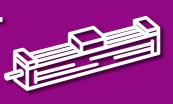


COMPACT MECHANICAL LINEAR ACTUATORS

MECHANICAL LINEAR ACTUATORS

ACCESSORIES



COMPACT MECHANICAL LINEAR ACTUATORS



COMPACT MECHANICAL LINEAR ACTUATORS

Part No. MAU322SS



COMPACT MECHANICAL LINEAR ACTUATORS (Synchro-Use)

Part No. MAU3222DS

MECHANICAL LINEAR ACTUATORS



MECHANICAL LINEAR ACTUATORS

Part No. MAU5040SS



MECHANICAL LINEAR ACTUATORS (Customized Stroke)

Part No. MAUX5040SS



MECHANICAL LINEAR ACTUATORS WITH ADJUSTABLE GEARBOX

Part No. MAG5040SS



MECHANICAL LINEAR ACTUATORS WITH ADJUSTABLE GEARBOX (Customized Stroke)

Part No. MAGX5040SS



MECHANICAL LINEAR ACTUATORS (Dual Carriage)

Part No. MAU5040SW







MECHANICAL LINEAR ACTUATORS (Dual Carriage, Customized Stroke)

Part No. MAUX5040SW



MECHANICAL LINEAR ACTUATORS WITH ADJUSTABLE GEARBOX (Dual Carriage)

Part No. MAG5040SW



MECHANICAL LINEAR ACTUATORS WITH ADJUSTABLE GEARBOX (Dual Carriage, Customized Stroke)

Part No. MAGX5040SW



MECHANICAL LINEAR ACTUATORS (Synchro-Use)

Part No. MAU5040DS



(Synchro-Use, Customized Stroke)

Part No. MAUX5040DS



MECHANICAL LINEAR ACTUATORS WITH ADJUSTABLE GEARBOX (Synchro-Use)

Part No. MAG5040DS



MECHANICAL LINEAR ACTUATORS WITH ADJUSTABLE GEARBOX (Synchro-Use, Customized Stroke)

Part No. MAGX5040DS



MECHANICAL LINEAR ACTUATORS (Dual Carriage, Synchro-Use)

Part No. MAU5040DW



MECHANICAL LINEAR ACTUATORS (Dual Carriage, Synchro-Use, Customized Stroke)

Part No. MAUX5040DW



MECHANICAL LINEAR ACTUATORS WITH ADJUSTABLE GEARBOX (Dual Carriage, Synchro-Use)

Part No. MAG5040DW



MECHANICAL LINEAR ACTUATORS WITH ADJUSTABLE GEARBOX (Dual Carriage, Synchro-Use, Customized Stroke)

Part No. MAGX5040DW







SHAFT LOCKS

Part No. MAU-SL



ONE-TOUCH SPINDLE LOCKS

Part No. QCSPL



POSITIONING PLATE

Part No. MAU5040-PS01



DIGITAL POSITION INDICATORS

Part No. SDP-02



DIGITAL POSITION INDICATORS

Part No. SDP-04



POINTER

Part No. ES3-A



SCALES

Part No. ES1N



ADAPTER SHAFTS

Part No. MAU-SH



PLASTIC KNURLED KNOBS

Part No. GH-N



PLASTIC SOLID DISK HANDWHEEL

Part No. EDHN-M



PLASTIC ANGLED-SPOKE HANDWHEELS

Part No. TWN-M









PLASTIC CRANK HANDLES

Part No. BCHN-M



PAIR OF STOPS

Part No. MAU5040-ST02



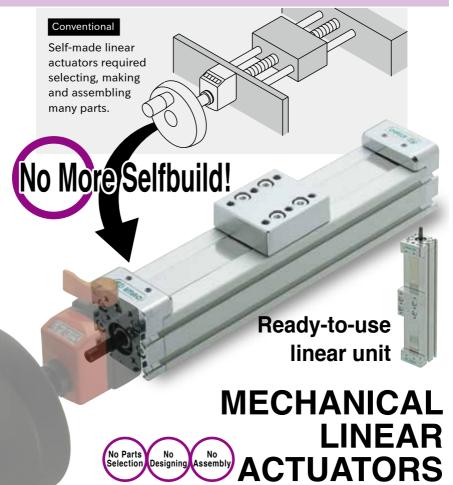
T-NUTS

Part No. L5-TST



GROOVE COVER

Part No. L5-GVC2000N

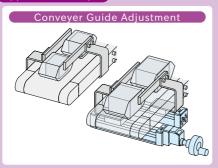


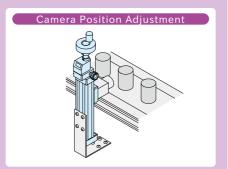
IMAO's pre-assembled Linear Unit can be used with simple manual adjustments without complex processes of parts selection, design and assembly.

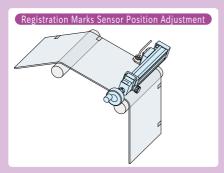
The internal parts are protected from dust by its aluminum profile body and dustproof sheet.

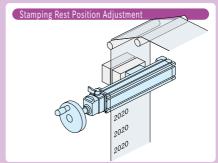


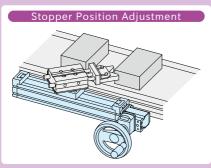
Application Example

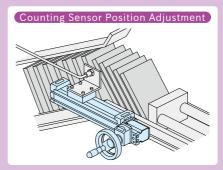


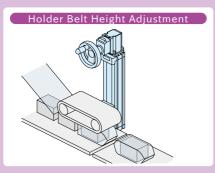


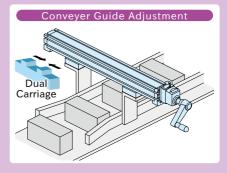












Lineup

Single Carriage ccw cw

Carriage moves along with rotation of the handle shaft.



Single Carriage

- Customized Stroke
- Adjustable Gearbox
- Adjustable Gearbox & Customized Stroke

Dual Carriage w

Carriages move towards the center or opposite directions along with the rotation of the handle shaft.



Dual Carriage

- Customized Stroke
- Adjustable Gearbox
- Adjustable Gearbox & Customized Stroke

Linkage Single Carriage

CCW CW With Handle Shaft Without Handle Shaft

The actuators can be used in pairs connected at linkage shafts.



- Customized Stroke
- Adjustable Gearbox
- Adjustable Gearbox & Customized Stroke

Linkage Dual Carriage

CW With Handle Shaft Without Handle Shaft

Carriages move towards the center or opposite directions along with the rotation of the shaft. The actuators can be used in pairs connected at linkage shafts.



Linkage Dual Carriage

- Customized Stroke
- Adjustable Gearbox
- Adjustable Gearbox &
- Customized Stroke

Lineup

Compact ccw cw

Carriage moves along with rotation of the handle shaft.



Compact Linkage

CCW CW

(With Handle Shaft) (Without Handle Shaft

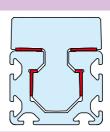
The actuators can be used in pairs connected at linkage shafts.



Mechanism

The abrasion resistance and self-lubricating material of sliding parts give the unit a longer lifetime against the load of up and down or sideways.





Related Product



Various accessories for actuators are available from IMAO.

SHAFT LOCKS





ONE-TOUCH SPINDLE LOCKS

Secure locking of spindles with a quarter



DIGITAL POSITION INDICATORS



HANDWHEELS

Dedicated handwheels for actuators



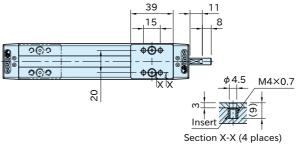
MAU3222SS

COMPACTMECHANICALLINEAR ACTUATORS

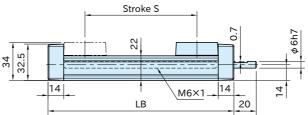
R⊕₩S **IMAO**



Body	Carriage End Plates	Shaft	Dustproof Sheet
A6N01 aluminum Anodized Natural	Polyamide (glass-fiber reinforced) Black	S45C steel Black oxide finish	SUS304 stainless steel

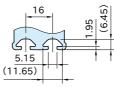












Dimensions of End Plate (Both ends) **Dimensions of Slots**

Part Number	Rotative Direction	S	LB	Weight (kg)
MAU3222SS-050R	CW	50	117	0.19
MAU3222SS-050L	CCW	30	117	0.19
MAU3222SS-100R	CW	100	107	0.26
MAU3222SS-100L	CCW	100 167	0.26	

Related Product

Choose the optional elements for your needs.

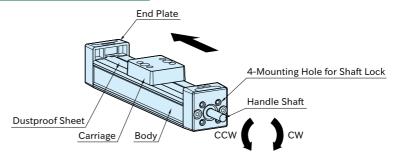
- ·Shaft Locks
- ·Digital Position Indicators
- ·Pointer
- ·Scales
- ·Adapter Shafts
- ·Handwheels
- ·T-Nuts



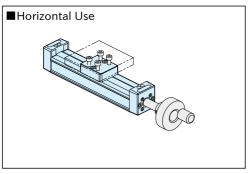


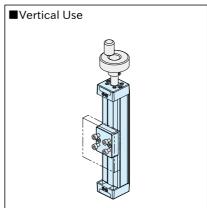
ACCESSORIES

How To Use



- MAU3222SS-R : Carriage moves toward the arrow direction by turning the Handle Shaft clockwise.
- MAU3222SS-L : Carriage moves toward the arrow direction by turning the Handle Shaft counterclockwise.
- · Carriage moves 1mm per rotation of the Handle Shaft.



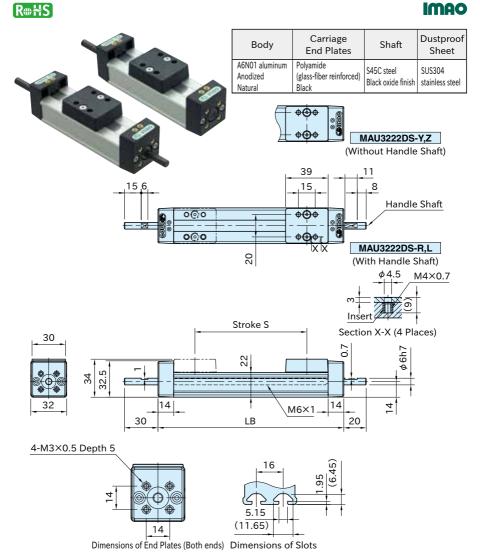


Reference

Technical Information of Mechanical Linear Actuators

MAU3222DS

COMPACT MECHANICAL LINEAR ACTUATORS (Synchro-Use)



Part N	Rotative	S	LB	Weight	
With Handle Shaft	Without Handle Shaft	Direction	5		(kg)
MAU3222DS-050R	MAU3222DS-050Y	CW	50	117	0.2
MAU3222DS-050L	MAU3222DS-050Z	CCW	50	117	0.2
MAU3222DS-100R	MAU3222DS-100Y	CW	100	167	0.27
MAU3222DS-100L	MAU3222DS-100Z	CCW	100	107	0.27

Related Product

Choose the optional elements for your needs.

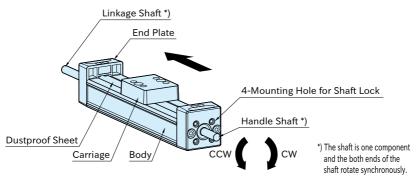
- ·Shaft Locks
- ·Digital Position Indicators
- ·Pointer
- ·Scales
- ·Adapter Shafts
- ·Handwheels
- ·T-Nuts





ACCESSORIES

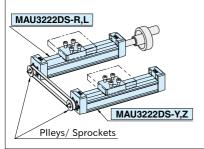
How To Use



- •MAU3222DS-R,Y : Carriage moves toward the arrow direction by turning the Handle Shaft clockwise.
- MAU3222DS-L,Z : Carriage moves toward the arrow direction by turning the Handle Shaft counterclockwise.
- · Carriage moves 1mm per rotation of the Handle Shaft.



Attach pulleys or sprockets to Linkage Shafts and align the carriages for movement in synchronization.



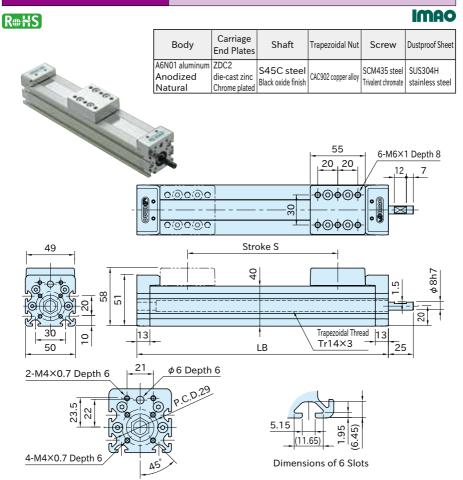
Serial Use Connect two linkage Shafts using a coupling. MAU3222DS-R,L Coupling MAU3222DS-Y,Z

Reference

Technical Information of Mechanical Linear Actuators

MAU5040SS

MECHANICAL LINEAR ACTUATORS



Dimensions of End Plate (Both ends)

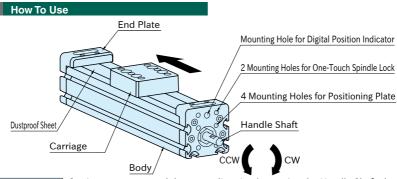
2				
Part Number	Rotative Direction	S	LB	Weight (kg)
MAU5040SS-100R	CW	100	201	1.5
MAU5040SS-100L	CCW	100	201	1.5
MAU5040SS-150R	CW	150	251	1.7
MAU5040SS-150L	CCW	150	201	1.7
MAU5040SS-200R	CW	200	301	1.9
MAU5040SS-200L	CCW	200	301	1.9
MAU5040SS-250R	CW	250	351	2.1
MAU5040SS-250L	CCW	230	331	۷.۱
MAU5040SS-300R	CW	300	401	2.3
MAU5040SS-300I	CCW	300	401	2.3

Related Product

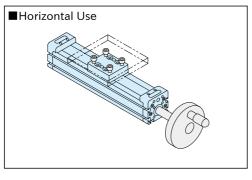
Choose the optional elements for your needs.

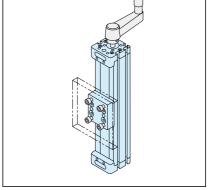
- •For actuators with customized stroke, see MAUX5040SS.
- ·One-Touch Spindle Locks
- ·Positioning Plate
- ·Digital Position Indicators
- ·Adapter Shafts
- ·Handwheels
- ·Pair of Stops
- ·T-Nuts
- ·Groove Cover





- ·MAU5040SS-R: Carriage moves toward the arrow direction by turning the Handle Shaft clockwise.
- ·MAU5040SS-L]: Carriage moves toward the arrow direction by turning the Handle Shaft counterclockwise.
- ·Carriage moves 3mm per rotation of the Handle Shaft.





Reference

Technical Information of Mechanical Linear Actuators

MAUX5040SS MECHANICAL LINEAR ACTUATORS (Customized Stroke)

■Vertical Use







Ordering Example

MAUX5040SS-AL 170

Feature

- •The stroke of MAU5040SS is customizable.
- ·For ordering, specify the stroke.

Note

Body length: LB = Stroke S + 101mm

Part Number		S (by 10mm)	Delivery Time
MAUX5040SS-A	D(CM)	160~290	
MAUX5040SS-B	R(CW) L(CCW)	310~500	15 Working Days
MAUX5040SS-C	L(CCVV)	510~700	

Reference

Technical Information of Mechanical Linear Actuators



MAG5040SS

MECHANICAL LINEAR ACTUATORS WITH ADJUSTABLE GEARBOX







Body	Carriage/End Plates Shaft		Trapezoidal Nut
A6N01 aluminum Anodized Natural	ZDC2 die-cast zinc Chrome plated	S45C steel Black oxide finish	CAC902 copper alloy
Screw	Dustproof Sheet	Gearbox	
SCM435 steel Trivalent chromate	I NINKIIAH (Tainiecc (Teel	S45C steel Electroless nickel plated	

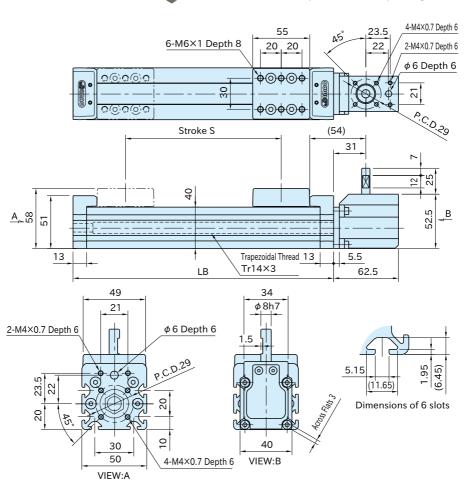








Gearbox can be positioned at every 90 degree.





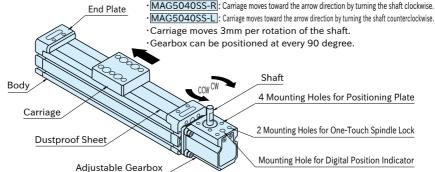
Part Number	Rotative Direction	S	LB	Weight(kg)	Delivery Time		
MAG5040SS-100R	CW	100	201	2.0			
MAG5040SS-100L	CCW	100	201	2.0			
MAG5040SS-150R	CW	150	251	2.2			
MAG5040SS-150L	CCW	150 251		150 2	251	2.2	
MAG5040SS-200R	CW	200	301	2.4	10 Working		
MAG5040SS-200L	CCW	200	301	2.4	Days		
MAG5040SS-250R	CW	250	251	2.6			
MAG5040SS-250L	CCW	250	351	2.0			
MAG5040SS-300R	CW	200	401	2.8			
MAG5040SS-300L	CCW	300	401	2.0			

Related Product

Choose the optional elements for your needs.

- ·For actuators with customized stroke, see MAGX5040SS.
- ·One-Touch Spindle Locks
- ·Positioning Plate
- Digital Position Indicators
- ·Adapter Shafts
- · Handwheels
- ·Pair of Stops
- ·T-Nuts
- ·Groove Cover

How To Use



4 Mounting Holes for Positioning Plate

2 Mounting Holes for One-Touch Spindle Lock

Mounting Hole for Digital Position Indicator

Note

The gearbox will be delivered with mounted to Mechanical Linear Actuators in the orientation as in the figure above.

Reference

- ·How To Change Gearbox Position
- ·Dimensions of Gearbox
- ·Technical Information of Mechanical Linear Actuators

MAGX5040SS

MECHANICAL LINEAR ACTUATORS WITH ADJUSTABLE GEARBOX (Customized Stroke)



Ordering Example

MAGX5040SS-AL

Part Number

Feature

- ·The stroke length of MAG5040SS is customizable.
- ·For ordering, specify the stroke.

Note

Body length: LB = Stroke S+101mm

Part Number		S Desired Length (by 10mm)	Delivery Time
MAGX5040SS-A	D(CM)	160~290	
MAGX5040SS-B	R(CW) L(CCW)	310~500	15 Working Days
MAGX5040SS-C	L(CCVV)	510~700	

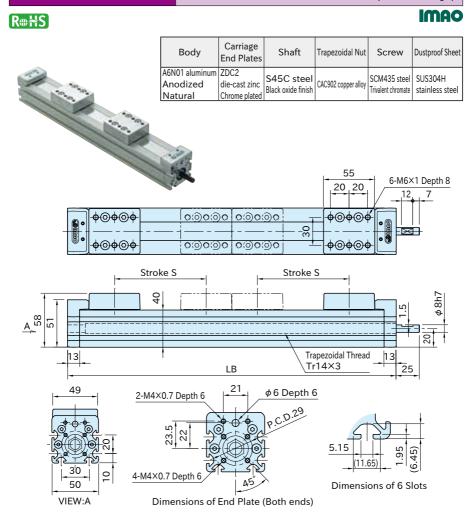
Reference

- ·How To Change Gearbox Position
- ·Dimensions of Gearbox
- ·Technical Information of Mechanical Linear Actuators



MAU5040SW

MECHANICAL LINEAR ACTUATORS (Dual Carriage)



Part Number	S	LB	Weight (kg)
MAU5040SW-100	100	356	2.4
MAU5040SW-150	150	456	2.8

Reference

Technical Information of Mechanical Linear Actuators

Related Product

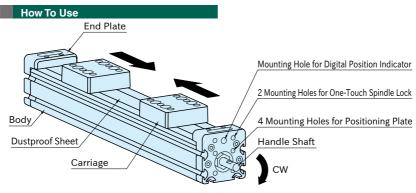
Choose the optional elements for your needs.

•For actuators with customized stroke, see MAUX5040SW.

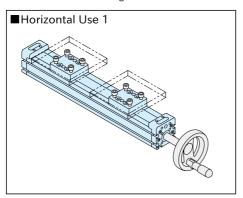
- ·One-Touch Spindle Locks
- ·Positioning Plate
- ·Digital Position Indicators
- ·Adapter Shafts
- ·Handwheels
- ·Pair of Stops
- ·T-Nuts
- ·Groove Cover

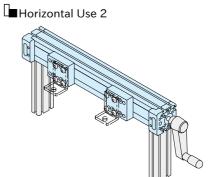






- •Two carriages move toward the arrow directions by turning the Handle Shaft clockwise.
- •Two carriages move against the arrow directions by turning the Handle Shaft counterclockwise.
- ·Pitch between two carriages increases or decreases 6mm per rotation of the Handle Shaft.





MAUX5040SW

MECHANICAL LINEAR ACTUATORS (Dual Carriage, Customized Stroke)







Ordering Example

MAUX5040SW-C

MAUX5040SW-B 240

Part Number

Stroke S

Feature

Reference

- •The stroke of MAU5040SW is customizable.
- ·For ordering, specify the stroke.

✓ Note

Body length : LB = Stroke $S \times 2 + 156$ mm

S Delivery Time Part Number (by 10m MAUX5040SW-A 160~220

nm)	Delivery	Tillic	T

MAUX5040SW-B 230~280 15 Working Days

290~340

MAG5040SW

MECHANICAL LINEAR ACTUATORS WITH ADJUSTABLE GEARBOX (Dual Carriage)









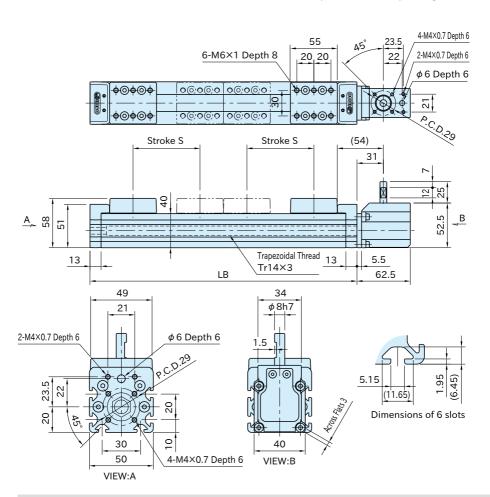






IMAO

Gearbox can be positioned at every 90 degree.



Part Number	S	LB	Weight(kg)	Delivery Time
MAG5040SW-100	100	356	2.9	10 Working
MAG5040SW-150	150	456	3.3	Days

Note

The gearbox will be delivered with mounted to Mechanical Linear Actuators in the orientation as in the figure below.

Reference

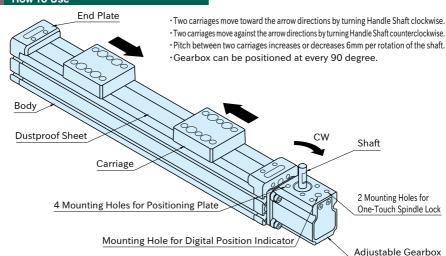
- ·How To Change Gearbox Position
- ·Dimensions of Gearbox
- ·Technical Information of Mechanical Linear Actuators

Related Product

Choose the optional elements for your needs.

- ·For actuators with customized stroke, see MAGX5040SW.
- ·One-Touch Spindle Locks
- ·Positioning Plate
- ·Digital Position Indicators
- ·Adapter Shafts
- ·Handwheels
- ·Pair of Stops
- ·T-Nuts
- · Groove Cover

How To Use



MAGX5040SW

MECHANICAL LINEAR ACTUATORS WITH ADJUSTABLE GEARBOX (Dual Carriage, Customized Stroke)





Ordering Example

MAGX5040SW-B

Part Number

Stroke S

Feature

- •The stroke length of MAG5040SW is customizable.
- ·For ordering, specify the stroke.

Note

Body length : LB = Stroke $S \times 2 + 156$ mm

Part Number	S Desired Stroke (by 10mm)	Delivery Time
MAGX5040SW-A	160~220	
MAGX5040SW-B	230~280	15 Working Days
MAGX5040SW-C	290~340	

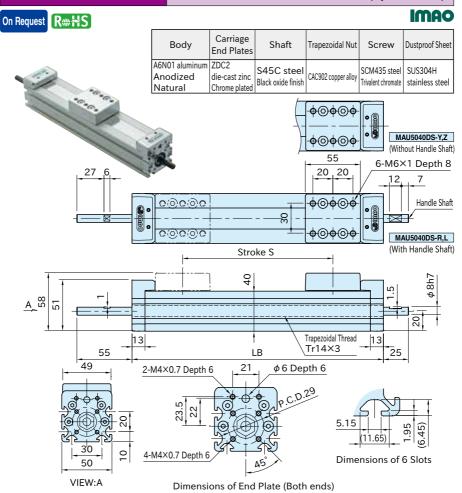
Reference

- ·How To Change Gearbox Position
- ·Dimensions of Gearbox
- ·Technical Information of Mechanical Linear Actuators



MAU5040DS

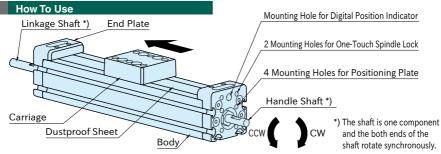
MECHANICAL LINEAR ACTUATORS (Synchro-Use)



	umber	Rotative	S LB		Weight	Delivery Time
With Handle Shaft	Without Handle Shaft	Direction			(kg)	Benvery Time
MAU5040DS-100R	MAU5040DS-100Y	CW	100	201	1.5	
MAU5040DS-100L	MAU5040DS-100Z	CCW	100 201		1.5	
MAU5040DS-150R	MAU5040DS-150Y	CW	150	251	1.7	
MAU5040DS-150L	MAU5040DS-150Z	CCW	150	201	1.7	
MAU5040DS-200R	MAU5040DS-200Y	CW	200	201	1.9	10 Working
MAU5040DS-200L	MAU5040DS-200Z	CCW	200	301	1.9	Days
MAU5040DS-250R	MAU5040DS-250Y	CW	250	251	2.1	
MAU5040DS-250L	MAU5040DS-250Z	CCW	250	331	2.1	
MAU5040DS-300R	MAU5040DS-300Y	CW	200	401	2.3	
MAU5040DS-300L	MAU5040DS-300Z	CCW	300	401	2.3	

Reference Technical Information of Mechanical Linear Actuators

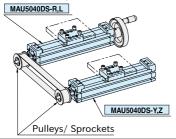


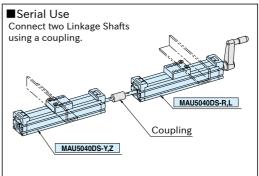


- ·MAU5040DS-R.YI: Carriage moves toward the arrow direction by turning the Handle Shaft clockwise.
- •MAU5040DS-L.Z]: Carriage moves toward the arrow direction by turning the Handle Shaft counterclockwise.
- ·Carriage moves 3mm per rotation of the Handle Shaft.

■Parallel Use

Attach pulleys or sprockets to Linkage Shafts and align the carriages for movement in synchronization.





Related Product

Choose the optional elements for your needs.

- ·For actuators with customized stroke, see MAUX5040DS.
- ·One-Touch Spindle Locks
- ·Positioning Plate
- ·Digital Position Indicators

- ·Adapter Shafts
- ·Handwheels ·Pair of Stops
- ·T-Nuts
- ·Groove Cover

MAUX5040DS

MECHANICAL LINEAR ACTUATORS (Synchro-Use, Customized Stroke)



IMAO

Ordering Example

MAUX5040DS-BR 450

Part Number

Feature

- •The stroke of MAU5040DS is customizable.
- ·For ordering, specify the stroke.

Note

Body length: LB = Stroke S + 101mm

	Part Number	S(by 10mm)	Delivery Time	
MAUX5040DS-A	D/CW With Handle Chaft	V/CW Without Handla Chaft)	160~290	15
MAUX5040DS-B	L(CCW, With Handle Shaft)	Y(CW, Without Handle Shaft) - Z(CCW, Without Handle Shaft) -	310~500	Working Days
MAUX5040DS-C			510~700	Working Days

Reference Technical Information of Mechanical Linear Actuators

CAD Download: https://www.imao.com/en/ IMAO CORPORATION



MAG5040DS

MECHANICAL LINEAR ACTUATORS WITH ADJUSTABLE GEARBOX (Synchro-Use)







Body	Body Carriage/End Plates		Trapezoidal Nut
A6N01 aluminum Anodized Natural	ZDC2 die-cast zinc Chrome plated	S45C steel Black oxide finish	CAC902 copper alloy
Screw	Dustproof Sheet	Gearbox	
SCM435 steel Trivalent chromate		S45C steel Electroless nickel plated	

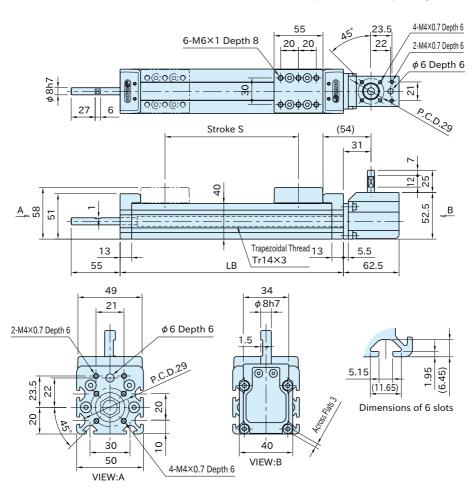








Gearbox can be positioned at every 90 degree.



Rotative Direction

CW

CCW

CW

CCW

CW

CCW

CW

CCW

CW

CCW

S

100

150

200

250 351

300 401

١	ס			LINEAR ACTUATORS	
	_	_		5 II T	
	ᆫ	В	Weight (kg)	Delivery Time	
	20	01	2.0		
	25	51	2.2		
	30	01	2.4	10 Working Days	

2.6

2.8

Related Product

Choose the optional elements for your needs.

- ·For actuators with customized stroke, see MAGX5040DS.
- ·One-Touch Spindle Locks
- ·Positioning Plate
- Digital Position Indicators
- ·Adapter Shafts
- · Handwheels
- ·Pair of Stops
- ·T-Nuts
- ·Groove Cover

How To Use

Part Number

MAG5040DS-100R

MAG5040DS-100L

MAG5040DS-150R

MAG5040DS-150L

MAG5040DS-200R

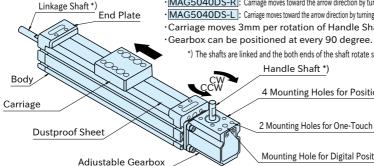
MAG5040DS-200L

MAG5040DS-250R

MAG5040DS-250L

MAG5040DS-300R

MAG5040DS-300L



• MAG5040DS-R: Carriage moves toward the arrow direction by turning Handle Shaft clockwise.

- MAG5040DS-L: Carriage moves toward the arrow direction by turning Handle Shaft counterclockwise.
- ·Carriage moves 3mm per rotation of Handle Shaft.
 - *) The shafts are linked and the both ends of the shaft rotate synchronously.

Handle Shaft *)

4 Mounting Holes for Positioning Plate

2 Mounting Holes for One-Touch Spindle Lock

Mounting Hole for Digital Position Indicator

Note

The gearbox will be delivered with mounted to Mechanical Linear Actuators in the orientation as in the figure above.

Reference

- ·How To Change Gearbox Position
- ·Dimensions of Gearbox
- ·Technical Information of Mechanical Linear Actuators

MAGX5040DS

MECHANICAL LINEAR ACTUATORS WITH ADJUSTABLE GEARBOX (Synchro-Use, Customized Stroke)



IMAO

Ordering Example

Feature

- •The stroke length of MAG5040DS is customizable.
- ·For ordering, specify the stroke.

MAGX5040DS-BR

Part Number

Note

Body length: LB = Stroke S+101mm

Part Number		S Desired Stroke (by 10mm)	Delivery Time	
MAGX5040DS-A	D(CM)	160~290		
MAGX5040DS-B	R(CW)	310~500	15 Working Days	
MAGX5040DS-C	L(CCW)	510~700		

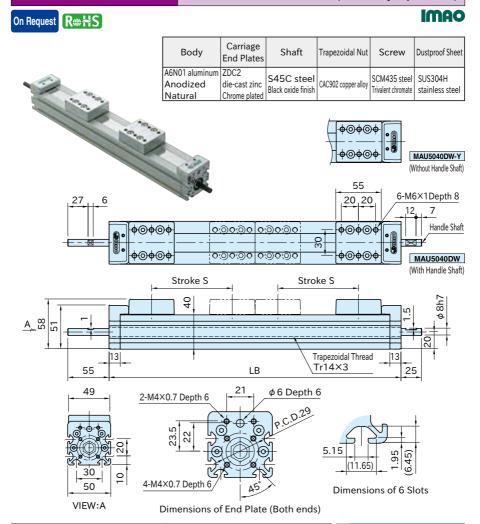
Reference

- · How To Change Gearbox Position
- ·Dimensions of Gearbox
- ·Technical Information of Mechanical Linear Actuators



MAU5040DW

MECHANICAL LINEAR ACTUATORS (Dual Carriage, Synchro-Use)



Part Number		S	LB	Weight	Delivery Time	
With Handle Shaft	Without Handle Shaft	3	LD	(kg)	Delivery Time	
MAU5040DW-100	MAU5040DW-100Y	100	356	2.4	10 Working	
MAU5040DW-150	MAU5040DW-150Y	150	456	2.8	Days	

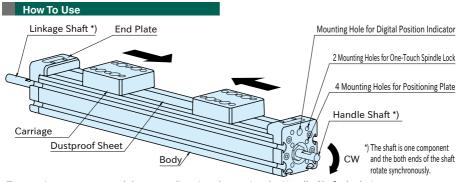
Reference Technical Information of Mechanical Linear Actuators

Related Product

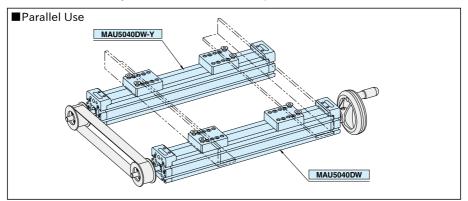
Choose the optional elements for your needs.

- ·For actuators with customized stroke,
- see MAUX5040DW.
- ·One-Touch Spindle Locks
- · Positioning Plate
- ·Digital Position Indicators
- ·Adapter Shafts
- ·Handwheels
- ·Pair of Stops
- ·T-Nuts
- ·Groove Cover





- ·Two carriages move toward the arrow directions by turning the Handle Shaft clockwise.
- •Two carriages move against the arrow directions by turning the Handle Shaft counterclockwise.
- ·Pitch between two carriages increases or decreases 6mm per rotation of the Handle Shaft.



MAUX5040DW

MECHANICAL LINEAR ACTUATORS (Dual Carriage, Synchro-Use, Customized Stroke)





IMAO

Ordering Example

MAUX5040DW-CY 290

Part Number

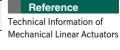
Feature

- •The stroke of MAU5040DW is customizable.
- ·For ordering, specify the stroke.

Note

Body length : LB = Stroke $S \times 2 + 156$ mm

Part	Number	S (by 10mm)	Delivery Time
MAUX5040DW-A	(Mith Hondle Cheft)	160~220	
MAUX5040DW-B	(With Handle Shaft) Y (Without Handle Shaft)	230~280	15 Working Days
MAUX5040DW-C	i (without Handle Shart)	290~340	

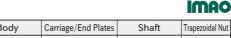




MAG5040DW

MECHANICAL LINEAR ACTUATORS WITH ADJUSTABLE GEARBOX (Dual Carriage, Synchro-Use)







воау	Carriage/End Plates	Snart	i rapezoidai ivut
A6N01 aluminum Anodized Natural	ZDC2 die-cast zinc Chrome plated	S45C steel Black oxide finish	CAC902 copper alloy
Screw	Dustproof Sheet	Gearbox	
SCM435 steel Trivalent chromate	SUS304H stainless steel	S45C steel Electroless nickel plated	

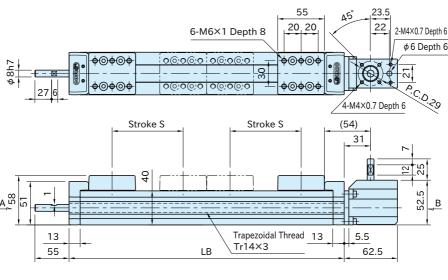


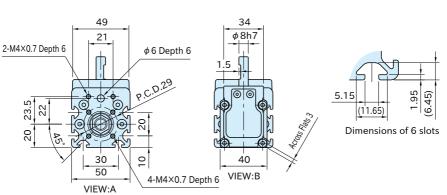






Gearbox can be positioned at every 90 degree.





Part Number	S	LB	Weight(kg)	Delivery Time
MAG5040DW-100	100	356	2.9	10 Working
MAG5040DW-150	150	456	3.3	Days

Note

The gearbox will be delivered with mounted to Mechanical Linear Actuators in the orientation as in the figure below.

Reference

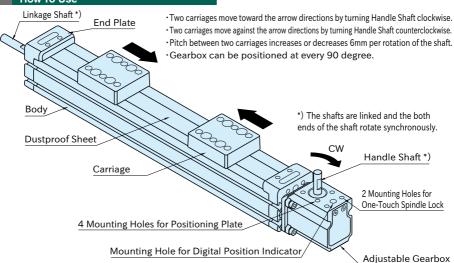
- ·How To Change Gearbox Position
- Dimensions of Gearbox
- ·Technical Information of Mechanical Linear Actuators

Related Product

Choose the optional elements for your needs.

- ·For actuators with customized stroke, see MAGX5040DW.
- ·One-Touch Spindle Locks
- ·Positioning Plate
- ·Digital Position Indicators
- ·Adapter Shafts
- · Handwheels
- ·Pair of Stops
- ·T-Nuts
- · Groove Cover

How To Use



MAGX5040DW

MECHANICAL LINEAR ACTUATORS WITH ADJUSTABLE GEARBOX (Dual Carriage, Synchro-Use, Customized Stroke)





IMAO

Ordering Example

MAGX5040DW-C

Part Number

Stroke S

Feature

- •The stroke length of MAG5040DW is customizable.
- ·For ordering, specify the stroke.

Note

Body length : LB = Stroke $S \times 2 + 156$ mm

Part Number	S Desired Stroke (by 10mm)	Delivery Time
MAGX5040DW-A	160~220	
MAGX5040DW-B	230~280	15 Working Days
MAGX5040DW-C	290~340	

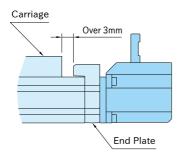
Reference

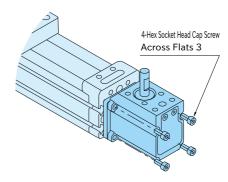
- ·How To Change Gearbox Position
- ·Dimensions of Gearbox
- ·Technical Information of Mechanical Linear Actuators



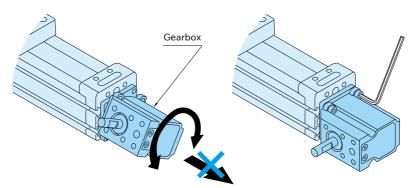
How To Change Gearbox Position

- ① The clearance between carriage and end plate should be 3mm at least.
- ② Remove four hex socket head cap screws attached to the gearbox.





- 3 The gearbox is free to rotate and change the position at every 90 degree.
- ④ Fix the gearbox at the desired position with four hex socket head cap screws.

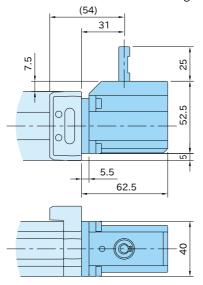


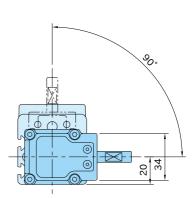
Note: Do not pull the gearbox to the axial direction.



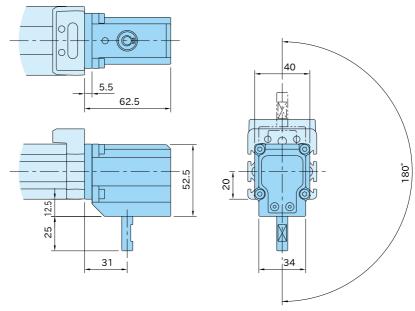
Dimensions of Gearbox

■ Dimensions of Gearbox at 90 degrees rotation (For dimensions of Gearbox at 270 degrees, invert the drawing below.)



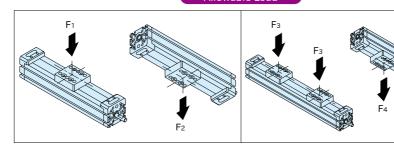


■Dimensions of Gearbox at 180 degrees rotation

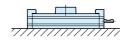


Technical Information of Mechanical Linear Actuators

Allowable Load

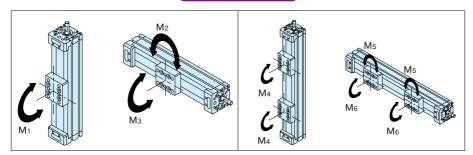


Туре	F ₁ (N)	F ₂ (N)	F ₃ (N)	F ₄ (N)	
MAU3222*S	30	15	-	-	
MAU5040*S	000	300	_	-	
MAG5040*S	600				
MAU5040*W			200		
MAG5040*W	_	_	300	150	

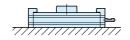


Note: The values above are for Actuators placed on a flat surface.

Allowable Moment



Туре	M ₁ (N·m)	M ₂ (N·m)	M₃ (N·m)	M ₄ (N·m)	M₅ (N·m)	M ₆ (N·m)
MAU3222*S	0.3	0.2	0.3	-	_	-
MAU5040*S	9	8	10	_	-	_
MAG5040*S						
MAU5040*W	-		_	4.5	4	_
MAG5040*W		_		4.5		5



Note: The values above are for Actuators placed on a flat surface.on a flat surface.

Allowable Rotation Speed

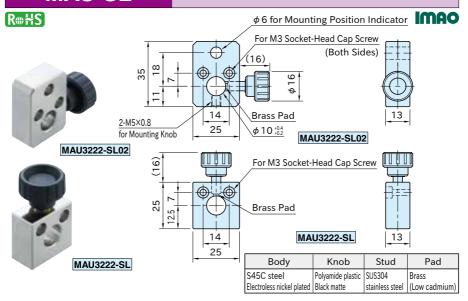
When using a motor, rotation speed must be within;

150min⁻¹ for MAU3222**

250min⁻¹ for MAU5040** MAG5040**

MAU-SL

SHAFT LOCKS



Part Number	Weight (g)	Proper Adapter Shaft
MAU3222-SL	58	MALIOOOO CLI
MAU3222-SL02	78	MAU3222-SH

Feature

- ·Avoide the shaft rotating. The brass pad of the knob prevents the shaft from damage.
- ·Can be used with MAU3222.

Supplied With

2 of M3×0.5-14L Hex Socket Head Screw

How To Use

■MAU3222-SL

The position of the knob follows the mounting direction.

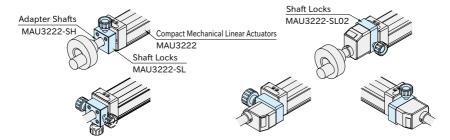
✓ Note

- •This product does not have bearing or guiding functions.
- ·Shocks or vibrations may loosen the lock.
- ·Can not be used with MAU5040** or MAG5040**.

■MAU3222-SL02

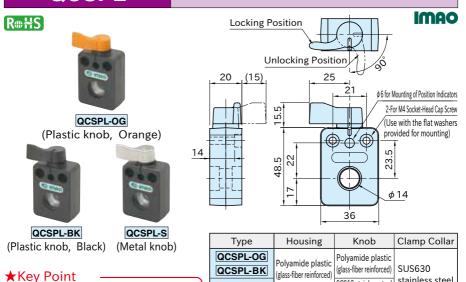
Use with SDP-02.

Mounting direction can be changed.



QCSPL

ONE-TOUCH SPINDLE LOCKS



Pl	astic Knob		Metal Kr		AH 11 11 12	0 11 1 6 11
Part N	umber	Weight	Part Number	Weight	Allowable Holding Torque(N·m)	Suitable shaft dia.
Orange	Black	(g)	Part Number	(g)	rorque(rviii)	(117)
QCSPL0414-OG	QCSPL0414-BK	50	QCSPI 0414-S	70	4	φ 14

QCSPL-S

Feature

· One-touch Spindle Locks enable quick and secure locking of shafts with one click of the knob.

Secure locking of spindles with one-touch action!

• When One-touch Spindle Lock is operated, the knob clicks and the shaft is locked with a steady force. This provides reliable locking of shafts.

Supplied With

2 of Flat round washer (Stainless Steel)

How To Use

Reference

Black matte

Please refer to another QCSPL page for further information.

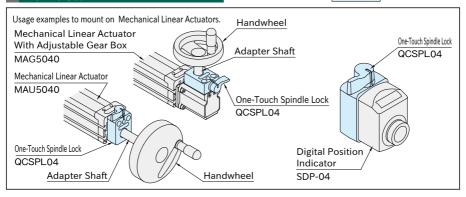
SCS13 stainless steel

(Equivalent to SUS304)

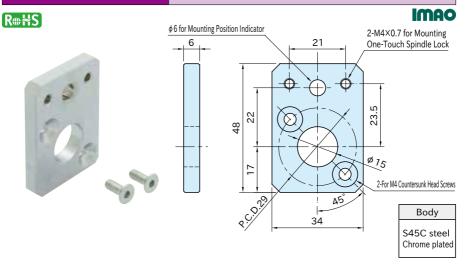
stainless steel

Note

- · Allowable Tightening Torque for Mounting Screws is
- Tightening with torque greater than the allowable tightening torque may cause failure by deformation of the body.
- ·Can not be used with MAU3222**



MAU5040-PS01 POSITIONING PLATE



Part Number	Weight (g)
MAU5040-PS01	63

Feature

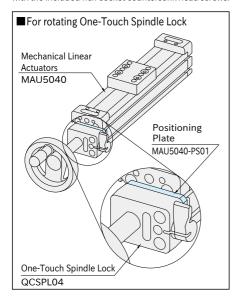
Enables to change the orientation of One-Touch Spindle Locks and Digital Position Indicators for every 90 degrees.

Supplied With

2 of M4×0.7-10L Hex Socket Countersunk Head Screw

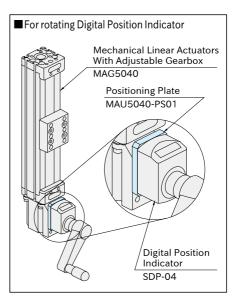
How To Use

Mount Positioning Plate to the End Plate of actuators with the included hex-socket countersunk head screws.



✓ Note

Can not be used with MAU3222**.



SDP-02

DIGITAL POSITION INDICATORS

R⊕₩S

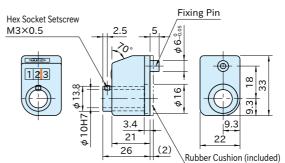




SDP-02H



SDP-02V On Request



Housing
Polyamide (nylon6) plastic
Orange

SDP-02F

On Request

Feature

Easyt to read the feed amount of Compact Mechanical Linear Actuators.

Supplied With

1 of rubber cushion (with adhesive tape)

Technical Information

Working temperature : Up to 80°C

Reference

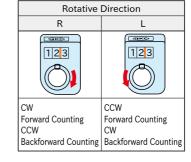
Please refer to another SPD-02 page for further information at our website.

Note

- •Ensure that the start-up revolution speed is 1/3 or less of the allowable revolution speed.
- ·Do not give rapid acculeration or sudden stop.
- •These position indicators can not be used in applications where the shaft moves in axial direction.
- ·Can not be used with MAU5040** · MAG5040**.

Window Position		
Style H	Style F	Style V
	On Request	On Request
To install on shaft at lower eye level	Window is visual at eye level	Install on vertical shaft

Display Example			
000	010	999	
Yellow Line Yellow Line	Forward	Backforward	
indicates	counting from	counting from	
decimal point.	"000"	"000"	



Туре	Window Style	Rotative Direction	Display Per Rotation	Allowable Rotation Speed (min ⁻¹)	Weight (g)	Proper Compact Mechanical Linear Actuators *)
SDP-02	H F On Request	R 123	1B 010 °)	500	20	MAU3222SS MAU3222DS
	V On Request					

*) Compact Mechanical Linear Actuators uses M6×1 Thread (Pitch 1mm). Carriage moves 1mm per rotation of the Handle Shaft.

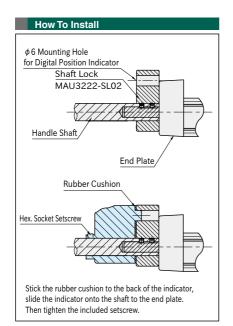
Ordering Example SDP-02 H

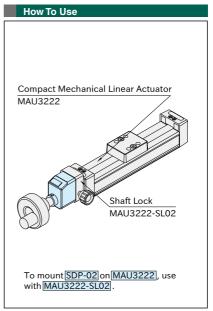
Style

Window Rotative

Direction

Display Per Rotation





SDP-04

DIGITAL POSITION INDICATORS







SDP-04F

2.8 0000 6 0.05 9 24 33

31

Housing Polyamide (nylon6) plastic Orange

Rubber Cushion(included)

SDP-04H



SDP-04V

Feature

- · Easy to read the feed amount of Mechanical Linear Actuator.
- ·Display figure height: 6mm

Supplied With

One rubber cusion

Techcnical Information

Working temperature : Up to 80℃

Reference

Please refer to another SDP-04 page for further information at our website.

(2)

Note

Hex Socket Setscrew

M4×0.7

- •Ensure that the start-up revolustion speed is 1/3 or less of the allowable revolution speed.
- ·Do not give rapid acculeration or sudden stop.
- These position indicators cannot be used in applications where the shaft moves in axial direction.
- ·Can not be used with MAU3222**.

Window Position											
Style H	Style H Style F										
	123%	Resu									
To install on shaft at lower eye level	Window is visual at eye level	Install on vertical shaft									

Display Example										
0000	0001	9999								
Yellow Line										
Yellow Line indicates decimal point.	Count up from "0000".	Count down from "0000".								

Rotative	Direction
R	L
1234	1234
CW Forward Counting CCW Backward Counting	CCW Forward Counting CW Backward Counting

MECHANICAL LINEAR ACTUATORS



Туре	Window Style	Rotative Direction	Spindle Thread Pitch Per Rotation	Allowable Rotation Speed (min ⁻¹)	Weight (g)	Proper Mechanical Linear Actuators *)
SDP-04	T TO THE	R 1234	3B 00301 **)	500	50	MAU5040*S MAUX5040*S MAG5040*S MAGX5040*S
	>		6B 0060 ***)	250		MAU5040*W MAUX5040*W MAG5040*W MAGX5040*W

- *) Mechanical Linear Actuator uses Tr14x3 Trapezoidal Thread (Pitch 3mm).
- **)[MAU5040*S] | MAUX5040*S] | MAG5040*S | MAGX5040*S | Carriage moves 3mm per rotation of the Handle Shaft.
- ***) MAU5040*W) · MAUX5040*W) · MAG5040*W) · MAGS5040*W Pitch between two carriages increases or decreases 6mm per rotation of the shaft.

Ordering Example

How To Install

SDP-04

Н

L

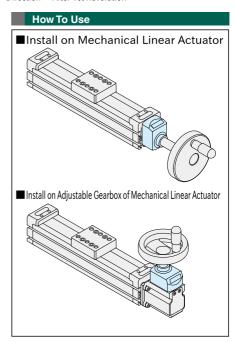
- <u>3B</u>

Window Rotative Style Direction Spindle Thread Pitch After 1st Revolution

φ 6 Mounting Hole for Digital Position Indicator Handle Shaft End Plate Rubber Cusion Hex. Socket Setscrew

Stick the rubber cushion to the back of the indicator, slide the indicator onto the shaft to the end plate.

Then tighten the included setscrew.



IMAO



POINTER







	2-φ3.5 m
†	10 Pod
0.3	20 Red
	CLICSO

Body SUS304 stainless steel

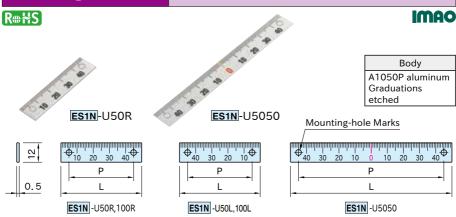
Part Number Weight(g) ES3-A

✓ Note

- ·This pointer is adhesive-mount. Ensure that the mounting surface is dry and clean before mount.
- ·The pointer tip can be bent.



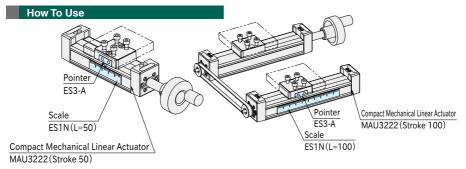
SCALES



Part Number	L	Р	No. of Mounting-Hole Mark	Weight(g)
ES1N-U50R	50	40		0.8
ES1N-U100R	100	90		1.6
ES1N-U50L	50	40	2	0.8
ES1N-U100L	100	90		1.6
ES1N-U5050	100	90		1.6

Note

- ·This scale is adhesive-mount. Ensure that the mounting surface is dry and clean before mount.
- ·Scales are not designed for accurate measurement.







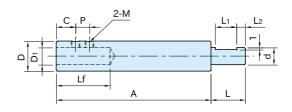


MAU-SH

ADAPTER SHAFTS







MAU3222-SH

Part Number	d (h8)	Α	L	Lı	L ₂	D (h7)	D ₁ (+ 0.018)	С	Р	Lf	М	Weight (g)	Proper Actuators
MAU3222-SH06-26		26	10	٥	0	10	6	4	6	01 5	MOVOE	13	MALIO000**
MAU3222-SH06-50	٥	50	12	0	3	10	0	4	6	21.5	M3×0.5	28	MAU3222**

MAU5040-SH

Part Number	d (h8)	Α	L	Lı	L ₂	D (h7)	D ₁ (H7)	С	Р	Lf	М	Weight (g)	Proper Actuators
MAU5040-SH08-42	8	42										46	
MAU5040-SH08-62	°	62	10	16 10	4	14	8	9	6.5 2	25	M4×0.7	70	
MAU5040-SH10-42	10	42	10									50	MAU5040**
MAU5040-SH10-62	10	62								20	W4×0.7	74	MAG5040**
MAU5040-SH12-42	12	42	20	12	6							57	
MAU5040-SH12-62	12	62	20	12								82	

Rerated Product

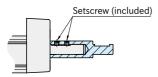
- Handwheel for MAU3222-SH
- •GH-1
- Handwheel for MAU5040-SH
- ·GH-N
- ·EDHN-M
- ·TWN-M
- ·BCHN-M

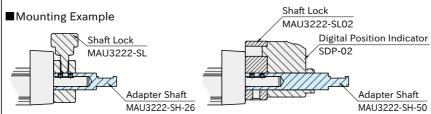
How To Use

MAU3222-SH

■ How to Fix

Fix the Adapter Shaft using setscrews included to the Handle Shaft of Compact Mechanical Linear Actuators.

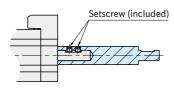




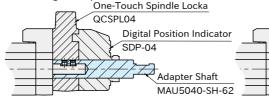
MAU5040-SH

■ How to Fix

Fix the Adapter Shaft using setscrews included to the Handle Shaft of Mechanical Linear Actuators.



■ Mounting Example



Digital Position Indicator SDP-04 Adapter Shaft MAU5040-SH-42

Note

To produce an adapter shaft at customers, we recommend to follow the specifications below.

MAU3222-SH

O.D. of Shaft: \$\phi\$ 10h7 Surface Roughness: \(\frac{63}{7} \)

MAU5040-SH

<For use with One-Touch Spindle Locks> O.D. of Shaft: ϕ 14h7 Surface Roughness:

<For use with Digital Position Indicators>
O.D. of Shaft: \$\phi\$ 14h9 Surface Roughness: \$\frac{63}{7}\$

Supplied With

MAU3222-SH: 2 of M3×0.5-2.5L Hex Socket Setscrew MAU5040-SH: 2 of M4×0.7-4L Hex Socket Setscrew

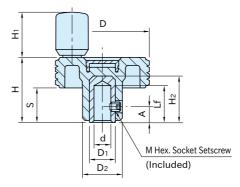
GH-N

PLASTIC KNURLED KNOBS







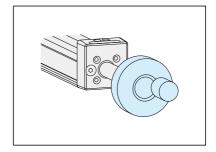


Knob	Handle	Hub	Center Cap
Polypropylene Black matte		Brass (Low cadmium)	Polyamide Black matte

Part Number	D	d (H9)	Н	D ₂	D ₁	H ₂	Lf	S	Α	H ₁	М	Weight (g)	Proper Adapter Shaft
GH40N	39.5		26.5	17	12	17	14	12.5	4	00	M4×0.7	34	MALIO000 CLIOC **
GH50N	50	6	33	20	4.5	23	18	16	5	20		54	MAU3222-SH06-**
GH60N	61	8	39	23	15	25	20	18.5	_	00	M5×0.8	65	MAU5040-SH08-**
GH70N	70	10	42	24	16	30	25	20.5	6	23		73	MAU5040-SH10-**

Reference

Please refer to another GH-N page for further information at our website.



EDHN-M

PLASTIC SOLID DISK HANDWHEEL

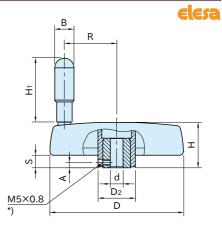
On Request R⊕₩S



EDHN-R-M (With Revolving Handle)



EDHN-F-M (With Revolving Fold-Away Handle)



Handwheel	Hub	Center cap	Handle
	SUM24L steel Black oxide finish	Polyacetal plastic Light gray (Only for EDHN80F-M) Polypropylene \Black matte	Polyamide Black matte

EDHN-R-M (With Revolving Handle)

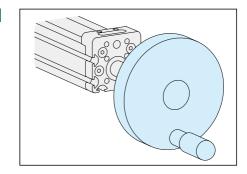
Part Number	D	d (H7)	Н	D ₂	S	Α	В	H1	R	Weight (g)	Delivery Time
EDHN 80R-M	83	8	29	26	9	_	15.5	45	30.5	106	O Mordina
EDHN100R-M	102	10	34	30	10	5	18	60	39	174	2 Working days **)
EDHN125R-M	125	12	39.5	35	11	6	10	00	49	270	uays)

EDHN-F-M (With Revolving Fold-Away Handle)

Part Number	D	d (H7)	I	D ₂	S	А	В	H₁	R	Weight (g)	Delivery Time
EDHN 80F-M	83	8	38	25	18.5	9	15.5	45	28	133	O Markina
EDHN100F-M	102	10	34	30	10	5	15.5	45	39	170	2 Working days **)
EDHN125F-M	125	12	39.5	35	11	6	18	60	49	307	uays)

Note

- *) These are machined handwheels of EDHN-R, EDHN-F to add the hole for setscrew. For further information, please refer to the catalog pages at our website.
- **) Ordering 11 pcs or more, please ask us for the delivery time.
- ***) Can not be used with MAU3222**.

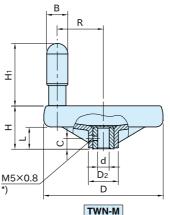


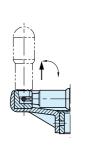
TWN-M

PLASTIC ANGLED-SPOKE HANDWHEELS









elesa

(With Revolving Handle) (With Revolving Fold-Away Handle)

TWN-F-M

Handlwhool Hub Contar Can Handle

Handlwheel	Hub	Center Cap	Handle
Polypropylene plastic Black matte	ISHM24L steel		Polyamide plastic Black matte

TWN-M (With Revolving Handle)

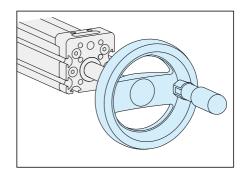
Part Number	D	d (H7)	Н	D ₂	L	С	В	H ₁	R	Weight (g)	Delivery Time
TWN 80-M	80	8	35	25	17	0	15.5	45	29	104	O Marking
TWN100-M	99	10	37	25.5	17	8	18	60	37	145	2 Working Davs **)
TWN125-M	125	12	44	31	22	11	22	65	48	245	Days)

TWN-F-M (With Revolving Fold-Away Handle)

Part Number	D	d (H7)	н	D ₂	L	С	В	H ₁	R	Weight (g)	Delivery Time
TWN 80F-M	80	8	35	25	17	0	15.5	45	29	102	O Markina
TWN100F-M	99	10	37	25.5	17	0	18	60	37	163	2 Working Davs **)
TWN125F-M	125	12	44	31	22	11	22	65	48	230	Days)

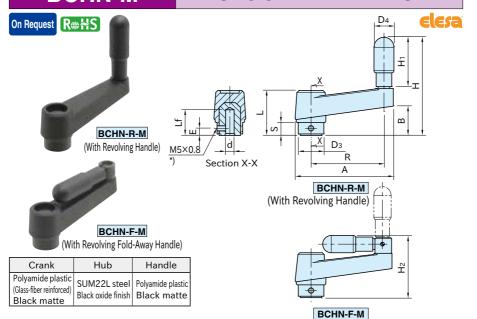
✓ Note

- *) These are machined handwheels of TWN , TWN-F to add the hole for setscrew. For further information, please refer to the catalog pages at our website.
- **) Ordering 11 pcs or more, please ask us for the delivery time.
- ***) Can not be used with MAU3222**.



BCHN-M

PLASTIC CRANK HANDLES



BCHN-R-M (With Revolving Handle)

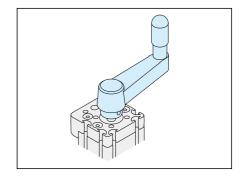
DCI IIV-H-IVI	11101	OIVIII;	5 1 141	iuic)										
Part Number	R	d (H9)	Lf	А	H	Dз	L	S	Е	В	D ₄	H ₁	Weight (g)	Delivery Time
BCHN 64R-M	64	8	20	86	78	20	31.5	9	5	17.5	15.5	45	82	0.14/5-4/5-5-5
BCHN 80R-M	80	10	25	106	99	0.4	37	11	6	23.5	18	60	118	2 Working davs **)
BCHN100R-M	100	12	24	128	106	24	40.5	10	5	25	22	65	190	uays)

BCHN-F-M (With Revolving Fold-Away Handle)

			0			,		,							
Part Number	R	d (H9)	Lf	Α	Ι	H ₂	Dз	L	S	Е	В	D ₄	Ηı	Weight (g)	Delivery Time
BCHN 64F-M	64	8	20	86	91	47	20	31.5	9	5	17.5	15.5	45	89	0.14/2-4/
BCHN 80F-M	80	10	25	106	111	53.5	0.4	37	11	6	23.5	18	60	130	2 Working davs **)
BCHN100F-M	100	12	24	128	124	59.5	24	40.5	10	5	25	22	65	200	uays)

Note

- *) These are machined handles of BCHN-R, BCHN-F to add the hole for setscrew. For further information, please refer to the catalog pages at our website.
- **) Ordering 11 pcs or more, please ask us for the delivery time.
- ***) Can not be used with MAU3222**.

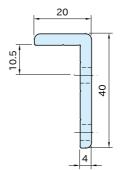


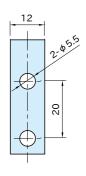
(With Revolving Fold-Away Handle)

MAU5040-ST02 PAIR OF STOPS

R⊕\S IMAO





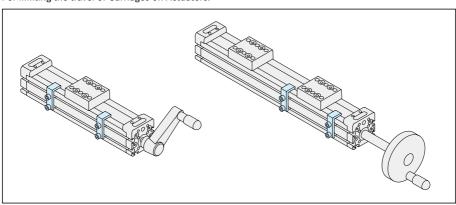


Part Number	Weight (g)
MAU5040-ST02	20

Body
Equivalent to A6N01 aluminum
Anodized
Natural color

How To Use

For limiting the travel of Carriages on Actuators.



✓ Note

- •Stops can be misaligned by shock or load from Carriages of Actuators.
- $\,{}^{\textstyle \cdot}{}$ The surfaces inside the mounting holes and the both cut ends are not anodized.
- \cdot T-Nut can be inserted directly into the T-slot of the body. (Cannot be slide-inserted from the end plates.)
- ·Can not be used with MAU3222**.

Supplied With

- ·2 of M5×0.8-10L Hex-Socket Head Cap Screw
- ·2 of round washer for M5 screws
- ·2 of M5 T-Slot Nut

11.5

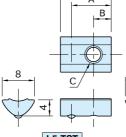
ACCESSORIES

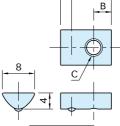
L5-TST

T-NUT









11.5

item

item

L5-TST (Steel)

L5-TST-SUS (Stainless steel)

Part Number	Α	В	С	Weight (g)
L5-TST3	٥	3	M3×0.5	
L5-TST4	8	3	M4×0.7	
L5-TST5	9	4	M5×0.8	2
L5-TST4-SUS	8	3	M4×0.7	
L5-TST5-SUS	9	4	M5×0.8	

Туре	Body
L5-TST	Steel Galvanized trivalent chromate treated
L5-TST-SUS	Stainless steel

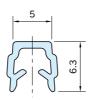
✓ Note

T-Nut can be inserted directly into the T-slot of the body. (Cannot be slide-inserted from the end plates.)

L5-GVC2000N GROOVE COVER

R⊕#S

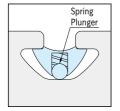




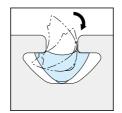
Body
PP Polypropylene plastic
(Include Thermoplastic elastomer)

Part Number	Length (m)	Weight (g)
1.5-GVC2000N	2	27

How To Use



Insert the nut into the groove. The spring plunger prevents the nut move freely inside the groove.



The nut can be inserted from any position on groove.



Use the groove cover for unused groove on profile body.

