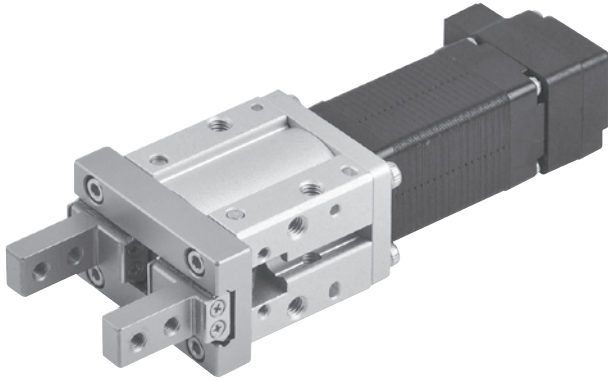


MEHC2 series

ELECTRIC GRIPPER (WITH MOTOR)



Specification

Model	MEHC2	
Size	16	25
Gripping force *1 (N)	19.5	26
Opening / Closing stroke *2 (mm)	6	14
Lead (mm)	1.5	
Stroke *2,3 (mm)	3.5	7.4
Positioning repeatability *4 (mm)	±0.02	
Motor size (mm)	□20	□28
Rated voltage	DC24 V ±10%	
Gripping mass *5 (kg)	0.4	0.8
Weight (g)	222	662

*1. Gripping force tolerance ± 20%.

*2. The opening/ closing stroke and the movement stroke of the nut are nonlinear.

*3. The operating stroke should be set within the range to avoid the screw getting locked.

*4. When under same procedure, the Positioning repeatability of workpiece.

*5. The gripping mass may change depending on the gripper attachments or friction coefficient.

Motor type	Step motor	Transmission	Lead screw
Environment	Standard	Guide type	Linear guideway

Order example

MEHC2 - 16 - N F - CK10 03 N 015

Model

Size

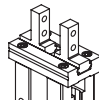
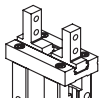
16

25

Spec. and type

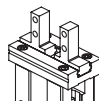
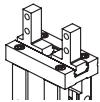
Blank: Standard

N: Narrow



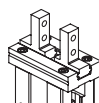
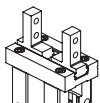
1: Standard (Side tapped)

N1: Narrow (Side tapped)

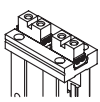


2: Standard (Through hole)

N2: Narrow (Through hole)

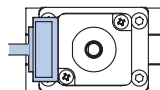


3: Flat

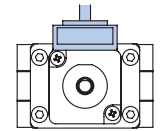


Motor cable entry

Blank: Parallel



F: Perpendicular



Controller

CK10

I/O type

N

NPN

I/O cable length

015

1.5 m

03

3 m

* Standard: 1.5 m

Power + Encoder cable of motor

015

1.5 m

03

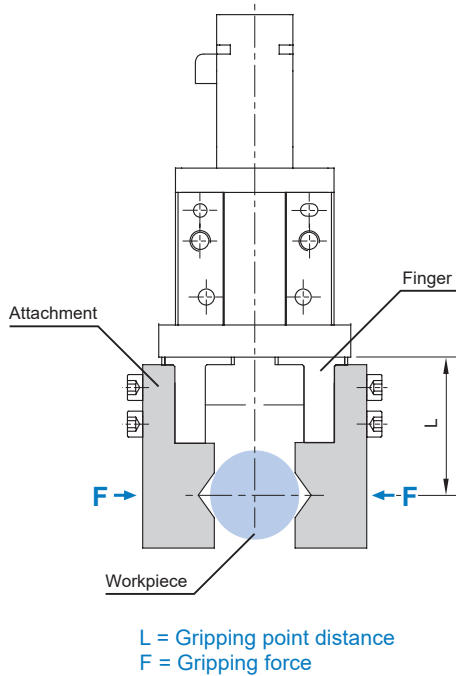
3 m

05

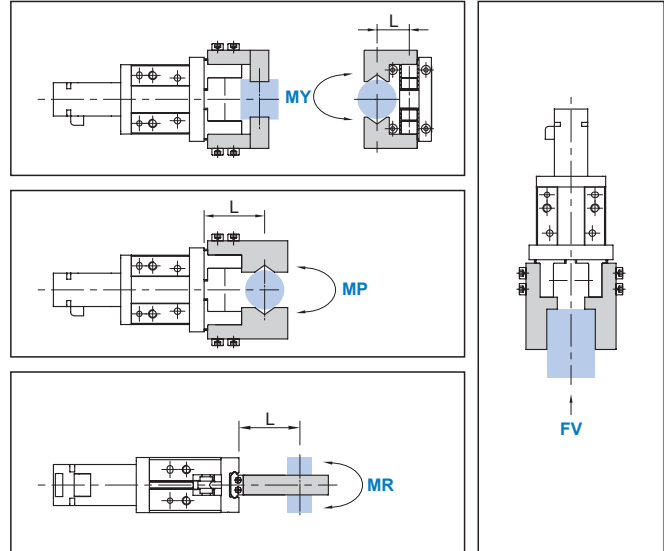
5 m

* Standard: 3 m

Evaluation of gripping force

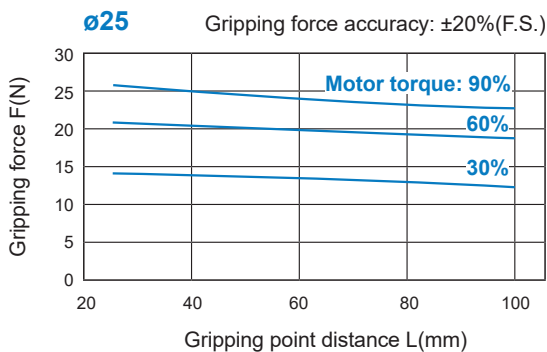
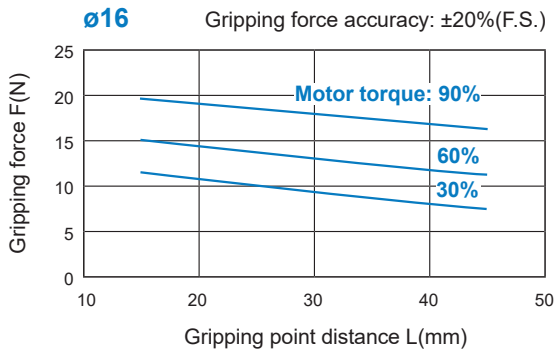


Allowable moment and force (N.m / N)



Model	MY	MP	MR	FV
	Max. moment (N.m)			Max. force (N)
MEHC2-16	0.68	0.68	1.36	98
MEHC2-25	1.94	1.94	3.88	255

Diagram



Calculation of allowable external force

$$\text{Allowable load } F(N) = \frac{M(\text{maximum allowable moment})(N \cdot m)}{L(m)}$$

*MY: Allowable yaw moment
*MP: Allowable pitch moment
*MR: Allowable roll moment

*FV: Vertical maximum force
*L: Distance to the loading location (mm).

Example

When a static load of 20N is operating, which applies roll Moment to point L=25mm from the **MEHC2-16** guide.

$$\text{Allowable load } F(N) = \frac{MR}{L(m)} = \frac{1.36}{0.025} = 54.4 \text{ N}$$

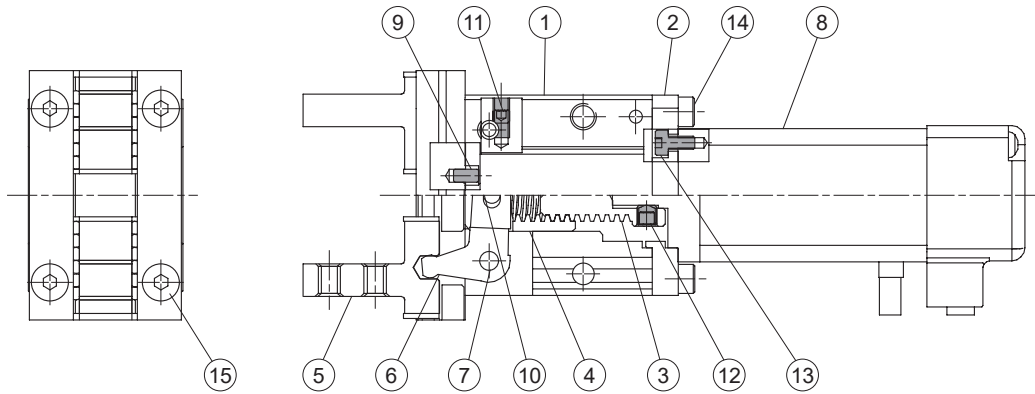
Since actual load 20N is less than allowable load 54.4 N, the gripper can be used.

MEHC2 Inside structure & Parts list

ELECTRIC GRIPPER (WITH MOTOR)



Mindman



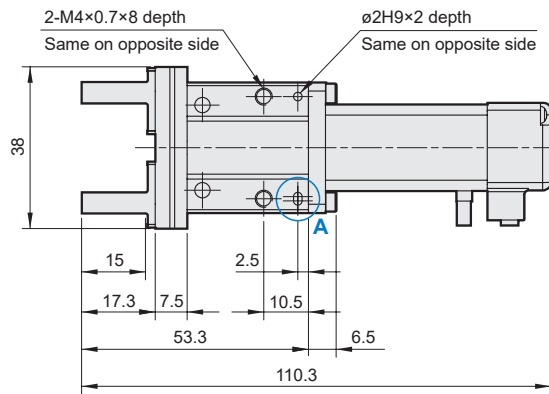
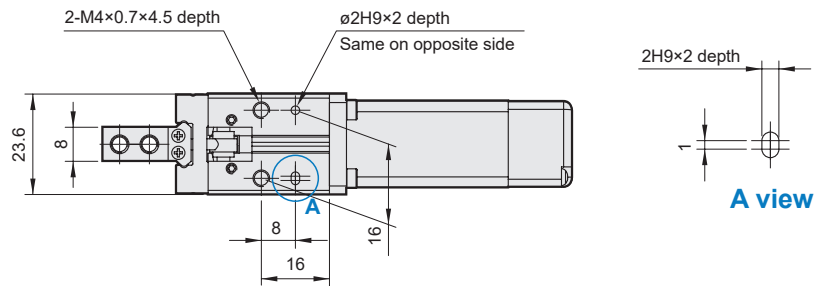
Material

No.	Part name	Material	Q'y
1	Body	Aluminum alloy	1
2	Motor fixed plate	Aluminum alloy	1
3	Screw	Stainless steel	1
4	Nut	Bronze	1
5	Gripping set	Stainless steel (*)	1
6	Rod	Stainless steel	2
7	Pin	Carbon steel	2
8	Step motor	-	1
9	Locating pin	Bearing steel	3
10	Pin	Steel	1
11	Screw	Stainless steel	4
12	Screw	Carbon steel	1
13	Bolt	Stainless steel	4
14	Bolt	Stainless steel	4
15	Bolt	Stainless steel	4

* Bearing steel balls as standard.

MEHC2 Dimensions 16

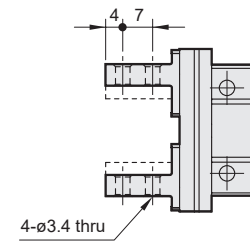
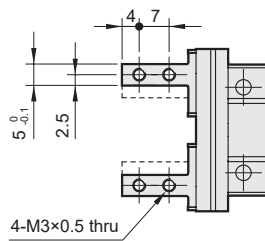
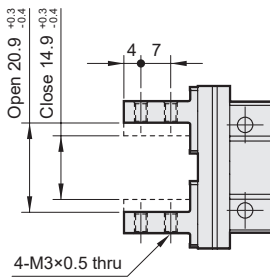
ELECTRIC GRIPPER (WITH MOTOR)



Standard

1: Standard (Side tapped)

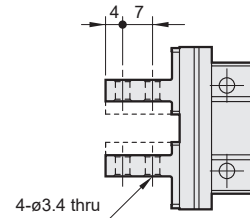
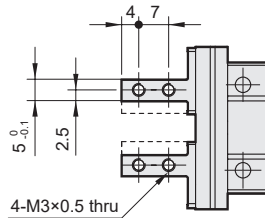
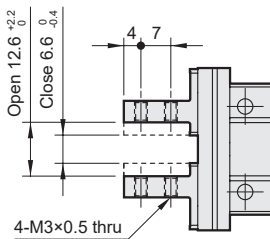
2: Standard (Through hole)



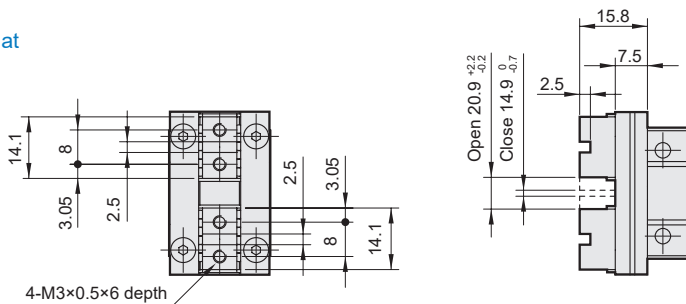
N: Narrow

N1: Narrow (Side tapped)

N2: Narrow (Through hole)

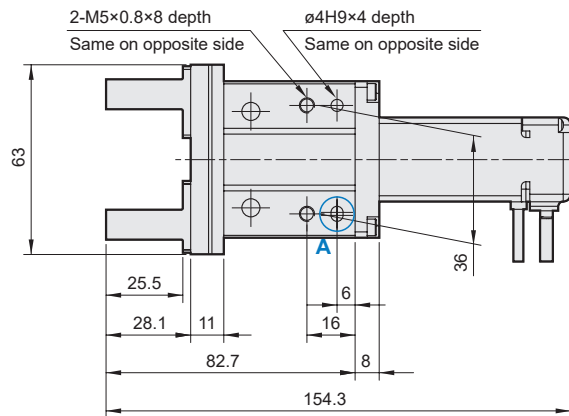
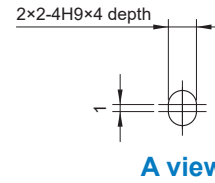
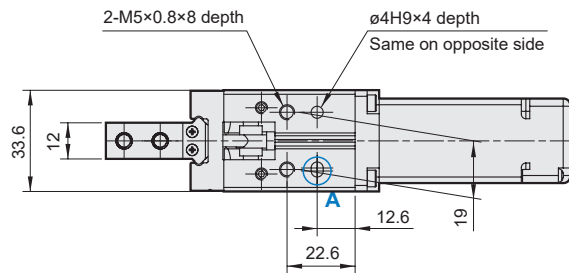


3: Flat



MEHC2 Dimensions 25

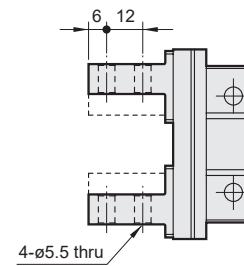
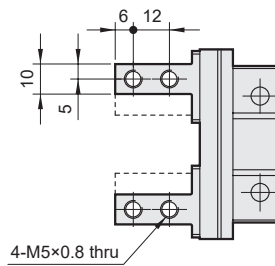
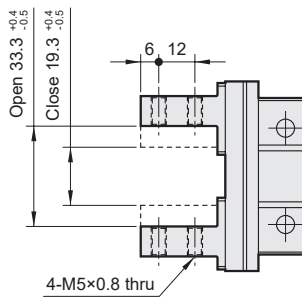
ELECTRIC GRIPPER (WITH MOTOR)



Standard

1: Standard (Side tapped)

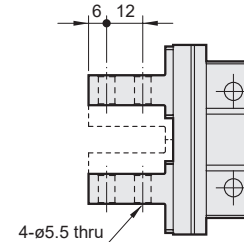
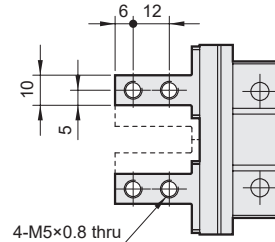
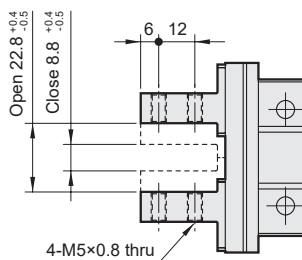
2: Standard (Through hole)



N: Narrow

N1: Narrow (Side tapped)

N2: Narrow type (Through hole)



3: Flat

