

**RIDUTTORI PER SERVOMOTORI**  
**GEARBOXES FOR SERVOMOTORS /**  
**GETRIEBE FÜR SERVOMOTOREN /**





## L'esperienza al servizio dell'innovazione

IT

Dal 1955 il Gruppo Varvel progetta e realizza sistemi di trasmissione di potenza impiegati in numerosi settori dell'industria. "Know-how to do it": Varvel ha le competenze per soddisfare al meglio le richieste dei clienti. Grazie alla grande esperienza maturata in oltre sessant'anni, Varvel offre alla clientela un'ampia gamma di soluzioni standard e prodotti personalizzati per esigenze specifiche. L'intera gamma di prodotti Varvel è progettata e realizzata in Italia, ma il Gruppo è presente in tutto il mondo con due filiali (una in USA e l'altra in India) e una rete globale con oltre 100 partner commerciali.

## Experience at the service of innovation

EN

The Varvel Group has been designing and producing power transmission systems for numerous areas of industry since 1955. "Know-how to do it": Varvel has the know-how needed to satisfy customers' requests in the best way possible. Thanks to over sixty years of accumulated experience, Varvel can offer customers a vast range of standard solutions and customise products for specific needs. The entire product range is designed and made in Italy and sold worldwide through two subsidiaries (in the USA and India) and a global network of over 100 commercial partners.

## Erfahrung im Dienste der Innovation

DE

Die Varvel-Gruppe entwickelt und produziert seit 1955 Kraftübertragungssysteme für viele Industriezweige. "Know-how to do it": Varvel verfügt über das Know-how, um die Anforderungen der Kunden bestmöglich zu erfüllen. Dank der in über sechzig Jahren Firmenaktivität gesammelten Erfahrung kann Varvel seinen Kunden eine breite Palette von Standardlösungen und maßgeschneiderten Produkten für alle spezifischen Anforderungen bieten. Die gesamte Varvel-Produktpalette wird in Italien entwickelt und hergestellt; darüber hinaus ist die Gruppe aber auch weltweit mit zwei Tochtergesellschaften (die eine in den USA und die andere in Indien) und einem globalen Netzwerk mit über 100 Geschäftspartnern präsent.

UNI EN ISO 9001:2015  
UNI EN ISO 14001:2015  
BS OHSAS 18001:2007



EC DIRECTIVE 2014/34/EC (ATEX)



## RIDUTTORI PER SERVOMOTORI

Vite senza fine.  
Ingranaggi,  
Paralleli,  
Ortogonalni,  
Epicicloidali,






## GEARBOXES FOR SERVOMOTORS

Worm,  
Helical,  
Parallel shaft,  
Bevel helical,  
Planetary.









## GETRIEBE FÜR SERVOMOTOREN

Schnecken-  
Stirnrad-  
Flach-  
Kegelrad-  
Planetengetriebe

<b>INDICE</b> 	<b>CONTENTS</b> 	<b>INDEX</b> 
Descrizione prodotti .....2	Product description ..... 2	Produkte ..... 2
Flange Entrata .....3	Input Flanges..... 3	Eingangsflansche ..... 3
Sistema modulare ..... 4-5	Modular system .....4-5	Modularsystem ..... 4-5
Giunto ..... 6-7	Coupling .....6-7	Kupplung..... 6-7
<b>Selezione e Dimensioni</b>	<b>Selection and Dimensions</b>	<b>Auswahl u. Abmessungen</b>
RS/RT .....8-15	RS/RT .....8-15	RS/RT ..... 8-15
RD ..... 16-20	RD ..... 16-20	RD ..... 16-20
RN .....21-24	RN .....21-24	RN ..... 21-24
RO/RV .....25-28	RO/RV .....25-28	RO/RV ..... 25-28
RO2 .....29-32	RO2 .....29-32	RO2 ..... 29-32
RG .....33-36	RG .....33-36	RG ..... 33-36

## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

### Descrizione prodotti - Product description - Produkte

Tipo Type Typ	Descrizione Description Beschreibung	N. Taglie Size No. Baugröße Nr.	Rapporti Ratios Untersetzung	Coppia Torque Drehmoment
 <b>RS</b>	Riduttori a vite senza fine Worm gearboxes Schneckengetriebe	9	5:1 ... 10000:1	8 ... 3020 Nm
 <b>RT</b>	Riduttori a vite senza fine Worm gearboxes Schneckengetriebe	7	5:1 ... 10000:1	8 ... 1350 Nm
 <b>RD</b>	Riduttori a ingranaggi Helical gearboxes Stirnradgetriebe	7	2.5:1 ... 630:1	50 ... 2300 Nm
 <b>RN</b>	Riduttori paralleli Parallel shaft gearboxes Flachgetriebe	6	6.3:1 ... 630:1	180 ... 3300 Nm
 <b>RO</b>	Riduttori ortogonali Bevel helical gearboxes Kegelradgetriebe	6	6.3:1 ... 315:1	180 ... 3300 Nm
 <b>RO2</b>	Riduttori ortogonali Bevel helical gearboxes Kegelradgetriebe	4	5:1 ... 51.5:1	120 ... 500 Nm
 <b>RV</b>	Riduttori ortogonali Bevel helical gearboxes Kegelradgetriebe	6	6.3:1 ... 315:1	180 ... 3300 Nm
 <b>RG</b>	Riduttori epicicloidali Planetary gearboxes Planetengetriebe	4	3:1 ... 100:1	6 ... 110 Nm

## Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

### Eingangsflansche - Input Flanges - Flange Entrata

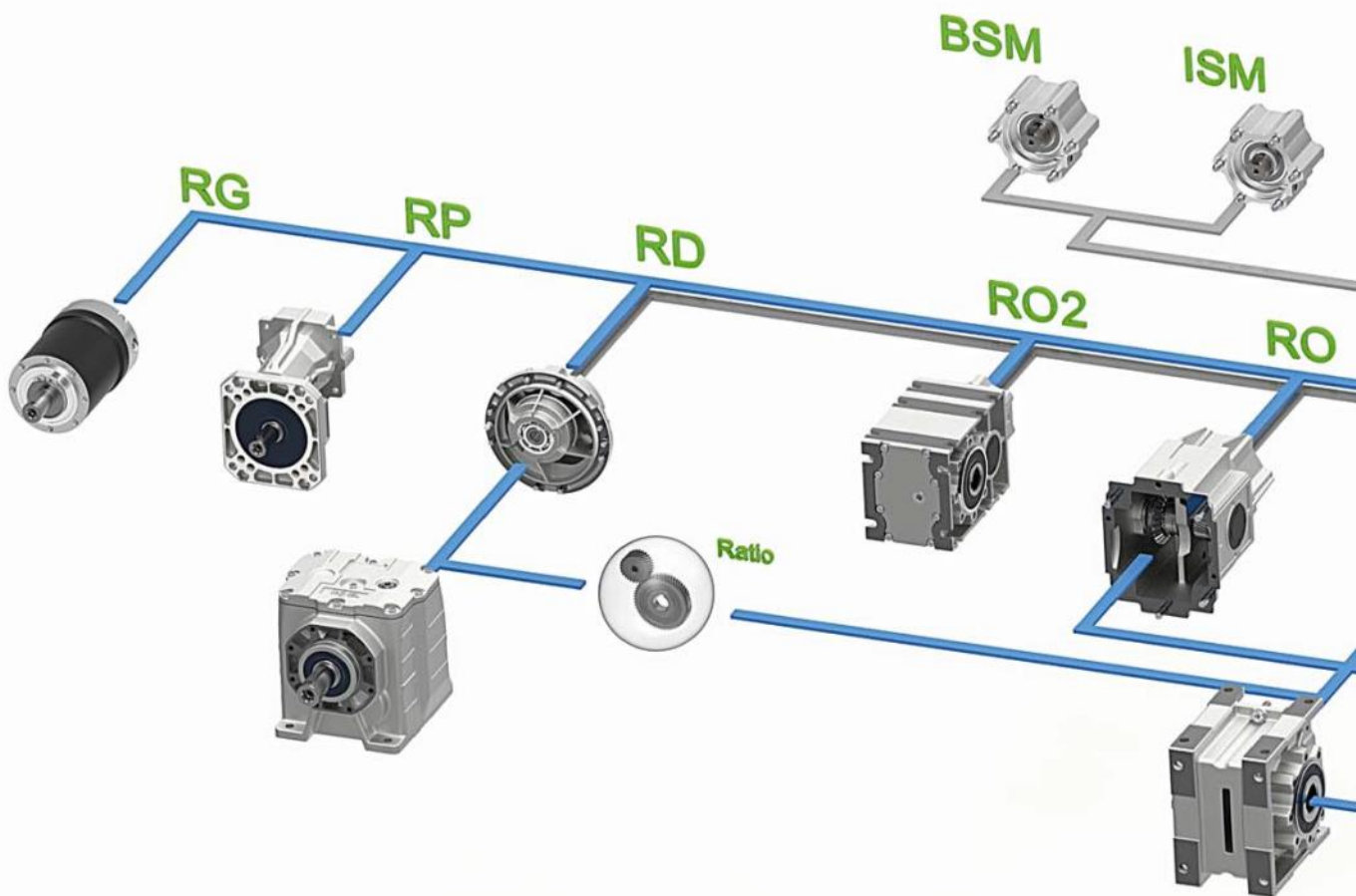


Tipo flangia quadra Square flange type Vierkantflanschtyp	RD	RG	RN	RO	RO2	RS	RT	RV
FM28	---	RG051 RG052	---	---	---	RS28	RT28	---
FM40	RD02 RD03	RG071 RG072	---	---	---	RS40	RT40	---
FM50	RD12 RD13	---	RN12 RN13	RO13	RO02	RS50	RT50	RV13
FM60	---	RG091 RG092	---	---	---	RS60	RT60	---
FM70	RD22-23 RD32-33	---	RN22-23 RN32-33	RO23	RO12	RS70	RT70	RV23
FM85	RD42 RD43	---	RN42 RN43	RO33	RO13	RS85	RT85	RV33
FM110	---	RG121 RG122	---	RO43	RO32	RS110	RT110	RV43
FM130-150	---	---	RN52-53 RN62-63	RO53 RO63	---	RS130 RS150	---	RV53 RV63



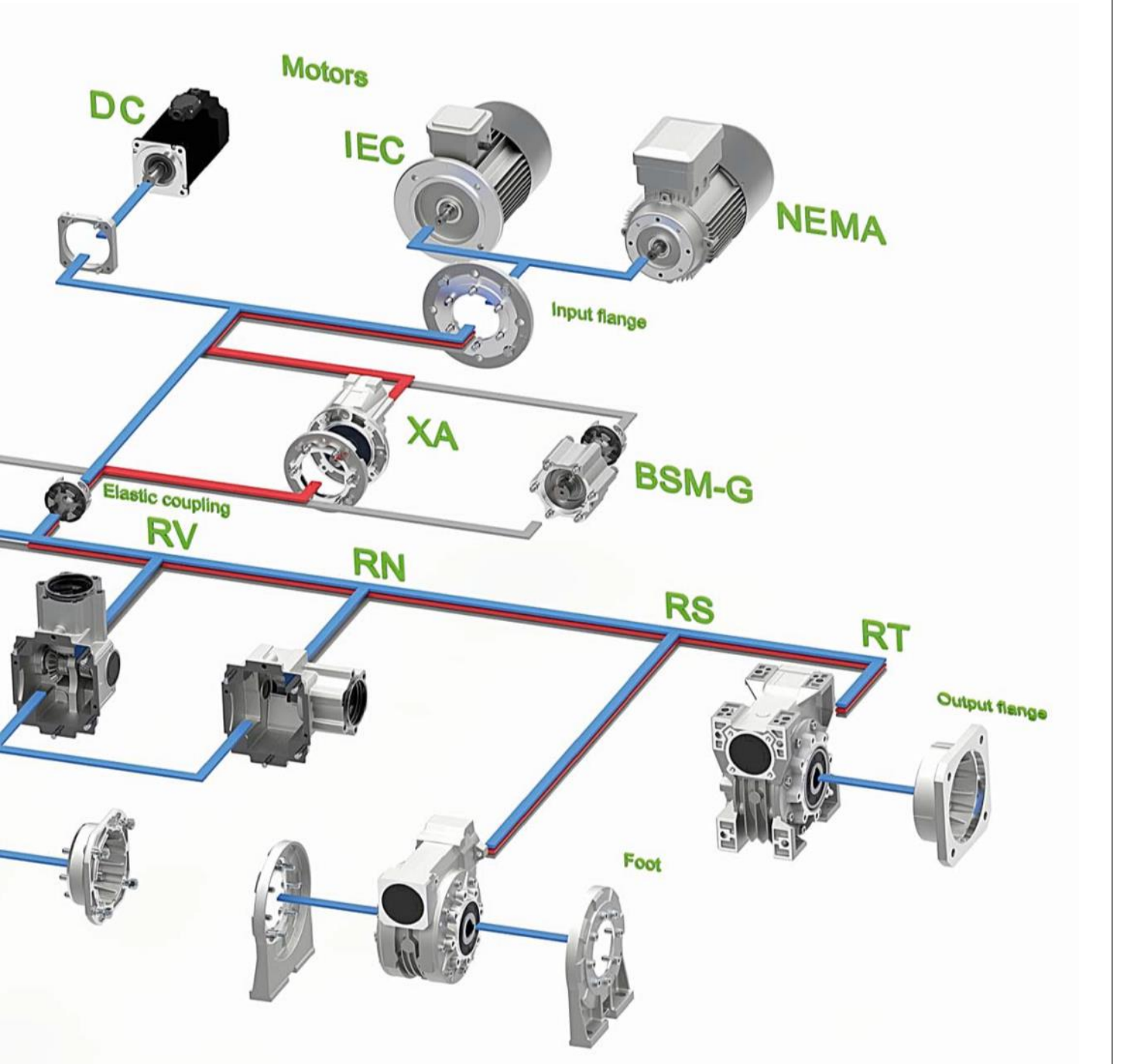
**Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren**

Sistema Modulare - Modular System - Modularesystem



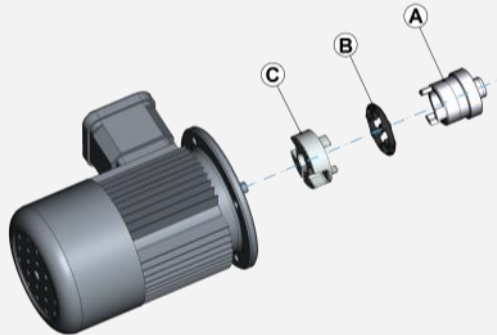
Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

Modularsystem - Modular System - Sistema Modulare



## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

### Giunto - Coupling - Kupplung



#### Semi-giunto riduttore

- Materiale: acciaio
- Integrale con albero entrata
- Supportato con due cuscinetti
- Dimensioni lato entrata invariate

#### Anello elastico

- Denti: collegati esternamente
- Materiale: Elastomero Termoplastico IXEF® - Polyarylamide
- Durezza  
90 Shore D
- Temperatura  
-30/+135°C (-22/+275°F)

#### Semi-giunto motore

- Materiale:  
Alluminio pressofuso (G3, G5, G6)  
Acciaio (GS3, GS5, GS6, GS8)
- Bilanciatura dinamica
- Calettamento:  
Morsetto (G3, G5, G6)  
Chiavetta (GS3, GS5, GS6, GS8)
- Fori disponibili secondo:  
IEC 72 / DIN42948  
NEMA C e TC

#### Vantaggi:

- Un solo riduttore per rapporto di riduzione
- Maggiore flessibilità
- Aumentata rotazione dello stock
- Eliminazione sfregamento fra chiavetta e cava (tribocorrosione)
- Collegamento riduttore / motore con gioco zero
- Disallineamento angolare ammesso max 1°
- Elevata rigidità torsionale
- Elevato smorzamento delle vibrazioni

#### Flange entrata:

- Materiale:  
Alluminio fino IEC112 e NEMA TC180  
Ghisa da IEC 132 e NEMA TC200

#### Reducer-side coupling hub

- Material: steel
- One piece machined on input shaft
- Two bearing setting
- Unchanged casing dimensions

#### Spider

- External tooth connection
- Material: Thermoplastic Elastomer: IXEF® - Polyarylamide
- Hardness  
90 Shore D
- Temperature  
-30/+135°C (-22/+275°F)

#### Motor-side coupling hub

- Material:  
Aluminium pressure die cast (G3, G5, G6)  
Steel (GS3, GS5, GS6, GS8)
- Dynamic balancing
- Fitting:  
Clamp (G3, G5, G6)  
Key (GS3, GS5, GS6, GS8)
- Bores, available according to:  
IEC 72 / DIN42948  
NEMA C and TC

#### Advantages:

- One gearbox only for each reduction ratio
- Greater flexibility
- Increased stock rotation
- Elimination of fretting corrosion between key and keyway
- Gearbox / motor connection with zero backlash
- Allowed angular misalignment 1° max.
- High torsional rigidity
- High vibration damping

#### Input flanges:

- Material:  
Aluminium up to IEC112 & NEMA TC180  
Cast iron from IEC 132 & NEMA TC200

#### Getriebekupplungshäfte

- Material: Stahl
- integrata Eingangswelle
- Zwei-Lager-Anordnung
- unveränderte Eingang Abmessungen

#### Kupplungsscheibe

- Äußerliche Zahnverbindung
- Material Thermoplastisch Elastomer: IXEF® - Polyarylamide
- Härte  
90 Shore D
- Temperatur  
-30/+135°C (-22/+275°F)

#### Motorkupplungshäfte

- Material:  
Aluminium Druckguss (G3, G5, G6)  
Stahl (GS3, GS5, GS6, GS8)
- dynamische Auswuchtung
- Verkeilung:  
Klammer (G3, G5, G6)  
Keil (GS3, GS5, GS6, GS8)
- Bohrungen, nach:  
IEC 72 / DIN42948  
NEMA C u. TC

#### Vorzüge:

- nur eine Getriebekomponente je Übersetzung
- gesteigerte Flexibilität
- höher Lagerumschlag
- Vermeidung von Passungsost zwischen Keil u. Keil Einschnitt
- Getriebe / Motor Spielfrei Verkeilung
- erlaubt Winkelausgleich bis 1°
- hohe Verdrehsteifigkeit
- hohe Dämpfung von Schwingungen

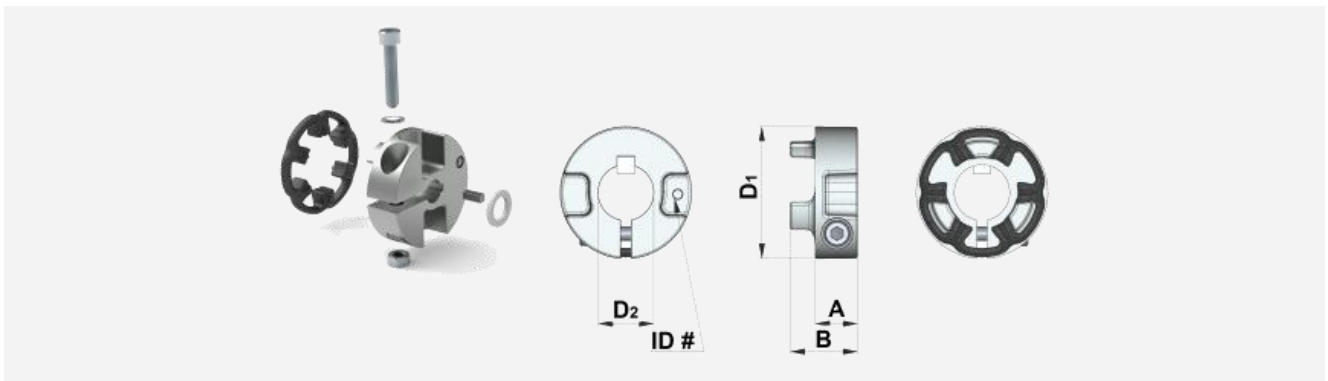
#### Eingangsflansche:

- Material:  
Aluminium bis IEC112 u. NEMA C180  
Grauguss ab IEC 132 u. NEMA C200



## Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

### Kuplungsauswahl - Coupling selection - Selezione giunto



Giunto Coupling Kupplung	IEC NEMA	Kit Code	Mt [Nm]	Mt1 [Nm]	Mt2 [Nm]	A [mm]	B [mm]	D1 [mm]	D2 [mm] [inch]	ID#
G3	IEC	KG3.009	4.5 - 6	15	8 - 10	11	19	30	9	309
		KG3.011	4.5 - 6	15	8 - 10			30	11	311
		KG3.014	7 - 8.5	28	18 - 22			36	14	314
G5	IEC	KG5.011	8.9 - 10	15	8 - 10	14.5	23	45	11	511
		KG5.014		30	12 - 17			45	14	514
		KG5.019		40	20 - 25			45	19	519
G6	IEC	KG6.014	15.3 - 18	60	30 - 40	19.5	31.5	58	14	614
		KG6.019		90	50 - 65				19	619
		KG6.024		130	85 - 100				24	624
*GS8	IEC	KG6.028	15.3 - 18	180	100 - 120	35	51	79	28	628
		KG6.N56		50	---				5/8"	6N56
		KG6.N140		85	---				7/8"	6N140
*GS8	NEMA	KG6.N180	15.3 - 18	200	---	35	51	79	1-1/8"	6N180
		KGS8.19		150	---				19	819
		KGS8.24		250	---				24	924
*GS8	IEC	KGS8.28	15	350	---	35	51	79	28	928
		KGS8.38		500	---				38	838
		KGS8.42		500	---				42	842
*GS8	NEMA	KGS8.48	15	500	---	35	51	79	48	848
		KGS8.N56		140	---				5/8"	8N56
		KGS8.140		200	---				7/8"	8N140
*GS8	IEC	KGS8.180	15	300	---	35	51	79	1-1/8"	8N180
		KGS8.210		500	---				1-3/8"	8N210

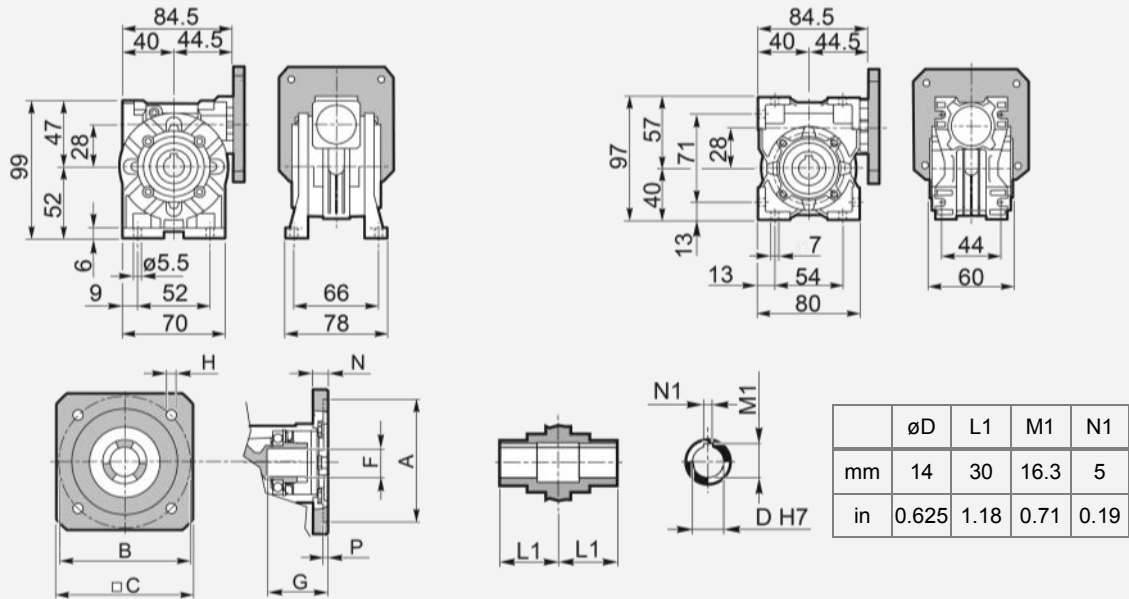
Mt - Coppia serraggio vite  
 Mt1 - Coppia trasmissibile con chiavetta  
 Mt2 - Coppia trasmissibile senza chiavetta  
 \* - Giunto GS8: acciaio e chiavetta/cava

Mt - Screw locking torque  
 Mt1 - Transmissible torque with key  
 Mt2 - Transmissible torque without key  
 \* - Coupling GS8: steel and key fit

Mt - Schraubenklemmendrehmoment  
 Mt1 - übertragbar Drehmoment mit Keil  
 Mt2 - übertragbar Drehmoment ohne Keil  
 \* - Kupplung GS8: Stahl u. Keilverkeilung

## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

RS28 - RT28



Codice flangia Flange part No. Flanschcode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
APP050004	22	43,84	56	15.5	34,5	Ø5 - 4	7	4,5
A180043A	30	45	50	15.5	36,5	M3 - 4	9	3
APP050009	36	70.71	60	15.5	36,5	M4 - 4	9	4,5
A180003A	36	70.71	60	15.5	40,5	M4 - 4	13	4,5
APP050006	38.1	66.66	56	15.5	36,5	M4 - 4	9	4,5
A180001A	38.1	66.66	56	15.5	42	M4 - 4	14,5	4,5
APP2101	38.1	66.66	57	15.5	40,5	M4 - 4	13	2,5
APP050003	40	63	56	15.5	36,5	M5 - 4	9	4,5
A180002A	40	63	56	15.5	40,5	M5 - 4	13	4,5
A180083A	40	63	56	15.5	44,5	M5 - 4	17	4,5
APP050013	50	70	60	15.5	36,5	M5 - 4	9	4,5
APP050022	50	70	60	15.5	48,5	M4 - 4	21	4,5
APP050027	50	70	60	15.5	48,5	M5 - 4	21	4,5
A180005A	50	70	60	15.5	40,5	M5 - 4	13	4,5
APP050035	60	75	65	15.5	39,5	M5 - 4	12	4,5
APP1829	73	98.43	83	15.5	49,8	M5 - 5	22,3	10

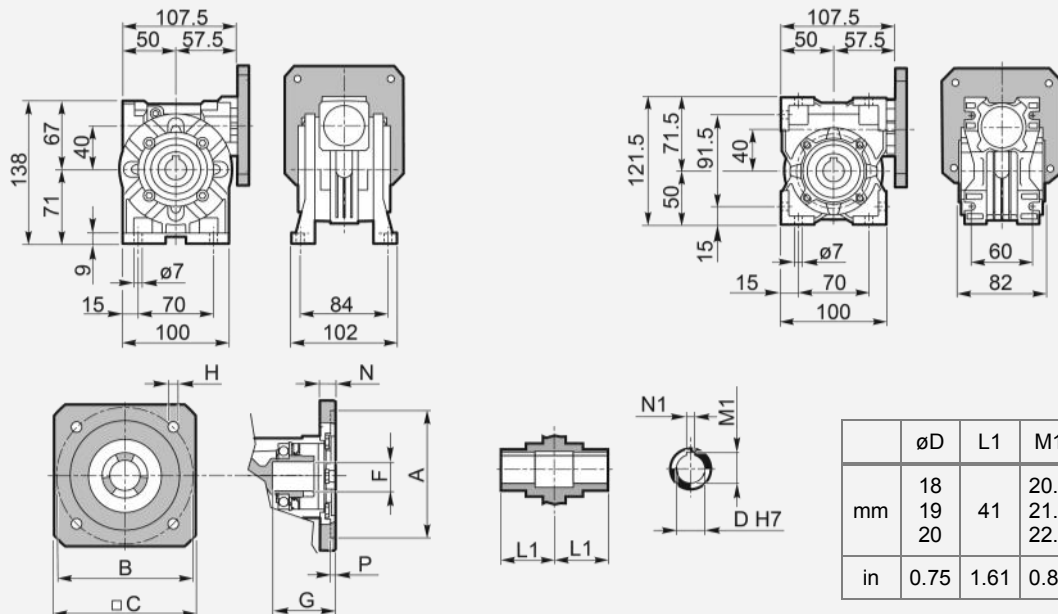
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

RS40 - RT40



	øD	L1	M1	N1
mm	18 19 20	41	20.8 21.8 22.8	5
in	0.75	1.61	0.84	0.19

Codice flangia Flange part No. Flanschcode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A18.0085A	38,1	66,66	65	15,5	44,5	M4 - 4	15	10
APP2258	40	63	65	15,5	44,5	M5 - 4	15	10,5
A180076A	40	73,5	65	15,5	43	M4 - 4	13,5	4,5
A180008A	50	95	80	15,5	43	M6 - 4	13,5	4
A180055A	50	70	60	15,5	43	M5 - 4	13,5	3,5
APP070006	60	75	72	15,5	43	M5 - 4	13,5	3
APP070003	70	90	80	15,5	43	M6 - 4	13,5	4,5
A180066A	70	90	80	15,5	49	M6 - 4	19,5	4,5
APP070011	73	98,29	85	15,5	43	M5 - 4	13,5	4,5
APP1897	73	98,43	83	15,5	49,3	M5 - 5	19,8	10
A180054A	73,025	98,43	87	15,5	44,5	M6 - 4	15	4,5
APP070002	80	100	85	15,5	43	M6 - 4	13,5	4,5
APP070008	80	100	85	15,5	43	M8 - 4	13,5	4,5
A180051A	80	100	90	15,5	43	M6 - 4	13,5	5,5
APP070007	95	115	98	15,5	43	M8 - 4	13,5	4
A180007A	95	115	98	15,5	54,5	M8 - 4	25	4

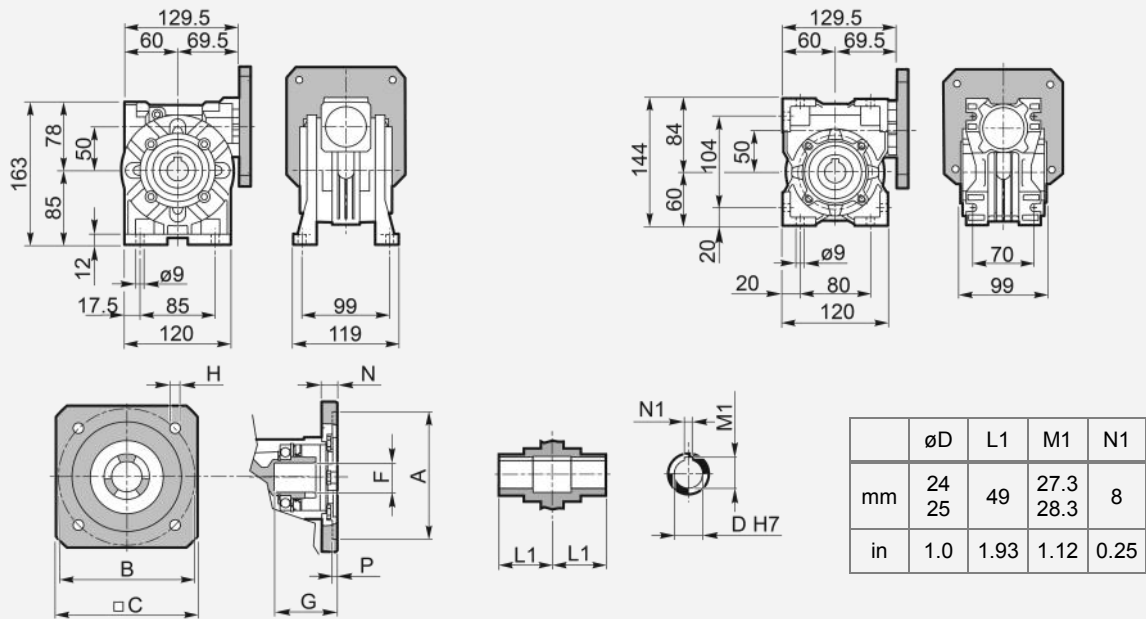
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

### RS50 - RT50



Codice flangia Flange part No. Flanschcode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180056A	70	90	80	24	52,5	M6 - 4	13,5	4,5
APP2144	70	90	80	24	55	M6 - 4	16	9
APP2259	95	115	100	24	52	Ø9 - 4	13	4
APP2134	110	145	120	24	55	M8 - 4	16	5

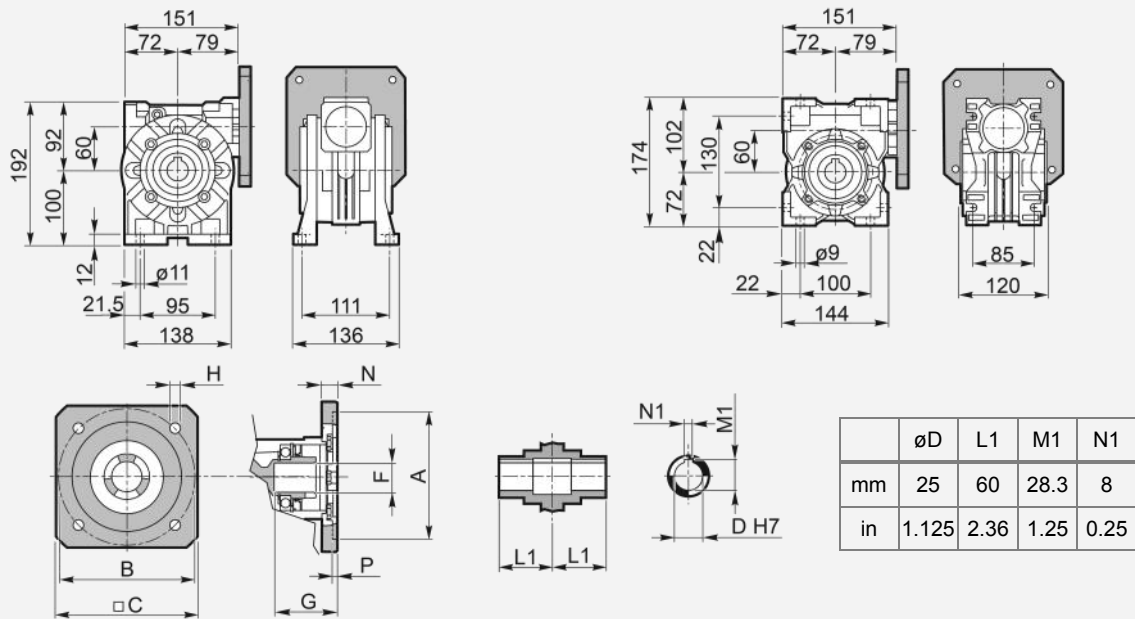
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

RS60 - RT60



Codice flangia Flange part No. Flanschcode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
APP090011	70	90	80	24	53,5	M6 - 4	14,5	4.5
A180064A	73	98.43	86	24	53,5	M6 - 4	14,5	4.5
APP090009	80	100	85	24	53,5	M6 - 4	14,5	4.5
A180037A	80	100	90	24	57	M6 - 4	18	6
APP090013	95	115	100	24	53,5	M8 - 4	14,5	4.5
APP090014	95	115	100	24	58	M6 - 4	19	4.5
APP090041	95	135	120	24	53,5	M8 - 4	14,5	6.5
APP090012	110	145	120	24	53,5	M8 - 4	14,5	6.5
APP090040	110	145	120	24	58,5	M8 - 4	19,5	6.5
A180036A	110	130	125	24	64	Ø8,5 - 4	25	8.5
A180041A	110	145	130	24	58	M8 - 4	19	11
A180045A	110	145	120	24	67	M8 - 4	28	6.5
A180059A	110	145	120	24	53,5	M8 - 4	14,5	3.5
A180061A	110	145	130	24	53,5	M8 - 4	14,5	3.5

(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

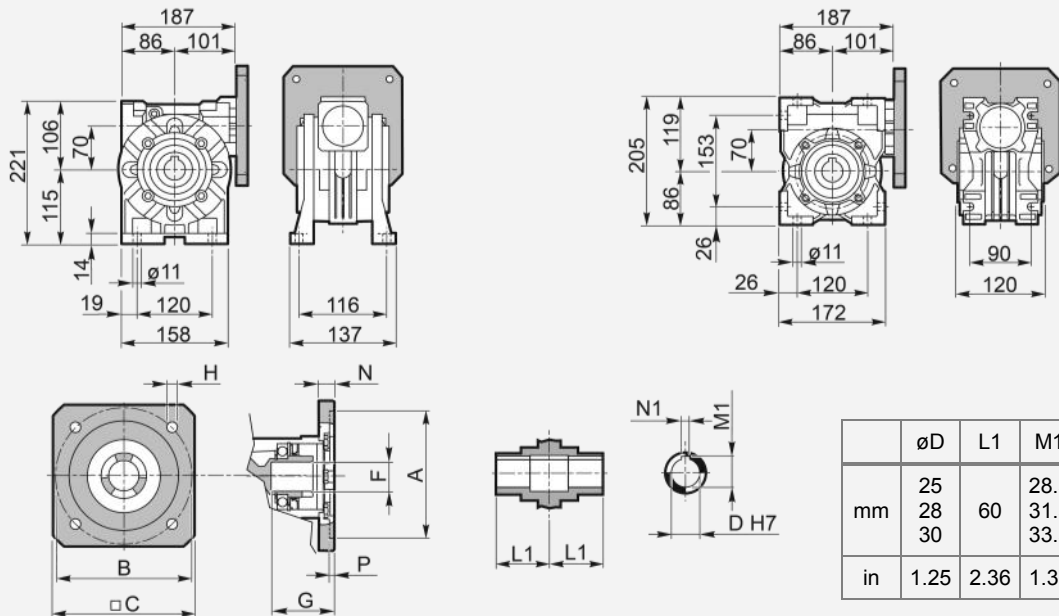
(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte



## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

### RS70 - RT70



Codice flangia Flange part No. Flanschckde Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180077A	70	90	90	28,5	64,5	M6 - 4	14,5	4,5
A180086A	80	100	105	28,5	65,5	M6 - 4	15,5	10,5
A180088A	80	100	82	28,5	85	M6 - 4	35	5
APP2132	95	115	100	28,5	72	M6 - 4	22	9
APP2133	110	145	130	28,5	75	M8 - 4	25	7

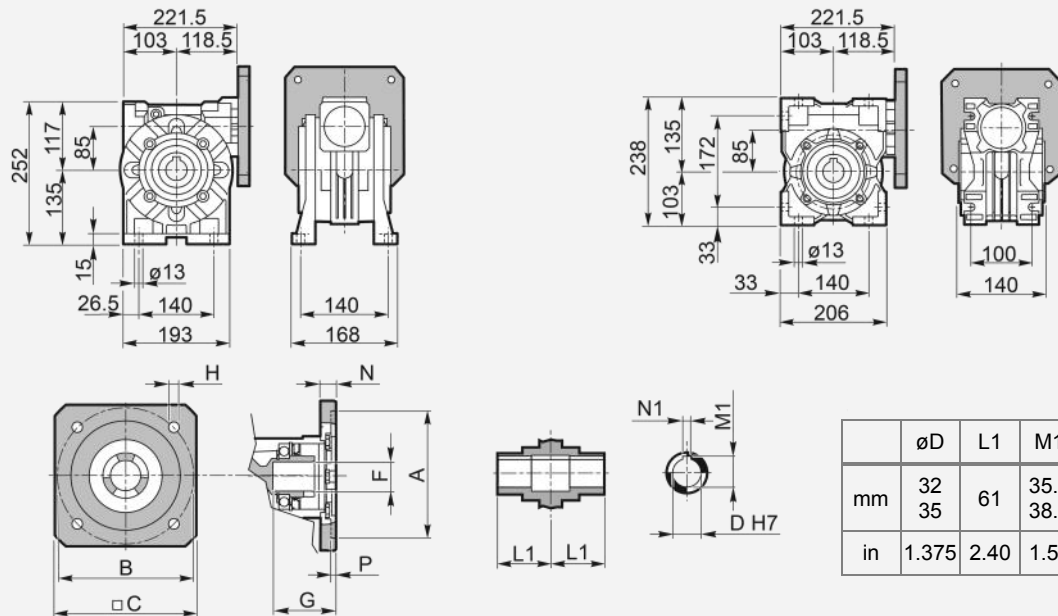
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

RS85 - RT85



Codice flangia Flange part No. Flanschcode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180078A	95	115	110	28,5	65,5	M8 - 4	15,5	3

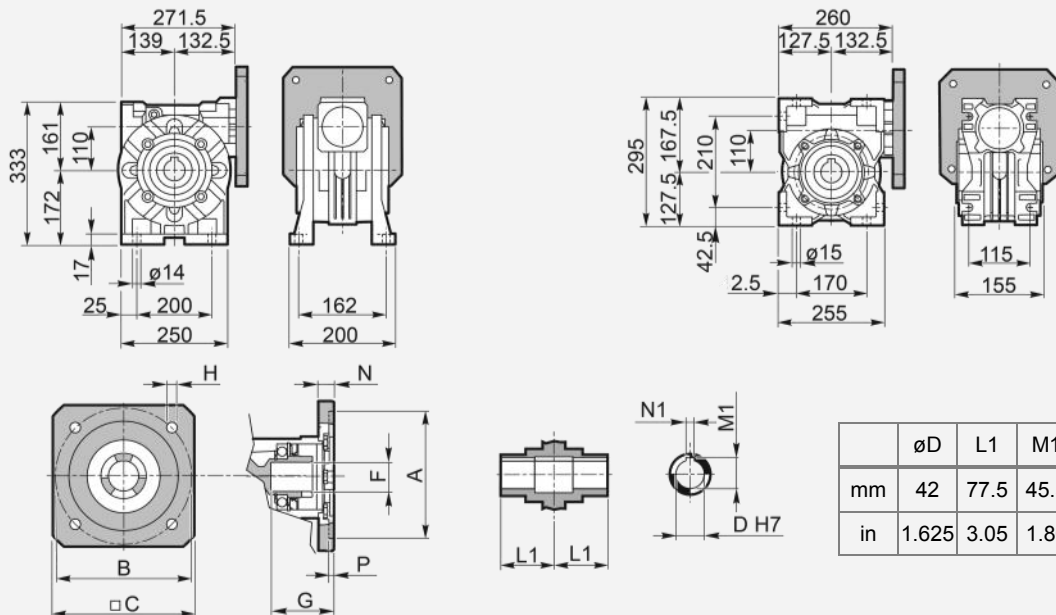
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

RS110 - RT110



	øD	L1	M1	N1
mm	42	77.5	45.3	12
in	1.625	3.05	1.80	0.38

Codice flangia Flange part No. Flanschckde Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
APP120001	95	115	110	28,5	65	M8 - 4	18	5
A180040A	110	130	126	28,5	65	M8 - 4	18	5
APP120006	130	165	140	28,5	65	M8 - 4	18	5
APP120033	130	165	140	28,5	65	M10 - 4	18	5

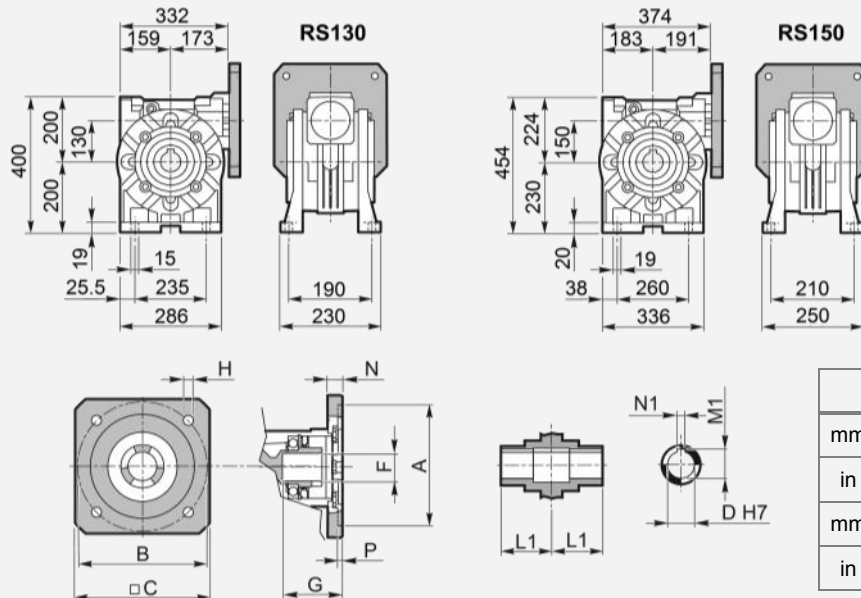
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

RS130 - RS150



	RS	øD	L1	M1	N1
mm	130	48	90	51.8	14
in		1.75	3.54	1.93	0.38
mm	150	55	105	59.3	16
in		2.0	8.27	2.27	0.5

Codice flangia Flange part No. Flanschcode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A18.0072A (RS130)	130	165	140	38	83	M10 - 4	18	5
A18.0072A (RS150)	130	165	140	42	94	M10 - 4	18	5

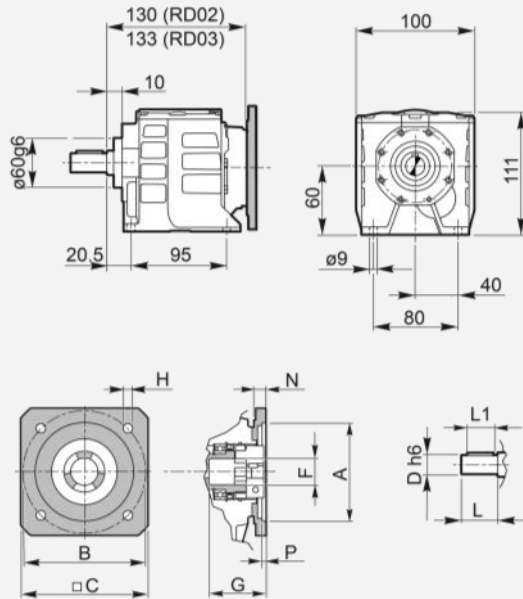
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

### RD02 - RD03



	øD	L	M1	N1
mm	17 20	35 40	19 22.5	5 6
in	0.625	1.38	0.705	0.187

Codice flangia Flange part No. Flanschcode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A18.0085A	38,1	66,66	65	19 - (14)	44,5 - (32)	M4 - 4	15	10
APP2258	40	63	65	19 - (14)	44,5 - (32)	M5 - 4	15	10.5
A180076A	40	73,5	65	19 - (14)	43 - (30,5)	M4 - 4	13,5	4.5
A180008A	50	95	80	19 - (14)	43 - (30,5)	M6 - 4	13,5	4
A180055A	50	70	60	19 - (14)	43 - (30,5)	M5 - 4	13,5	3.5
APP070006	60	75	72	19 - (14)	43 - (30,5)	M5 - 4	13,5	3
APP070003	70	90	80	19 - (14)	43 - (30,5)	M6 - 4	13,5	4.5
A180066A	70	90	80	19 - (14)	49 - (36,5)	M6 - 4	19,5	4.5
APP070011	73	98,29	85	19 - (14)	43 - (30,5)	M5 - 4	13,5	4.5
APP1897	73	98,43	83	19 - (14)	44,5 - (32)	M5 - 5	19,8	10
A180054A	73,025	98,43	87	19 - (14)	44,5 - (32)	M6 - 4	15	4.5
APP070002	80	100	85	19 - (14)	43 - (30,5)	M6 - 4	13,5	4.5
APP070008	80	100	85	19 - (14)	43 - (30,5)	M8 - 4	13,5	4.5
A180051A	80	100	90	19 - (14)	43 - (30,5)	M6 - 4	13,5	5.5
APP070007	95	115	98	19 - (14)	43 - (30,5)	M8 - 4	13,5	4
A180007A	95	115	98	19 - (14)	54,5 - (42)	M8 - 4	25	4

(::) - RD03

(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

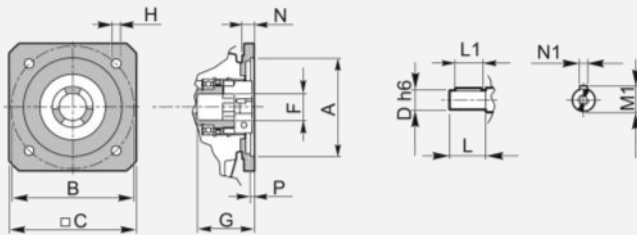
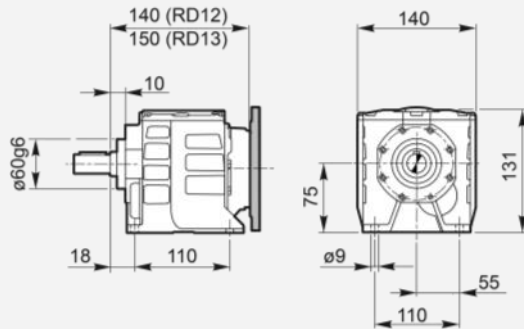
(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte



## Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

RD12 - RD13



	øD	L	M1	N1
mm	20 25	40 50	22.5 28	6 8
in	0.75	1.57	0.83	0.187

Codice flangia Flange part No. Flanschkode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180056A	70	90	80	24 - (14)	52,5 - (31,5)	M6 - 4	13,5	4,5
APP2144	70	90	80	24 - (14)	55 - (34)	M6 - 4	16	9
APP2259	95	115	100	24 - (14)	52 - (31)	Ø9 - 4	13	4
APP2134	110	145	120	24 - (14)	55 - (34)	M8 - 4	16	5

(::) - RD13

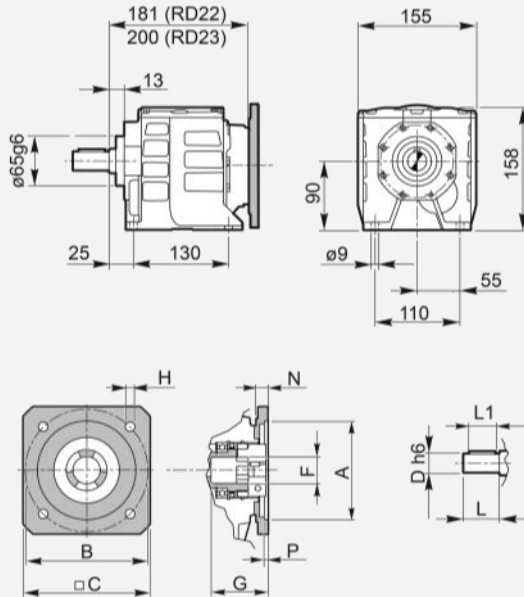
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

### RD22 - RD23



	øD	L	M1	N1
mm	25 30	50 60	28 33	8
in	1.0	1.97	1.11	0.25

Codice flangia Flange part No. Flanschkode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180077A	70	90	90	28,5 - (24)	61,5-(54,5)	M6 - 4	14,5	4.5
A180086A	80	100	105	28,5 - (24)	62,5-(55,5)	M6 - 4	15,5	10.5
A180088A	80	100	82	28,5 - (24)	82 - (75)	M6 - 4	35	5
APP2132	95	115	100	28,5 - (24)	69 - (62)	M6 - 4	22	9
APP2133	110	145	130	28,5 - (24)	72 - (65)	M8 - 4	25	7

(::) - RD23

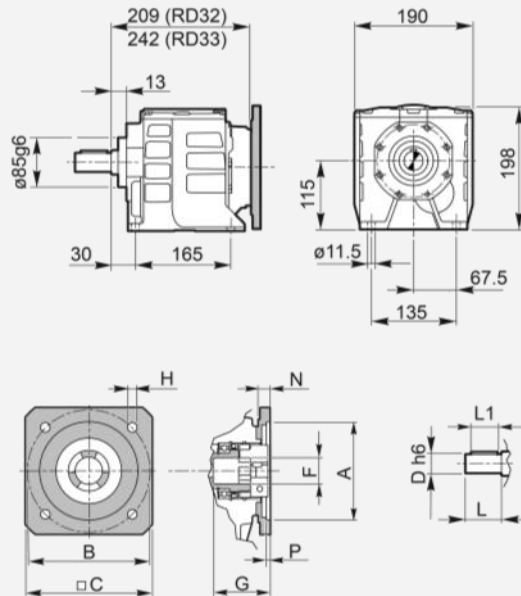
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

RD32 - RD33



	øD	L	M1	N1
mm	30 32	60 80	33 35	8 10
in	1.25	2.36	1.36	0.25

Codice flangia Flange part No. Flanschkode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180077A	70	90	90	28,5	61,5	M6 - 4	14,5	4,5
A180086A	80	100	105	28,5	62,5	M6 - 4	15,5	10,5
A180088A	80	100	82	28,5	82	M6 - 4	35	5
APP2132	95	115	100	28,5	69	M6 - 4	22	9
APP2133	110	145	130	28,5	72	M8 - 4	25	7

(::) - RD33

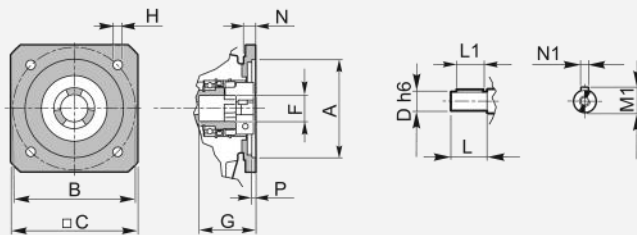
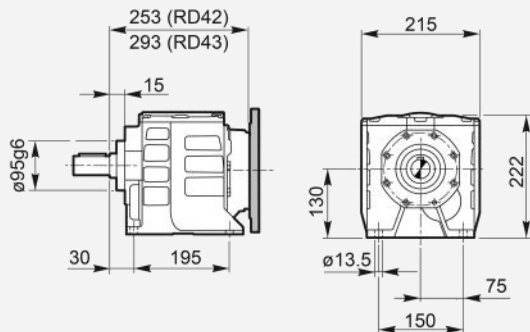
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

RD42 - RD43



	øD	L	M1	N1
mm	35 40	70 80	38 43	10 12
in	1.375	2.76	1.51	0.312

Codice flangia Flange part No. Flanschkode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180078A	95	115	110	28,5	62,5	M8 - 4	15,5	3

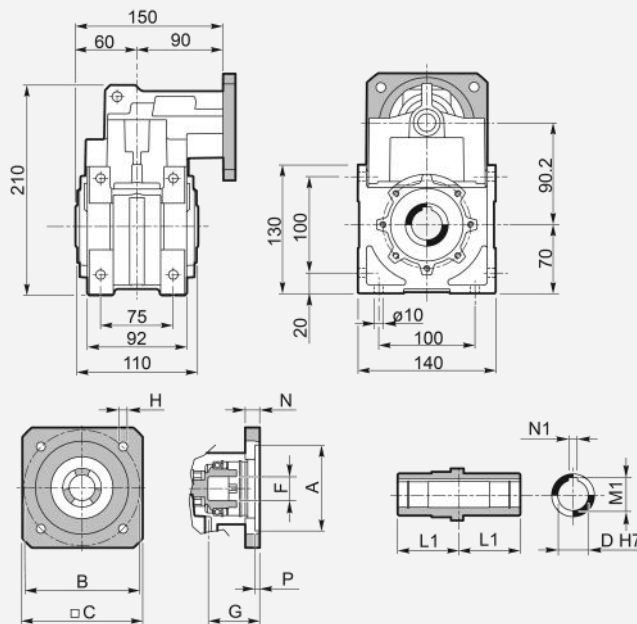
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

RN12 - RN13



	øD	L1	M1	N1
mm	30 35	60	28.3 33.3	8
in	1.0 1.25	2.36	1.13 1.25	0.25

Codice flangia Flange part No. Flanschkode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180056A	70	90	80	24	52,5	M6 - 4	13,5	4,5
APP2144	70	90	80	24	55	M6 - 4	16	9
APP2259	95	115	100	24	52	Ø9 - 4	13	4
APP2134	110	145	120	24	55	M8 - 4	16	5

(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

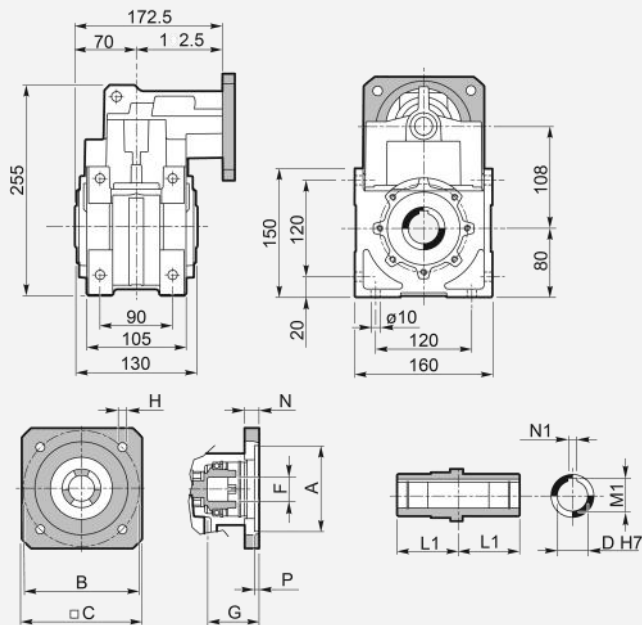
(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte



## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

### RN22 - RN23



	øD	L1	M1	N1
mm	30 35	70	33.3 38.3	8 10
in	1.25 1.375	2.76	1.36 1.53	0.25

Codice flangia Flange part No. Flanschkode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180077A	70	90	90	28,5	61,5	M6 - 4	14,5	4,5
A180086A	80	100	105	28,5	62,5	M6 - 4	15,5	10,5
A180088A	80	100	82	28,5	82	M6 - 4	35	5
APP2132	95	115	100	28,5	69	M6 - 4	22	9
APP2133	110	145	130	28,5	72	M8 - 4	25	7

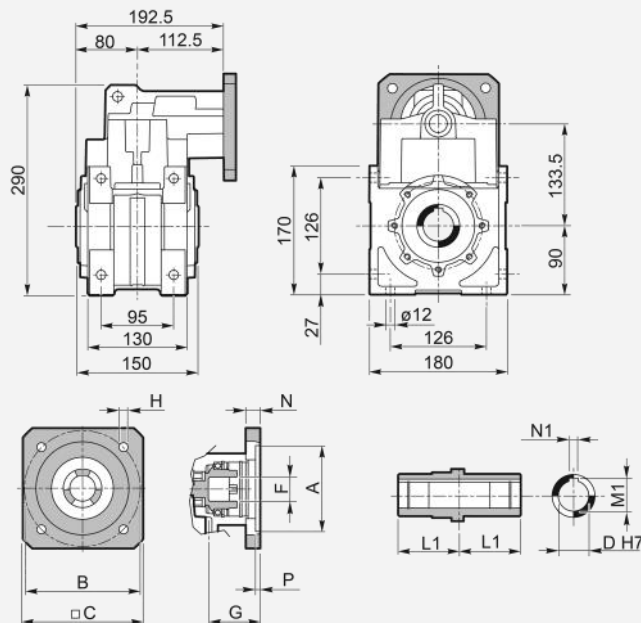
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

RN32 - RN33



	øD	L1	M1	N1
mm	35 40	80	38.3 43.3	10 12
in	1.375 1.5	3.15	1.53 1.69	0.25 0.375

Codice flangia Flange part No. Flanschkode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180077A	70	90	90	28,5	61,5	M6 - 4	14,5	4,5
A180086A	80	100	105	28,5	62,5	M6 - 4	15,5	10,5
A180088A	80	100	82	28,5	82	M6 - 4	35	5
APP2132	95	115	100	28,5	69	M6 - 4	22	9
APP2133	110	145	130	28,5	72	M8 - 4	25	7

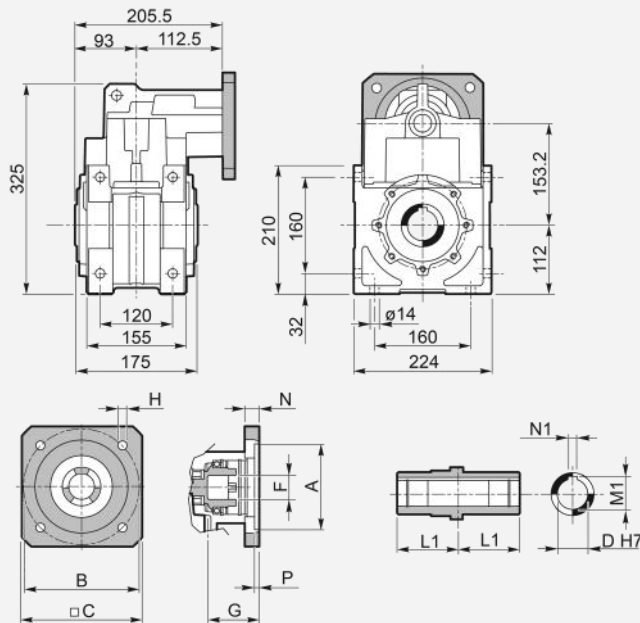
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

RN42 - RN43



	øD	L1	M1	N1
mm	40 50	93	43.3 53.8	12 14
in	1.5 1.625	3.66	1.69 1.81	0.325 0.375

Codice flangia Flange part No. Flanschcode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180078A	95	115	110	28,5	62,5	M8 - 4	15,5	3

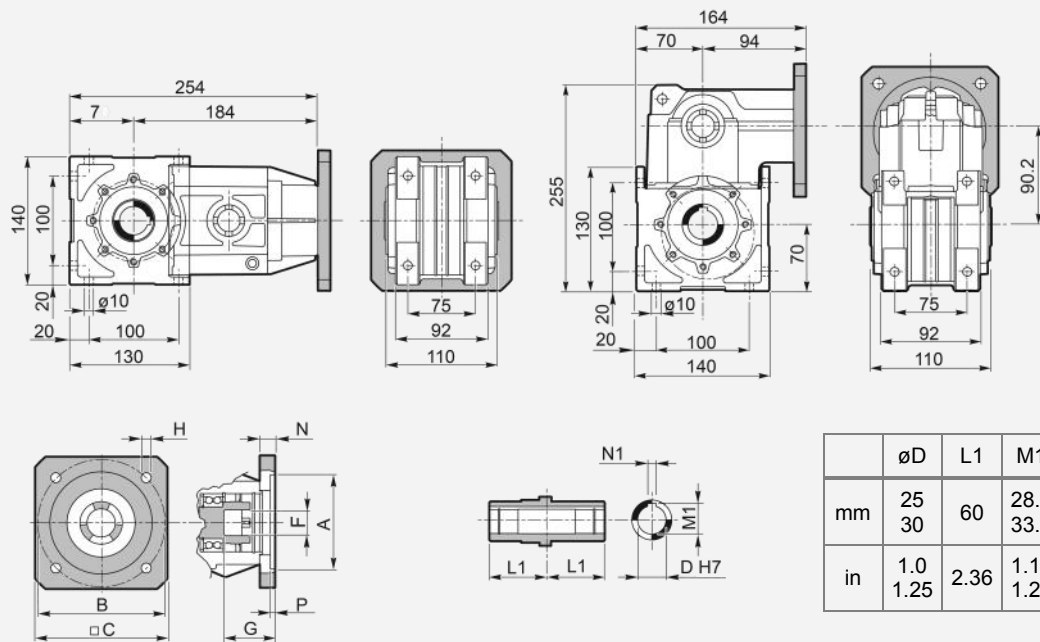
(#) - Ordinata per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

RO13 / RV13



	øD	L1	M1	N1
mm	25 30	60	28.3 33.3	8
in	1.0 1.25	2.36	1.13 1.25	0.25

Codice flangia Flange part No. Flanschcode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180056A	70	90	80	24	52,5	M6 - 4	13,5	4,5
APP2144	70	90	80	24	55	M6 - 4	16	9
APP2259	95	115	100	24	52	Ø9 - 4	13	4
APP2134	110	145	120	24	55	M8 - 4	16	5

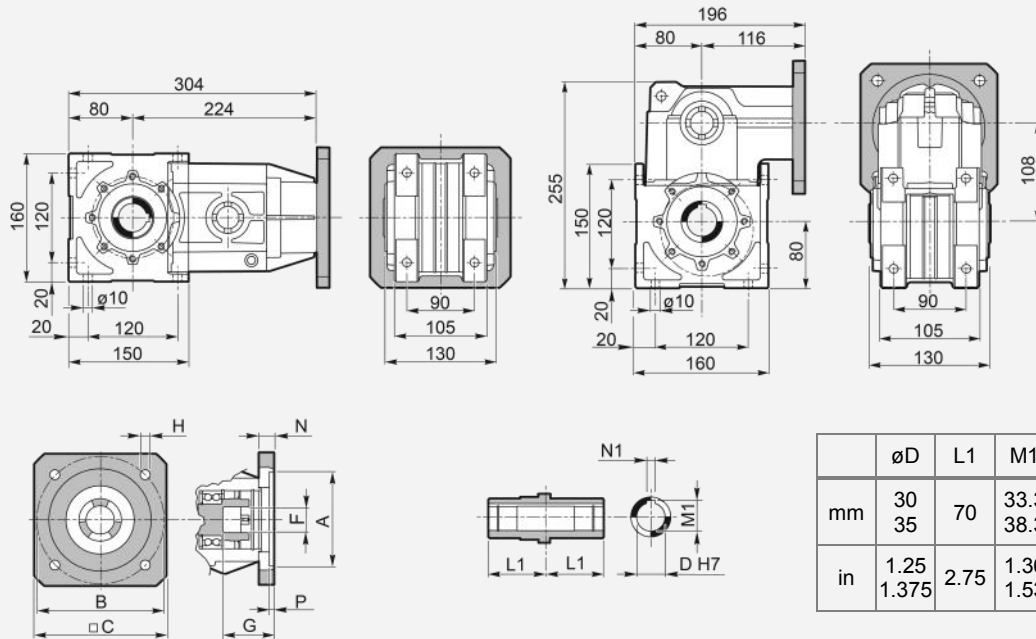
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

RO23 / RV23



	øD	L1	M1	N1
mm	30 35	70	33.3 38.3	8 10
in	1.25 1.375	2.75	1.36 1.53	0.25

Codice flangia Flange part No. Flanschcode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180077A	70	90	90	28,5	61,5	M6 - 4	14,5	4,5
A180086A	80	100	105	28,5	62,5	M6 - 4	15,5	10,5
A180088A	80	100	82	28,5	82	M6 - 4	35	5
APP2132	95	115	100	28,5	69	M6 - 4	22	9
APP2133	110	145	130	28,5	72	M8 - 4	25	7

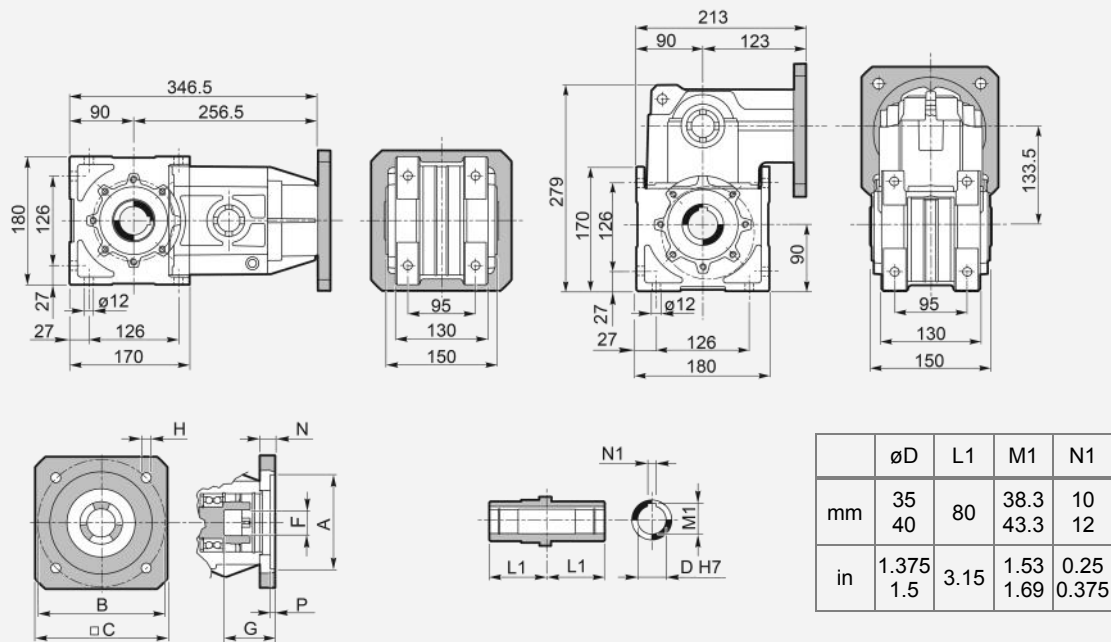
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

# Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

RO33 / RV33



Codice flangia Flange part No. Flanschkode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180078A	95	115	110	28,5	62,5	M8 - 4	15,5	3

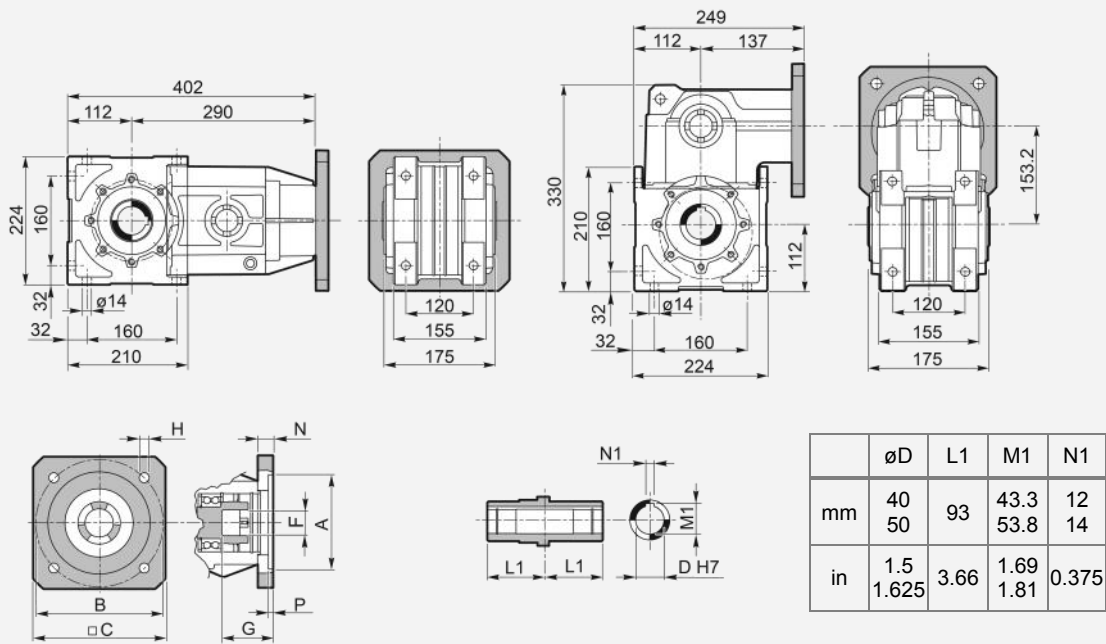
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

RO43 / RV43



Codice flangia Flange part No. Flanschkode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
APP120001	95	115	110	28,5	65	M8 - 4	18	5
A180040A	110	130	126	28,5	65	M8 - 4	18	5
APP120006	130	165	140	28,5	65	M8 - 4	18	5
APP120033	130	165	140	28,5	65	M10 - 4	18	5

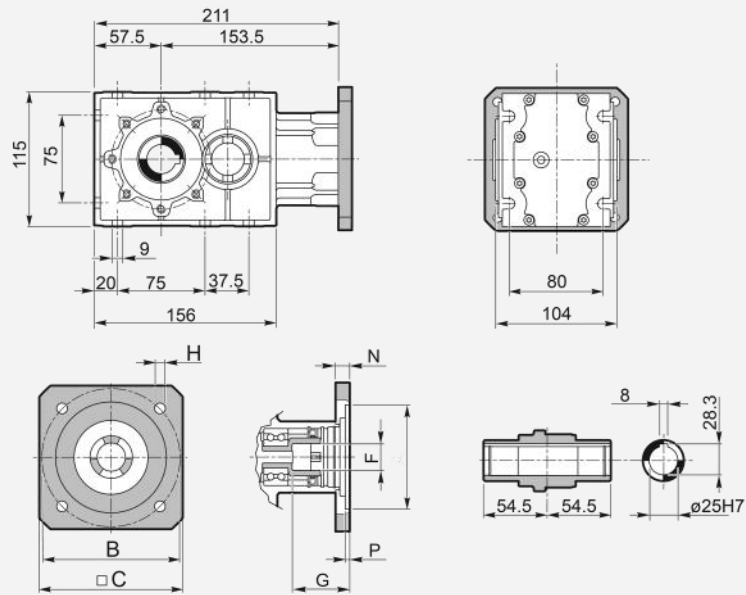
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

RO02



	øD	L1	M1	N1
mm	25	54.5	28.3	8
in	1.0	2.15	1.13	0.25

Codice flangia Flange part No. Flanschcode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180056A	70	90	80	24	52,5	M6 - 4	13,5	4,5
APP2144	70	90	80	24	55	M6 - 4	16	9
APP2259	95	115	100	24	52	Ø9 - 4	13	4
APP2134	110	145	120	24	55	M8 - 4	16	5

(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

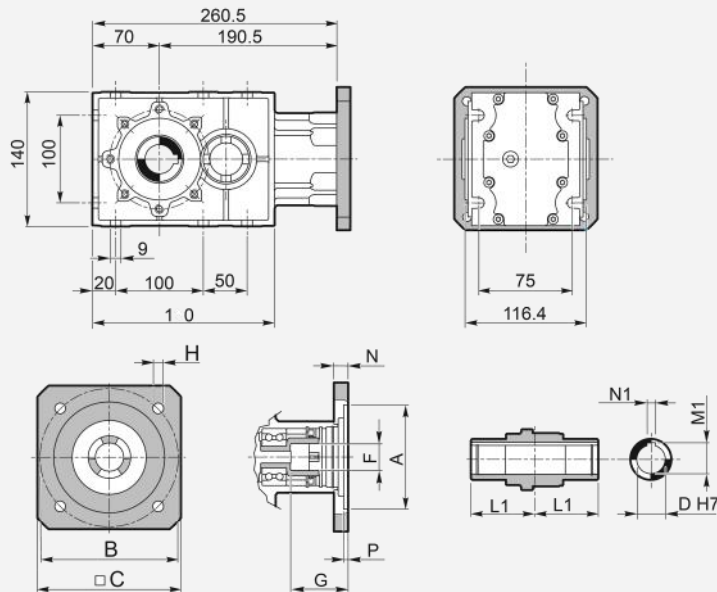
(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte



## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

RO12



	øD	L1	M1	N1
mm	25 30	60	28.3 33.3	8
in	1.0 1.125	2.36	1.13 1.25	0.25

Codice flangia Flange part No. Flanschcode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180077A	70	90	90	28,5	61,5	M6 - 4	14,5	4,5
A180086A	80	100	105	28,5	62,5	M6 - 4	15,5	10,5
A180088A	80	100	82	28,5	82	M6 - 4	35	5
APP2132	95	115	100	28,5	69	M6 - 4	22	9
APP2133	110	145	130	28,5	72	M8 - 4	25	7

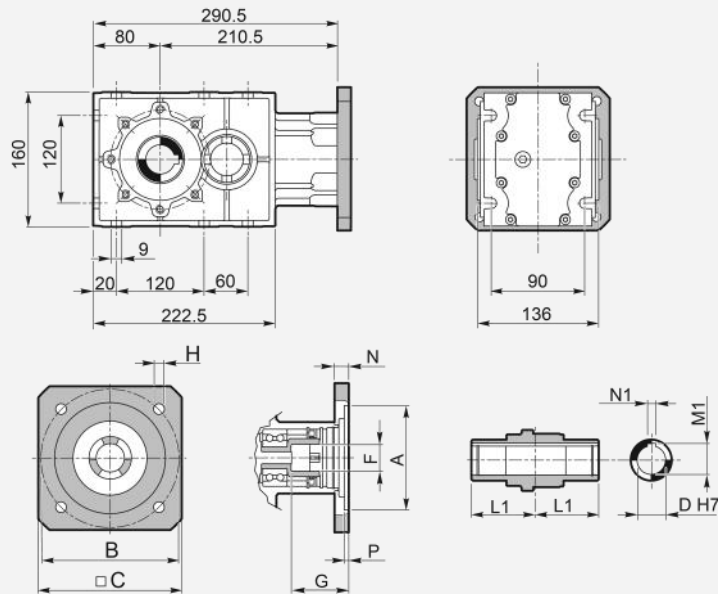
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

RO22



Codice flangia Flange part No. Flanschcode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A180078A	95	115	110	28,5	62,5	M8 - 4	15,5	3

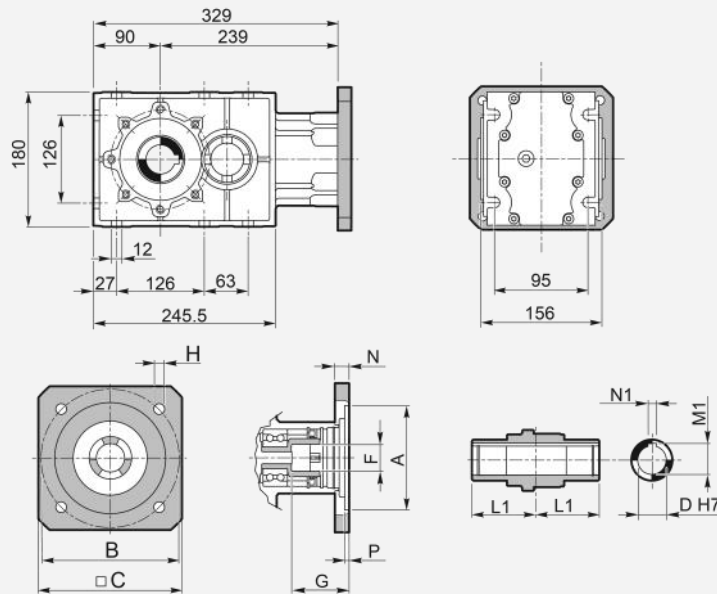
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

RO32



	øD	L1	M1	N1
mm	35 40	80	38.3 43.3	10 12
in	1.375 1.5	3.15	1.53 1.69	0.25 0.375

Codice flangia Flange part No. Flanschcode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
APP120001	95	115	110	28,5	65	M8 - 4	18	5
A180040A	110	130	126	28,5	65	M8 - 4	18	5
APP120006	130	165	140	28,5	65	M8 - 4	18	5
APP120033	130	165	140	28,5	65	M10 - 4	18	5

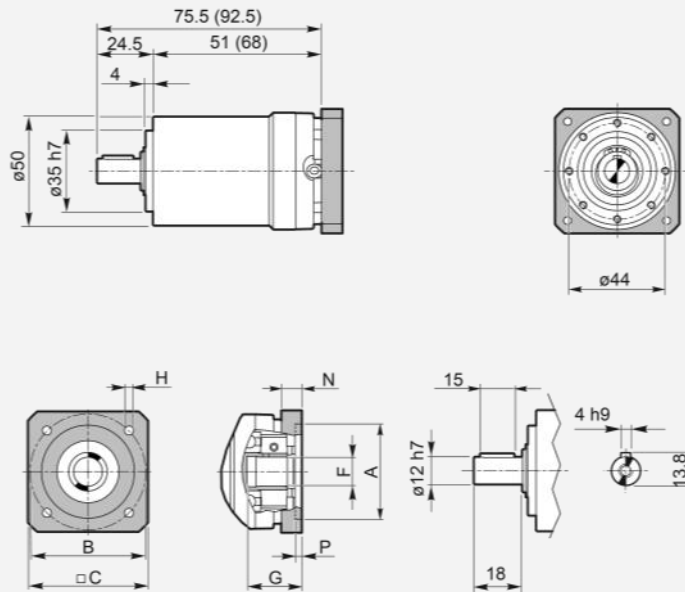
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

RG051 - RG052



Codice flangia Flange part No. Flanschkode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
APP050004	22	43,84	56	11	22 - 30	Ø5 - 4	7	4,5
A180043A	30	45	50	11	24 - 32	M3 - 4	9	3
APP050009	36	70.71	60	11	24 - 32	M4 - 4	9	4,5
A180003A	36	70.71	60	11	28 - 36	M4 - 4	13	4,5
APP050006	38.1	66.66	56	11	24 - 32	M4 - 4	9	4,5
A180001A	38.1	66.66	56	11	30 - 38	M4 - 4	14,5	4,5
APP2101	38.1	66.66	57	11	28 - 36	M4 - 4	13	2,5
APP050003	40	63	56	11	24 - 32	M5 - 4	9	4,5
A180002A	40	63	56	11	28 - 36	M5 - 4	13	4,5
A180083A	40	63	56	11	32 - 40	M5 - 4	17	4,5
APP050013	50	70	60	11	24 - 32	M5 - 4	9	4,5
APP050022	50	70	60	11	36 - 44	M4 - 4	21	4,5
APP050027	50	70	60	11	36 - 44	M5 - 4	21	4,5
A180005A	50	70	60	11	28 - 36	M5 - 4	13	4,5
APP050035	60	75	65	11	27 - 36	M5 - 4	12	4,5
652206070	60	75	70	11	23	M4 - 4	21	4
APP1829	73	98.43	83	11	37 - 45	M5 - 5	22,3	10

(::) - RG052

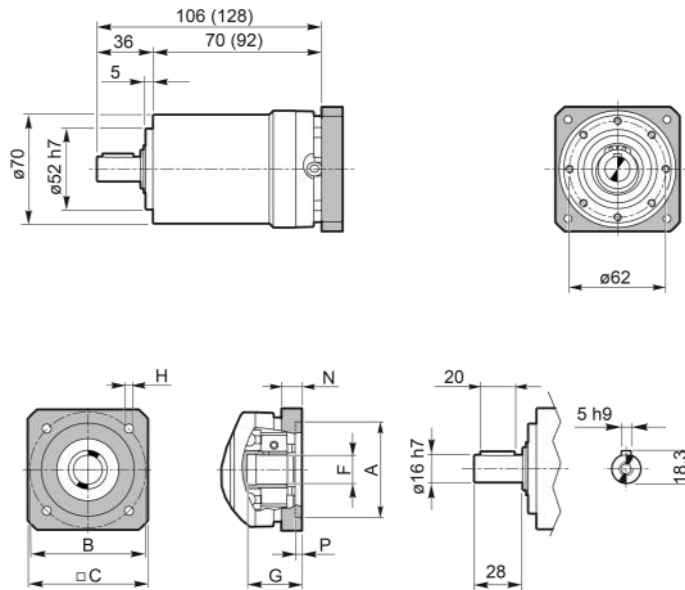
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

RG071 - RG072



Codice flangia Flange part No. Flanschcode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
A18.0085A	38,1	66,66	65	19	36 - 45	M4 - 4	15	10
APP2258	40	63	65	19	36 - 45	M5 - 4	15	10.5
A180076A	40	73,5	65	19	34 - 43	M4 - 4	13,5	4.5
A180008A	50	95	80	19	34 - 43	M6 - 4	13,5	4
A180055A	50	70	60	19	34 - 43	M5 - 4	13,5	3.5
APP070006	60	75	72	19	34 - 43	M5 - 4	13,5	3
APP070003	70	90	80	19	34 - 43	M6 - 4	13,5	4.5
A180066A	70	90	80	19	40 - 49	M6 - 4	19,5	4.5
APP070011	73	98,29	85	19	34 - 43	M5 - 4	13,5	4.5
APP1897	73	98,43	83	19	40 - 49	M5 - 5	19,8	10
A180054A	73,025	98,43	87	19	36 - 45	M6 - 4	15	4.5
APP070002	80	100	85	19	34 - 43	M6 - 4	13,5	4.5
APP070008	80	100	85	19	34 - 43	M8 - 4	13,5	4.5
A180051A	80	100	90	19	34 - 43	M6 - 4	13,5	5.5
653206085	80	100	85	19	29	M6 - 4	25	4.5
APP070009	80	100	85	19	29	M6 - 4	25	4.5
APP070007	95	115	98	19	34 - 43	M8 - 4	13,5	4
A180007A	95	115	98	19	46 - 55	M8 - 4	25	4

(::) - RG072

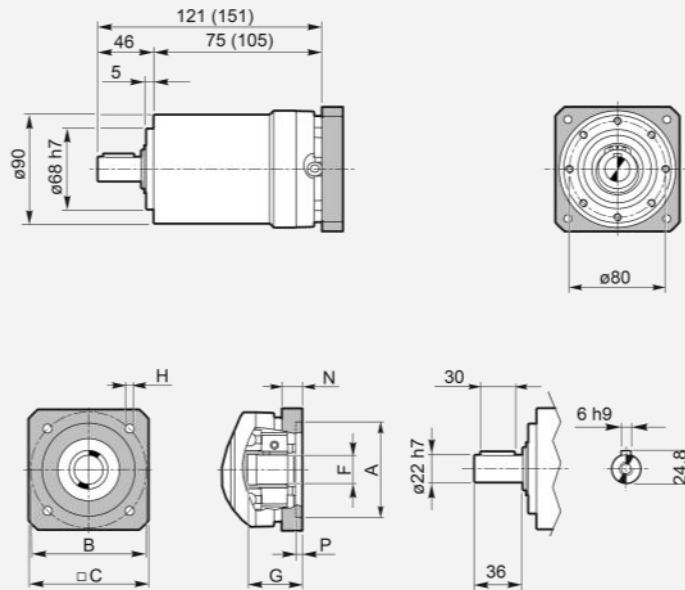
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Getriebe für Servomotoren - Gearboxes for Servomotors - Riduttori per Servomotori

RG091 -RG092



Codice flangia Flange part No. Flanschkode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
APP090011	70	90	80	24	41 - 65	M6 - 4	14,5	4.5
A180064A	73	98.43	86	24	41 - 65	M6 - 4	14,5	4.5
APP090009	80	100	85	24	41 - 65	M6 - 4	14,5	4.5
A180037A	80	100	90	24	44 - 68	M6 - 4	18	6
APP090013	95	115	100	24	41 - 65	M8 - 4	14,5	4.5
APP090014	95	115	100	24	45 - 69	M6 - 4	19	4.5
APP090041	95	135	120	24	41 - 65	M8 - 4	14,5	6.5
APP090012	110	145	120	24	41 - 65	M8 - 4	14,5	6.5
APP090040	110	145	120	24	46 - 70	M8 - 4	19,5	6.5
A180036A	110	130	125	24	51 - 75	$\phi 8,5 - 4$	25	8.5
A180041A	110	145	130	24	45 - 69	M8 - 4	19	11
A180045A	110	145	120	24	54 - 78	M8 - 4	28	6.5
A180059A	110	145	120	24	41 - 65	M8 - 4	14,5	3.5
A180061A	110	145	130	24	41 - 65	M8 - 4	14,5	3.5
654206120	110	130	120	24	50	M8 - 4	50	4,5
APP090003	60	75	95	24	38	$\phi 6 - 4$	37,5	4,5

(::) - RG092

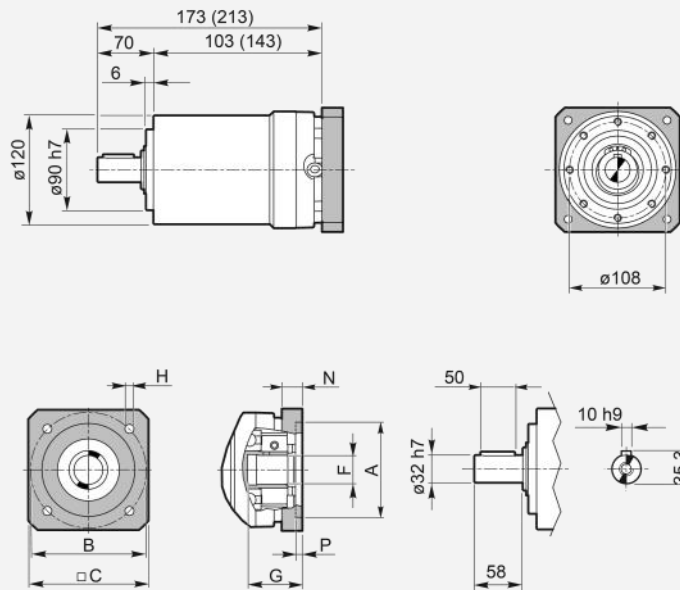
(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte

## Riduttori per Servomotori - Gearboxes for Servomotors - Getriebe für Servomotoren

### RG121 - RG122



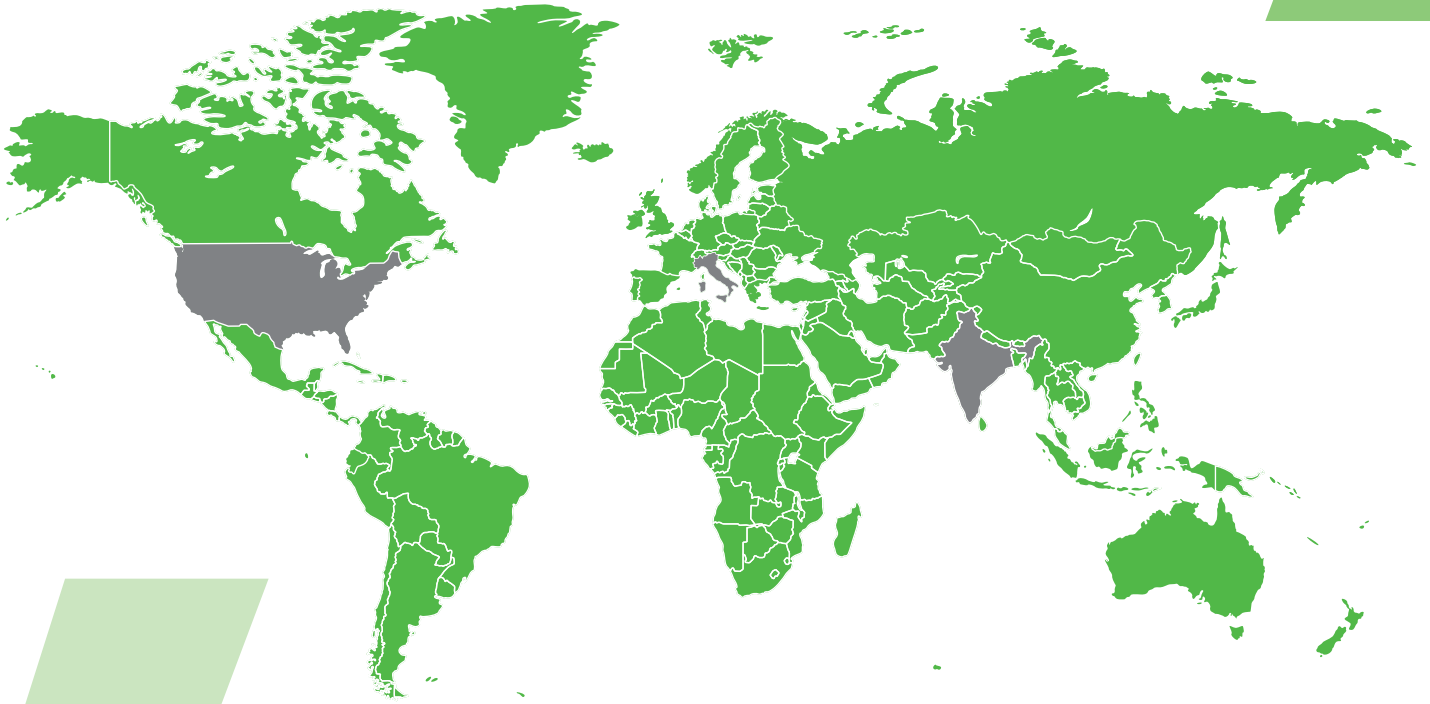
Codice flangia Flange part No. Flanschkode Nr.	Flangia motore - Motor flange - Motorflansch							
	A (#)	B	C	F	G	H	N	P
APP120001	95	115	110	38	51 - 80	M8 - 4	18	5
A180082A	110	130	126	38	59	M8 - 4	58	5
655206001	110	145	130	38	66	M8 - 4	65	7
A180040A	110	130	126	38	51 - 80	M8 - 4	18	5
655206158	130	165	158	38	59	M10 - 4	58	7
APP120006	130	165	140	38	51 - 80	M8 - 4	18	5
APP120033	130	165	140	38	51 - 80	M10 - 4	18	5

(::) - RG0122

(#) - Ordinato per diametro centraggio  
Dimensioni e pesi non impegnativi

(#) - Sorted by spigot diameter  
Dimensions and weights are not binding

(#) - Sortiert nach Durchmesser Zentrierung  
unverbindliche Abmessungen u. Gewichte



**2 Filiali estere in India e USA**  
Foreign subsidiaries, one in India, one in the USA  
Auslandsfilialen: in Indien und in den USA



**60 Oltre 60 anni di storia e successi internazionali**  
Over 60 years of history and international success  
Über 60 Jahre Unternehmensgeschichte und internationale



**100 Rete globale con oltre 100 partner commerciali**  
A global network with over 100 commercial partners  
Globales Vertriebsnetz mit mehr als 100 Handelspartnern

India subsidiary:  
**MGM-VARVEL Power Transmission Pvt Ltd**  
Warehouse N. G3 and G4 | Ground Floor  
Indus Valley's Logistic Park | Unit 3  
Mel Ayanambakkam Vellala Street  
Chennai - 600 095 | Tamil Nadu | INDIA  
info@mgmvarvelindia.com  
[www.mgmvarvelindia.com](http://www.mgmvarvelindia.com)

USA subsidiary:  
**VARVEL USA LLC**  
2815 Colonnades Court  
Peachtree Corners, GA 30071 | USA  
T 770-217-4567 | F 770-255-1978  
info@varvelusa.com  
[www.varvelusa.com](http://www.varvelusa.com)



