             |                 |                                                                                        | 98 20 65 SL    |                                                              |        | 1      | 1.2 x 6.5 x 150<br>mm |          |
|             |                 |                                                                                        | 98 20 55 SL    | Screwdriver (Slim) for slotted screws                        |        | 1      | 1.0 x 5.5 x 125<br>mm | _        |
|             |                 |                                                                                        | 98 20 40 SL    |                                                              |        | 1      | 0.6 x 3.5 x 100<br>mm |          |
|             |                 | 🛧 1000 V 🖄 🖨 🗘                                                                         | 98 24 01 SL    | Screwdrivers for cross recessed Phillips® screws             |        | 1      | PH1 x 80 mm           |          |
|             |                 |                                                                                        | 98 24 02 SL    | Screwarivers for closs recessed Filmips- screws              |        | 1      | PH2 x 80 mm           |          |
|             |                 |                                                                                        | 98 25 01 SL    | Screwdrivers for cross recessed Pozidriv <sup>®</sup> screws |        | 1      | PZ1 x 80 mm           |          |
|             |                 |                                                                                        | 98 25 02 SL    | Screwarivers for cross recessed rozidity Screws              |        | 1      | PZ2 x 80 mm           |          |
|             |                 | <b>☆ 1000 V ﷺ</b>                                                                      | 98 52          | Cable Knife                                                  |        | 1      | 185 mm                |          |
|             |                 | •                                                                                      |                | Voltage detector, single-pole, 247                           | Wera   | 1      | 0.5 x 3.0 x 70 mm     |          |
| 00 21 20 LE | 044567          |                                                                                        | Tool Case "Vis | sion24", empty                                               |        |        |                       | 4485     |

# Tool Case "Vision27" Sanitary

### Flexible and extensively equipped: large plumbing range for professionals

- ► Equipped with 52 brand tools, partly VDE-tested according to DIN EN 60900
- Max. payload: 20 kg
- ► Volume: 27 litres
- > For extensive plumbing and installation work
- > Flexible options due to the individual partitioning of the inserts in the 60 mm deep base tray and its cover plate with six large tool compartments
- > Tough ratchet hinges hold the lid open where necessary despite the deadweight of the tools
- > Strong, ergonomic handle, snaps into place at a 90° angle
- > Removable tool board with 15 tool pockets on the base side and six tool pockets as well as a clamp compartment (400 mm wide) on the cover side, held by a push button
- > Two lockable steel flip locks protect the case contents from theft
- > With circumferential double aluminium frame
- > Rugged design made of ABS material, black
- > Cover and tool boards made from dirt-repellent PP twin-wall sheets
- > Dimensions, exterior (W x H x D): 480 x 380 x 200 mm Dimensions, interior (W x H x D): 460 x 310 x 190 mm



00 21 21 HK S

| Article No.   | EAN<br>4003773- |                  |              |                                                           |           | Number | Nominal size          | ۲<br>g |
|---------------|-----------------|------------------|--------------|-----------------------------------------------------------|-----------|--------|-----------------------|--------|
| 00 21 21 HK S | 080671          |                  | Tool Case "V | ision27" Sanitary, 52 parts                               |           | 1      |                       | 960    |
|               |                 | $\Box$           | 86 03 180    | Pliers Wrench                                             |           | 1      | 180 mm                |        |
|               |                 |                  | 87 01 250    | KNIPEX Cobra <sup>®</sup> , Hightech Water Pump Pliers    |           | 1      | 250 mm                |        |
|               |                 |                  | 87 01 400    | KNIPEX Cobra® XL, Hightech Water Pump Pliers              |           | 1      | 400 mm                |        |
|               |                 | 🛧 1000 V 🖄 🚰 🗲 🕇 | 74 06 180    | High Leverage Diagonal Cutter                             | KNIPEX    | 1      | 180 mm                |        |
|               |                 | <u> </u>         | 26 16 200    | Snipe Nose Side Cutting Pliers, (Stork Beak Pliers)       |           | 1      | 200 mm                |        |
|               |                 |                  | 00 11 01     | KNIPEX TwinKey <sup>®</sup> , Control Cabinet Key         |           | 1      |                       |        |
|               |                 | £ 1000 V 🕸 🗲 🖨   |              | Screwdrivers for slotted screws, 160i                     |           | 1      | 0.6 x 3.5 x<br>100 mm |        |
|               |                 | <u> </u>         |              | Screwdrivers for slotted screws, 160i                     |           | 1      | 1.0 x 5.5 x<br>125 mm |        |
|               |                 | 숨 1000 V 🖄 🚭 🜔   |              | Screwdriver for Torx <sup>®</sup> screws, 167i            |           | 1      | TX15 x 80 mm          |        |
|               |                 | 🛧 1000 V 🖄 🚭 🜔   |              | Screwdriver for Torx <sup>®</sup> screws, 167i            |           | 1      | TX20 x 80 mm          |        |
|               |                 | 🛧 1000 V 🖄 🥌 🗘   |              | Screwdriver for Torx <sup>®</sup> screws, 167i            | 162i PH 1 | 1      | TX25 x 80 mm          |        |
|               |                 | 🛧 1000 V 🖄 🚭 🗘   |              | Screwdrivers for cross recessed Phillips® screws, 162i PH |           | 1      | PH1x80mm              |        |
|               |                 | 🚖 1000 V 🖄 🥌 🗘   |              | Screwdrivers for cross recessed Phillips® screws, 162i PH | Wera      | 1      | PH2 x100 mm           |        |
|               |                 |                  |              | Slotted chisel, 932 A                                     | Weld      | 1      | 1.2 x 7.0 x<br>125 mm | _      |
|               |                 |                  |              | Slotted chisel, 932 A                                     | 1         | 1      | 1.6 x 9.0 x<br>150 mm |        |
|               |                 |                  |              | Voltage detector, single-pole, 247                        |           | 1      | 0.5 x 3.0 x<br>70 mm  |        |
|               |                 |                  |              | Zyklop set of metal ratchets 8100 SA 8, 28 parts          |           | 1      | 1/4"                  |        |
|               |                 |                  |              | Joker open-end wrench                                     |           | 1      | 10 x 13 mm            |        |
|               |                 |                  |              | Set of hex key wrenches                                   |           | 1      | 1.5 - 10 mm           |        |
|               |                 |                  |              | Express key                                               | Неусо     | 1      | 17 x 19 mm<br>M 10    |        |
|               |                 |                  |              | Safety cutter knife                                       |           | 1      | 18 mm                 |        |
|               |                 |                  |              | Locksmith's hammer                                        | Picard    | 1      | 300 g                 |        |
|               |                 |                  |              | Mason's Chisels                                           | Rennsteig | 1      | 250 mm                |        |
|               |                 |                  |              | Spirit level type 70                                      | Stabila   | 1      | 30 cm                 |        |

## Tool Case "Focus" Electro

# Roomy and variable: the power tool case with large base tray and tool range

- ► Equipped with 23 brand tools, partly VDE-tested according to DIN EN 60900
- 90 mm deep base tray with variable compartments (e.g. for measuring and testing instruments)
- Max. payload: 25 kg
- ► Volume: 35 litres
- > Sturdy ABS hard-shell construction with aluminium frame and wraparound buffer protection
- > Document compartment and pen holding straps
- > One removable tool plate, with elastic loops on both sides
- > Sturdy metal locks and three-digit combination lock protect the contents of the case
- > Strong, ergonomic handle
- > Feet on both sides
- > Colour: silver, aluminium look
- > Dimensions, exterior (W x H x D): 520 x 420 x 210 mm Dimensions, interior (W x H x D): 480 x 360 x 200 mm





00 21 30 LE Case supplied without tools

|             |              |                                                         |                |                                                           |        | Number | Nominal size       | ۵ <sup>۲</sup> ۵<br>g |
|-------------|--------------|---------------------------------------------------------|----------------|-----------------------------------------------------------|--------|--------|--------------------|-----------------------|
| 00 21 30    | 21 30 051084 |                                                         | Tool Case "Foo | cus" Electro, 23 parts                                    |        |        |                    | 9440                  |
|             |              |                                                         | 00 11 01       | KNIPEX TwinKey <sup>®</sup> , Control Cabinet Key         |        | 1      |                    |                       |
|             |              | £ 1000 V 🖄 🚰 💷 🚺 🗲                                      | 03 06 180      | Combination Pliers                                        |        | 1      | 180 mm             |                       |
|             |              | ٨٨٨٨                                                    | 12 40 200      | Self-Adjusting Insulation Stripper                        |        | 1      | 200 mm             |                       |
|             |              | / V V V \                                               | 16 95 01 SB    | KNIPEX ErgoStrip <sup>®</sup> , Universal Stripping Tool  |        | 1      | 135 mm             |                       |
|             |              | £ 1000 V @ 🚰 ⊖ 💷 🕨 🖊                                    | 26 16 200      |                                                           |        | 1      | 200 mm             |                       |
|             |              | <u>A</u> 1000 V (A) | 26 26 200      | Snipe Nose Side Cutting Pliers (Stork Beak Pliers)        |        | 1      | 200 mm             |                       |
|             |              |                                                         | 70 06 125      | Diagonal Cuttor                                           |        | 1      | 125 mm             | -                     |
|             |              | <u>₩</u> 1000 V @\$ <b>@</b> ►                          | 70 06 160      | Diagonal Cutter                                           |        | 1      | 160 mm             |                       |
|             |              | $\Box$                                                  | 86 03 180      | Pliers Wrench                                             |        | 1      | 180 mm             |                       |
|             |              | <u>会</u> 1000 V 滲 ▥▥                                    | 87 03 250      | KNIPEX Cobra <sup>®</sup> ,<br>Hightech Water Pump Pliers |        | 1      | 250 mm             |                       |
|             |              |                                                         | 92 27 62       | Precision Tweezers, insulated                             | KNIPEX | 1      | 150 mm             |                       |
|             |              |                                                         | 98 20 25       | Screwdrivers for slotted screws                           |        | 1      | 0.4 x 2.5 x 75 mm  |                       |
|             |              |                                                         | 98 20 35 SL    |                                                           | _      | 1      | 0.6 x 3.5 x 100 mm |                       |
|             |              |                                                         | 98 20 40 SL    | Consudations (Cline) for electrical consum                |        | 1      | 0.8 x 4.0 x 100 mm |                       |
|             |              | X 1000 V @ C                                            | 98 20 55 SL    | Screwdriver (Slim) for slotted screws                     |        | 1      | 1.0 x 5.5 x 125 mm | T                     |
|             |              | _                                                       | 98 20 65 SL    |                                                           |        | 1      | 1.2 x 6.5 x 150 mm |                       |
|             |              | 🚖 1000 V 🖄 🗲 🖨                                          | 98 20 80       | Screwdrivers for slotted screws                           |        | 1      | 1.2 x 8.0 x 175 mm |                       |
|             |              | 🚖 1000 V 🖄 🚰 🗘                                          | 98 24 00       | Screwdrivers for cross recessed Phillips® screws          |        | 1      | PH0 x 60 mm        |                       |
|             |              |                                                         | 98 24 01 SL    | Screwdrivers (Slim) for cross-recessed screws,            |        | 1      | PH1 x 80 mm        |                       |
|             |              |                                                         | 98 24 02 SL    | Phillips®                                                 |        | 1      | PH2 x 100 mm       |                       |
|             |              | A 1000 V @ 🛋 🚱                                          | 98 25 01 SL    | Screwdrivers for cross recessed Pozidriv® screws          |        | 1      | PZ1 x 80 mm        |                       |
|             |              | - <u>A</u> 1000 V 🆄 🚰 🛟                                 | 98 25 02 SL    | Screwarivers for cross recessed PoziarIV® SCrews          |        | 1      | PZ2 x 100 mm       |                       |
| 00 21 30 LE | 060697       |                                                         | Tool Case "Foo | cus", empty                                               |        |        | *                  | 5450                  |

## **KNIPEX L-BOXX®**

# Ideal storage and transport solution: the KNIPEX L-BOXX<sup>®</sup>

- ▶ Strong box made of impact- and shock-proof ABS plastic
- Max. payload: 25 kg
- > Splash-proof
- > Several boxes can be securely joined together
- > Flexible inner partitions
- > Handle can be lowered into a hollow in the lid to save space
- > Ergonomically shaped handles with additional moulded recess on the side for flexible, convenient handling
- > With two-piece tool board made from dirt-repellent PP twin-wall sheets
- > Tool holders are connected to each other using hook-and-loop
- > Cover part with ten pockets and ten elastic straps
- > Top of base part with seven pockets and tab for hanging up the tool card; can also be used to lift and set up the L-BOXX  $^{\circledast}$
- > Bottom of base part with 7 pockets and 7 elastic straps
- > Dimensions, exterior (W x H x D): 442 x 442 x 151 mm Dimensions, interior (W x H x D): 375 x 311 x 107 mm



**00 21 19 LB** Case empty, with tool card



00 21 19 LB LE Case empty, without tool card



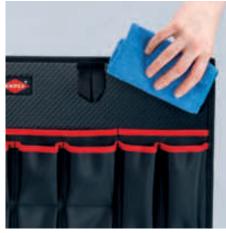
00 21 19 LB WK Tool card, individually available



The boxes are stackable and can be securely joined together



A lock can be attached to secure the device (lock not included in delivery)



Washable tool boards

| Article No.    | EAN<br>4003773- |                                                       | ۵۵<br>g |
|----------------|-----------------|-------------------------------------------------------|---------|
| 00 21 19 LB    | 081616          | KNIPEX L-BOXX <sup>®</sup> , empty, with tool card    | 3200    |
| 00 21 19 LB WK | 081609          | Two-part tool holder for KNIPEX L-BOXX®               | 953     |
| 00 21 19 LB LE | 081975          | KNIPEX L-BOXX <sup>®</sup> , empty, without tool card | 2200    |

д

# **KNIPEX L-BOXX® Electro**

### Ideal storage and transport solution: the KNIPEX L-BOXX<sup>®</sup> with a large range of tools for professional electricians

Equipped with 14 KNIPEX tools, a total of 63 brand tools, partly VDE-tested according to DIN EN 60900

26 26 200

70 06 160

74 06 200

86 03 180

87 01 180

KNIPEX

KNIPEX

KNIPEX

KNIPEX

KNIPEX

>For further benefits of the case, see page 315



#### 97 53 04 Wera KNIPEX 3 98 52 Picard KNIPEX **2 x** 98 2X XX Rennsteig KNIPEX 16 parts Stabila Wera 28 parts Stabila ---Wera

| Article No.    | EAN<br>4003773- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                             |                                                          |           | Number       | Nominal size          | ۲۵<br>g |
|----------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------|-----------|--------------|-----------------------|---------|
| 00 21 19 LB E  | 081623          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | KNIPEX L-BOX                                                | X <sup>®</sup> Electro, 63 parts                         |           |              |                       | 7800    |
|                |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 00 11 01                                                    | KNIPEX TwinKey <sup>®</sup> , Control Cabinet Key        |           | 1            |                       |         |
|                |                 | 🛧 1000 V 🖄 🚰 💷 🖊 🔍                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 08 26 145                                                   | Needle-Nose Combination Pliers                           |           | 1            | 145 mm                |         |
|                |                 | MM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 12 42 195                                                   | KNIPEX MultiStrip 10, Automatic Insulation Stripper      |           | 1            | 195 mm                | ]       |
|                |                 | <ul> <li>★ 1000 V ▲</li> <li>★ 1000 V ▲</li></ul> | 13 86 200                                                   | Pliers for Electrical Installation                       |           | 1            | 200 mm                |         |
|                |                 | MM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 16 95 01 SB                                                 | KNIPEX ErgoStrip <sup>®</sup> , Universal Stripping Tool |           | 1            | 135 mm                |         |
|                |                 | ★1000 V ▲ ● ★40° ⊖                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 26 26 200                                                   | Snipe Nose Side Cutting Pliers (Stork Beak Pliers)       |           | 1            | 200 mm                |         |
|                |                 | £ 1000 V 🖄 🚰 ► 🗨                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 70 06 160                                                   | Diagonal Cutter                                          | KNIPEX    | 1            | 160 mm                |         |
|                |                 | 🛧 1000 V 🖄 🚰 🗲                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 74 06 200                                                   | High Leverage Diagonal Cutter                            | NIVIFEA   | 1            | 200 mm                |         |
|                |                 | $\Box$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 86 03 180                                                   | Pliers Wrench                                            |           | 1            | 180 mm                |         |
|                |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 87 01 180                                                   | KNIPEX Cobra®, Hightech Water Pump Pliers                |           | 1            | 180 mm                |         |
|                |                 | AMM 🖾                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 97 53 04                                                    | Self-Adjusting Crimping Pliers for wire end sleeves      |           | 1            | 180 mm                |         |
|                |                 | <b>☆1000 V ﷺ</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 98 52                                                       | Cable Knife                                              |           | 1            | 185 mm                |         |
|                | <u> </u>        | 98 25 01 SL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Screwdrivers (Slim) for cross-recessed screws,<br>Pozidriv® |                                                          | 1         | PZ 1 x 80 mm |                       |         |
|                |                 | <u>À</u> 1000 V 🖄 🖨 🖨                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 98 20 35 SL                                                 | Screwdriver (Slim) for slotted screws                    |           | 1            | 0.6 x<br>3.5 x 100 mm |         |
|                |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                             | Kraftform Kompakt VDE 16 extra slim 1, 16 parts          |           | 1            |                       | 1       |
|                |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                             | Zyklop set of metal ratchets, 8100 SA 8, 28 parts        | Wera      | 1            | 1/4"                  |         |
|                |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                             | Joker open-end wrench                                    |           | 1            | 10 x 13 mm            |         |
|                |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                             | Locksmith's hammer                                       | Picard    | 1            | 300 g                 |         |
|                |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                             | Electrician's Chisel                                     | Rennsteig | 1            | 250 x 10 mm           |         |
|                |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                             | Spirit level type 70 Electric                            | Stabila   | 1            | 430 mm                |         |
|                |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                             | Pocket Electric mini spirit level                        | Stabila   | 1            | 68 mm                 |         |
| 00 21 19 LB    | 081616          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                             | X®, empty, with tool card                                |           |              |                       | 320     |
| 00 21 19 LB WK | 081609          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Two-part tool                                               | holder for KNIPEX L-BOXX®                                |           |              |                       | 953     |
| 00 21 19 LB LE | 081975          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | KNIPEX L-BOX                                                | X <sup>®</sup> , empty, without tool card                |           |              |                       | 220     |

### **Content overview**

00 11 01

08 26 145

12 42 195

13 86 200

16 95 01 SB

KNIPEX

KNIPEX

KNIPEX

KNIPEX

KNIPEX

## **KNIPEX L-BOXX® Sanitary**

### Ideal storage and transport solution: the KNIPEX L-BOXX<sup>®</sup> with a large range of tools for the sanitary, heating and air-conditioning professional

Equipped with 13 KNIPEX tools, a total of 52 brand tools, partly VDE-tested according to DIN EN 60900

87 01 400

**7 x** 98 2X XX

28-teilig

Wera

Wera

KNIPEX Wera James Contractor

KNIPEX

> For further benefits of the case, see page 315

### **Content overview**

00 11 01

26 16 200

74 06 180

86 03 250

87 01 250

KNIPEX

KNIPEX

KNIPEX

KNIPEX

KNIPEX



| <b>9-teilig</b><br>Wera | <b>L</b> |
|-------------------------|----------|
| Неусо                   |          |
| Неусо                   |          |
| Rennsteig               |          |
| Rennsteig               |          |



| Article No.    | EAN<br>4003773- |                  |             |                                                        |           | Number | Nominal size                | ے<br>ا |
|----------------|-----------------|------------------|-------------|--------------------------------------------------------|-----------|--------|-----------------------------|--------|
| 00 21 19 LB S  | 081630          |                  | KNIPEX L-BO | DXX® Sanitary, 52 parts                                |           |        |                             | 94     |
|                |                 |                  | 00 11 01    | KNIPEX TwinKey <sup>®</sup> , Control Cabinet Key      |           | 1      |                             |        |
|                |                 |                  | 26 16 200   | Snipe Nose Side Cutting Pliers (Stork Beak Pliers)     |           | 1      | 200 mm                      |        |
|                |                 | 🛧 1000 V 🖄 🛃 🕨 ◄ | 74 06 180   | High Leverage Diagonal Cutter                          |           | 1      | 180 mm                      | 1      |
|                |                 | $\Box$           | 86 03 250   | Pliers Wrench                                          |           | 1      | 250 mm                      | 1      |
|                |                 |                  | 87 01 250   | KNIPEX Cobra <sup>®</sup> , Hightech Water Pump Pliers | 1         | 1      | 250 mm                      | 1      |
|                |                 |                  | 87 01 400   | KNIPEX Cobra® XL, Hightech Water Pump Pliers           |           | 1      | 400 mm                      | 1      |
|                | *               | £ 1000 V 🏤 🖨 🖨   | 98 20 35    | Screwdrivers for slotted screws                        | KNIPEX    | 1      | 0.6 x<br>3.5 x 100 mm       | _      |
|                |                 | £ 1000 V 🖄 🚭 🖨   | 98 20 55    | Screwdrivers for slotted screws                        |           | 1      | 1.0 x<br>5.5 x 125 mm       |        |
|                |                 | 🛧 1000 V 🖄 🚭 🗘   | 98 26 15    | Screwdriver for Torx <sup>®</sup> screws               |           | 1      | TX15 x 80 mm                |        |
|                |                 | 🛧 1000 V 🖄 🚭 🗘   | 98 26 20    | Screwdriver for Torx <sup>®</sup> screws               |           | 1      | TX20 x 80 mm                |        |
|                |                 | 🛧 1000 V 🖄 🚭 🗘   | 98 26 25    | Screwdriver for Torx <sup>®</sup> screws               |           | 1      | TX25 x 80 mm                |        |
|                |                 | 🛧 1000 V 🖄 🖨 🗘   | 98 24 01    | Screwdrivers for cross-recessed screws, Phillips®      |           | 1      | PH1 x 80 mm                 |        |
|                |                 | 🛧 1000 V 🖄 🔂 🗘   | 98 24 02    | Screwdrivers for cross-recessed screws, Phillips®      |           | 1      | PH2 x 100 mm                |        |
|                |                 |                  |             | Voltage detector, single-pole, 247                     |           | 1      | 0.5 x 3.0 x<br>70 mm        |        |
|                |                 |                  |             | Zyklop set of metal ratchets, 8100 SA 8, 28 parts      | Wera      | 1      | 1/4"                        | 1      |
|                |                 |                  |             | Joker open-end wrench                                  |           | 1      | 10 x 13 mm                  | 1      |
|                |                 |                  |             | Set of hex key wrenches                                | _         | 1      | 1.5 - 10 mm                 | 1      |
|                |                 |                  |             | Express key                                            | Неусо     | 1      | 17 x 19 mm<br>M 10          |        |
|                |                 |                  |             | Safety cutter knife                                    |           | 1      | 18 mm                       | 1      |
|                |                 |                  |             | Electrician's Chisel                                   | D         | 1      | 250 x 10 mm                 | 1      |
|                |                 |                  |             | Mason's Chisels                                        | Rennsteig | 1      | 250 mm                      |        |
|                |                 |                  |             | Locksmith's hammer                                     | Picard    | 1      | 300 g                       | 1      |
|                |                 |                  |             | Spirit level type 70                                   | Chabila   | 1      | 30 cm                       | 1      |
|                |                 |                  |             | Metre ruler (yardstick)                                | Stabila   | 1      | 2 m                         |        |
|                |                 |                  |             | Pipe cutter                                            | Zenten    | 1      | 3 - 35 mm /<br>1/8 - 1 1/2" |        |
| 00 21 19 LB    | 081616          |                  | KNIPEX L-B  | OXX®, empty, with tool card                            | ,         |        |                             | 32     |
| 00 21 19 LB WK | 081609          |                  |             | ol holder for KNIPEX L-BOXX®                           |           |        |                             | 95     |
| 00 21 19 LB LE | 081975          |                  |             | OXX®, empty, without tool card                         |           |        |                             | 22     |

# Tool bag "Classic" Electro

### Tried-and-tested: the handy tool bag with tool equipment

- Equipped with 23 brand tools, partly VDE-tested according to DIN EN 60900
- > Light design made of hard-wearing, reinforced polyester fabric
- > Front additionally reinforced with aluminium brackets
- > Semi-fold-out front with adjustable loops and exterior document compartment
- > With galvanized steel base tray
- > With carrying handle and adjustable shoulder strap
- > Dimensions, exterior (W x H x D): 440 x 270 x 180 mm Dimensions, interior (W x H x D): 420 x 250 x 160 mm



00 21 02 EL

52

g 6700

2970

| Article No. | EAN<br>4003773- |                      |               |                                                          |              | Number | Nominal size          |
|-------------|-----------------|----------------------|---------------|----------------------------------------------------------|--------------|--------|-----------------------|
| 00 21 02 EL | 081951          |                      | Tool bag "Cla | ssic" Electro, 23 parts                                  |              |        |                       |
|             |                 | 🚖 1000 V @≧🚭 আ∭ ▶ ◄  | 03 06 180     | Combination Pliers                                       |              | 1      | 180 mm                |
|             |                 | £ 1000 V 🖄 🚭 MM      | 11 06 160     | Insulation Stripper                                      |              | 1      | 160 mm                |
|             |                 | 1000 V € আ∭ ▶◀ ⊖     | 25 06 160     | Snipe Nose Side Cutting Pliers, Radio Pliers             |              | 1      | 160 mm                |
|             |                 | £ 1000 V 🖄 🚭 🕨 🗨     | 70 06 160     | Diagonal Cutter                                          |              | 1      | 160 mm                |
|             |                 | <b>会 1000 V @ </b> € | 98 52         | Cable Knife                                              |              | 1      | 185 mm                |
|             |                 | MM .                 | 16 95 01 SB   | KNIPEX ErgoStrip <sup>®</sup> , Universal Stripping Tool |              | 1      | 135 mm                |
|             |                 | ≙ 1000 V 🖄 🚭 🖨       | 98 20 25      | Screwdrivers for slotted screws                          |              | 1      | 0.4 x 2.5 x<br>75 mm  |
|             |                 |                      | 98 20 35 SL   |                                                          | KNIPEX       | 1      | 0.6 x 3.5 x<br>100 mm |
|             |                 | <u> </u>             | 98 20 55 SL   | Screwdriver (Slim) for slotted screws                    |              | 1      | 1.0 x 5.5 x<br>115 mm |
|             |                 | -                    | 98 20 65 SL   | -                                                        |              | 1      | 1.2 x 6.5 x<br>150 mm |
|             |                 |                      | 98 24 01 SL   | Screwdrivers (Slim) for cross-recessed screws,           |              | 1      | PH1 x 80 mm           |
|             |                 | A 1000 V 🖄 🚭 🗘       | 98 24 02 SL   | Phillips®                                                |              | 1      | PH2 x 100 mi          |
|             |                 | MM                   | 16 20 165     | Dismantling Tool                                         |              | 1      | 165 mm                |
|             |                 |                      |               | Voltage detector, single-pole, 247                       | Wera         | 1      | 0.5 x 3.0 x<br>70 mm  |
|             |                 |                      |               | Mason's Chisels                                          | D            | 1      | 300 x 29 mn           |
|             |                 |                      |               | Electrician's Chisel                                     | Rennsteig    | 1      | 250 x 10 mm           |
|             |                 |                      |               | Locksmith's hammer                                       | Ruthe        | 1      | 300 g                 |
|             |                 |                      |               | Chipping hammer                                          |              |        | 800 g                 |
|             |                 |                      |               | Metre ruler (yardstick)                                  | Picard       | 1      | 2 m                   |
|             |                 |                      |               | Flat brush                                               | Picard       | 1      | 40 mm                 |
|             |                 |                      |               | Plaster bowl                                             |              | 1      | 127 x 94 mm           |
|             |                 |                      |               | PUK <sup>®</sup> Junior Hacksaw                          | Haunstätter  | 1      | 150 x 240 mr          |
|             |                 |                      |               | Painter's spatula, wood, high quality                    | Maurerfreund | 1      | 40 mm                 |
| 00 21 02 LE | 057499          |                      | Tool bag "Cla | ssic", empty                                             |              |        |                       |

00 21 02 LE

# Tool bag "Kompakt" Electric

- ▶ Equipped with 12 KNIPEX tools, partly VDE-tested according to DIN EN 60900
- > Compact tool bag for the service technician
   > Suitable as an insert for: "Basic" 00 21 05 LE, "BIG Basic Move" 00 21 06 LE, "BIG Twin Move" 00 21 41 LE, "BIG Twin" 00 21 42 LE, "BIG Twin Move RED" 98 99 15 LE
- and other popular tool cases
- > With 8 tool pouches and 7 tool straps
- > Slip-through back strap to attach to a trolley
- > Made from tough polyester fabric, with zip fastener
- > Bag without tools



00 21 11

00 21 11 LE Bag without tools

| Article No. | EAN<br>4003773- |                           |             |                                                                      | Quantity | ۵۵<br>g |
|-------------|-----------------|---------------------------|-------------|----------------------------------------------------------------------|----------|---------|
| 00 21 11    | 084532          |                           |             | Tool Bag "Kompakt" Electric                                          |          | 2975    |
|             | 026662          | MM                        | 12 40 200   | Self-Adjusting Insulation Stripper                                   | 1        | 202     |
|             | 035565          | <u></u> £ 1000 V          | 98 52       | Cable Knife                                                          | 1        | 67      |
|             | 028017          | M PAT. PEND.              | 97 53 04    | Self-Adjusting Crimping Pliers for wire ferrules with lateral access | 1        | 459     |
|             | 022022          |                           | 87 01 250   | KNIPEX Cobra <sup>®</sup> Hightech Water Pump Pliers                 | 1        | 335     |
|             | 079767          | <u></u> £ 1000 ∨ <b>€</b> | 98 24 02 SL | Screwdriver (Slim) for cross-recessed screws Phillips®               | 1        | 94      |
|             | 079774          | A 10001/ C                | 98 25 01 SL | Screwdriver (Slim) for cross-recessed screws Pozidriv®               | 1        | 56      |
|             | 079781          | <u></u> 8 1000 V €        | 98 25 02 SL | Screwdriver (Slim) for cross-recessed screws Pozidriv®               | 1        | 90      |
|             | 079712          | <u></u> £ 1000 V ●        | 98 20 35 SL | Screwdriver (Slim) for slotted screws                                | 1        | 35      |
|             | 075097          | ☐ 1000 V                  | 13 86 200   | Pliers for Electrical Installation                                   | 1        | 280     |
|             | 079927          | MM (PAT. PEND.)           | 16 95 01 SB | KNIPEX ErgoStrip <sup>®</sup> Universal Stripping Tool               | 1        | 75      |
|             | 021995          | ▶ <b>4</b> 1000 V         | 70 06 160   | Diagonal Cutter                                                      | 1        | 216     |
|             | 084099          |                           | 78 06 125   | Electronic Super Knips® VDE                                          | 1        | 60      |
| 00 21 11 LE | 077718          | Tool Bag "Kompakt" empty  |             |                                                                      |          |         |

## **Crimp Assortments**

### for non-insulated wire ferrules

- > In a TANOS MINI-systainer® (solid plastic box)
- > T-Loc fastener for one-handed operation: open or close the systainer® with one turn and connect to a second systainer®
- > Opening when connected: fast and simple access to content without disconnecting
- > Two stackable plastic inserts with 6 trays each for connectors
- > With an assortment of wire ferrules with/without collar

#### 97 90 05

> With Crimping Pliers for end sleeves 97 71 180; Wire end sleeves without collar

#### 97 90 17

> With crimping pliers for wire ferrules 97 53 09 and self-adjusting insulation stripper 12 42 195

#### 97 90 23

> With Crimping Pliers PreciForce<sup>®</sup> for wire end sleeves 97 52 38

#### 97 90 24

> With Self-Adapting Universal Insulation Stripper Multistrip 10, 12 42 195; With Self-Adjusting Crimping Pliers for wire end sleeves 97 53 08

#### 97 90 06

> With Crimping Pliers for end sleeves 97 71 180; Wire end sleeves with collar

#### 97 90 09

> With Self-Adjusting Crimping Pliers for wire end sleeves 97 53 04

#### 97 90 10

> With Self-Adjusting Insulation Stripper 12 40 200; With Self-Adjusting Crimping Pliers for wire end sleeves 97 53 04

#### 97 90 12

> With Self-Adjusting Insulation Stripper 12 40 200; With Self-Adjusting Crimping Pliers for wire end sleeves 97 53 08

### 97 90 13

 > With KNIPEX Twistor 16<sup>®</sup>
 97 53 18 crimping pliers for wire ferrules

#### 97 90 14

 > With crimping pliers for wire ferrules KNIPEX Twistor16<sup>®</sup>
 97 53 18 and automatic insulation stripper KNIPEX PreciStrip16 12 52 195

#### 97 90 15

> With crimping pliers for wire ferrules 97 53 09 and automatic insulation stripper KNIPEX PreciStrip16 12 52 195

#### 97 90 16

> With crimping pliers for wire ferrules 97 53 09 and selfadjusting insulation stripper 12 40 200



97 90 13



97 90 23



Several boxes can be connected with each other

| Article No. | EAN<br>4003773- |                                                  | Pliers                | 200 x<br>mm <sup>2</sup>   | 150 x<br>mm² | 100 x<br>mm <sup>2</sup> | 75 x<br>mm² | 50 x<br>mm² | 40 x<br>mm² | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|--------------------------------------------------|-----------------------|----------------------------|--------------|--------------------------|-------------|-------------|-------------|-----------------------|
| 97 90 05    | 025535          | <i>i</i> i i i i i i i i i i i i i i i i i i     | 97 71 180             | 0,5 / 0,75 / 1 / 1,5 / 2,5 | 4 / 6        |                          |             | 10 / 16     |             | 930                   |
| 97 90 06    | 025542          | <i>i i</i>                                       | 97 71 180             | 0,5 / 0,75 / 1 / 1,5       | 2,5          |                          | 6           | 10          | 16          | 1000                  |
| 97 90 09    | 028574          | <i>i i i i i i i i i i i i i i i i i i i </i>    | 97 53 04              | 0,5 / 0,75 / 1 / 1,5 / 2,5 |              | 4 / 6                    |             | 10          |             | 1420                  |
| 97 90 10    | 046202          | <i>i i i i i i i i i i i i i i i i i i i </i>    | 12 40 200<br>97 53 04 | 0,5 / 0,75 / 1 / 1,5 / 2,5 |              | 4 / 6                    |             | 10          |             | 1353                  |
| 97 90 12    | 048916          | <i>i i i i i i i i i i i i i i i i i i i </i>    | 12 40 200<br>97 53 08 | 0,5 / 0,75 / 1 / 1,5 / 2,5 |              | 4 / 6                    |             | 10          |             | 1427                  |
| 97 90 13    | 083474          | <i>i i i i i i i i i i i i i i i i i i i </i>    | 97 53 18              | 0,5 / 0,75 / 1 / 1,5       | 2,5          |                          | 6           | 10          | 16          | 1270                  |
| 97 90 14    | 084884          | <i>i i i i i i i i i i i i i i i i i i i </i>    | 97 53 18<br>12 52 195 | 0,5 / 0,75 / 1 / 1,5       | 2,5          |                          | 6           | 10          | 16          | 1450                  |
| 97 90 15    | 084877          | <i>i al </i> | 97 53 09<br>12 52 195 |                            |              | 1,5 / 2,5                |             | 6           | 4           | 1450                  |
| 97 90 16    | 086024          | <i>i i i i i i i i i i i i i i i i i i i </i>    | 12 40 200<br>97 53 09 | 0,5 / 0,75 / 1 / 1,5 / 2,5 |              | 4 / 6                    |             | 10          |             | 1450                  |
| 97 90 17    | 086031          | <i>i al </i> | 97 53 09              | 0,5 / 0,75 / 1 / 1,5 / 2,5 |              | 4 / 6                    |             | 10          |             | 1450                  |
| 97 90 23    | 062158          | <i>i</i> i i i i i i i i i i i i i i i i i i     | 97 52 38              | 0,5 / 0,75 / 1 / 1,5 / 2,5 |              | 4 / 6                    |             |             |             | 1226                  |
| 97 90 24    | 062394          | <i>i al </i> | 97 53 08              | 0,5 / 0,75 / 1 / 1,5 / 2,5 |              | 4 / 6                    |             | 10          |             | 1348                  |
| 97 90 00 LE | 054009          | TANOS MINI-systainer®                            | empty                 | 1                          | ,            |                          |             | 1           |             | 900                   |

## **Crimp Assortments**

### for cable connectors

> In a TANOS MINI-systainer® (solid plastic box)

- > T-Loc fastener for one-handed operation: open or close the systainer® with one turn and connect to a second systainer®
- > Opening when connected: fast and simple access to content without disconnecting

97 90 25

97 90 26

> With crimping pliers 97 22 240

> With crimping pliers 97 32 240

- > Two stackable plastic inserts with 6 trays each for connectors
- > With an assortment of standard cable connectors

#### 97 90 21

> With Crimping Pliers KNIPEX PreciForce<sup>®</sup> 97 52 36 (for insulated terminals and plug connectors)

#### 97 90 22

> With Self-Adapting Universal Insulation Stripper KNIPEX Multistrip 10, 12 42 195; with Crimping Pliers KNIPEX PreciForce<sup>®</sup> 97 52 36 (for insulated terminals and plug connectors)









|             | EAN      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Cable Conn                                                             | ectors          | I                      | 52    |
|-------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|------------------------------------------------------------------------|-----------------|------------------------|-------|
| Article No. | 4003773- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Zangen                          |                                                                        | Quantity        | Cable mm <sup>2</sup>  | g     |
| 97 90 21    | 062134   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 97 52 36                        |                                                                        | 25              | 0,5 - 1                | 1416  |
| 97 90 21    | 002154   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Blade Terminal Sockets, 6.3 x 0.8 mm                                   | 25              | 1,5 - 2,5              |       |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                                                                        | 25              | 0,5 - 1                |       |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Round Sockets, Ø 4 mm                                                  | 25              | 0,5 - 1                |       |
|             |          | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                 | Cable Connectors, eye type, Ø 4 mm                                     | 25              | 4 - 6                  |       |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Cable Connectors, eye type, b 4 mm                                     | 25              | 4 - 6                  |       |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Cable Connectors, eye type, Ø 5 mm                                     | 25              | 1,5 - 2,5              |       |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                                                                        | 25              | 1,5 - 2,5              |       |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Cable Connectors, eye type, Ø 6 mm                                     | 25              | 1,5 - 2,5              |       |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Butt Connectors, insulated, red                                        | 25              | 0,5 - 1                |       |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Butt Connectors, insulated, blue                                       | 25              | 4 - 6                  |       |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Round Pin Plugs, Ø 4 mm                                                | 25              | 1,5 - 2,5              |       |
| 97 90 22    | 062141   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 97 52 36                        | Blade Terminal Sockets, 6.3 x 0.8 mm                                   | 25              | 0,5 - 1                | 1527  |
|             | 002111   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                                                                        | 25              | 1,5 - 2,5              |       |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 12 42 195                       | Cable Connectors, eye type, Ø 4 mm                                     | 25              | 0,5 - 1                |       |
|             |          | al <sup>p</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Cable Connectors, eye type, Ø 5 mm                                     | 25              | 0,5 - 1                |       |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Cable Connectors, eye type, Ø 6 mm                                     | 25              | 1,5 - 2,5              | _     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Cable Connectors, eye type, Ø 8 mm                                     | 25              | 1,5 - 2,5              | _     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Cable Connectors, eye type, Ø 4 mm                                     | 25              | 1,5 - 2,5              | _     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Cable Connectors, eye type, Ø 5 mm                                     | 25              | 4 - 6                  | _     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Cable Connectors, eye type, Ø 6 mm                                     | 25              | 4 - 6                  | _     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Butt Connectors, insulated, red                                        | 25              | 0,5 - 1                | _     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Butt Connectors, insulated, blue                                       | 25              | 1,5 - 2,5              |       |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Butt Connectors, insulated, yellow                                     | 25              | 4 - 6                  |       |
| 97 90 25    | 076971   | ∧⊾                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 97 22 240                       | Blade Terminal Sockets, 6.3 x 0.8 mm                                   | 25              | 0,5 - 1,5              | 1150  |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                                                                        | 25              | 1 - 2,5                | _     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Cable Connectors, eye type, Ø 4 mm                                     | 25              | 0,5 - 1                | _     |
|             |          | 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                 | Cable Connectors, eye type, Ø 5 mm                                     | 25              | 1,5 - 2,5              | _     |
|             |          | and the second s |                                 | Cable Connectors, eye type, Ø 4 mm                                     | 25              | 4 - 6                  | _     |
|             |          | and<br>Secolo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                 | Cable Connectors, eye type, Ø 5 mm                                     | 25              | 0,5 - 1                | _     |
|             |          | J                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                 | Cable Connectors, eye type, $\emptyset$ 6 mm                           | 25              | 1,5 - 2,5              | _     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                                                                        | 25              | 0,5 - 1                | _     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Cable Connectors, eye type, Ø 8 mm                                     | 25              | 1,5 - 2,5              | _     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Butt Connectors, insulated, red                                        | 25              | 0,5 - 1                | _     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Butt Connectors, insulated, blue                                       | 25              | 1,5 - 2,5              | _     |
|             | 070504   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 07.00.040                       | Butt Connectors, insulated, yellow                                     | 25              | 4 - 6                  | 4.422 |
| 97 90 26    | 079521   | ЪV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 97 32 240                       | Non-insulated Blade Terminal Sockets                                   | 25              | 1,5 - 2,5              | 1420  |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | 6.3 x 0.8 mm                                                           |                 | 4 - 6                  | _     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Blade Terminal Sockets                                                 | <u>25</u><br>25 | 0,5 - 1                | _     |
|             |          | Care .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                 | 6.3 x 0.8 mm                                                           | 25              | 0,5 - 1                | _     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Blade Terminal Plugs                                                   | 25              | 1,5 - 2,5<br>1,5 - 2,5 | _     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | 6.3 x 0.8 mm                                                           | 25              | 4 - 6                  | _     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | 0.5 X 0.8 11111                                                        | 25              | 4 - 6                  | -     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Cable Connectors, eye type Ø 4 mm                                      | 25              | 0,5 - 1                | -     |
|             |          | J.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                 | Butt Connectors, insulated, red                                        | 25              | 1,5 - 2,5              | -     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Butt Connectors, insulated, ied                                        | 25              | 0,5 - 1                | -     |
|             |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 | Butt Connectors, insulated, blue<br>Butt Connectors, insulated, yellow | 25              | 0,5 - 1                | -     |
| 07 00 00 1  | E 054009 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | II-systainer <sup>®</sup> empty | Butt Connectors, insulated, yenow                                      | 23              | 0,5 1                  | 900   |

# **Tool Case for Photovoltaics**

- > With tools for photovoltaics
- > Without crimping dies please order separately (see ref. 97 49...) for individual assortment
- > With service tools (hexagonal key) for the change of crimping dies
- > Shock-resistant plastic case
- > Foam insert with recesses for tools, crimping dies and locators
- > Dimensions, exterior (W x H x D): 345 x 80 x 280 mm



97 91 01

| Article No. | EAN<br>4003773- |                    |               |                                                     | Quantity | ۲ <mark>۵</mark> |
|-------------|-----------------|--------------------|---------------|-----------------------------------------------------|----------|------------------|
| 97 91 01    | 070351          |                    | Tool Case for | Photovoltaics                                       |          | 1964             |
|             |                 | MM                 | 12 12 11      | Precision Insulation Stripper, with adapted blades  | 1        |                  |
|             |                 | 숨 1000 V 🖄 🚭 🤁 🝧 🕤 | 95 16 165     | Cable Shears                                        | 1        |                  |
|             |                 | MM                 | 97 43 200     | Crimp System Pliers, for exchangeable crimping dies | 1        |                  |



## **Compact Tool Case**

### 17 parts

- ▶ With insulated tools for works on electrical installations
- > Shock-resistant plastic case
- > Foam insert with precise recesses for holding the pliers
- > Equipped with a range of customary insulated KNIPEX tools for work on electrical systems
- > All tools are tested one by one and meet the requirements of ASTM F1505 and IEC 60900
- > Dimensions, exterior (W x H x D): 380 x 85 x 260 mm
- > DIN EN 60900, IEC 60900



98 99 11

| Article No. | EAN<br>4003773- |                       |            |                                                                | Quantity | ے لے<br>g |
|-------------|-----------------|-----------------------|------------|----------------------------------------------------------------|----------|-----------|
| 98 99 11    | 026624          |                       | Compact To | ol Case 17 parts                                               |          | 3675      |
|             |                 | £ 1000 V @ 🚰 💷 🕨      | 03 07 200  | Combination Pliers                                             | 1        |           |
|             |                 | 🛧 1000 V 🖄 🚰 ► 🗨      | 70 07 160  | Diagonal Cutter                                                | 1        |           |
|             |                 |                       | 98 20 35   |                                                                | 1        |           |
|             |                 | 🛧 1000 V 🖄 🚭 🖨        | 98 20 40   | Screwdrivers for slotted screws                                | 1        |           |
|             |                 |                       | 98 20 55   |                                                                | 1        | 1         |
|             |                 | A 1000 V 🖄 🖨 🗘        | 98 24 00   | Screwdriver for cross recessed screws, Phillips®               | 1        |           |
|             |                 | <u></u> £ 1000 V 1∕2  | 98 42      | Reversible Ratchet, with driving square 1/2"                   | 1        |           |
|             |                 |                       | 98 45 125  | Extension Bar, with internal/external square 1/2"              | 1        |           |
|             |                 | - <u>A</u> 1000 V 🜠 🕲 | 98 45 250  |                                                                | 1        |           |
|             |                 |                       | 98 47 10   |                                                                | 1        |           |
|             |                 | _                     | 98 47 11   |                                                                | 1        |           |
|             |                 |                       | 98 47 12   |                                                                | 1        |           |
|             |                 | <u></u> £ 1000 V 🔿 🕲  | 98 47 13   | Hexagon Socket for hexagonal screws, with internal square 1/2" | 1        |           |
|             |                 | _                     | 98 47 14   |                                                                | 1        |           |
|             |                 | 98 47 17              |            | 1                                                              |          |           |
|             |                 |                       | 98 47 19   |                                                                | 1        |           |
|             |                 | ∱ 1000 V €            | 98 52      | Cable Knife                                                    | 1        |           |

# **Compact Tool Case**

### 26 parts

- ▶ With insulated tools for works on electrical installations
- > Shock-resistant plastic case
- > Foam insert with precise recesses for holding the pliers
- > Equipped with a range of customary insulated KNIPEX tools for work on electrical systems
- > Fixable partition wall
- > Dimensions, exterior (W x H x D): 440 x 105 x 385 mm



98 99 12

| Article No. | EAN<br>4003773-            |                           |                                 |                                                                | Quantity | ۲۵<br>g |
|-------------|----------------------------|---------------------------|---------------------------------|----------------------------------------------------------------|----------|---------|
| 98 99 12    | 026631                     |                           | Standard To                     | ool Case 26 parts                                              |          | 5533    |
|             |                            | £ 1000 V @ 🚰 💷 🕨          | 03 07 200                       | Combination Pliers                                             | 1        |         |
|             |                            | 🚖 1000 V 🖄 🚰 🕨 🗨          | 70 07 160                       | Diagonal Cutter                                                | 1        |         |
|             |                            |                           | 98 00 10                        |                                                                | 1        |         |
|             |                            |                           | 98 00 11                        |                                                                | 1        |         |
|             |                            |                           | 98 00 12                        | Open End Wrench                                                | 1        |         |
|             |                            | <u></u> £ 1000 V <b>○</b> | 98 00 13                        |                                                                | 1        |         |
|             |                            | _                         | 98 00 14                        |                                                                | 1        |         |
|             |                            |                           | 98 00 17                        |                                                                | 1        |         |
|             |                            |                           | 98 00 19                        |                                                                | 1        |         |
|             |                            | <b>会 1000 V @@</b>        | 98 53 03                        | Dismantling Knife for round cables                             | 1        |         |
|             |                            |                           | 98 20 25                        | Consumptions for electron consume                              | 1        |         |
|             |                            | A 400014 @ B              | 98 20 35                        |                                                                | 1        |         |
|             | <u> </u>                   | 98 20 40                  | Screwdrivers for slotted screws | 1                                                              |          |         |
|             |                            |                           | 98 20 55                        |                                                                | 1        |         |
|             |                            |                           | 98 24 00                        |                                                                | 1        |         |
|             |                            | 🚖 1000 V 🖄 🖨 🗘            | 98 24 01                        | Screwdriver for cross recessed screws, Phillips®               | 1        |         |
|             |                            |                           | 98 24 02                        |                                                                | 1        |         |
|             |                            | <u> </u>                  | 98 40                           | T-Handle Drive, with driving square 1/2"                       | 1        |         |
|             |                            |                           | 98 47 10                        |                                                                | 1        |         |
|             |                            |                           | 98 47 11                        |                                                                | 1        |         |
|             |                            |                           | 98 47 12                        |                                                                | 1        |         |
|             | <u>≜</u> 1000 V <b>○</b> 🕲 | <b>≙ 1000 V 🔿 🐵</b>       | 98 47 13                        | Hexagon Socket for hexagonal screws, with internal square 1/2" | 1        |         |
|             |                            |                           | 98 47 14                        |                                                                | 1        |         |
|             |                            |                           | 98 47 17                        |                                                                | 1        |         |
|             |                            |                           | 98 47 19                        |                                                                | 1        |         |
|             |                            | A 1000 V 🖄 🖨              | 98 52                           | Cable Knife                                                    | 1        |         |

# Tool bag "Stretched"

# Handy, but roomy: the tool bag for long tools

- > Made of hard-wearing polyester fabric
- > For tools up to 450 mm in length
- > With two compartments on the back
- > With carrying handle and adjustable shoulder strap
- > Closing strap made of leather
- > Bag without tools



| Article No. | EAN      | Dimension exterior (interior) width | Dimension exterior (interior) height | Dimension exterior (interior) depth | ۲ <sub>۵</sub> |
|-------------|----------|-------------------------------------|--------------------------------------|-------------------------------------|----------------|
|             | 4003773- | mm                                  | mm                                   | mm                                  | ع              |
| 00 21 07 LE | 071358   | 550 (530)                           | 225 (190)                            | 190 (160)                           | 1760           |

# Tool bag "LightPack"

### Lightweight and durable, securely locked but quick to open: good for the service vehicle, good for the boot

> Can be opened from both sides

- > Made from tough polyester fabric, with zip fasteners and hook-and-loop fastener
- > Tool loops inside
- > Plastic base tray
- > Steel handle with softgrip
- > Shoulder strap (can also be used as tool belt)
- > Max. payload: 20 kg
- > Bag without tools









|             | EAN      | Dimension exterior (interior) width | Dimension exterior (interior) height | Dimension exterior (interior) depth | 52   |
|-------------|----------|-------------------------------------|--------------------------------------|-------------------------------------|------|
| Article No. | 4003773- | mm                                  | mm                                   | mm                                  | g    |
| 00 21 08 LE | 077787   | 480 (450)                           | 380 (310)                            | 300 (260)                           | 2800 |

# Tool bag "Service"

# Everything you need: store your tools and notebook safely

- > Lined inside pouch for notebook and DIN A4 documents; also with DIN A4 zipped compartment
- > 90° fold-out front pouch with 8 tool pouches and one small inside pouch
- > Reverse side of the front pouch with 5 tool pouches and 3 pen pouches
- > Removable tool board with 8 tool pouches on the front and 2 rows of elastic loops on the back
- > Splash-water-protected bottom
- > Adjustable shoulder belt with quick-release fastener
- > With two carry loops
- > Made of hard-wearing polyester fabric
- > Bag without tools



00 21 10 LE

| Article No. | EAN      | Dimension exterior (interior) width | Dimension exterior (interior) height | Dimension exterior (interior) depth | ۵'۵  |
|-------------|----------|-------------------------------------|--------------------------------------|-------------------------------------|------|
|             | 4003773- | mm                                  | mm                                   | mm                                  | g    |
| 00 21 10 LE | 074472   | 460 (410)                           | 310 (300)                            | 240                                 | 2700 |

# Tool bag "Kompakt"

### **Everything organised: tools well stored**

- Compact tool bag for the service technician
- > Suitable as an insert for: "Basic" 00 21 05 LE,
   "BIG Basic Move" 00 21 06 LE, "BIG Twin Move" 00 21 41 LE,
   "BIG Twin" 00 21 42 LE, "BIG Twin Move RED" 98 99 15 LE
   and other popular tool cases
- > With 8 tool pouches and 7 tool straps
- > Slip-through back strap to attach to a trolley
- > Made from tough polyester fabric, with zip fastener
- > Bag without tools





|             | EAN      | Dimension exterior (interior) width | Dimension exterior (interior) height | Dimension exterior (interior) depth | 52  |
|-------------|----------|-------------------------------------|--------------------------------------|-------------------------------------|-----|
| Article No. | 4003773- | mm                                  | mm                                   | mm                                  | g   |
| 00 21 11 LE | 077718   | 410 (380)                           | 300 (280/280)                        | 80 (65)                             | 450 |

### TOOL CASES

# **Tool Roll**

### empty

> Tool roll made of hard-wearing polyester fabric > With practical, adjustable quick release fastener > Dimensions, open (L x H): 450 x 290 mm





| Article No. | EAN<br>4003773- | ۵'۵<br>g |
|-------------|-----------------|----------|
| 00 19 41 LE | 035930          | 155      |

# **Tool Roll**

### empty

> With practical, adjustable quick release fastener



| Article No. | EAN<br>4003773- | ۲ <u>۵</u><br>g |
|-------------|-----------------|-----------------|
| 98 99 13 LE | 028888          | 500 g           |

# **Belt Pouch**

# For two pliers: well stored and close at hand

- > For two pliers up to 160 mm in length
- > Made of hard-wearing polyester fabric
- > With hook-and-loop fastener
- > With elastic side holder for small flash lamp, pen or suchlike
- > With practical belt clip
- > Bag without tools



00 19 72 LE



Practical clip for attaching to belt or trousers



For better accessibility, the clip can be fixed on the inside with the hook-and-loop fastener

| Article No. | EAN      | Width | Height | Depth | ۵'۵ |
|-------------|----------|-------|--------|-------|-----|
|             | 4003773- | mm    | mm     | mm    | g   |
| 00 19 72 LE | 070191   | 75    | 180    | 55    | 65  |



# **Belt Tool Pouch**

### The most important tools straight to you: The tool bag for your belt

- > Made of hard-wearing polyester fabric and leather
- > With pockets for up to 8 tools
- > Tool loops made of leather, riveted
- > With snap hook
- > Bag without tools

| Article No. | EAN      | Width | Height | Depth | ۵'۵ |
|-------------|----------|-------|--------|-------|-----|
|             | 4003773- | mm    | mm     | mm    | g   |
| 00 19 73 LE | 072065   | 170   | 235    | 75    | 210 |



| 00 11 01                     | 143        | 00 20 90 V02                    | 279        | 02 07 200                  | 198        | 12 49 02                     | 27         | 20 01 140                  | 46         | 30 25 160                  | 50         |
|------------------------------|------------|---------------------------------|------------|----------------------------|------------|------------------------------|------------|----------------------------|------------|----------------------------|------------|
| 00 11 02<br>00 11 03         | 143<br>143 | 00 21 02 EL<br>00 21 02 LE      | 318<br>318 | 02 07 225<br>02 07 225     | 5<br>198   | 12 49 03<br>12 49 04         | 27<br>26   | 20 01 160<br>20 01 180     | 46<br>46   | 30 25 190<br>30 31 160     | 50<br>50   |
| 00 11 04                     | 144        | 00 21 05 LE                     | 287        | 03 01 140                  | 4          | 12 49 04                     | 27         | 20 02 140                  | 46         | 30 33 160                  | 50         |
| 00 11 06                     | 144        | 00 21 06                        | 291        | 03 01 160                  | 4          | 12 49 05                     | 27         | 20 02 160                  | 46         | 30 35 140                  | 50         |
| 00 11 06 V01<br>00 11 06 V03 | 144<br>145 | 00 21 06 HK S<br>00 21 06 HL S  | 293<br>290 | 03 01 180<br>03 01 200     | 4          | 12 49 21<br>12 49 23         | 26<br>26   | 20 05 140<br>20 05 160     | 46<br>46   | 30 35 160<br>30 36 160     | 50<br>207  |
| 00 11 07                     | 145        | 00 21 06 LE                     | 290        | 03 01 250                  | 4          | 12 49 31                     | 29         | 20 06 160                  | 46         | 30 36 160                  | 50         |
| 00 11 V50                    | 142        | 00 21 06 LE                     | 291        | 03 02 160                  | 4          | 12 50 200                    | 27         | 20 06 160                  | 205        | 30 41 160                  | 142        |
| 00 11 V79<br>00 19 41        | 142<br>270 | 00 21 06 LE<br>00 21 06 LE      | 289<br>292 | 03 02 180<br>03 02 200     | 4          | 12 52 195<br>12 52 195 SB    | 29<br>29   | 22 01 125<br>22 01 140     | 47         | 31 11 160<br>31 15 160     | 49<br>49   |
| 00 19 41 LE                  | 270        | 00 21 06 LE                     | 293        | 03 05 140                  | 4          | 12 59 01                     | 27         | 22 01 160                  | 47         | 31 21 160                  | 49         |
| 00 19 41 LE<br>00 19 55 S4   | 328        | 00 21 06 M<br>00 21 07 LE       | 292<br>326 | 03 05 160<br>03 05 180     | 4          | 12 59 02<br>12 62 180        | 27<br>30   | 22 02 140<br>22 02 160     | 47         | 31 25 160<br>32 11 135     | 49<br>51   |
| 00 19 55 54<br>00 19 55 54   | 106<br>271 | 00 21 07 LE                     | 326        | 03 05 200                  | 4          | 12 62 180                    | 30         | 22 02 160                  | 47         | 32 21 135                  | 51         |
| 00 19 55 S4 LE               | 271        | 00 21 10 LE                     | 327        | 03 06 160                  | 4          | 12 69 21                     | 30         | 22 05 160                  | 47         | 32 31 135                  | 51         |
| 00 19 55 S5<br>00 19 55 S5   | 113<br>271 | 00 21 11<br>00 21 11 LE         | 319<br>327 | 03 06 160<br>03 06 180     | 199<br>4   | 12 69 23<br>12 69 31         | 30<br>31   | 22 06 160<br>22 06 160     | 47<br>204  | 33 01 160<br>33 03 160     | 51<br>51   |
| 00 19 55 55 LE               | 113        | 00 21 11 LE                     | 319        | 03 06 180                  | 199        | 12 74 180 SB                 | 31         | 23 01 140                  | 14         | 34 12 130                  | 252        |
| 00 19 55 S5 LE               | 271        | 00 21 15                        | 236        | 03 06 180 T                | 4          | 12 79 31                     | 31         | 25 01 125                  | 15         | 34 12 130 ESD              | 252        |
| 00 19 56<br>00 19 56         | 67<br>272  | 00 21 15<br>00 21 15 LE         | 284<br>236 | 03 06 180 T<br>03 06 180 T | 199<br>266 | 12 80 040 SB<br>12 80 100 SB | 32<br>32   | 25 01 140<br>25 01 160     | 15<br>15   | 34 22 130<br>34 22 130 ESD | 252<br>252 |
| 00 19 56 LE                  | 67         | 00 21 15 LE                     | 284        | 03 06 200                  | 4          | 12 82 130 SB                 | 32         | 25 02 140                  | 15         | 34 32 130 250              | 252        |
| 00 19 56 LE                  | 272        | 00 21 15 LE                     | 236        | 03 06 200                  | 199        | 12 85 100 SB                 | 33         | 25 02 160                  | 15         | 34 32 130 ESD              | 252        |
| 00 19 56 V01<br>00 19 56 V01 | 67<br>272  | 00 21 15 LE<br>00 21 19 LB      | 284<br>315 | 03 07 160<br>03 07 160     | 4<br>199   | 13 01 160<br>13 02 160       | 12<br>12   | 25 03 125<br>25 05 140     | 15<br>15   | 34 42 130<br>34 42 130 ESD | 252<br>252 |
| 00 19 57                     | 67         | 00 21 19 LB                     | 316        | 03 07 180                  | 4          | 13 05 160                    | 12         | 25 05 160                  | 15         | 34 52 130                  | 252        |
| 00 19 57                     | 272        | 00 21 19 LB                     | 317        | 03 07 180                  | 199        | 13 05 160 T                  | 12         | 25 06 160                  | 15         | 34 52 130 ESD              | 252        |
| 00 19 57 V01<br>00 19 57 V01 | 67<br>272  | 00 21 19 LB E<br>00 21 19 LB LE | 316<br>316 | 03 07 200<br>03 07 200     | 4<br>199   | 13 05 160 T<br>13 42 165     | 266<br>34  | 25 06 160<br>25 06 160 T   | 205        | 35 11 115<br>35 12 115     | 253<br>253 |
| 00 19 58 LE                  | 68         | 00 21 19 LB LE                  | 317        | 03 07 250                  | 4          | 13 45 165                    | 34         | 25 06 160 T                | 205        | 35 12 115 ESD              | 254        |
| 00 19 58 LE                  | 273        | 00 21 19 LB LE                  | 315        | 03 07 250                  | 199        | 13 46 165                    | 34         | 25 06 160 T                | 266        | 35 21 115                  | 253        |
| 00 19 58 V01<br>00 19 58 V02 | 273<br>273 | 00 21 19 LB S<br>00 21 19 LB WK | 317<br>315 | 08 05 110<br>08 21 145     | 8          | 13 46 165<br>13 62 180       | 203        | 25 21 160<br>25 25 160     | 15<br>15   | 35 22 115<br>35 22 115 ESD | 253<br>254 |
| 00 19 72 LE                  | 329        | 00 21 19 LB WK                  | 316        | 08 22 145                  | 7          | 13 66 180                    | 35         | 25 26 160                  | 205        | 35 31 115                  | 253        |
| 00 19 72 LE                  | 275        | 00 21 19 LB WK<br>00 21 20      | 317        | 08 22 145 T<br>08 22 145 T | 266        | 13 66 180<br>13 66 180 T     | 201        | 25 26 160                  | 15<br>17   | 35 32 115<br>35 32 115 ESD | 253<br>254 |
| 00 19 72 LE<br>00 19 72 V01  | 274<br>275 | 00 21 20 LE                     | 312<br>312 | 08 25 145 1                | 7          | 13 66 180 T                  | 266        | 26 11 200<br>26 12 200     | 17         | 35 41 115                  | 254        |
| 00 19 72 V01                 | 274        | 00 21 21 HK S                   | 313        | 08 26 145                  | 7          | 13 66 180 T                  | 201        | 26 12 200 T                | 266        | 35 42 115                  | 253        |
| 00 19 73 LE<br>00 20 01 V02  | 329<br>69  | 00 21 25<br>00 21 25            | 71<br>285  | 08 26 145<br>08 26 145 T   | 200<br>7   | 13 81 200<br>13 82 200       | 11<br>11   | 26 12 200 T<br>26 13 200   | 17<br>17   | 35 42 115 ESD<br>35 52 145 | 254<br>253 |
| 00 20 01 V02                 | 277        | 00 21 30                        | 314        | 08 26 145 T                | 200        | 13 82 200 T                  | 266        | 26 15 200                  | 17         | 35 62 145                  | 253        |
| 00 20 01 V09                 | 69         | 00 21 30 LE                     | 314        | 08 26 145 T                | 266        | 13 82 200 T                  | 11         | 26 15 200 T                | 17         | 35 72 145                  | 253        |
| 00 20 01 V09<br>00 20 01 V15 | 277<br>277 | 00 21 35<br>00 21 35 LE         | 305<br>305 | 09 01 240<br>09 02 240     | 9<br>9     | 13 86 200<br>13 86 200       | 11<br>204  | 26 15 200 T<br>26 16 200   | 266<br>17  | 35 82 145<br>36 12 130     | 253<br>255 |
| 00 20 01 V16                 | 277        | 00 21 36                        | 307        | 09 02 240 T                | 266        | 13 91 200                    | 11         | 26 16 200                  | 206        | 36 22 125                  | 255        |
| 00 20 01 V17                 | 277<br>70  | 00 21 36 LE<br>00 21 37         | 307<br>309 | 09 02 240 T<br>09 11 240   | 9<br>9     | 13 92 200<br>13 96 200       | 11<br>204  | 26 16 200 T                | 17         | 36 32 125<br>37 11 125     | 255<br>52  |
| 00 20 03 SB<br>00 20 03 SB   | 278        | 00 21 37<br>00 21 37 LE         | 309        | 09 12 240                  | 9          | 13 96 200                    | 11         | 26 16 200 T<br>26 16 200 T | 206<br>266 | 37 13 125                  | 52         |
| 00 20 03 V02                 | 70         | 00 21 37 LE                     | 311        | 09 12 240 T                | 9          | 13 96 200 T                  | 11         | 26 17 200                  | 17         | 37 21 125                  | 52         |
| 00 20 03 V02<br>00 20 04 SB  | 278<br>70  | 00 21 37 M<br>00 21 41          | 311<br>297 | 09 12 240 T<br>10 98 I220  | 266<br>126 | 13 96 200 T<br>13 96 200 T   | 266<br>204 | 26 17 200<br>26 21 200     | 206        | 37 23 125<br>37 31 125     | 52<br>52   |
| 00 20 04 SB                  | 278        | 00 21 41 LE                     | 296        | 10 99 1220                 | 126        | 14 22 160                    | 23         | 26 22 200                  | 17         | 37 33 125                  | 52         |
| 00 20 04 V01                 | 70         | 00 21 41 LE                     | 297        | 11 01 160                  | 20         | 14 25 160                    | 23         | 26 22 200 T                | 17         | 37 41 125                  | 52         |
| 00 20 04 V01<br>00 20 09 V01 | 278<br>280 | 00 21 42<br>00 21 42 LE         | 299<br>298 | 11 02 160<br>11 05 160     | 20<br>20   | 14 26 160<br>14 26 160       | 23<br>203  | 26 22 200 T<br>26 25 200   | 266        | 37 43 125<br>38 11 200     | 52<br>53   |
| 00 20 09 V02                 | 280        | 00 21 42 LE                     | 299        | 11 06 160                  | 20         | 15 11 120                    | 33         | 26 25 200 T                | 17         | 38 15 200                  | 53         |
| 00 20 09 V03                 | 280        | 00 31 20 V01                    | 283        | 11 06 160                  | 200        | 15 19 005                    | 33         | 26 25 200 T                | 266        | 38 21 200                  | 53         |
| 00 20 10<br>00 20 11         | 280<br>281 | 00 31 20 V02<br>00 31 20 V03    | 283<br>283 | 11 06 160 T<br>11 06 160 T | 200<br>266 | 15 19 006<br>15 19 008       | 33<br>33   | 26 26 200<br>26 26 200     | 206        | 38 25 200<br>38 31 200     | 53<br>53   |
| 00 20 11 V01                 | 281        | 00 50 01 T BK                   | 266        | 11 06 160 T                | 20         | 15 19 010                    | 33         | 26 26 200 T                | 17         | 38 35 200                  | 53         |
| 00 20 12<br>00 20 12 V01     | 281<br>282 | 00 50 02 T BK<br>00 50 03 T BK  | 266<br>266 | 11 07 160<br>11 07 160     | 20<br>200  | 15 51 160<br>15 61 160       | 36<br>36   | 26 26 200 T<br>26 26 200 T | 266<br>206 | 38 35 200 T<br>38 35 200 T | 266<br>53  |
| 00 20 12 V02                 | 282        | 00 50 04 T BK                   | 266        | 11 09 01                   | 20         | 15 81 160                    | 36         | 26 27 200                  | 206        | 38 41 190                  | 53         |
| 00 20 12 V03                 | 282        | 00 50 05 T BK                   | 266        | 11 12 160                  | 20         | 16 20 16 SB                  | 36         | 26 27 200                  | 17         | 38 45 190                  | 53         |
| 00 20 12 V04<br>00 20 12 V05 | 283<br>283 | 00 50 06 T BK<br>01 06 160      | 266<br>8   | 11 17 160<br>11 17 160     | 20<br>200  | 16 20 165 SB<br>16 20 28 SB  | 36<br>36   | 27 01 160<br>28 01 200     | 14<br>48   | 38 71 200<br>38 91 200     | 53<br>53   |
| 00 20 13                     | 281        | 01 06 160                       | 198        | 12 11 180                  | 25         | 16 20 50 SB                  | 37         | 28 21 200                  | 48         | 38 95 200                  | 53         |
| 00 20 15<br>00 20 15         | 236<br>284 | 01 06 190<br>01 06 190          | 8<br>198   | 12 12 02<br>12 12 06       | 25<br>25   | 16 29 165<br>16 30 135 SB    | 36<br>37   | 28 71 280<br>28 81 280     | 48         | 40 04 180<br>40 04 250     | 54<br>54   |
| 00 20 15                     | 256        | 02 01 180                       | 5          | 12 12 10                   | 25         | 16 30 145 SB                 | 37         | 29 11 160                  | 48         | 40 04 250                  | 54         |
| 00 20 16                     | 276        | 02 01 200                       | 5          | 12 12 11                   | 25         | 16 39 135                    | 37         | 29 21 160                  | 49         | 41 04 180                  | 55         |
| 00 20 16 P<br>00 20 16 P     | 256<br>276 | 02 01 225<br>02 02 180          | 5          | 12 12 12<br>12 12 13       | 25<br>25   | 16 40 150<br>16 49 150       | 38<br>38   | 29 25 160<br>30 11 140     | 49<br>50   | 41 04 250<br>41 04 300     | 55<br>55   |
| 00 20 16 P ESD               | 256        | 02 02 200                       | 5          | 12 12 13                   | 25         | 16 60 05 SB                  | 38         | 30 11 160                  | 50         | 41 14 250                  | 55         |
| 00 20 16 P ESD               | 276        | 02 02 225                       | 5          | 12 19 02                   | 25         | 16 60 06 SB                  | 39         | 30 11 190                  | 50         | 41 24 225                  | 55         |
| 00 20 17<br>00 20 17         | 256<br>276 | 02 02 225 T<br>02 02 225 T      | 266<br>5   | 12 19 06<br>12 19 10       | 25<br>25   | 16 60 100 SB<br>16 64 125 SB | 39<br>40   | 30 13 140<br>30 13 160     | 50<br>50   | 41 34 165<br>41 44 200     | 55<br>55   |
| 00 20 18                     | 256        | 02 05 180                       | 5          | 12 19 11                   | 25         | 16 65 125 SB                 | 40         | 30 15 140                  | 50         | 42 14 280                  | 54         |
| 00 20 18                     | 276        | 02 05 200                       | 5          | 12 19 12                   | 25         | 16 80 125 SB                 | 41         | 30 15 160                  | 50         | 42 24 280                  | 54         |
| 00 20 18 ESD<br>00 20 18 ESD | 256<br>276 | 02 05 225<br>02 06 180          | 5<br>5     | 12 19 13<br>12 19 14       | 25<br>25   | 16 80 175 SB<br>16 85 125 SB | 41<br>41   | 30 15 190<br>30 16 160     | 50<br>50   | 42 34 280<br>42 44 280     | 54<br>54   |
| 00 20 72 V01                 | 274        | 02 06 180                       | 198        | 12 19 180                  | 25         | 16 90 130 SB                 | 42         | 30 16 160                  | 207        | 44 10 J5                   | 64         |
| 00 20 72 V02<br>00 20 72 V04 | 274<br>274 | 02 06 200<br>02 06 200          | 5<br>198   | 12 21 180<br>12 29 180     | 25<br>25   | 16 95 01 SB<br>16 95 02 SB   | 43<br>43   | 30 21 140<br>30 21 160     | 50<br>50   | 44 10 J6<br>44 11 J0       | 64<br>58   |
| 00 20 72 V06                 | 275        | 02 06 225                       | 5          | 12 40 200                  | 27         | 19 01 130                    | 13         | 30 21 190                  | 50         | 44 11 J1                   | 58         |
| 00 20 72 V06                 | 274        | 02 06 225                       | 198        | 12 42 195                  | 26         | 19 03 130                    | 13         | 30 23 140                  | 50         | 44 11 J2                   | 58         |
| 00 20 90 V01                 | 279        | 02 07 200                       | 5          | 12 49 01                   | 27         | 20 01 125                    | 46         | 30 25 140                  | 50         | 44 11 J3                   | 58         |

| 44 11 J4                                                                                          | 58                                           | 49 31 A2                                                                                        | 63                                  | 70 07 160                                                                          | 85                             | 74 07 200                                                                          | 89                              | 79 42 125 Z                                                   | 244                                    | 87 09 125                                                        | 111                             |
|---------------------------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------|------------------------------------------------------------------------------------|--------------------------------|------------------------------------------------------------------------------------|---------------------------------|---------------------------------------------------------------|----------------------------------------|------------------------------------------------------------------|---------------------------------|
| 44 13 J0                                                                                          | 58                                           | 49 31 A3                                                                                        | 63                                  | 70 07 180                                                                          | 85                             | 74 07 200                                                                          | 209                             | 79 42 125 Z ESD                                               | 245                                    | 87 09 150                                                        | 111                             |
| 44 13 J1                                                                                          | 58                                           | 49 41 A01                                                                                       | 63                                  | 70 07 180                                                                          | 208                            | 74 07 250                                                                          | 209                             | 79 52 125                                                     | 244                                    | 87 09 180                                                        | 111                             |
| 44 13 J2                                                                                          | 58                                           | 49 41 A11                                                                                       | 63                                  | 70 11 110                                                                          | 85                             | 74 07 250                                                                          | 89                              | 79 52 125 ESD                                                 | 245                                    | 87 09 400                                                        | 112                             |
| 44 13 J3                                                                                          | 58                                           | 49 41 A21                                                                                       | 63                                  | 70 15 110                                                                          | 85                             | 74 12 160                                                                          | 89                              | 79 62 125                                                     | 244                                    | 87 09 560                                                        | 112                             |
| 44 13 J4                                                                                          | 58                                           | 49 41 A31                                                                                       | 63                                  | 70 26 160                                                                          | 85                             | 74 12 180                                                                          | 89                              | 79 62 125 ESD                                                 | 245                                    | 87 11 250                                                        | 113                             |
| 44 20 J51                                                                                         | 64                                           | 50 00 160                                                                                       | 74                                  | 70 26 160                                                                          | 208                            | 74 21 180                                                                          | 89                              | 81 01 250                                                     | 123                                    | 87 19 250                                                        | 113                             |
| 44 20 J61                                                                                         | 64                                           | 50 00 180                                                                                       | 74                                  | 71 01 160                                                                          | 93                             | 74 21 200                                                                          | 89                              | 81 03 250                                                     | 123                                    | 87 21 250                                                        | 114                             |
| 44 21 J01                                                                                         | 58                                           | 50 00 210                                                                                       | 74                                  | 71 01 200                                                                          | 94                             | 74 21 250                                                                          | 89                              | 81 11 250                                                     | 123                                    | 87 21 300                                                        | 114                             |
| 44 21 J11                                                                                         | 58                                           | 50 00 225                                                                                       | 74                                  | 71 01 250                                                                          | 96                             | 74 22 200                                                                          | 89                              | 81 13 250                                                     | 123                                    | 87 22 250                                                        | 114                             |
| 44 21 J21                                                                                         | 58                                           | 50 00 250                                                                                       | 74                                  | 71 02 200                                                                          | 94                             | 74 22 200 T                                                                        | 267                             | 81 19 250                                                     | 123                                    | 87 26 250                                                        | 115                             |
| 44 21 J31                                                                                         | 58                                           | 50 00 300                                                                                       | 74                                  | 71 02 200 T                                                                        | 94                             | 74 22 200 T                                                                        | 89                              | 83 10 010                                                     | 120                                    | 87 26 250                                                        | 211                             |
| 44 21 J41                                                                                         | 58                                           | 50 01 160                                                                                       | 74                                  | 71 02 200 T                                                                        | 267                            | 74 22 250                                                                          | 89                              | 83 10 015                                                     | 120                                    | 87 26 250 T                                                      | 267                             |
| 44 23 J11                                                                                         | 58                                           | 50 01 180                                                                                       | 74                                  | 71 12 200                                                                          | 94                             | 74 22 250 T                                                                        | 89                              | 83 10 020                                                     | 120                                    | 87 26 250 T                                                      | 115                             |
| 44 23 J21                                                                                         | 58                                           | 50 01 210                                                                                       | 74                                  | 71 21 200                                                                          | 95                             | 74 22 250 T                                                                        | 267                             | 83 10 030                                                     | 120                                    | 87 26 250 T                                                      | 211                             |
| 44 23 J31                                                                                         | 58                                           | 50 01 225                                                                                       | 74                                  | 71 22 200                                                                          | 95                             | 74 91 250                                                                          | 91                              | 83 10 040                                                     | 120                                    | 87 29 01                                                         | 114                             |
| 44 31 J02                                                                                         | 58                                           | 50 01 250                                                                                       | 74                                  | 71 22 200 T                                                                        | 95                             | 75 02 125                                                                          | 246                             | 83 20 010                                                     | 120                                    | 87 29 01                                                         | 115                             |
| 44 31 J12                                                                                         | 58                                           | 50 01 300                                                                                       | 74                                  | 71 22 200 T                                                                        | 267                            | 75 12 125                                                                          | 246                             | 83 20 015                                                     | 120                                    | 87 29 300                                                        | 114                             |
| 44 31 J22                                                                                         | 58                                           | 51 01 210                                                                                       | 74                                  | 71 31 160                                                                          | 93                             | 75 22 125                                                                          | 246                             | 83 20 020                                                     | 120                                    | 87 41 250                                                        | 108                             |
| 44 31 J32                                                                                         | 58                                           | 55 00 300                                                                                       | 75                                  | 71 31 200                                                                          | 95                             | 75 52 125                                                                          | 246                             | 83 30 005                                                     | 121                                    | 87 51 250                                                        | 115                             |
| 44 31 J42                                                                                         | 58                                           | 58 30 225                                                                                       | 75                                  | 71 31 250                                                                          | 96                             | 76 01 125                                                                          | 86                              | 83 30 010                                                     | 121                                    | 88 01 180                                                        | 117                             |
| 45 10 170                                                                                         | 66                                           | 61 01 200                                                                                       | 99                                  | 71 32 200                                                                          | 95                             | 76 03 125                                                                          | 86                              | 83 30 015                                                     | 121                                    | 88 01 250                                                        | 117                             |
| 45 21 200                                                                                         | 66                                           | 61 02 200                                                                                       | 99                                  | 71 32 200 T                                                                        | 95                             | 76 05 125                                                                          | 86                              | 83 30 020                                                     | 121                                    | 88 01 300                                                        | 117                             |
| 46 10 100                                                                                         | 65                                           | 62 12 120                                                                                       | 251                                 | 71 32 200 T                                                                        | 267                            | 76 12 125                                                                          | 86                              | 83 30 030                                                     | 121                                    | 88 01 400                                                        | 118                             |
| 46 10 A5                                                                                          | 64                                           | 64 01 115                                                                                       | 251                                 | 71 41 200                                                                          | 95                             | 76 22 125                                                                          | 86                              | 83 60 010                                                     | 121                                    | 88 02 180                                                        | 117                             |
| 46 10 A6                                                                                          | 64                                           | 64 02 115                                                                                       | 251                                 | 71 72 460                                                                          | 97                             | 76 81 125                                                                          | 86                              | 83 60 015                                                     | 121                                    | 88 02 250                                                        | 117                             |
| 46 11 A0                                                                                          | 59                                           | 64 02 115 ESD                                                                                   | 251                                 | 71 72 610                                                                          | 97                             | 77 01 115                                                                          | 247                             | 83 60 020                                                     | 121                                    | 88 02 250 T                                                      | 267                             |
| 46 11 A1                                                                                          | 59                                           | 64 11 115                                                                                       | 251                                 | 71 72 760                                                                          | 97                             | 77 01 130                                                                          | 247                             | 83 61 010                                                     | 121                                    | 88 02 250 T                                                      | 117                             |
| 46 11 A2                                                                                          | 59                                           | 64 12 115                                                                                       | 251                                 | 71 72 910                                                                          | 97                             | 77 02 115                                                                          | 247                             | 83 61 015                                                     | 121                                    | 88 02 300                                                        | 117                             |
| 46 11 A3                                                                                          | 59                                           | 64 12 115 ESD                                                                                   | 251                                 | 71 79 460                                                                          | 97                             | 77 02 115 ESD                                                                      | 248                             | 83 61 020                                                     | 121                                    | 88 02 300 T                                                      | 267                             |
| 46 11 A4                                                                                          | 59                                           | 64 22 115                                                                                       | 251                                 | 71 79 610                                                                          | 97                             | 77 02 120 H                                                                        | 249                             | 84 11 200                                                     | 136                                    | 88 02 300 T                                                      | 117                             |
| 46 11 G0                                                                                          | 66                                           | 64 22 115 ESD                                                                                   | 251                                 | 71 79 760                                                                          | 97                             | 77 02 120 H ESD                                                                    | 249                             | 84 21 200                                                     | 136                                    | 88 03 180                                                        | 117                             |
| 46 11 G1                                                                                          | 66                                           | 64 32 120                                                                                       | 251                                 | 71 79 910                                                                          | 97                             | 77 02 130                                                                          | 247                             | 85 01 250                                                     | 108                                    | 88 03 250                                                        | 117                             |
| 46 11 G2                                                                                          | 66                                           | 64 32 120 ESD                                                                                   | 251                                 | 71 82 950                                                                          | 98                             | 77 02 135 H                                                                        | 249                             | 85 51 180 A                                                   | 137                                    | 88 03 300                                                        | 117                             |
| 46 11 G3                                                                                          | 66                                           | 64 42 115                                                                                       | 251                                 | 71 89 950                                                                          | 98                             | 77 02 135 H ESD                                                                    | 249                             | 85 51 180 C                                                   | 138                                    | 88 05 180                                                        | 117                             |
| 46 11 G4                                                                                          | 66                                           | 64 52 115                                                                                       | 251                                 | 72 01 140                                                                          | 80                             | 77 11 115                                                                          | 247                             | 85 51 250 A                                                   | 137                                    | 88 05 250                                                        | 117                             |
| 46 13 A0                                                                                          | 59                                           | 64 62 120                                                                                       | 251                                 | 72 01 160                                                                          | 80                             | 77 12 115                                                                          | 247                             | 85 51 250 AF                                                  | 137                                    | 88 05 300                                                        | 117                             |
| 46 13 A1                                                                                          | 59                                           | 64 62 120 ESD                                                                                   | 251                                 | 72 01 180                                                                          | 80                             | 77 12 115 ESD                                                                      | 248                             | 85 51 250 C                                                   | 138                                    | 88 06 250                                                        | 117                             |
| 46 13 A2                                                                                          | 59                                           | 64 72 120                                                                                       | 251                                 | 72 02 125                                                                          | 80                             | 77 21 115 N                                                                        | 247                             | 85 59 250 A                                                   | 137                                    | 88 06 250                                                        | 210                             |
| 46 13 A3                                                                                          | 59                                           | 67 01 140                                                                                       | 99                                  | 72 11 160                                                                          | 80                             | 77 21 130                                                                          | 247                             | 85 59 250 C                                                   | 138                                    | 88 07 250                                                        | 117                             |
| 46 19 100 01                                                                                      | 65                                           | 67 01 160                                                                                       | 99                                  | 72 21 160                                                                          | 80                             | 77 22 115                                                                          | 247                             | 86 01 180                                                     | 105                                    | 88 07 250                                                        | 210                             |
| 46 19 100 02                                                                                      | 65                                           | 67 01 200                                                                                       | 99                                  | 72 51 160                                                                          | 81                             | 77 22 115 ESD                                                                      | 248                             | 86 01 250                                                     | 105                                    | 88 07 300                                                        | 117                             |
| 46 20 A51                                                                                         | 64                                           | 67 05 140                                                                                       | 99                                  | 72 62 200                                                                          | 81                             | 77 22 130                                                                          | 247                             | 86 01 300                                                     | 105                                    | 88 07 300                                                        | 210                             |
| 46 20 A61                                                                                         | 64                                           | 67 05 160                                                                                       | 99                                  | 73 02 160                                                                          | 87                             | 77 32 115                                                                          | 247                             | 86 02 180                                                     | 105                                    | 89 01 250                                                        | 119                             |
| 46 21 A01                                                                                         | 59                                           | 67 05 200                                                                                       | 99                                  | 73 05 160                                                                          | 87                             | 77 32 115 ESD                                                                      | 248                             | 86 02 250                                                     | 105                                    | 89 03 250                                                        | 119                             |
| 46 21 A11                                                                                         | 59                                           | 68 01 160                                                                                       | 75                                  | 73 05 160 T                                                                        | 267                            | 77 32 120 H                                                                        | 249                             | 86 03 125                                                     | 105                                    | 89 05 250                                                        | 119                             |
| 46 21 A21                                                                                         | 59                                           | 68 01 160                                                                                       | 101                                 | 73 05 160 T                                                                        | 87                             | 77 32 120 H ESD                                                                    | 249                             | 86 03 150                                                     | 105                                    | 90 01 125                                                        | 119                             |
| 46 21 A31                                                                                         | 59                                           | 68 01 180                                                                                       | 101                                 | 73 06 160                                                                          | 87                             | 77 41 115                                                                          | 247                             | 86 03 180                                                     | 105                                    | 90 03 125                                                        | 119                             |
| 46 21 A41                                                                                         | 59                                           | 68 01 180                                                                                       | 75                                  | 73 06 160                                                                          | 209                            | 77 42 115                                                                          | 247                             | 86 03 250                                                     | 105                                    | 90 10 185                                                        | 130                             |
| 46 23 A01                                                                                         | 59                                           | 68 01 200                                                                                       | 75                                  | 73 06 160 T                                                                        | 209                            | 77 42 115 ESD                                                                      | 248                             | 86 03 300                                                     | 105                                    | 90 20 185                                                        | 129                             |
| 46 23 A11                                                                                         | 59                                           | 68 01 200                                                                                       | 101                                 | 73 06 160 T                                                                        | 267                            | 77 42 130                                                                          | 247                             | 86 03 400                                                     | 106                                    | 90 22 01 SB                                                      | 127                             |
| 46 23 A21                                                                                         | 59                                           | 68 01 280                                                                                       | 75                                  | 73 06 160 T                                                                        | 87                             | 77 52 115                                                                          | 247                             | 86 05 150                                                     | 105                                    | 90 22 02 SB                                                      | 127                             |
| 46 23 A31                                                                                         | 59                                           | 68 01 280                                                                                       | 101                                 | 73 71 180                                                                          | 90                             | 77 52 115 ESD                                                                      | 248                             | 86 05 150 S02                                                 | 107                                    | 90 25 185                                                        | 130                             |
| 46 31 A02                                                                                         | 59                                           | 69 01 130                                                                                       | 101                                 | 73 72 180                                                                          | 90                             | 77 72 115                                                                          | 247                             | 86 05 180                                                     | 105                                    | 90 25 20                                                         | 133                             |
| 46 31 A12                                                                                         | 59                                           | 69 03 130                                                                                       | 101                                 | 73 72 180 F                                                                        | 90                             | 77 72 115 ESD                                                                      | 248                             | 86 05 180 T                                                   | 267                                    | 90 25 40                                                         | 134                             |
| 46 31 A22                                                                                         | 59                                           | 70 01 110                                                                                       | 85                                  | 74 01 140                                                                          | 89                             | 78 03 125                                                                          | 241                             | 86 05 180 T                                                   | 105                                    | 90 29 01                                                         | 133                             |
| 46 31 A32                                                                                         | 59                                           | 70 01 125                                                                                       | 85                                  | 74 01 160                                                                          | 89                             | 78 03 125 ESD                                                                      | 241                             | 86 05 250                                                     | 105                                    | 90 29 02                                                         | 133                             |
| 46 31 A42                                                                                         | 59                                           | 70 01 140                                                                                       | 85                                  | 74 01 180                                                                          | 89                             | 78 03 140                                                                          | 242                             | 86 05 250 T                                                   | 267                                    | 90 29 15                                                         | 133                             |
| 48 11 J0                                                                                          | 60                                           | 70 01 160                                                                                       | 85                                  | 74 01 200                                                                          | 89                             | 78 03 140 ESD                                                                      | 243                             | 86 05 250 T                                                   | 105                                    | 90 29 185                                                        | 129                             |
| 48 11 J1                                                                                          | 60                                           | 70 01 180                                                                                       | 85                                  | 74 01 250                                                                          | 89                             | 78 06 125                                                                          | 241                             | 86 06 250                                                     | 105                                    | 90 29 40                                                         | 134                             |
| 48 11 J2                                                                                          | 60                                           | 70 02 125                                                                                       | 85                                  | 74 02 140                                                                          | 89                             | 78 13 125                                                                          | 241                             | 86 06 250                                                     | 210                                    | 90 31 02 SB                                                      | 128                             |
| 48 11 J3                                                                                          | 60                                           | 70 02 140                                                                                       | 85                                  | 74 02 160                                                                          | 89                             | 78 13 125 ESD                                                                      | 241                             | 86 09 180 V01                                                 | 107                                    | 90 39 02 V01                                                     | 128                             |
| 48 11 J4                                                                                          | 60                                           | 70 02 160                                                                                       | 85                                  | 74 02 180                                                                          | 89                             | 78 23 125                                                                          | 241                             | 86 09 250 V01                                                 | 107                                    | 90 39 02 V02                                                     | 128                             |
| 48 21 J01                                                                                         | 60                                           | 70 02 180                                                                                       | 85                                  | 74 02 200                                                                          | 89                             | 78 31 125                                                                          | 241                             | 86 09 300 V01                                                 | 107                                    | 90 42 250                                                        | 135                             |
| 48 21 J11                                                                                         | 60                                           | 70 05 110                                                                                       | 85                                  | 74 02 200 T                                                                        | 267                            | 78 41 125                                                                          | 241                             | 86 43 250                                                     | 105                                    | 90 42 340                                                        | 135                             |
| 48 21 J21                                                                                         | 60                                           | 70 05 125                                                                                       | 85                                  | 74 02 200 T                                                                        | 89                             | 78 61 125                                                                          | 241                             | 87 00 100                                                     | 109                                    | 90 49 340                                                        | 135                             |
| 48 21 J31                                                                                         | 60                                           | 70 05 140                                                                                       | 85                                  | 74 02 250                                                                          | 89                             | 78 61 125 ESD                                                                      | 241                             | 87 01 125                                                     | 111                                    | 90 49 340 M                                                      | 135                             |
| 48 21 J41                                                                                         | 60                                           | 70 05 160                                                                                       | 85                                  | 74 02 250 T                                                                        | 89                             | 78 61 140                                                                          | 242                             | 87 01 150                                                     | 111                                    | 90 55 280                                                        | 135                             |
| 48 31 J0                                                                                          | 61                                           | 70 05 160 T                                                                                     | 266                                 | 74 02 250 T                                                                        | 267                            | 78 61 140 ESD                                                                      | 243                             | 87 01 180                                                     | 111                                    | 90 59 280                                                        | 135                             |
| 48 31 J1                                                                                          | 61                                           | 70 05 160 T                                                                                     | 85                                  | 74 05 140                                                                          | 89                             | 78 71 125                                                                          | 241                             | 87 01 250                                                     | 111                                    | 90 61 16                                                         | 136                             |
| 48 31 J2                                                                                          | 61                                           | 70 05 180                                                                                       | 85                                  | 74 05 160                                                                          | 89                             | 78 71 125 ESD                                                                      | 241                             | 87 01 300                                                     | 111                                    | 90 61 20                                                         | 136                             |
| 48 31 J3                                                                                          | 61                                           | 70 05 180 T                                                                                     | 85                                  | 74 05 180                                                                          | 89                             | 78 81 125                                                                          | 241                             | 87 01 400                                                     | 112                                    | 90 70 220                                                        | 139                             |
| 48 41 J01                                                                                         | 61                                           | 70 05 180 T                                                                                     | 266                                 | 74 05 200                                                                          | 89                             | 78 91 125                                                                          | 241                             | 87 01 560                                                     | 112                                    | 91 00 200                                                        | 139                             |
| 48 41 J11                                                                                         | 61                                           | 70 06 125                                                                                       | 85                                  | 74 05 250                                                                          | 89                             | 79 02 120                                                                          | 244                             | 87 02 180                                                     | 111                                    | 91 13 250                                                        | 140                             |
| 48 41 J21                                                                                         | 61                                           | 70 06 125                                                                                       | 208                                 | 74 06 160                                                                          | 89                             | 79 02 120 ESD                                                                      | 245                             | 87 02 180 T                                                   | 267                                    | 91 19 250 01                                                     | 140                             |
| 48 41 J31                                                                                         | 61                                           | 70 06 140                                                                                       | 208                                 | 74 06 160                                                                          | 209                            | 79 02 125                                                                          | 244                             | 87 02 180 T                                                   | 111                                    | 91 31 180                                                        | 141                             |
| 49 11 A0                                                                                          | 62                                           | 70 06 140                                                                                       | 85                                  | 74 06 180                                                                          | 209                            | 79 02 125 ESD                                                                      | 245                             | 87 02 250                                                     | 111                                    | 91 51 160                                                        | 141                             |
| 49 11 A1                                                                                          | 62                                           | 70 06 160                                                                                       | 85                                  | 74 06 180                                                                          | 89                             | 79 02 125 S1                                                                       | 244                             | 87 02 250 T                                                   | 111                                    | 91 61 160                                                        | 141                             |
| 10 11 13                                                                                          | 62                                           | 70 06 160                                                                                       | 208                                 | 74 06 200                                                                          | 89                             | 79 12 125                                                                          | 244                             | 87 02 250 T                                                   | 267                                    | 91 71 160                                                        | 141                             |
| 49 11 A2                                                                                          |                                              | 70 06 160 T                                                                                     | 208                                 | 74 06 200                                                                          | 209                            | 79 12 125 ESD                                                                      | 245                             | 87 02 300                                                     | 111                                    | 91 92 180                                                        | 140                             |
| 49 11 A3                                                                                          | 62                                           |                                                                                                 | 267                                 | 74 06 200 T                                                                        | 89                             | 79 22 120                                                                          | 244                             | 87 02 300 T                                                   | 111                                    | 92 02 53                                                         | 257                             |
| 49 11 A3<br>49 11 A4                                                                              | 62                                           | 70 06 160 T                                                                                     |                                     |                                                                                    |                                |                                                                                    | 245                             |                                                               |                                        |                                                                  |                                 |
| 49 11 A3<br>49 11 A4<br>49 21 A01                                                                 | 62<br>62                                     | 70 06 160 T                                                                                     | 85                                  | 74 06 200 T                                                                        | 267                            | 79 22 120 ESD                                                                      |                                 | 87 02 300 T                                                   | 267                                    | 92 02 54                                                         | 257                             |
| 49 11 A3<br>49 11 A4<br>49 21 A01<br>49 21 A11                                                    | 62<br>62<br>62                               | 70 06 160 T<br>70 06 180                                                                        | 85<br>85                            | 74 06 200 T                                                                        | 209                            | 79 22 125                                                                          | 244                             | 87 03 125                                                     | 111                                    | 92 02 55                                                         | 257                             |
| 49 11 A3<br>49 11 A4<br>49 21 A01<br>49 21 A11<br>49 21 A21                                       | 62<br>62<br>62<br>62                         | 70 06 160 T<br>70 06 180<br>70 06 180                                                           | 85<br>85<br>208                     | 74 06 200 T<br>74 06 250                                                           | 209<br>209                     | 79 22 125<br>79 22 125 ESD                                                         | 244<br>245                      | 87 03 125<br>87 03 180                                        | 111<br>111                             | 92 02 55<br>92 08 78 ESD                                         | 257<br>261                      |
| 49 11 A3<br>49 11 A4<br>49 21 A01<br>49 21 A11<br>49 21 A21<br>49 21 A31                          | 62<br>62<br>62<br>62<br>62                   | 70 06 160 T<br>70 06 180<br>70 06 180<br>70 06 180<br>70 06 180 T                               | 85<br>85<br>208<br>266              | 74 06 200 T<br>74 06 250<br>74 06 250                                              | 209<br>209<br>89               | 79 22 125<br>79 22 125 ESD<br>79 32 125                                            | 244<br>245<br>244               | 87 03 125<br>87 03 180<br>87 03 250                           | 111<br>111<br>111                      | 92 02 55<br>92 08 78 ESD<br>92 08 79 ESD                         | 257<br>261<br>261               |
| 49 11 A3<br>49 11 A4<br>49 21 A01<br>49 21 A11<br>49 21 A21<br>49 21 A31<br>49 21 A41             | 62<br>62<br>62<br>62<br>62<br>62             | 70 06 160 T<br>70 06 180<br>70 06 180<br>70 06 180<br>70 06 180 T<br>70 06 180 T                | 85<br>85<br>208<br>266<br>85        | 74 06 200 T<br>74 06 250<br>74 06 250<br>74 06 250 T                               | 209<br>209<br>89<br>209        | 79 22 125<br>79 22 125 ESD<br>79 32 125<br>79 32 125<br>79 32 125 ESD              | 244<br>245<br>244<br>245        | 87 03 125<br>87 03 180<br>87 03 250<br>87 03 300              | 111<br>111<br>111<br>111<br>111        | 92 02 55<br>92 08 78 ESD<br>92 08 79 ESD<br>92 12 52             | 257<br>261<br>261<br>257        |
| 49 11 A3<br>49 11 A4<br>49 21 A01<br>49 21 A11<br>49 21 A21<br>49 21 A31<br>49 21 A41<br>49 31 A0 | 62<br>62<br>62<br>62<br>62<br>62<br>62<br>63 | 70 06 160 T<br>70 06 180<br>70 06 180<br>70 06 180<br>70 06 180 T<br>70 06 180 T<br>70 06 180 T | 85<br>85<br>208<br>266<br>85<br>208 | 74 06 200 T<br>74 06 250<br>74 06 250<br>74 06 250 T<br>74 06 250 T<br>74 06 250 T | 209<br>209<br>89<br>209<br>267 | 79 22 125<br>79 22 125 ESD<br>79 32 125<br>79 32 125<br>79 32 125 ESD<br>79 42 125 | 244<br>245<br>244<br>245<br>244 | 87 03 125<br>87 03 180<br>87 03 250<br>87 03 300<br>87 05 250 | 111<br>111<br>111<br>111<br>111<br>111 | 92 02 55<br>92 08 78 ESD<br>92 08 79 ESD<br>92 12 52<br>92 22 04 | 257<br>261<br>261<br>257<br>257 |
| 49 11 A3<br>49 11 A4<br>49 21 A01<br>49 21 A11<br>49 21 A21<br>49 21 A31<br>49 21 A41             | 62<br>62<br>62<br>62<br>62<br>62             | 70 06 160 T<br>70 06 180<br>70 06 180<br>70 06 180<br>70 06 180 T<br>70 06 180 T                | 85<br>85<br>208<br>266<br>85        | 74 06 200 T<br>74 06 250<br>74 06 250<br>74 06 250 T                               | 209<br>209<br>89<br>209        | 79 22 125<br>79 22 125 ESD<br>79 32 125<br>79 32 125<br>79 32 125 ESD              | 244<br>245<br>244<br>245        | 87 03 125<br>87 03 180<br>87 03 250<br>87 03 300              | 111<br>111<br>111<br>111<br>111        | 92 02 55<br>92 08 78 ESD<br>92 08 79 ESD<br>92 12 52             | 257<br>261<br>261<br>257        |

| 92 22 07                     | 257        | 95 27 600                    | 214        | 97 49 59                 | 171        | 97 52 20                   | 174        | 97 99 010              | 188        | 97 99 397                 | 191        |
|------------------------------|------------|------------------------------|------------|--------------------------|------------|----------------------------|------------|------------------------|------------|---------------------------|------------|
| 92 22 12                     | 258        | 95 29 600                    | 154        | 97 49 59 1               | 163        | 97 52 23                   | 175        | 97 99 011              | 188        | 97 99 398                 | 191        |
| 92 22 13<br>92 22 35         | 258<br>258 | 95 31 250<br>95 31 280       | 156<br>156 | 97 49 59 1<br>97 49 60   | 171<br>163 | 97 52 30<br>97 52 33       | 176<br>176 | 97 99 020<br>97 99 021 | 188<br>188 | 97 99 399<br>97 99 500    | 191<br>193 |
| 92 23 05                     | 257        | 95 32 038                    | 159        | 97 49 60                 | 171        | 97 52 34                   | 176        | 97 99 022              | 188        | 97 99 905                 | 192        |
| 92 24 01                     | 257        | 95 32 060                    | 159        | 97 49 61                 | 163        | 97 52 35                   | 176        | 97 99 030              | 188        | 97 99 906                 | 192        |
| 92 24 34<br>92 27 61         | 258        | 95 32 100                    | 159<br>158 | 97 49 61                 | 171        | 97 52 36                   | 176<br>176 | 97 99 050              | 188        | 97 99 907                 | 192        |
| 92 27 61                     | 212<br>260 | 95 32 315 A<br>95 32 320     | 158        | 97 49 62<br>97 49 62     | 163<br>171 | 97 52 37<br>97 52 38       | 176        | 97 99 060<br>97 99 070 | 188<br>188 | 97 99 908<br>97 99 909    | 192<br>192 |
| 92 27 62                     | 212        | 95 32 340 SR                 | 155        | 97 49 63                 | 163        | 97 52 50                   | 176        | 97 99 071              | 188        | 97 99 910                 | 192        |
| 92 27 62                     | 260        | 95 36 250                    | 156        | 97 49 63                 | 171        | 97 52 63                   | 179        | 97 99 090              | 188        | 97 99 911                 | 192        |
| 92 28 69 ESD<br>92 28 70 ESD | 261<br>261 | 95 36 250<br>95 36 280       | 215<br>156 | 97 49 64<br>97 49 64     | 163<br>171 | 97 52 63 DG<br>97 52 64    | 179<br>179 | 97 99 091<br>97 99 092 | 188<br>188 | 98 00 07<br>98 00 08      | 219<br>219 |
| 92 28 70 ESD                 | 261        | 95 36 280                    | 215        | 97 49 65                 | 163        | 97 52 65                   | 179        | 97 99 110              | 188        | 98 00 09                  | 219        |
| 92 28 72 ESD                 | 261        | 95 36 315 A                  | 158        | 97 49 65                 | 171        | 97 52 65 A                 | 179        | 97 99 111              | 188        | 98 00 1/2"                | 219        |
| 92 32 29                     | 258        | 95 36 315 A                  | 216        | 97 49 65 1               | 163        | 97 52 65 DG                | 179        | 97 99 112              | 188        | 98 00 1/4"                | 219        |
| 92 34 28<br>92 34 36         | 258<br>258 | 95 36 320<br>95 36 320       | 157<br>216 | 97 49 65 1<br>97 49 66   | 171<br>163 | 97 52 65 DG A<br>97 53 04  | 179<br>180 | 97 99 130<br>97 99 131 | 188<br>188 | 98 00 10<br>98 00 11      | 219<br>219 |
| 92 34 37                     | 258        | 95 39 038                    | 159        | 97 49 66                 | 171        | 97 53 08                   | 182        | 97 99 150              | 189        | 98 00 12                  | 219        |
| 92 37 64                     | 212        | 95 39 04                     | 156        | 97 49 66 1               | 163        | 97 53 09                   | 182        | 97 99 151              | 189        | 98 00 13                  | 219        |
| 92 37 64<br>92 38 75 ESD     | 260        | 95 39 04<br>95 39 08         | 215<br>156 | 97 49 66 1<br>97 49 66 1 | 171<br>173 | 97 53 14<br>97 53 18       | 180<br>181 | 97 99 170<br>97 99 171 | 189<br>189 | 98 00 14<br>98 00 15      | 219<br>219 |
| 92 44 42                     | 259        | 95 39 08 S                   | 156        | 97 49 66 2               | 173        | 97 54 24                   | 183        | 97 99 172              | 189        | 98 00 15                  | 219        |
| 92 52 23                     | 258        | 95 39 08 S                   | 215        | 97 49 66 4               | 163        | 97 54 25                   | 183        | 97 99 173              | 189        | 98 00 17                  | 219        |
| 92 58 74 ESD                 | 261        | 95 39 250                    | 156        | 97 49 66 4               | 171        | 97 54 26                   | 183        | 97 99 174              | 189        | 98 00 18                  | 219        |
| 92 64 43<br>92 64 44         | 259<br>259 | 95 39 250<br>95 39 280       | 215<br>156 | 97 49 66 4<br>97 49 66 6 | 173<br>163 | 97 54 27<br>97 55 04       | 183<br>180 | 97 99 175<br>97 99 176 | 189<br>189 | 98 00 19<br>98 00 22      | 219<br>219 |
| 92 67 63                     | 212        | 95 39 280                    | 215        | 97 49 66 6               | 171        | 97 55 14                   | 180        | 97 99 177              | 189        | 98 00 22                  | 219        |
| 92 67 63                     | 260        | 95 39 315 A01                | 158        | 97 49 66 6               | 173        | 97 59 06                   | 174        | 97 99 178              | 189        | 98 00 27                  | 219        |
| 92 69 84                     | 259        | 95 39 315 A01                | 216        | 97 49 67                 | 163        | 97 59 12                   | 174        | 97 99 179              | 189        | 98 00 3/4"                | 219        |
| 92 70 46<br>92 72 45         | 259<br>259 | 95 39 320 01<br>95 39 320 01 | 157<br>216 | 97 49 67<br>97 49 68     | 171<br>163 | 97 59 14<br>97 59 30       | 174<br>180 | 97 99 180<br>97 99 210 | 189<br>189 | 98 00 3/8"<br>98 00 5/16" | 219<br>219 |
| 92 78 77 ESD                 | 261        | 95 39 320 02                 | 157        | 97 49 68                 | 171        | 97 59 30                   | 182        | 97 99 211              | 189        | 98 00 5/8"                | 219        |
| 92 84 18                     | 259        | 95 39 320 02                 | 216        | 97 49 68 1               | 163        | 97 59 31                   | 180        | 97 99 212              | 189        | 98 00 7/16"               | 219        |
| 92 88 73 ESD<br>92 94 91     | 261        | 95 39 340 01<br>95 39 720    | 155        | 97 49 68 1<br>97 49 69 1 | 171        | 97 59 31<br>97 59 65 2     | 182<br>179 | 97 99 213<br>97 99 214 | 189        | 98 00 9/16"<br>98 01 07   | 219<br>220 |
| 92 94 91                     | 260<br>260 | 95 39 720                    | 159<br>159 | 97 49 69 1               | 163<br>171 | 97 61 145 A                | 183        | 97 99 215              | 189<br>189 | 98 01 08                  | 220        |
| 92 95 90                     | 260        | 95 41 165                    | 150        | 97 49 69 11              | 163        | 97 61 145 F                | 183        | 97 99 216              | 189        | 98 01 09                  | 220        |
| 94 10 185                    | 134        | 95 61 150                    | 160        | 97 49 69 11              | 171        | 97 62 145 A                | 183        | 97 99 217              | 189        | 98 01 10                  | 220        |
| 94 15 215<br>94 19 02        | 131<br>131 | 95 61 190<br>95 62 160       | 160<br>152 | 97 49 69 2<br>97 49 69 2 | 163<br>171 | 97 68 145 A<br>97 68 145 A | 218<br>183 | 97 99 218<br>97 99 219 | 189<br>189 | 98 01 11<br>98 01 12      | 220<br>220 |
| 94 19 02                     | 134        | 95 62 160 TC                 | 152        | 97 49 70                 | 163        | 97 71 180                  | 184        | 97 99 220              | 189        | 98 01 13                  | 220        |
| 94 19 185                    | 134        | 95 62 190                    | 160        | 97 49 70                 | 171        | 97 72 180                  | 184        | 97 99 250              | 189        | 98 01 14                  | 220        |
| 94 19 215                    | 131        | 95 62 190 T                  | 267        | 97 49 71                 | 163        | 97 78 180                  | 184        | 97 99 251<br>97 99 252 | 189        | 98 01 15                  | 220        |
| 94 19 215<br>94 35 215       | 131<br>131 | 95 62 190 T<br>95 71 445     | 160<br>161 | 97 49 71<br>97 49 71 1   | 171<br>163 | 97 78 180<br>97 78 180 T   | 218<br>267 | 97 99 252<br>97 99 270 | 189<br>190 | 98 01 16<br>98 01 17      | 220<br>220 |
| 94 55 200                    | 129        | 95 71 600                    | 161        | 97 49 71 1               | 171        | 97 78 180 T                | 184        | 97 99 271              | 190        | 98 01 18                  | 220        |
| 94 59 200 01                 | 129        | 95 77 600                    | 161        | 97 49 72                 | 163        | 97 78 180 T                | 218        | 97 99 272              | 190        | 98 01 19                  | 220        |
| 95 02 21<br>95 03 160 SB     | 132<br>132 | 95 77 600<br>95 79 445       | 217        | 97 49 72<br>97 49 74     | 171<br>163 | 97 81 180<br>97 90 00 LE   | 185<br>187 | 97 99 290<br>97 99 291 | 190<br>190 | 98 01 22<br>98 01 24      | 220<br>220 |
| 95 05 10 SB                  | 153        | 95 79 600                    | 161        | 97 49 74                 | 171        | 97 90 00 LE                | 321        | 97 99 292              | 190        | 98 03 04                  | 221        |
| 95 05 140                    | 133        | 95 79 600                    | 217        | 97 49 76                 | 163        | 97 90 00 LE                | 186        | 97 99 293              | 190        | 98 03 05                  | 221        |
| 95 05 155 SB                 | 153        | 95 81 600                    | 161        | 97 49 76<br>97 49 81     | 171        | 97 90 00 LE                | 320        | 97 99 330              | 190        | 98 03 055                 | 221        |
| 95 05 165<br>95 05 185       | 153<br>133 | 95 89 600<br>97 21 215       | 161<br>164 | 97 49 81                 | 163<br>171 | 97 90 05<br>97 90 05       | 186<br>320 | 97 99 331<br>97 99 332 | 190<br>190 | 98 03 06<br>98 03 07      | 221<br>221 |
| 95 05 190                    | 133        | 97 21 215 B                  | 164        | 97 49 82                 | 163        | 97 90 06                   | 186        | 97 99 333              | 190        | 98 03 08                  | 221        |
| 95 06 230                    | 153        | 97 21 215 C                  | 164        | 97 49 82                 | 171        | 97 90 06                   | 320        | 97 99 334              | 190        | 98 03 09                  | 221        |
| 95 06 230<br>95 11 160       | 212<br>149 | 97 22 240<br>97 32 240       | 164<br>164 | 97 49 83<br>97 49 83     | 163<br>171 | 97 90 09<br>97 90 09       | 186<br>320 | 97 99 335<br>97 99 336 | 190<br>190 | 98 03 10<br>98 03 11      | 221<br>221 |
| 95 11 160 SB                 | 149        | 97 33 01                     | 167        | 97 49 84                 | 163        | 97 90 10                   | 186        | 97 99 337              | 190        | 98 03 12                  | 221        |
| 95 11 165                    | 150        | 97 33 02                     | 167        | 97 49 84                 | 171        | 97 90 10                   | 320        | 97 99 338              | 190        | 98 03 13                  | 221        |
| 95 11 200<br>95 12 160       | 151<br>149 | 97 39 05<br>97 39 06         | 167<br>167 | 97 49 87<br>97 49 87     | 163<br>171 | 97 90 12<br>97 90 12       | 186<br>320 | 97 99 339<br>97 99 350 | 190<br>190 | 98 04 08<br>98 04 10      | 221<br>221 |
| 95 12 160 SB                 | 149        | 97 39 08                     | 167        | 97 49 90                 | 163        | 97 90 12                   | 186        | 97 99 351              | 190        | 98 04 13                  | 221        |
| 95 12 165                    | 150        | 97 39 09                     | 167        | 97 49 90                 | 171        | 97 90 13                   | 320        | 97 99 352              | 190        | 98 04 17                  | 221        |
| 95 12 165 T                  | 267        | 97 39 13                     | 167        | 97 49 93                 | 163        | 97 90 14                   | 186        | 97 99 353              | 190        | 98 04 19                  | 221        |
| 95 12 165 T<br>95 12 200     | 150<br>151 | 97 39 13 A<br>97 39 90       | 167<br>167 | 97 49 93<br>97 49 94     | 171<br>163 | 97 90 14<br>97 90 15       | 320<br>186 | 97 99 354<br>97 99 355 | 190<br>190 | 98 04 22<br>98 05 13      | 221<br>221 |
| 95 12 500                    | 154        | 97 40 10                     | 165        | 97 49 94                 | 171        | 97 90 15                   | 320        | 97 99 356              | 190        | 98 05 17                  | 221        |
| 95 16 160                    | 149        | 97 40 20 SB                  | 173        | 97 49 94                 | 175        | 97 90 16                   | 186        | 97 99 357              | 190        | 98 05 19                  | 221        |
| 95 16 160 SB<br>95 16 165    | 149<br>150 | 97 43 05<br>97 43 06         | 168<br>168 | 97 49 94<br>97 49 95     | 176<br>163 | 97 90 16<br>97 90 17       | 320<br>186 | 97 99 358<br>97 99 359 | 190<br>190 | 98 07 250<br>98 13 20     | 220<br>222 |
| 95 16 165                    | 213        | 97 43 200                    | 168        | 97 49 95                 | 171        | 97 90 17                   | 320        | 97 99 370              | 190        | 98 13 25                  | 222        |
| 95 16 165 T                  | 213        | 97 43 200 A                  | 168        | 97 49 95                 | 175        | 97 90 21                   | 187        | 97 99 371              | 191        | 98 13 30                  | 222        |
| 95 16 165 T                  | 267        | 97 43 E                      | 169        | 97 49 95                 | 176        | 97 90 21                   | 321        | 97 99 372              | 191        | 98 13 40                  | 222        |
| 95 16 165 T<br>95 16 200     | 150<br>151 | 97 43 E 01<br>97 43 E AUS    | 169<br>169 | 97 50 01<br>97 51 10     | 173<br>174 | 97 90 22<br>97 90 22       | 187<br>321 | 97 99 373<br>97 99 374 | 191<br>191 | 98 13 50<br>98 13 60      | 222<br>222 |
| 95 16 200                    | 213        | 97 43 E UK                   | 169        | 97 51 12                 | 174        | 97 90 22                   | 186        | 97 99 375              | 191        | 98 14 05                  | 222        |
| 95 17 200                    | 151        | 97 43 E US                   | 169        | 97 52 04                 | 175        | 97 90 23                   | 320        | 97 99 376              | 191        | 98 14 06                  | 222        |
| 95 17 200                    | 213        | 97 49 04                     | 162        | 97 52 05                 | 175        | 97 90 24                   | 186        | 97 99 377              | 191        | 98 14 08                  | 222        |
| 95 17 500<br>95 17 500       | 154<br>214 | 97 49 04<br>97 49 28 1       | 170<br>163 | 97 52 06<br>97 52 08     | 175<br>175 | 97 90 24<br>97 90 25       | 320<br>187 | 97 99 378<br>97 99 390 | 191<br>191 | 98 15 05<br>98 15 06      | 222<br>222 |
| 95 21 165                    | 150        | 97 49 28 1                   | 171        | 97 52 09                 | 175        | 97 90 25                   | 321        | 97 99 391              | 191        | 98 15 08                  | 222        |
| 95 21 600                    | 154        | 97 49 50                     | 163        | 97 52 10                 | 175        | 97 90 26                   | 187        | 97 99 392              | 191        | 98 20 10                  | 223        |
| 95 22 165<br>95 26 165       | 150<br>150 | 97 49 50<br>97 49 54         | 171<br>163 | 97 52 13<br>97 52 14     | 175<br>174 | 97 90 26<br>97 91 01       | 321<br>172 | 97 99 393<br>97 99 394 | 191<br>191 | 98 20 25<br>98 20 30      | 223<br>223 |
| 95 26 165                    | 213        | 97 49 54                     | 171        | 97 52 18                 | 175        | 97 91 01                   | 322        | 97 99 395              | 191        | 98 20 35                  | 223        |
| 95 27 600                    | 154        | 97 49 59                     | 163        | 97 52 19                 | 175        | 97 99 001                  | 188        | 97 99 396              | 191        | 98 20 35 SL               | 223        |

| 98 20 40                                                                                                                                                                                                                                                                                                                                                                          | 223                                                                | 98 53 03      | 230 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------|-----|
| 98 20 40 SL                                                                                                                                                                                                                                                                                                                                                                       | 223                                                                | 98 53 13      | 230 |
| 98 20 55                                                                                                                                                                                                                                                                                                                                                                          | 223                                                                | 98 54         | 230 |
| 98 20 55 SL                                                                                                                                                                                                                                                                                                                                                                       |                                                                    | 98 55         | 230 |
| 98 20 65                                                                                                                                                                                                                                                                                                                                                                          | 223                                                                | 98 56         | 231 |
|                                                                                                                                                                                                                                                                                                                                                                                   |                                                                    | 98 56 09      | 231 |
| 98 20 65 SL<br>98 20 80                                                                                                                                                                                                                                                                                                                                                           | 223                                                                | 98 62 01      | 231 |
|                                                                                                                                                                                                                                                                                                                                                                                   |                                                                    | 98 62 02      |     |
| 98 21 45                                                                                                                                                                                                                                                                                                                                                                          | 223                                                                |               | 231 |
| 98 24 00                                                                                                                                                                                                                                                                                                                                                                          | 223                                                                | 98 64 02      | 232 |
| 98 24 01                                                                                                                                                                                                                                                                                                                                                                          |                                                                    | 98 65 01      | 232 |
| 98 24 01 SL                                                                                                                                                                                                                                                                                                                                                                       | 224                                                                | 98 65 02      | 232 |
| 98 24 01 SLS                                                                                                                                                                                                                                                                                                                                                                      | 224                                                                | 98 65 03      | 232 |
| 98 24 02                                                                                                                                                                                                                                                                                                                                                                          | 223                                                                | 98 65 40      | 232 |
| 98 24 02 SL                                                                                                                                                                                                                                                                                                                                                                       | 224                                                                | 98 65 41      | 232 |
| 98 24 02 SLS                                                                                                                                                                                                                                                                                                                                                                      | 224                                                                | 98 65 42      | 232 |
| 98 24 03                                                                                                                                                                                                                                                                                                                                                                          | 223                                                                | 98 66 10      |     |
| 98 24 04                                                                                                                                                                                                                                                                                                                                                                          | 223                                                                | 98 66 20      | 232 |
| 98 25 00                                                                                                                                                                                                                                                                                                                                                                          |                                                                    | 98 66 30      | 232 |
|                                                                                                                                                                                                                                                                                                                                                                                   |                                                                    | 98 66 40      | 232 |
| 98 25 01<br>98 25 01 SL                                                                                                                                                                                                                                                                                                                                                           | 224                                                                | 98 66 45      |     |
| 90 25 01 SL                                                                                                                                                                                                                                                                                                                                                                       | 225                                                                |               |     |
| 98 25 02                                                                                                                                                                                                                                                                                                                                                                          | 114                                                                | 98 66 50      | 232 |
| 98 25 02 SL                                                                                                                                                                                                                                                                                                                                                                       | 225                                                                | 98 66 60      | 232 |
| 90 20 00                                                                                                                                                                                                                                                                                                                                                                          | 224                                                                | 98 67 05      | 233 |
| 98 25 04                                                                                                                                                                                                                                                                                                                                                                          | 224                                                                | 98 67 10      | 233 |
| 98 26 10                                                                                                                                                                                                                                                                                                                                                                          | 225                                                                | 98 67 15      | 233 |
| 98 26 15                                                                                                                                                                                                                                                                                                                                                                          | 225                                                                | 98 67 20      | 233 |
| 98 26 20                                                                                                                                                                                                                                                                                                                                                                          | 225                                                                | 98 67 25      | 233 |
| 98 26 25                                                                                                                                                                                                                                                                                                                                                                          | 225                                                                | 98 90         | 233 |
| 98 26 30                                                                                                                                                                                                                                                                                                                                                                          | 225                                                                | 98 90 01      | 233 |
| 98 29 25                                                                                                                                                                                                                                                                                                                                                                          | 226                                                                | 98 99 11      | 234 |
| 98 29 27                                                                                                                                                                                                                                                                                                                                                                          | 226                                                                | 98 99 11      | 324 |
| 98 29 30                                                                                                                                                                                                                                                                                                                                                                          | 226                                                                | 98 99 12      |     |
| 90 29 30                                                                                                                                                                                                                                                                                                                                                                          |                                                                    |               |     |
| 98 29 40                                                                                                                                                                                                                                                                                                                                                                          | 226                                                                | 98 99 12      | 325 |
| 98 29 45                                                                                                                                                                                                                                                                                                                                                                          |                                                                    | 98 99 13      | 237 |
| 98 29 50                                                                                                                                                                                                                                                                                                                                                                          | 226                                                                | 98 99 13      | 270 |
| 98 30                                                                                                                                                                                                                                                                                                                                                                             | 226                                                                | 98 99 13 LE   |     |
| 98 31                                                                                                                                                                                                                                                                                                                                                                             | 226                                                                | 98 99 13 LE   | 270 |
| 98 33 25                                                                                                                                                                                                                                                                                                                                                                          | 229                                                                | 98 99 13 LE   | 328 |
| 98 33 50                                                                                                                                                                                                                                                                                                                                                                          | 229                                                                | 98 99 15      | 301 |
| 98 35 125                                                                                                                                                                                                                                                                                                                                                                         | 227                                                                | 98 99 15 LE   | 301 |
| 98 35 250                                                                                                                                                                                                                                                                                                                                                                         | 227                                                                | 99 00 200     | 76  |
| 98 37 1/2"                                                                                                                                                                                                                                                                                                                                                                        | 228                                                                | 99 00 220     |     |
| 98 37 10                                                                                                                                                                                                                                                                                                                                                                          | 227                                                                | 99 00 220 K12 | 76  |
| 98 37 10                                                                                                                                                                                                                                                                                                                                                                          |                                                                    | 99 00 250 KTZ |     |
|                                                                                                                                                                                                                                                                                                                                                                                   |                                                                    |               | 76  |
| 98 37 12                                                                                                                                                                                                                                                                                                                                                                          | 227                                                                | 99 00 280     | 76  |
| 98 37 13                                                                                                                                                                                                                                                                                                                                                                          | 227                                                                | 99 00 300     | 76  |
| 98 37 14                                                                                                                                                                                                                                                                                                                                                                          | 227                                                                | 99 01 200     | 76  |
| 98 37 16                                                                                                                                                                                                                                                                                                                                                                          | 227                                                                | 99 01 220     | 76  |
| 98 37 17                                                                                                                                                                                                                                                                                                                                                                          | 227                                                                | 99 01 250     | 76  |
| 98 37 19                                                                                                                                                                                                                                                                                                                                                                          | 227                                                                | 99 01 280     | 76  |
| 98 37 3/4"                                                                                                                                                                                                                                                                                                                                                                        | 228                                                                | 99 01 300     | 76  |
| 98 37 3/8"                                                                                                                                                                                                                                                                                                                                                                        | 228                                                                | 99 04 220     | 76  |
| 98 37 5/16"                                                                                                                                                                                                                                                                                                                                                                       | 228                                                                | 99 04 250     | 76  |
| 98 37 5/8"                                                                                                                                                                                                                                                                                                                                                                        | 228                                                                | 99 04 280     | 76  |
| 98 37 7/16"                                                                                                                                                                                                                                                                                                                                                                       | 228                                                                | 99 10 250     | 77  |
| 98 37 9/16"                                                                                                                                                                                                                                                                                                                                                                       | 228                                                                | 99 10 300     | 77  |
| 98 39 05                                                                                                                                                                                                                                                                                                                                                                          | 228                                                                |               |     |
|                                                                                                                                                                                                                                                                                                                                                                                   |                                                                    | 99 11 250     | 77  |
| 98 39 06                                                                                                                                                                                                                                                                                                                                                                          | 228                                                                | 99 11 300     | 77  |
| 98 39 08                                                                                                                                                                                                                                                                                                                                                                          | 228                                                                | 99 14 250     | 77  |
| 98 40                                                                                                                                                                                                                                                                                                                                                                             | 226                                                                | 99 14 300     | 77  |
| 98 41                                                                                                                                                                                                                                                                                                                                                                             | 226                                                                |               |     |
| 98 42                                                                                                                                                                                                                                                                                                                                                                             | 229                                                                |               |     |
|                                                                                                                                                                                                                                                                                                                                                                                   |                                                                    |               |     |
| 98 43 50                                                                                                                                                                                                                                                                                                                                                                          | 229                                                                |               |     |
| 98 45 125                                                                                                                                                                                                                                                                                                                                                                         | 227                                                                |               |     |
|                                                                                                                                                                                                                                                                                                                                                                                   |                                                                    |               |     |
| 98 45 125                                                                                                                                                                                                                                                                                                                                                                         | 227                                                                |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"                                                                                                                                                                                                                                                                                                                                                | 227<br>227                                                         |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 1/2"                                                                                                                                                                                                                                                                                                                                  | 227<br>227<br>228<br>228                                           |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 1/2"<br>98 47 1/2"                                                                                                                                                                                                                                                                                                                    | 227<br>227<br>228<br>228<br>228<br>227                             |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 1/2"<br>98 47 10<br>98 47 11                                                                                                                                                                                                                                                                                                          | 227<br>227<br>228<br>228<br>228<br>227<br>227                      |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 1/2"<br>98 47 10<br>98 47 11<br>98 47 11/16"                                                                                                                                                                                                                                                                                          | 227<br>227<br>228<br>228<br>227<br>227<br>227<br>228               |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 1/2"<br>98 47 10<br>98 47 11<br>98 47 11/16"<br>98 47 12                                                                                                                                                                                                                                                                              | 227<br>227<br>228<br>228<br>227<br>227<br>227<br>228<br>227        |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 1/2"<br>98 47 10<br>98 47 11<br>98 47 11/16"<br>98 47 12<br>98 47 13                                                                                                                                                                                                                                                                  | 227<br>227<br>228<br>228<br>227<br>227<br>227<br>228<br>227<br>227 |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 1/2"<br>98 47 10<br>98 47 11<br>98 47 11/16"<br>98 47 12<br>98 47 13<br>98 47 14                                                                                                                                                                                                                                                      | 227<br>227<br>228<br>228<br>227<br>227<br>227<br>228<br>227<br>227 |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 1/2"<br>98 47 10<br>98 47 11<br>98 47 11/16"<br>98 47 12<br>98 47 13<br>98 47 14<br>98 47 16                                                                                                                                                                                                                                          | 227<br>227<br>228<br>227<br>227<br>227<br>227<br>228<br>227<br>227 |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 1/2"<br>98 47 10<br>98 47 10<br>98 47 11<br>98 47 11/16"<br>98 47 12<br>98 47 13<br>98 47 16<br>98 47 16<br>98 47 17                                                                                                                                                                                                                  | 227<br>227<br>228<br>227<br>227<br>227<br>227<br>227<br>227<br>227 |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 1/2"<br>98 47 10<br>98 47 11<br>98 47 11<br>98 47 11<br>98 47 12<br>98 47 13<br>98 47 13<br>98 47 16<br>98 47 16<br>98 47 17<br>98 47 18                                                                                                                                                                                              | 227<br>227<br>228<br>228<br>227<br>227<br>227<br>227<br>227<br>227 |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 10<br>98 47 10<br>98 47 11<br>98 47 11<br>98 47 11<br>98 47 12<br>98 47 13<br>98 47 13<br>98 47 14<br>98 47 16<br>98 47 17<br>98 47 18<br>98 47 19                                                                                                                                                                                    | 227<br>227<br>228<br>228<br>227<br>227<br>227<br>227<br>227<br>227 |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 12"<br>98 47 10<br>98 47 11<br>98 47 11<br>98 47 12<br>98 47 12<br>98 47 12<br>98 47 13<br>98 47 14<br>98 47 16<br>98 47 17<br>98 47 18<br>98 47 19<br>98 47 22                                                                                                                                                                       | 227<br>227<br>228<br>228<br>227<br>227<br>227<br>227<br>227<br>227 |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 10<br>98 47 10<br>98 47 11<br>98 47 11<br>98 47 11<br>98 47 12<br>98 47 13<br>98 47 13<br>98 47 14<br>98 47 16<br>98 47 17<br>98 47 18<br>98 47 19                                                                                                                                                                                    | 227<br>227<br>228<br>228<br>227<br>227<br>227<br>227<br>227<br>227 |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 12"<br>98 47 10<br>98 47 11<br>98 47 11<br>98 47 12<br>98 47 12<br>98 47 12<br>98 47 13<br>98 47 14<br>98 47 16<br>98 47 17<br>98 47 18<br>98 47 19<br>98 47 22                                                                                                                                                                       | 227<br>227<br>228<br>228<br>227<br>227<br>227<br>227<br>227<br>227 |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 1/2"<br>98 47 10<br>98 47 11<br>98 47 11<br>98 47 12<br>98 47 12<br>98 47 12<br>98 47 13<br>98 47 14<br>98 47 16<br>98 47 16<br>98 47 16<br>98 47 17<br>98 47 18<br>98 47 19<br>98 47 22<br>98 47 24<br>98 47 24                                                                                                                      | 227<br>227<br>228<br>228<br>227<br>227<br>227<br>227<br>227<br>227 |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 1/2"<br>98 47 10<br>98 47 11<br>98 47 11<br>98 47 12<br>98 47 12<br>98 47 12<br>98 47 13<br>98 47 16<br>98 47 16<br>98 47 16<br>98 47 17<br>98 47 18<br>98 47 19<br>98 47 22<br>98 47 22<br>98 47 27<br>98 47 3/4"                                                                                                                    | 227<br>227<br>228<br>228<br>227<br>227<br>227<br>227<br>227<br>227 |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 10<br>98 47 11<br>98 47 11<br>98 47 11<br>98 47 12<br>98 47 12<br>98 47 13<br>98 47 14<br>98 47 16<br>98 47 17<br>98 47 17<br>98 47 18<br>98 47 19<br>98 47 22<br>98 47 24<br>98 47 27<br>98 47 3/4"<br>98 47 5/8"                                                                                                                    | 227<br>227<br>228<br>227<br>227<br>227<br>227<br>227<br>227<br>227 |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 10<br>98 47 11<br>98 47 11<br>98 47 11<br>98 47 12<br>98 47 12<br>98 47 13<br>98 47 13<br>98 47 14<br>98 47 16<br>98 47 17<br>98 47 18<br>98 47 19<br>98 47 22<br>98 47 24<br>98 47 24<br>98 47 27<br>98 47 3/4"<br>98 47 5/8"<br>98 47 7/8"                                                                                          | 227<br>227<br>228<br>228<br>227<br>227<br>227<br>227<br>227<br>227 |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 10<br>98 47 11<br>98 47 11<br>98 47 11<br>98 47 12<br>98 47 12<br>98 47 12<br>98 47 13<br>98 47 14<br>98 47 16<br>98 47 17<br>98 47 18<br>98 47 17<br>98 47 18<br>98 47 22<br>98 47 24<br>98 47 24<br>98 47 27<br>98 47 3/4"<br>98 47 5/8"<br>98 47 7/8"<br>98 47 9/16"                                                               | 227<br>227<br>228<br>228<br>227<br>227<br>227<br>227<br>227<br>227 |               |     |
| 98 45 125<br>98 47 1"<br>98 47 1/2"<br>98 47 10<br>98 47 10<br>98 47 11<br>98 47 11<br>98 47 12<br>98 47 12<br>98 47 12<br>98 47 14<br>98 47 16<br>98 47 16<br>98 47 16<br>98 47 17<br>98 47 18<br>98 47 18<br>98 47 22<br>98 47 22<br>98 47 24<br>98 47 24<br>98 47 3/4"<br>98 47 7/8"<br>98 47 7/8"                                                                             | 227<br>227<br>228<br>227<br>227<br>227<br>227<br>227<br>227<br>227 |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 1/2"<br>98 47 10<br>98 47 11<br>98 47 11<br>98 47 12<br>98 47 12<br>98 47 12<br>98 47 13<br>98 47 14<br>98 47 16<br>98 47 16<br>98 47 17<br>98 47 18<br>98 47 19<br>98 47 22<br>98 47 24<br>98 47 24<br>98 47 27<br>98 47 24<br>98 47 5/8"<br>98 47 9/16"<br>98 49 05<br>98 49 05                                                     | 227<br>227<br>228<br>227<br>227<br>227<br>227<br>227<br>227<br>227 |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 1/2"<br>98 47 10<br>98 47 11<br>98 47 11<br>98 47 12<br>98 47 12<br>98 47 12<br>98 47 13<br>98 47 14<br>98 47 16<br>98 47 16<br>98 47 17<br>98 47 17<br>98 47 18<br>98 47 19<br>98 47 22<br>98 47 24<br>98 47 27<br>98 47 24<br>98 47 27<br>98 47 5/8"<br>98 47 7/8"<br>98 47 7/8"<br>98 47 9/16"<br>98 49 05<br>98 49 06<br>98 49 08 | 227<br>227<br>228<br>227<br>227<br>227<br>227<br>227<br>227<br>227 |               |     |
| 98 45 125<br>98 45 250<br>98 47 1"<br>98 47 1/2"<br>98 47 10<br>98 47 11<br>98 47 11<br>98 47 12<br>98 47 12<br>98 47 12<br>98 47 13<br>98 47 14<br>98 47 16<br>98 47 16<br>98 47 17<br>98 47 18<br>98 47 19<br>98 47 22<br>98 47 24<br>98 47 24<br>98 47 27<br>98 47 24<br>98 47 5/8"<br>98 47 9/16"<br>98 49 05<br>98 49 05                                                     | 227<br>227<br>228<br>227<br>227<br>227<br>227<br>227<br>227<br>227 |               |     |

|                                                                                               | 220                                   |
|-----------------------------------------------------------------------------------------------|---------------------------------------|
| 12-Point Sockets                                                                              | 228                                   |
| ACSR Cable Cutter (ratchet action)                                                            |                                       |
| Adjustable Wrench                                                                             | 220                                   |
| Anvil shears                                                                                  |                                       |
| Assortment Boxes                                                                              |                                       |
| Automatic Insulation Stripper                                                                 | 26 20                                 |
|                                                                                               |                                       |
| Automatic Insulation Stripper for flat cable                                                  |                                       |
| Automatic Stripping Pliers                                                                    |                                       |
| Belt Pouch                                                                                    | 329                                   |
| Belt Tool Pouch                                                                               | 329                                   |
| Blade Terminal Plugs                                                                          | 122                                   |
| Diade Terminal Codets                                                                         | 100                                   |
| Blade Terminal Sockets                                                                        |                                       |
| Bolt Cutters                                                                                  |                                       |
| Bolt End Cutting Nippers                                                                      | 99                                    |
| Bowden Cable Cutter                                                                           | 160                                   |
| Box Wrenches                                                                                  | 220                                   |
| Brick Pincers                                                                                 |                                       |
|                                                                                               |                                       |
| Butt Connectors                                                                               |                                       |
| Cable Connectors, eye type                                                                    | 189                                   |
| Cable Cutters (ratchet action / SWA cable)                                                    |                                       |
| Cable Cutters (ratchet action)                                                                | 156 215                               |
| Cable Cutters (ratchet principle, 3-stage)                                                    | 157 216                               |
| Cable Cutters (fatchet philiciple, 5-stage)                                                   |                                       |
| Cable Knives                                                                                  |                                       |
| Cable Shears 150, 153,                                                                        | 212, 213, 214                         |
| Cable Shears (ratchet action)                                                                 | 159                                   |
| Cable Shears for two-hand operation                                                           | 154                                   |
| Cable Shears with twin cutting edge                                                           | 151 213                               |
| Cable the sutting east                                                                        |                                       |
| Cable tie cutting set                                                                         |                                       |
| Carpenters' Pincers                                                                           | /4                                    |
| Case for Electronics Pliers                                                                   | 276                                   |
| Circlip Pliers for external circlips on shafts                                                | 59                                    |
| Circlip Pliers for grip rings on shafts                                                       | 66                                    |
| Circlip Pliers for internal circlips in bore holes                                            | 50                                    |
| Circlip Filers for lange external sinding                                                     |                                       |
| Circlip Pliers for large external circlips                                                    |                                       |
| Circlip Pliers for large internal circlips<br>Circlip Tool for internal and external circlips | 64                                    |
| Circlip Tool for internal and external circlips                                               | 65                                    |
| Combination Pliers                                                                            | 4.8.198.199                           |
| Combination Shears                                                                            |                                       |
|                                                                                               | 133                                   |
|                                                                                               |                                       |
| Compact Diagonal Cutters                                                                      |                                       |
| Compact Diagonal Cutters<br>Compact Tool Case                                                 |                                       |
| Compact Diagonal Cutters<br>Compact Tool Case                                                 | 87, 209<br>235, 324, 325<br>173       |
| Compact Diagonal Cutters<br>Compact Tool Case                                                 | 87, 209<br>235, 324, 325<br>173<br>98 |
| Compact Diagonal Cutters<br>Compact Tool Case                                                 | 87, 209<br>235, 324, 325<br>173<br>98 |
| Compact Diagonal Cutters<br>Compact Tool Case                                                 | 87, 209<br>235, 324, 325<br>173<br>98 |
| Compact Diagonal Cutters                                                                      |                                       |

| Electronics End Cutting Nippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 250                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electronics Mounting Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 255                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Electronics Oblique Cutting Nipper                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 251                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Electronics Pliers / ESD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Electronics Pliers Sets                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 256                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Electronics Wire Stripper                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Electronics Wire Stripping Shears                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| End Cutting Nippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ./5, 101                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| End Cutting Nippers for mechanics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 101                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Extension Bars                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Extension sets Electro<br>F-compression connector                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2/9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| F-compression connector                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 195                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Flat Nose Grozing Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Flat Nose Pliers<br>Flat Nose Pliers with cutting edges                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | .40, 205                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Flat Pin Accessory Distributors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 14<br>100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Folding Knife for Electricians                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Four-Mandrel Crimping Pliers for turned contacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Glass Breaking Pincer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Glass Nibbling Pincers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1/11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Grip Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 141                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Gripping Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | رد<br>۱۵                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Gripping Pliers for precision mechanics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Halogen Rulh Evchange Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | JZ<br>1/12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Halogen Bulb Exchange Pliers<br>Hammerhead Style Carpenters' Pincers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 142<br>7/                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Hexagon Sockets for hexagonal socket screws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| High Leverage Centre Cutters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Q1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| High Leverage Combination Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| High Leverage Concreters' Nippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 5, 150                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| High Leverage Diagonal Cutters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 88 209                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| High Leverage End Cutting Nippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 00, 205<br>QQ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| High Leverage Flush Cutter for soft metal and plastic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| High Performance Diagonal Cutters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 90                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Hose Clamp Pliers for Click clamps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 138                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Hose Clamp Pliers for Click clamps<br>Insertion tool for LSA-Plus and identical construction design                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 165                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Insulating clamps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Insulating Mats from rubber                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 233                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Insulation Strippers 20.25                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 36 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>116                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>116<br>210                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>116<br>210<br>118                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>116<br>210<br>118<br>94                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>116<br>210<br>118<br>94<br>93                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>116<br>210<br>118<br>94<br>93<br>96                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>16<br>210<br>118<br>94<br>93<br>96<br>110                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>16<br>210<br>118<br>94<br>93<br>96<br>110<br>115                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>16<br>210<br>118<br>94<br>93<br>96<br>110<br>115<br>114                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>116<br>210<br>118<br>94<br>93<br>96<br>110<br>115<br>114<br>!13, 271                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>116<br>210<br>118<br>94<br>94<br>93<br>96<br>110<br>115<br>114<br>I13, 271<br>I15, 211                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>16<br>210<br>118<br>94<br>94<br>93<br>96<br>110<br>115<br>114<br>114<br>114<br>112                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>16<br>116<br>118<br>94<br>94<br>93<br>96<br>110<br>115<br>114<br>115<br>115<br>115<br>112<br>112<br>109                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>16<br>116<br>118<br>94<br>94<br>93<br>96<br>110<br>115<br>114<br>115<br>115<br>115<br>112<br>112<br>109<br>113                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>16<br>116<br>94<br>94<br>93<br>96<br>110<br>115<br>114<br>115<br>114<br>112<br>109<br>113<br>169<br>143                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>16<br>116<br>94<br>94<br>93<br>96<br>110<br>115<br>114<br>115<br>114<br>119<br>113<br>109<br>113<br>169<br>43<br>169<br>43<br>                                                                                                                                                                                                                                                                                                                                                                                                     |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>16<br>116<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>                                                                                              |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>16<br>116<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>                                                                                              |
| Insulation Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 36, 200<br>35<br>13<br>16<br>116<br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Insulation       Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 36, 200<br>35<br>13<br>16<br>210<br>118<br>94<br>94<br>94<br>94<br>94<br>96<br>110<br>115<br>114<br>112<br>109<br>113<br>109<br>113<br>113<br>166<br>26                                                                                                                                                                                                                                                                                                                                                                                                   |
| Insulation       Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 36, 200<br>35<br>35<br>13<br>16<br>116<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>96<br>110<br>115<br>114<br>112<br>103<br>113<br>113<br>113<br>113<br>113<br>113<br>113<br>113<br>113<br>113<br>113<br>116<br>112<br>112<br>113<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>                                                         |
| Insulation       Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 36, 200<br>35<br>35<br>13<br>16<br>210<br>118<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>96<br>110<br>115<br>114<br>115<br>112<br>109<br>113<br>109<br>113<br>113<br>116<br>129<br>131<br>116<br>112<br>113<br>116<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>112<br>       |
| Insulation       Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 36, 200<br>35<br>35<br>13<br>116<br>210<br>118<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>110<br>115<br>114<br>115<br>114<br>115<br>114<br>115<br>114<br>115<br>116<br>116<br>116<br>116<br>116<br>116<br>116<br>116<br>116<br>116<br>116<br>116<br>116<br>116<br>116<br>116<br>116<br>116<br>110<br>116<br>110<br>116<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>110<br>112<br>110<br>113<br>113<br> |
| Insulation       Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 36, 200<br>35<br>35<br>13<br>16<br>210<br>118<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>110<br>115<br>114<br>115<br>112<br>109<br>113<br>166<br>216<br>129<br>166<br>29<br>108                                                                                                                                                                                                                                                                                                                                                                   |
| InsulationStrippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 36, 200<br>35<br>35<br>13<br>116<br>210<br>118<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>112<br>112<br>112<br>113<br>169<br>131<br>169<br>131<br>169<br>131<br>169<br>131<br>169<br>131<br>169<br>131<br>169<br>131<br>169<br>131<br>169<br>131<br>169<br>131<br>116<br>129<br>131<br>116<br>110<br>112<br>112<br>112<br>112<br>112<br>113<br>114<br>112<br>112<br>113<br>114<br>112<br>112<br>112<br>112<br>113<br>114<br>112<br>112<br>112<br>113<br>114<br>                                                                                   |
| Insulation       Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 36, 200<br>35<br>13<br>16<br>210<br>118<br>94<br>94<br>93<br>96<br>110<br>115<br>114<br>115, 211<br>115, 211<br>115, 211<br>112<br>109<br>13<br>169<br>131<br>166<br>219<br>179<br>179<br>166<br>219<br>108<br>                                                                                                                                                                                                                                                                                                                                           |
| InsulationStrippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 36, 200<br>35<br>35<br>13<br>16<br>210<br>118<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>                     |
| Insulation       Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 36, 200<br>35<br>35<br>13<br>16<br>210<br>118<br>94<br>94<br>93<br>96<br>10<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>112<br>112<br>112<br>112<br>112<br>                                                                                                      |
| Insulation       Strippers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 36, 200<br>35<br>35<br>13<br>16<br>210<br>118<br>94<br>94<br>93<br>96<br>10<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>112<br>112<br>112<br>112<br>115<br>115<br>112<br>                                                                                        |
| InsulationStrippers.20, 25,Insulation strippers with cable shears.Jewellers' PliersJewellers' PliersKNIPEX Alligator® - Water Pump Pliers.KNIPEX Alligator® - Water Pump Pliers.KNIPEX Alligator® XL - Water Pump Pliers.KNIPEX CoBolt® - Compact Bolt CuttersKNIPEX CoBolt® S - Compact Bolt Cutters.KNIPEX CoBolt® XL - Compact Bolt Cutters.KNIPEX Cobra® - Hightech Water Pump PliersKNIPEX Cobra® - Hightech Water Pump PliersKNIPEX Cobra® ES - Water Pump Pliers extra-slimKNIPEX Cobra® QuickSet - Hightech Water Pump PliersKNIPEX Cobra® Set - Hightech Water Pump PliersKNIPEX Cobra® XL / XXL - Hightech Water Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX Cobra® Mater - Water Pump PliersKNIPEX Cobra® Mater - Water Pump PliersKNIPEX Cobra® Mater - Water Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX Cobra® Mater - Water Pump PliersKNIPEX Cobra® Mater - Water Pump PliersKNIPEX L-BOXX® - Tool CaseKNIPEX L-BOXX® Electro - Tool CaseKNIPEX MultiCrimp® - Crimping Pliers with changer magazineKNIPEX MultiStrip 10 - Automatic Insulation StripperKNIPEX PreciForce® - Crimping PliersKNIPEX StriX® - Insulation strippers with cable shearsKNIPEX StriX® - Insulation strippers with cable shearsKNIPEX StriX® - Insulation strippers with cable shearsKNIPEX TubiX® - Pipe CutterKNIPEX TubiX® - Pipe CutterKNIPEX TubiX® - Pipe CutterKNIPEX TwinKey® - Control Cabinet KeyKNIPEX TwinKey® - Control Cabinet                                                                                                                                                                        | 36, 200<br>35<br>35<br>13<br>16<br>210<br>118<br>94<br>94<br>93<br>96<br>10<br>115<br>114<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>112<br>115<br>112<br>112<br>112<br>112<br>112<br>115<br>112<br>                                                                                        |
| InsulationStrippers.20, 25,Insulation strippers with cable shears.Jewellers' PliersJewellers' PliersKNIPEX Alligator® - Water Pump PliersKNIPEX Alligator® - Water Pump PliersKNIPEX Alligator® XL - Water Pump PliersKNIPEX CoBolt® - Compact Bolt CuttersKNIPEX CoBolt® S - Compact Bolt Cutters.KNIPEX CoBolt® XL - Compact Bolt CuttersKNIPEX Cobolt® S - Compact Bolt Cutters.KNIPEX Cobolt® S - Compact Bolt CuttersKNIPEX Cobolt® S - Water Pump Pliers extra-slimKNIPEX Cobra® ES - Water Pump Pliers extra-slimKNIPEX Cobra® QuickSet - Hightech Water Pump PliersKNIPEX Cobra® VDE - Hightech Water Pump PliersKNIPEX Cobra® XL / XXL - Hightech Water Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX Cobra® Correct Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX Cobra® Correct Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX Cobra® Correct Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX Cobra® Correct Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX SergoStrip® - Universal Stripping Tool.KNIPEX L-BOXX® Electro - Tool CaseKNIPEX HebOXX® Sanitary - Tool CaseKNIPEX MultiCrimp® - Crimping Pliers with changer magazineKNIPEX PreciForce® - Crimping PliersKNIPEX SmartGrip® - Water Pump PliersKNIPEX SmartGrip® - Water Pump PliersKNIPEX StepCutKNIPEX StepCutKNIPEX StepCutKNIPEX TwinForce® - High Performance Diagonal CuttersKNIPEX TwinFo                                                                                                                                                                                          | 36, 200<br>35<br>35<br>13<br>16<br>210<br>118<br>94<br>94<br>93<br>96<br>110<br>115<br>114<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>112<br>112<br>129<br>129<br>129<br>128<br>128<br>                                                                                                                                                                                         |
| Insulation Strippers.       20, 25,         Insulation strippers with cable shears.       Jewellers' Pliers.         KNIPEX Alligator® - Water Pump Pliers.       KNIPEX Alligator® - Water Pump Pliers.         KNIPEX Alligator® - Water Pump Pliers.       KNIPEX CoBolt® - Compact Bolt Cutters.         KNIPEX Cobolt® S - Compact Bolt Cutters.       KNIPEX Cobolt® S - Compact Bolt Cutters.         KNIPEX Cobolt® XL- Compact Bolt Cutters.       KNIPEX Cobolt® S - Compact Bolt Cutters.         KNIPEX Cobra® - Hightech Water Pump Pliers       KNIPEX Cobra® ES - Water Pump Pliers extra-slim         KNIPEX Cobra® ES - Water Pump Pliers extra-slim       KNIPEX Cobra® Set - Hightech Water Pump Pliers         KNIPEX Cobra® Set - Hightech Water Pump Pliers       KNIPEX Cobra® XL - XXL - Hightech Water Pump Pliers         KNIPEX Cobra® XS - Hightech Water Pump Pliers       KNIPEX Cobra® XS - Hightech Water Pump Pliers         KNIPEX Cobra® XS - Hightech Water Pump Pliers       KNIPEX Cobra® XS - Hightech Water Pump Pliers         KNIPEX Cobra® XS - Hightech Water Pump Pliers       KNIPEX Cobra® XS - Hightech Water Pump Pliers         KNIPEX Cobra® XS - Gord Case       KNIPEX Cobra® XS - Hightech Water Pump Pliers         KNIPEX L-BOXX® Electro - Tool Case       KNIPEX MultiCrimp® - Crimping Pliers with changer magazine         KNIPEX MultiCrimp® - Crimping Pliers       KNIPEX StepCut         KNIPEX PreciForce® - Crimping Pliers       KNIPEX StepCut <tr< td=""><td>36, 200<br/>35<br/>35<br/>13<br/>16<br/>118<br/>94<br/>94<br/>93<br/>96<br/>110<br/>115<br/>114<br/>15, 211<br/>115, 211<br/>115, 211<br/>115<br/>114<br/>15, 211<br/>115<br/>115<br/>116<br/></td></tr<> | 36, 200<br>35<br>35<br>13<br>16<br>118<br>94<br>94<br>93<br>96<br>110<br>115<br>114<br>15, 211<br>115, 211<br>115, 211<br>115<br>114<br>15, 211<br>115<br>115<br>116<br>                                                                                                                                                                                                                                                                                                                                                                                  |
| InsulationStrippers.20, 25,Insulation strippers with cable shears.Jewellers' PliersJewellers' PliersKNIPEX Alligator® - Water Pump PliersKNIPEX Alligator® - Water Pump PliersKNIPEX Alligator® XL - Water Pump PliersKNIPEX CoBolt® - Compact Bolt CuttersKNIPEX CoBolt® S - Compact Bolt Cutters.KNIPEX CoBolt® XL - Compact Bolt CuttersKNIPEX Cobolt® S - Compact Bolt Cutters.KNIPEX Cobolt® S - Compact Bolt CuttersKNIPEX Cobolt® S - Water Pump Pliers extra-slimKNIPEX Cobra® ES - Water Pump Pliers extra-slimKNIPEX Cobra® QuickSet - Hightech Water Pump PliersKNIPEX Cobra® VDE - Hightech Water Pump PliersKNIPEX Cobra® XL / XXL - Hightech Water Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX Cobra® Correct Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX Cobra® Correct Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX Cobra® Correct Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX Cobra® Correct Pump PliersKNIPEX Cobra® XS - Hightech Water Pump PliersKNIPEX SergoStrip® - Universal Stripping Tool.KNIPEX L-BOXX® Electro - Tool CaseKNIPEX HebOXX® Sanitary - Tool CaseKNIPEX MultiCrimp® - Crimping Pliers with changer magazineKNIPEX PreciForce® - Crimping PliersKNIPEX SmartGrip® - Water Pump PliersKNIPEX SmartGrip® - Water Pump PliersKNIPEX StepCutKNIPEX StepCutKNIPEX StepCutKNIPEX TwinForce® - High Performance Diagonal CuttersKNIPEX TwinFo                                                                                                                                                                                          | 36, 200<br>35<br>35<br>13<br>16<br>118<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>94<br>115<br>114<br>115<br>114<br>115<br>115<br>115<br>114<br>115<br>115<br>115<br>115<br>115<br>116<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>116<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>115<br>112<br>112<br>                                                                                                                                                 |

| Long Reach Needle-Nose Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LUNG Reach Needle-Nuse Fliels                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Long Reach Needle-Nose Pliers with transverse profiles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Long Reach Needle-Nose Pliers with wave profile                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Magnetic LED Lamp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Material catcher                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Mechanics' Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Mini Combination Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Mini pliers sets                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Mini Water Pump Pliers with groove joint119                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Mini Wire Stripper                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Mitre Shears for plastic and rubber sections                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Multifunctional – cutting and stripping with one pair of pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Multiple Slip Joint Spanner                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Needle-Nose Combination Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Needle-Nose Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Non-insulated Solderless Terminals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Non-insulated wire ferrules191                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Notching Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Nut Drivers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Open-end wrenches                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Devent Deal Dinger 120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Parrot Beak Pincer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Pen-Style Control Cabinet Key                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Pipe Cutter for composite and plastic pipes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Pipe Cutter for composite pipes and protective tubes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Pipe Cutter for plastic conduit pipes134                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Pipe cutters for multilayer and pneumatic hoses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Pipe cutters for plastic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Pipe Wrenches 45°120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Pipe Wrenches 90°120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Pipe Wrenches S-Type121                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Plastic Flat Nose Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Plastic Slip-On Caps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Plastic Snipe Nose Pliers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Pliers for Electrical Installation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Pliers Sets                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Pliers Minerals – Distanting inves                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Pliers Wrench - Protective jaws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Pliers Wrench with roughened jaws                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Pliers Wrench XL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Pliers Wrenches                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Plug Connectors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Potters' Pincers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers252Precision Insulation Strippers24                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Potters' Pincers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers252Precision Insulation Strippers24Precision Mechanics Pliers14Precision Tweezers212, 257, 258, 259, 260, 261                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Potters' Pincers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Potters' Pincers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Potters' Pincers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers252Precision Insulation Strippers24Precision Tweezers212, 257, 258, 259, 260, 261Profi-Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers15, 205                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Potters' Pincers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers252Precision Insulation Strippers24Precision Tweezers212, 257, 258, 259, 260, 261Profi-Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers51Reversible Ratchets226, 229                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Potters' Pincers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers252Precision Insulation Strippers24Precision Mechanics Pliers14Precision Meceares212, 257, 258, 259, 260, 261Profi-Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers51Reversible Ratchets226, 229Revolving Punch Pliers139Ring Pliers for retaining rings on shafts66                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers252Precision Insulation Strippers24Precision Mechanics Pliers14Precision Meceares212, 257, 258, 259, 260, 261Profi-Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers51Reversible Ratchets226, 229Revolving Punch Pliers139Ring Pliers for retaining rings on shafts66Round Nose Pliers47, 204                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Potters' Pincers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers252Precision Insulation Strippers24Precision Mechanics Pliers14Precision Meceares212, 257, 258, 259, 260, 261Profi-Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers51Reversible Ratchets226, 229Revolving Punch Pliers139Ring Pliers for retaining rings on shafts66Round Nose Pliers47, 204                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Potters' Pincers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Potters' Pincers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers252Precision Insulation Strippers24Precision Tweezers212, 257, 258, 259, 260, 261Profi-Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers51Reversible Ratchets226, 229Revolving Punch Pliers139Ring Pliers for retaining rings on shafts66Round Nose Pliers139Round Piers with cutting edge13Round Sockets188Screwdrivers222, 223, 224, 225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers252Precision Insulation Strippers24Precision Tweezers212, 257, 258, 259, 260, 261Profi-Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers51Reversible Ratchets226, 229Revolving Punch Pliers139Ring Pliers for retaining rings on shafts66Round Nose Pliers139Round Pin Plugs139Round Pliers with cutting edge13Round Sockets188Screwdrivers222, 223, 224, 225Self-Adjusting Crimping Pliers for wire ferrules180, 181, 182                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Potters' Pincers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Potters' Pincers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Potters' Pincers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers252Precision Insulation Strippers24Precision Tweezers212, 257, 258, 259, 260, 261Profi-Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers51Reversible Ratchets226, 229Revolving Punch Pliers139Ring Pliers for retaining rings on shafts66Round Nose Pliers47, 204Round Sockets188Screwdrivers222, 223, 224, 225Self-Adjusting Crimping Pliers for wire ferrules180, 181, 182Self-Clamping Slip-On Caps232Set of Circlip Pliers67, 68, 70, 272, 273, 278Set of Mounting Tools for solar cable connectors MC4 (Multi-Contact)173                                                                                                                                                                                                                                                                                                                               |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers252Precision Insulation Strippers24Precision Tweezers212, 257, 258, 259, 260, 261Profi-Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers51Reversible Ratchets226, 229Reversible Ratchets226, 229Revolving Punch Pliers139Ring Pliers for retaining rings on shafts66Round Nose Pliers138Round Sockets188Screwdrivers222, 223, 224, 225Self-Adjusting Crimping Pliers for wire ferrules180, 181, 182Self-Adjusting Insulation Strippers27Self-Adjusting Insulation Strippers27Set of Circlip Pliers232Set of Circlip Pliers232Set of Pliers Wrenches106, 271                                                                                                                                                                                                                                                                                                  |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers252Precision Insulation Strippers24Precision Mechanics Pliers14Precision Tweezers212, 257, 258, 259, 260, 261Profi-Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers15, 205Relay Adjusting Pliers51Reversible Ratchets226, 229Revolving Punch Pliers139Ring Pliers for retaining rings on shafts66Round Nose Pliers189Round Sockets188Screwdrivers222, 223, 224, 225Self-Adjusting Insulation Strippers27Self-Adjusting Crimping Pliers for wire ferrules180, 181, 182Self-Adjusting Insulation Strippers27Set of Circlip Pliers67, 68, 70, 272, 273, 278Set of Mounting Tools for solar cable connectors MC4 (Multi-Contact)173Shears for KEVLAR® fibres132                                                                                                                                                                                                 |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers252Precision Insulation Strippers24Precision Mechanics Pliers14Precision Tweezers212, 257, 258, 259, 260, 261Profi-Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers15, 205Relay Adjusting Pliers51Reversible Ratchets226, 229Revolving Punch Pliers139Ring Pliers for retaining rings on shafts66Round Nose Pliers189Round Sockets188Screwdrivers222, 223, 224, 225Self-Adjusting Crimping Pliers for wire ferrules180, 181, 182Self-Clamping Slip-On Caps232Set of Circlip Pliers67, 68, 70, 272, 273, 278Set of Pliers Wrenches132Sheet Metal Nibbler132Sheet Metal Nibbler135                                                                                                                                                                                                                                                                            |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers252Precision Mechanics Pliers24Precision Tweezers212, 257, 258, 259, 260, 261Profi-Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers51Reversible Ratchets226, 229Revolving Punch Pliers139Ring Pliers for retaining rings on shafts66Round Nose Pliers189Round Pin Plugs188Screwdrivers232Self-Adjusting Crimping Pliers for wire ferrules180, 181, 182Self-Clamping Slip-On Caps232Set of Circlip Pliers67, 68, 70, 272, 273, 278Set of Neunting Tools for solar cable connectors MC4 (Multi-Contact)173Set of Pliers Wrenches132Sheet Metal Nibbler135Siphon and Connector Pliers132Sheet Metal Nibbler135Siphon and Connector Pliers132                                                                                                                                                                                                                   |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers252Precision Mechanics Pliers14Precision Tweezers212, 257, 258, 259, 260, 261Profi-Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers15, 205Relay Adjusting Pliers51Reversible Ratchets226, 229Revolving Punch Pliers139Ring Pliers for retaining rings on shafts66Round Nose Pliers138Screwdrivers222, 223, 224, 225Self-Adjusting Crimping Pliers for wire ferrules180, 181, 182Self-Adjusting Insulation Strippers27Self-Clamping Slip-On Caps232Set of Circlip Pliers67, 68, 70, 272, 273, 278Set of Pliers Wrenches132Sheet Metal Nibbler135Siphon and Connector Pliers132Shall High Leverage Combination Pliers with pointed jaw61                                                                                                                                                                                                                      |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Insulation Strippers242Precision Mechanics Pliers14Precision Tweezers212, 257, 258, 259, 260, 261Profi-Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers51Reversible Ratchets226, 229Revolving Punch Pliers139Ring Pliers for retaining rings on shafts66Round Nose Pliers147, 204Round Pliers189Round Sockets180Screwdrivers222, 223, 224, 225Self-Adjusting Insulation Strippers27Self-Clamping Slip-On Caps232Set of Circlip Pliers67, 68, 70, 272, 273, 278Set of Mounting Tools for solar cable connectors MC4 (Multi-Contact)173Sheat Metal Nibbler135Siphon and Connector Pliers132Sheat Metal Nibbler135Siphon and Connector Pliers132Sheat Metal Nibbler135Siphon and Connector Pliers with pointed jaw.6Snipe Nose Pliers with centre cutter14                                                                                                                                |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers24Precision Mechanics Pliers24Precision Tweezers212, 257, 258, 259, 260, 261Profi-Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers15, 205Relay Adjusting Pliers51Reversible Ratchets226, 229Revolving Punch Pliers139Ring Pliers for retaining rings on shafts66Round Nose Pliers143Round Sockets189Screwdrivers222, 223, 224, 225Self-Adjusting Pliers173Set of Circlip Pliers67, 68, 70, 272, 273, 278Set of Circlip Pliers67Ster of Circlip Pliers132Sheet Metal Nibbler132Sheet M                                                                         |
| Potters' Pincers75Precision Circlip Pliers for internal circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Gripping Pliers244, 245Precision Insulation Strippers24Precision Mechanics Pliers14Precision Tweezers212, 257, 258, 259, 260, 261Prof.Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers15, 205Relay Adjusting Pliers51Reversible Ratchets226, 229Revolving Punch Pliers139Ring Pliers for retaining rings on shafts66Round Nose Pliers139Round Pine Plugs189Round Piner Plugs189Round Sockets188Screwdrivers222, 223, 224, 225Self-Adjusting Crimping Pliers for wire ferrules180, 181, 182Self-Adjusting Crimping Pliers for solar cable connectors MC4 (Multi-Contact)173Set of Circlip Pliers67, 68, 70, 272, 273, 278Set of Mounting Tools for solar cable connectors MC4 (Multi-Contact)173Shear Metal Nibbler132Shear Metal Nibbler133Small High Leverage Combination Pliers with pointed jaw67Siphon and Connector Pliers123Shear Metal Nibbler123Shear Metal Nibbler123Shear Metal Nibbler123Sockets with Torx drive226 |
| Potters' Pincers75Precision Circlip Pliers for external circlips on shafts62Precision Circlip Pliers for internal circlips in bore holes60Precision Circlip Pliers Set70, 278Precision Electronics Diagonal Cutters / ESD244, 245Precision Electronics Gripping Pliers24Precision Mechanics Pliers24Precision Tweezers212, 257, 258, 259, 260, 261Profi-Key144PUK® Junior Hacksaw233Punch Lock Riveters135Radio Pliers15, 205Relay Adjusting Pliers51Reversible Ratchets226, 229Revolving Punch Pliers139Ring Pliers for retaining rings on shafts66Round Nose Pliers143Round Sockets189Screwdrivers222, 223, 224, 225Self-Adjusting Pliers173Set of Circlip Pliers67, 68, 70, 272, 273, 278Set of Circlip Pliers67Ster of Circlip Pliers132Sheet Metal Nibbler132Sheet M                                                                         |

| Stand Mats from rubber                                                          |                    |
|---------------------------------------------------------------------------------|--------------------|
| Stork Beak Pliers                                                               |                    |
| Stripping Knives                                                                |                    |
| Stripping Pliers                                                                |                    |
| Stripping Tool for coax cables                                                  |                    |
| Stripping Tool for data cables                                                  |                    |
| Stripping Tool for fibre optics<br>Stripping Tool for flat and round cables     |                    |
|                                                                                 |                    |
| Stripping Tools<br>Stripping Tools for spiral cutting                           | ٥כ<br>דכ           |
| Stripping Tools with scalpel blade                                              | ، د<br>عد          |
| Stripping Tweezers for coated wire                                              | 33                 |
| T-handle                                                                        |                    |
| Tear-off Pliers for vehicle bodywork                                            |                    |
| Telephone Pliers                                                                |                    |
| Tethered Tools                                                                  |                    |
| Tile Breaking Pliers                                                            | 140                |
| Tile Nibbling Pincer                                                            | 139                |
| Tool bag "Classic" Electro                                                      | 318                |
| Tool bag "Kompakt"                                                              | 327                |
| Tool bag "Kompakt" Electric                                                     | 319                |
| Tool bag "Kompakt" Electric<br>Tool bag "LightPack"<br>Tool bag "Service"       |                    |
| lool bag "Service"                                                              |                    |
| Tool bag "Stretched"                                                            |                    |
| Tool Box "RED" Electro                                                          | 236, 284           |
| Tool Box "SRZ" Precision Circlip Pliers<br>Tool Case "Basic"                    | לאכ (1, 285<br>דסר |
| Tool Case "BIG Basic Move"                                                      | / ۵۷۷۵<br>مەر      |
| Tool Case "BIG Basic Move" Electro                                              | 209<br>200         |
| Tool Case "BIG Basic Move" Sanitary                                             |                    |
| Tool Case "BIG Twin Move Red"                                                   | 300                |
| Tool Case "BIG Twin Move"                                                       |                    |
| Tool Case "BIG Twin Move" Electro                                               |                    |
| Tool Case "BIG Twin" Electro                                                    |                    |
| Tool Case "BIG Twin"                                                            |                    |
| Tool Case "Focus" Electro                                                       |                    |
| Tool Case "Robust"                                                              |                    |
| Tool Case "Robust23" Electro                                                    |                    |
| Tool Case "Robust34" Electro                                                    |                    |
| Tool Case "Robust45 Move" Electro                                               |                    |
| Tool Case "Robust45 Move" Mechanics                                             |                    |
| Tool Case "Vision24" Electro                                                    |                    |
| Tool Case "Vision27" Sanitary                                                   |                    |
| Tool Case "BIG Basic Move" Électro Plus<br>Tool Case "BIG Basic Move" Mechanics |                    |
| Tool Case for Photovoltaics                                                     |                    |
| Tool Kits                                                                       | 280 282            |
| Tool Roll                                                                       |                    |
| Torque Wrenches                                                                 |                    |
| Tower Pincers, Steel Fixers' Nippers                                            |                    |
| Twin wire ferrules with plastic collar                                          |                    |
| Universal Grip Pliers                                                           |                    |
| Universal Key                                                                   | 144                |
| Universal Key "Construction"                                                    | 144                |
| Universal Stripping Tool for building and industrial cables                     |                    |
| Universal Stripping Tools                                                       | 41, 43             |
| Upholstery Pliers                                                               | 140                |
| Vinyl Shears                                                                    |                    |
| Water Pump Pliers                                                               | 118                |
| Water Pump Pliers with groove joint                                             | 119                |
| Welding Grip Pliers                                                             |                    |
| Wire ferrules with plastic collar                                               |                    |
| Wire Rope and ACSR-Cable Cutters                                                |                    |
| Wire Rope Cutters                                                               | 160, גכו<br>רב     |
| Wire Stripper for fibre optics<br>Wire Stripping Tool for coax and data cable   | 22<br>مد           |
|                                                                                 | 39                 |

It is not permissible to copy the catalogue or parts of it in any way without our approval.

Illustrations, dimensions and weights are just approximate. No liability is assumed for misprints or errors.

Printed in the Federal Republic of Germany.

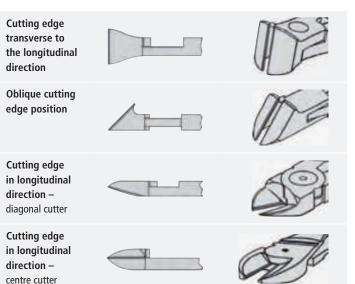
KNIPEX-Werk C. Gustav Putsch KG 2020

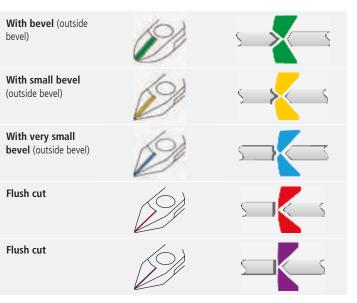
### KNOWLEDGE OF PLIERS



### Direction and position of the cutting edges

### Cutting edge shapes DIN ISO 5742





### Joint types

#### Lap joint

With the lap joint, which is used on carpenters' pincers, concretors' nippers and high leverage diagonal cutters, the two halves of the pliers lie on top of each other withou being milled out. The pliers handle can thus be designed to be very robust.

#### Single joint

With the single joint, half the thickness of each pliers handle is milled. Both pliers handles can thus be fitted into one another. The outer sides in the rivet area are smooth and not indented.

#### Box joint

One handle on the pliers is slit. The other handle is pushed through this slot. This joint connection can withstand a high level of load and strain because the joint bolt is supported on both sides and the inside handle is guided on both sides.

#### Slip joint

Slip joints enable optimal adaptation of the gripping jaws of pliers to various workpiece sizes. The opening width of the jaws is increased or decreased for this purpose. This occurs through shifting the two pliers handles with respect to one another.

### Safety instruction

- > Each tool should only be used for its specified purpose.
- > When using cutting pliers: beware of wire ends flying off. Wear protective goggles and – if needed – gloves. Be aware of bystanders!
- > Only handles marked with the symbol A 1000 V are insulating.

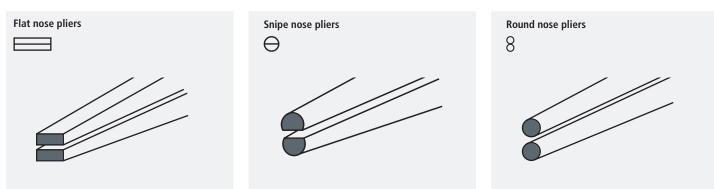


### **Care instructions**

A drop of oil (e.g. WD-40<sup>®</sup>) on the polished surfaces and in the joint keeps your pliers in good working order and extends their service life!



### Basic jaw shapes



### Examples of different handle types on a pair of pliers



Straight handles, fully-metal design without plastic grips are used when the hand must be placed at various positions when gripping. This is often the case with carpenters' pliers and concretors' nippers.



#### S-shaped handles, thin plastic coatings

render pliers slip resistant and pleasant to grip. They support a precise hand position, which can be useful in screwing motions, for example. The typical handle for water pump pliers.



#### Curved handles, thin plastic coatings support the hand at the front and rear. This is always beneficial where high forces are required, for example with diagonal cutters.



#### Multi-component grips

Compared to handles with a thin plastic coating, comfort handles offer the hand a larger contact surface, enabling better distribution of force and thus making work more comfortable.



VDE\*-insulated handles, multi-component grips Insulated grips for working on electrical systems. Approved to DIN EN/IEC 60900, these pliers comply with significantly more stringent technical and safety

standards.



**VDE\*-insulated handles with dip-insulation** The dipped VDE-handles guarantee the same electrical protection as other VDE insulated handles. In particular, energy companies use these different looking VDE-pliers to help prevent the wrong tool from being used.

\* Association for Electrical, Electronic and Information Technologies \*\* electrostatic discharge



ESD\*\*-grips, multi-component grips Dissipative sleeves enable a gradual, controlled equalisation of any prevailing differences in electric potential between the operator and sensitive electronic components.

### Cutting value table

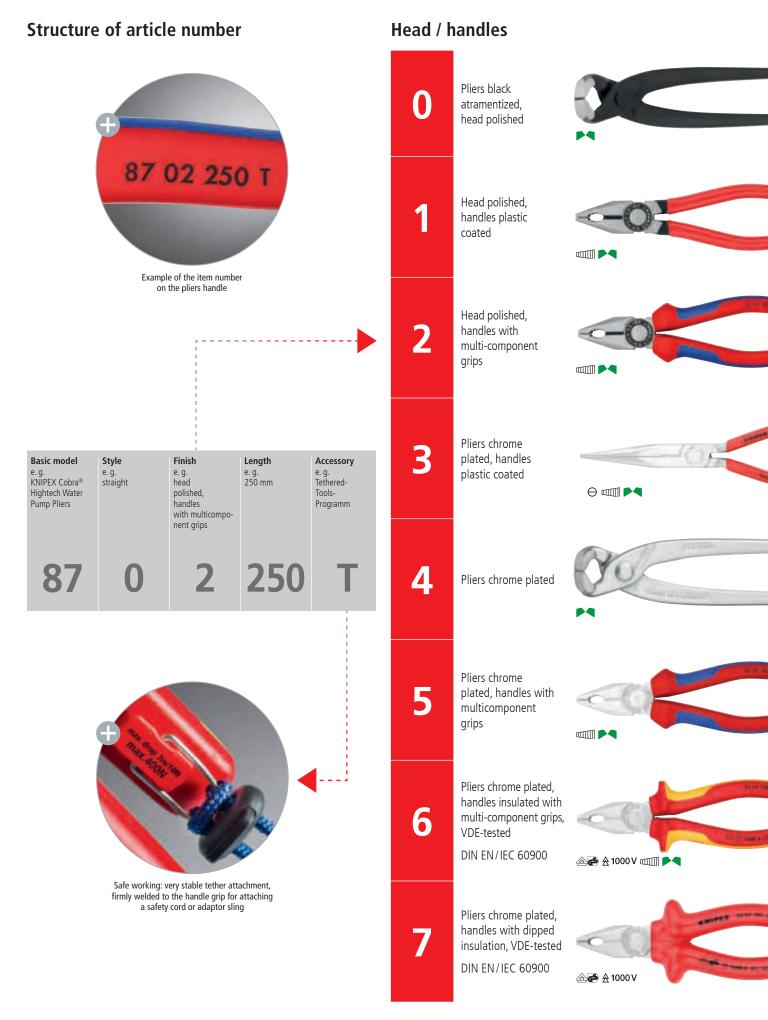
|                   |            | $\bullet$  |            |            |      |                                               |                         |            | $\bullet$              |            | •          |      |           |
|-------------------|------------|------------|------------|------------|------|-----------------------------------------------|-------------------------|------------|------------------------|------------|------------|------|-----------|
| Article No.       | Length     | Ø mm       | Ø mm       | Ø mm       | Ø mm | Page                                          | Article No.             | Length     | Ø mm                   | Ømm        | Ømm        | Ø mm | Page      |
| 020               | 180        |            |            | 2,5        | 2,0  | 5, 198                                        | 73 0                    | 160        | 4,8                    | 3,8        | 2,7        | 2,2  | 87, 209   |
|                   | 200        |            |            | 2,8        | 2,2  | 5, 198                                        | 73 7                    | 180        | 5,5                    | 4,6        | 3,2        | 3,0  | 90        |
|                   | 225        |            |            | 3,0        | 2,5  | 5, 198                                        | 74 0                    | 140        |                        | 3,1        | 2,0        | 1,5  | 89        |
| 030               | 140        |            | 2,8        | 1,8        |      | 4,199                                         |                         | 160        |                        | 3,4        | 2,5        | 2,0  | 89, 209   |
|                   | 160        |            | 3,1        | 2,0        |      | 4,199                                         |                         | 180        |                        | 3,8        | 2,7        | 2,2  | 89, 209   |
|                   | 180        |            | 3,4        | 2,2        |      | 4,199                                         |                         | 200        |                        | 4,2        | 3,0        | 2,5  | 89, 209   |
|                   | 200        |            | 3,8        | 2,5        |      | 4,199                                         |                         | 250        |                        | 4,6        | 3,5        | 3,0  | 89, 209   |
|                   | 250        |            | 3,8        | 2,5        |      | 4,199                                         | 74 91                   | 250        | 5,0                    | 5,0        | 3,8        | 3,5  | 91        |
| 08 0              | 110        |            | 2,5        | 1,6        |      | 8                                             | 75 02                   | 125        | 0,2 - 1,3              | 1,0        | 0,6        | 0,4  | 246       |
| 08 2              | 145        |            | 3,0        | 2,0        |      | 6, 200                                        | 75 12                   | 125        | 0,2 - 1,3              | 1,0        | 0,6        | 0,4  | 246       |
| 09 01/02/11/12    | 240        |            | 4,6        | 3,0        |      | 9                                             | 75 22                   | 125        | 0,2 - 1,3              | 0,9        | 0,4        | 0,3  | 246       |
| 130               | 160        |            | 2,5        | 1,6        |      | 12<br>34, 203                                 | 75 52<br>76 01/03/05/12 | 125        | 0,2 - 0,8              | 0,5        | 0,3        | 0.0  | 246<br>86 |
| 13 4              | 165        |            | 3,2        | 2,2        |      |                                               |                         | 125        | 0,4 - 3,0              | 2,3        | 1,5        | 0,6  | 86        |
| 190               | 130        | 2 5        | 2,2        | 1,6        |      | <u>13</u><br>14                               | 76 22<br>76 81          | 125        | 0,4 - 2,5              | 1.2        | 0,8        |      | 86        |
| 23 01<br>25 01/03 | 140<br>125 | 2,5        | 1,6<br>2,2 | 1,6        |      | 14                                            | 77 01/02                | 125<br>115 | 0,4 - 1,7<br>0,3 - 1,6 | 1,3<br>1,2 | 0,8        |      | 247       |
| 25 0/21/25/26     | 125        |            | 2,2        | 1,6        |      | 15                                            | 7701/02                 | 115        | 0,3 - 1,6              | 1,2        | 0,6        |      | 247       |
| 23 0/21/23/20     | 140        |            | 2,5        | 1,6        |      | 15, 205                                       | 77 11/12                | 115        | 0,3 - 2,0              | 1,5        | 0,8        |      | 247       |
| 26 1/26 2         | 200        |            | 3,2        | 2,2        |      | 16, 205                                       | 77 21                   | 115        | 0,3 - 1,3              | 1,2        | 0,0        |      | 247       |
| 50 0              | 160        |            | 1,8        | 2,2        |      | 74                                            | 11 21                   | 130        | 0,3 - 1,6              | 1,0        |            |      | 247       |
| 50 0              | 180        |            | 2,0        |            |      | 74                                            | 77 22                   | 115        | 0,3 - 1,3              | 1,0        |            |      | 247       |
|                   | 210        |            | 2,0        |            |      | 74                                            | 11 22                   | 130        | 0,3 - 2,0              | 1,5        |            |      | 247       |
|                   | 225        |            | 2,2        |            |      | 74                                            | 77 32                   | 115        | 0,3 - 1,3              | 1,0        | 0,5        |      | 247       |
|                   | 250        |            | 2,2        |            |      | 74                                            | 77 41                   | 115        | 1,3                    | 0,8        | 0,5        |      | 247       |
|                   | 300        |            | 2,4        |            |      | 74                                            | 77 42                   | 115        | 0,3 - 1,3              | 0,8        |            |      | 247       |
| 51 01             | 210        |            | 1.8        |            |      | 74                                            |                         | 130        | 0.3 - 1.6              | 1,3        |            |      | 247       |
| 55 00 300         | 300        | 2,0 - 3,0  | .,=        |            |      | 75                                            | 77 52                   | 115        | 0,3 - 1,0              | 0.8        | 0,5        |      | 247       |
| 58 30 225         | 225        | 2,0        |            |            |      | 75                                            | 77 72                   | 115        | 0,3 - 0,8              |            |            |      | 247       |
| 61 0              | 200        | 1,0 - 6,0  | 4,0        | 3,5        | 3,0  | 99                                            | 78 03/13                | 125        | 0,2 - 1,6              | 1,0        |            |      | 241       |
| 62 12             | 120        | 0,3 - 1,0  | 0,7        |            |      | 251                                           | 78 03                   | 140        | 0,2 - 2,1              | 1,2        |            |      | 242, 243  |
| 64 0              | 115        | 2,0        | 1,0        | 0,6        |      | 251                                           | 78 23                   | 125        | 0,2 - 1,0              | 0,6        |            |      | 241       |
| 64 11             | 115        | 1,4        | 0,8        |            |      | 251                                           | 78 31/41                | 125        | 0,2 - 1,0              |            |            |      | 241       |
| 64 12             | 115        | 2,0        | 0,8        | 0,5        |      | 251                                           | 78 61/71                | 125        | 0,2 - 1,6              | 1,2        |            |      | 241       |
| 64 22             | 115        | 0,8        |            |            |      | 251                                           | 78 61                   | 140        | 0,2 - 2,1              | 1,4        |            |      | 242, 243  |
| 64 32             | 120        | 1,5        | 1,0        | 0,5        |      | 251                                           | 78 81/91                | 125        | 0,2 - 1,6              | 1,2        | 0,6        |      | 241       |
| 64 42             | 115        | 1,5        | 1,0        | 0,5        |      | 251                                           | 79 02                   | 120        | 0,2 - 1,4              | 1,0        | 0,6        |      | 244       |
| 64 52             | 115        | 1,3        |            |            |      | 251                                           | 79 02                   | 125        | 0,2 - 1,7              | 1,3        | 0,7        |      | 244       |
| 64 62             | 120        | 0,6        |            |            |      | 251                                           | 79 12                   | 125        | 0,3 - 1,7              | 1,3        | 1,0        | 0,6  | 244       |
| 64 72             | 120        | 1,5        |            | 2.2        | 4.5  | 251                                           | 79 22                   | 120        | 0,1 - 1,3              | 0,8        |            |      | 244       |
| 67 0              | 140        | 4,0        | 3,1        | 2,0        | 1,5  | 99                                            | 79 22                   | 125        | 0,1 - 1,7              | 1,0        | 0.5        |      | 244       |
|                   | 160        | 4,5        | 3,4        | 2,5        | 2,0  | 99                                            | 79 32                   | 125        | 0,2 - 1,5              | 1,1        | 0,6        |      | 244       |
| 60.04             | 200        | 5,0        | 3,8        | 3,0        | 2,5  | 99                                            | 79 42                   | 125        | 0,1 - 1,5              | 0,8        | 0.5        |      | 244       |
| 68 01             | 160        | 4,0        | 2,8        | 2,3        |      | 101                                           | 79 52                   | 125        | 0,2 - 1,3              | 0,9        | 0,5        |      | 244       |
|                   | 180        | 4,0        | 3,2        | 2,5        |      | 101                                           | 79 62                   | 125        | 0,1 - 1,3              | 0,8        | 1.4        |      | 244       |
|                   | 200        | 4,0        | 3,5        | 2,8        |      | 101                                           | 99 0                    | 200        |                        | 1,8        | 1,4        |      | 76        |
| 69 0              | 280<br>130 | 4,5        | 4,0        | 3,2        | 0.0  | <u>    101                               </u> |                         | 220<br>250 |                        | 2,4        | 1,6        |      | 76<br>76  |
| 70                | 130        | 0,4 - 2,0  | 1,3<br>2.0 | 1,0        | 0,8  |                                               |                         | 250        |                        | 2,4        | 1,6        |      | 76        |
| 70                | 125        | 3,0<br>3,0 | 2,0        | 1,2        |      | <u>85</u><br>85, 208                          |                         | 300        |                        | 2,8<br>3,1 | 1,8<br>1,8 |      | 76        |
|                   | 125        | 3,0        | 2,3        | 1,5<br>1,8 |      | 85, 208                                       | 99 1                    | 250        |                        | 3,1        | 1,8        |      | 76        |
|                   | 140        | 4,0        | 3.0        | 2.0        |      | 85, 208                                       | 33 1                    | 300        |                        | 3,8        | 2,0        |      | 77        |
|                   | 180        | 4,0        | 3,0        | 2,0        |      | 85, 208                                       |                         | 300        |                        | 0,0        | 2,0        |      | 11        |
| 71                | 160        | 5,3        | 4,4        | 3,2        | 3,0  | 93                                            |                         |            |                        |            |            |      |           |
| /1                | 200        | 6,0        | 5,2        | 4,0        | 3,6  | 94, 95                                        |                         |            |                        |            |            |      |           |

### Wire classes

|            | Material examples            | Type of wire | Tensile s<br>N/mm² | trength<br>kp/mm² |     |
|------------|------------------------------|--------------|--------------------|-------------------|-----|
| $\bigcirc$ | Copper, plastics             | soft         | 220                | 22                |     |
| $\bullet$  | Nail, wire pin               | medium-hard  | 750                | 75                |     |
| •          | Wire rope strand, steel wire | hard         | 1800               | 180               | - Y |
|            | Spring steel wire            | piano wire   | 2300               | 230               |     |

#### Note

The maximum values always indicate the performance limit under the most favourable cutting conditions, when the wire is placed as near as possible to the joint.



## Pictograms

| F               | Packing unit                                                                      |
|-----------------|-----------------------------------------------------------------------------------|
| SB              | Carded pliers                                                                     |
| BK              | Pliers in a blister                                                               |
| ESD             | Electrostatic discharging, dissipative                                            |
| <b>会 1000 V</b> | Insulated according to IEC 60900,<br>usable up to 1000 V AC/1500 V DC             |
|                 | VDE tested, also in compliance with<br>GPSG (Equipment and Product Safety<br>Act) |
| •               | Cu- + Al-multi-conductor cable, solid and multi-stranded                          |
|                 | Wire rope                                                                         |
| (11111)         | Ribbon cable                                                                      |
| ۲               | Steel wire armoured cable (SWA)                                                   |
| ۲               | ACSR cable                                                                        |
|                 | Soft wire                                                                         |
|                 | Medium hard wire                                                                  |
| J               | Hard wire                                                                         |
|                 | Piano wire                                                                        |
|                 | Square crimp automatic                                                            |
| <b>X</b>        | Hexagonal crimp automatic                                                         |
| ×               | Four mandrel crimp                                                                |
|                 | Mandrel crimp                                                                     |
|                 | Trapezoid crimp                                                                   |
|                 | Oval crimp                                                                        |
|                 | F-crimp                                                                           |
| V               | Mandrel crimp narrow                                                              |

|                | Trapezoid indent crimp         |
|----------------|--------------------------------|
| v              | W-crimp                        |
| <b>^</b>       | F-crimp narrow                 |
|                | Hexagonal crimp                |
|                | Square crimp                   |
|                | Tyco crimp                     |
| <b>ایس</b> ا   | Western crimp                  |
| $\mathbf{V}$   | Trapezoidal crimp front        |
| 0              | Hexagon                        |
| 0              | Hexagonal screw                |
| •              | Slotted screw                  |
| 0              | Cross recessed screw           |
| 0              | PlusMinus cross recessed screw |
| $\bigcirc$     | Pozidriv cross recessed screw  |
| 0              | Torx                           |
| 3⁄8"           | With driving square 3/8"       |
| 1/2"           | With driving square 1/2"       |
| 3/8            | Internal square 3/8"           |
| 1/2            | Internal square 1/2"           |
| 0              | Hexagonal socket               |
| <b>O</b><br>MM | 12-point                       |
| MM             | With opening spring            |
| >              | With lead catcher              |

| $\bigcirc$   | Internal circlip                                                            |
|--------------|-----------------------------------------------------------------------------|
| $\bigcirc$   | Externel circlip                                                            |
| 0            | Retaining ring, straight                                                    |
| 0            | Retaining ring, diagonal                                                    |
| Ö            | Grip ring                                                                   |
|              | Flat jaws                                                                   |
|              | Flat and pointed jaws                                                       |
| θ            | Half-round jaws                                                             |
| 8            | Round jaws                                                                  |
| $\checkmark$ | Angle                                                                       |
| $\Box$       | Smooth gripping surfaces                                                    |
|              | Smooth-serrated gripping surfaces                                           |
|              | Knurled gripping surfaces                                                   |
|              | Cross-hatched, knurled gripping<br>surfaces                                 |
|              | Centre cutter                                                               |
|              | Cutting edges with bevel                                                    |
|              | Cutting edges with small bevel                                              |
|              | Cutting edges with very small bevel                                         |
|              | Cutting edges without bevel                                                 |
|              | For flush cut of soft materials                                             |
| <b>E</b>     | Mechanically tested in accordance with the Equipment and Product Safety Act |
| Œ            | Conforms to a European directive                                            |
| X            | WEEE marking (Waste Electrical and Electronic Equipment Directive)          |

### Registered Trademarks of the companies

| Con-Pearl®                                | friedola TECH GmbH                   |
|-------------------------------------------|--------------------------------------|
| gesis®                                    | Wieland Electric GmbH                |
| Kapton <sup>®</sup> , KEVLAR <sup>®</sup> | E. I. du Pont de Nemours and Company |
| L-BOXX®                                   | Sortimo International GmbH           |
| Mini-Fit®, Micro-Fit™                     | Molex <sup>®</sup> Inc.              |
| MC®                                       | Multi-Contact AG                     |
| Phillips®                                 | Phillips Screw Company               |
| Pozidriv®                                 | European Industrial Service Ltd.     |
| Radox®                                    | HUBER+SUHNER AG                      |
| Scotchlok™                                | 3M                                   |
| Solarlok®                                 | Tyco Electronics                     |
| systainer®                                | TANOS GmbH                           |
| Torx®                                     | Acument Global Technologies, Inc.    |
| WD-40®                                    | WD-40 Company                        |
|                                           |                                      |



KNIPEX-Werk C. Gustav Putsch KG

42337 Wuppertal Tel +49 202 47 94-0 Fax +49 202 47 74 94

info@knipex.com www.knipex.com