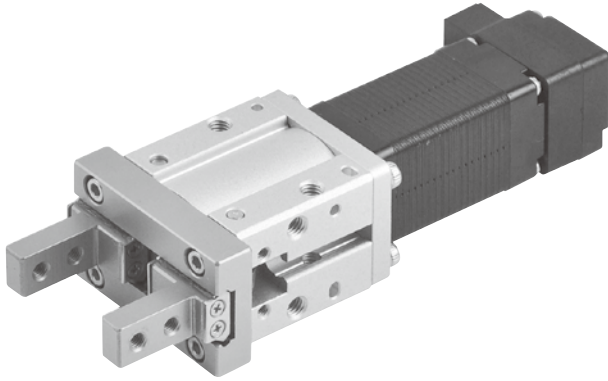


# MEHC2 series

## ELECTRIC GRIPPER (WITH MOTOR)



### Specification

Model	MEHC2	
Size	16	25
Gripping force *1 (N)	19.5	26
Opening / Closing stroke (mm)	6	14
Position repeatability *2 (mm)	±0.02	
Motor size (mm)	□20	□28
Encoder	Incremental A/B/Z (4000PPR)	
Rated voltage	DC24 V ±10%	
Gripping mass *3 (kg)	0.4	0.8
Weight (g)	222	662

\*1. Gripping force tolerance ± 20%.

\*2. When under same procedure, the position repeatability of workpiece.

\*3. 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

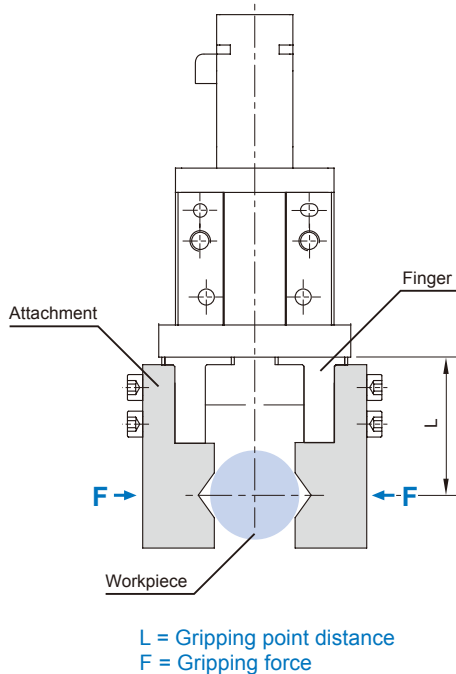
### Order example

**MEHC2 - 16 - N F - CQ1 03 N 01 - XA00**

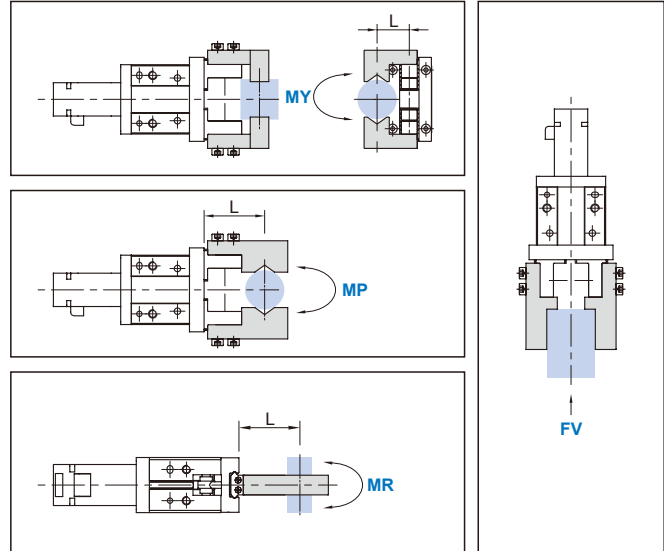
Model: MEHC2    Size: 16, 25    Special order no.: XA00

Spec. and type		Motor cable entry	Controller	I/O type	I/O cable length
Blank: Standard	1: Standard type with side tapped	Blank: Parallel	CQ1   MECQ1	N   NPN	01   1.5 m 03   3 m
			* Please refer to page 4-106.		* Standard: 1.5 m
N: Narrow	N1: Narrow type with side tapped	F: Perpendicular		Actuator cable length	
				01   1.5 m 03   3 m 05   5 m	
				* Standard: 3 m	

### Evaluation of gripping force

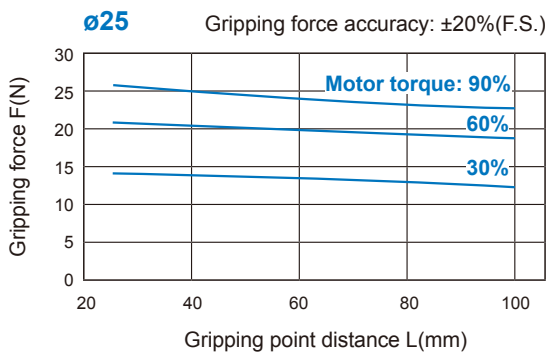
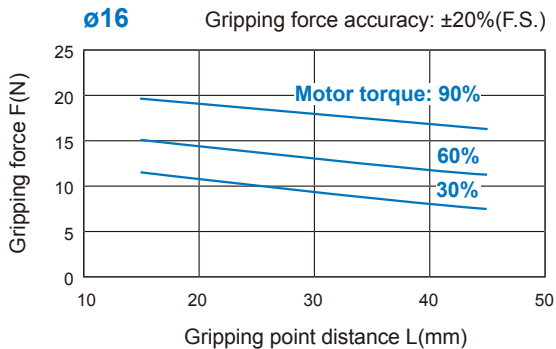


### Allowable moment and force (N.m / N)



Model	MY	MP	MR	FV
	Max. moment (N.m)			Max. force (N)
<b>MEHC2-16</b>	0.68	0.68	1.36	98
<b>MEHC2-25</b>	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.

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

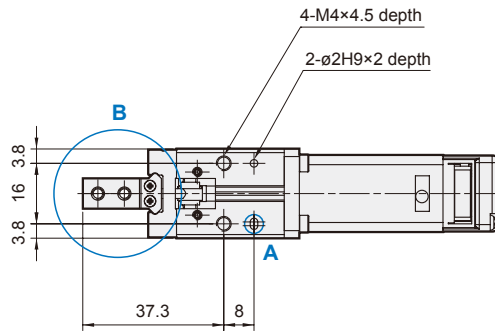
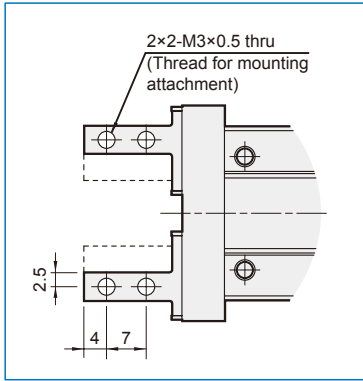
Since actual load 20N is less than allowable load 54.4 N, the gripper can be used.

# MEHC2 Dimensions $\varnothing 16$

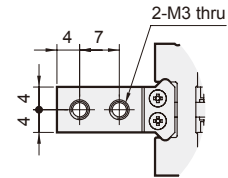
## ELECTRIC GRIPPER (WITH MOTOR)



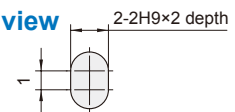
### 1: Standard type with side tapping



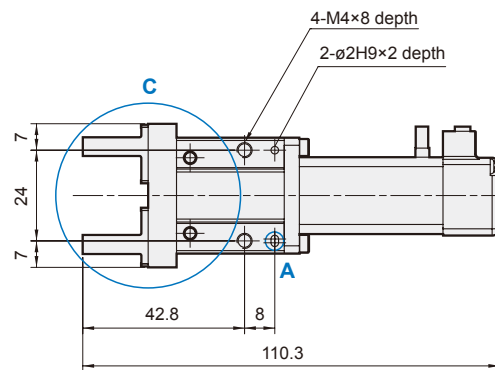
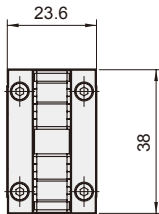
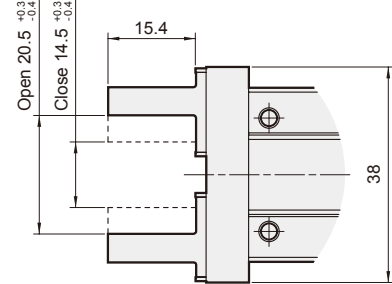
#### B view



#### A view

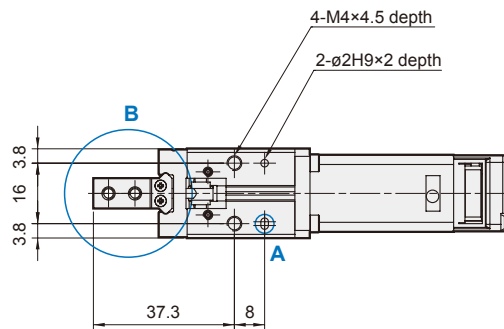
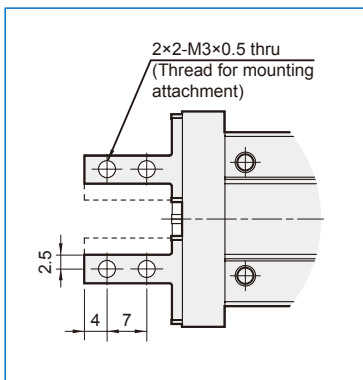


#### C view

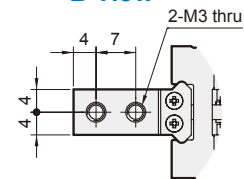


## N Narrow type

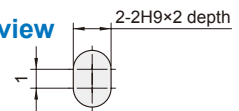
### N1: Narrow type with side tapping



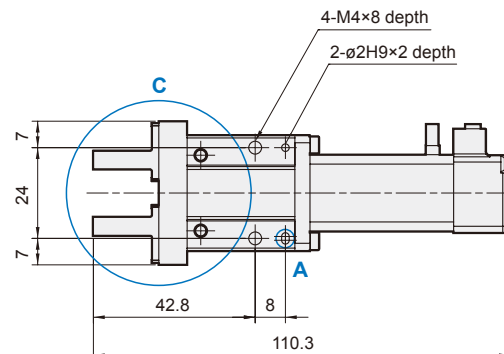
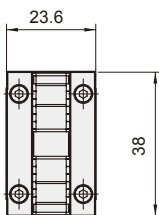
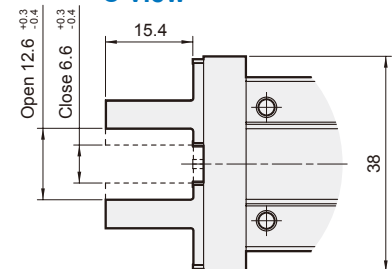
#### B view



#### A view



#### C view

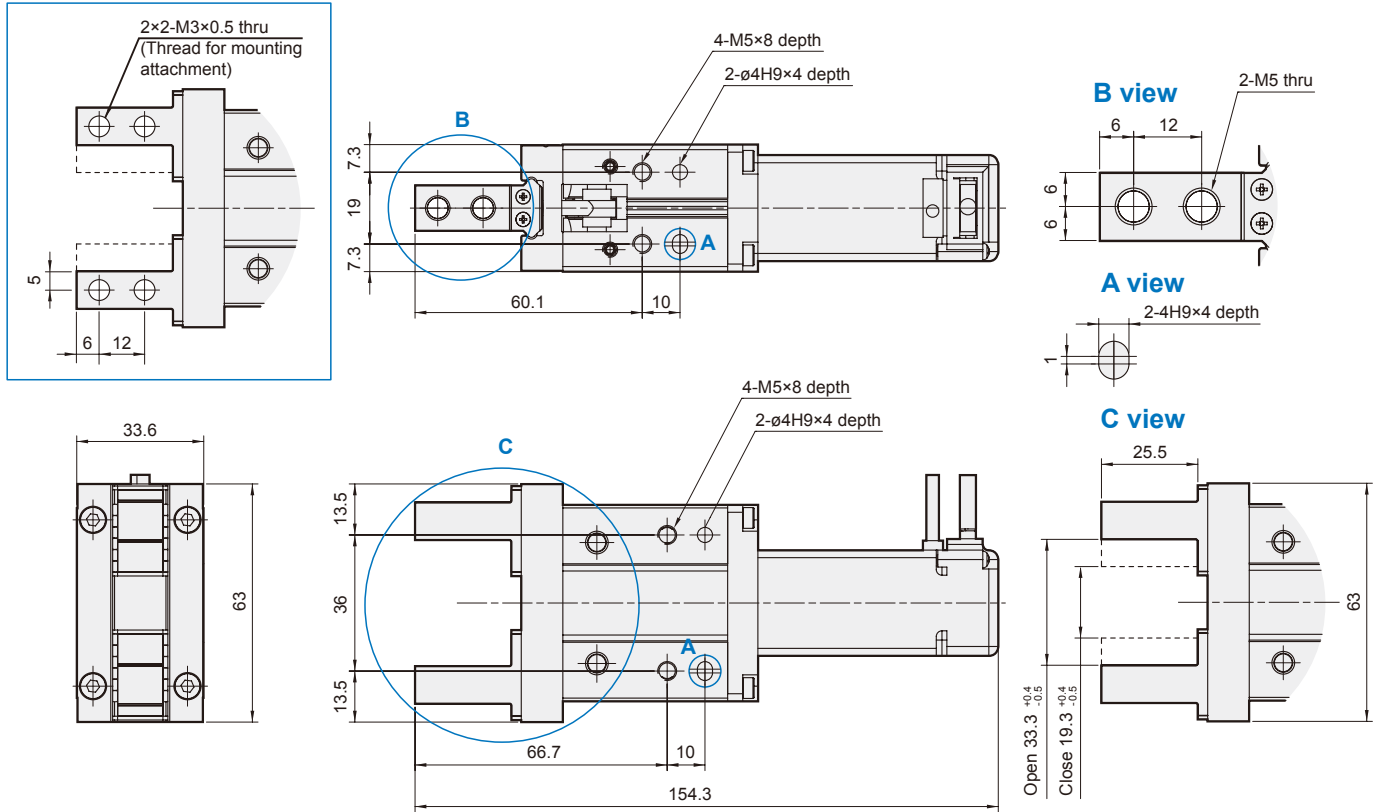


# MEHC2 Dimensions $\varnothing 25$

## ELECTRIC GRIPPER (WITH MOTOR)

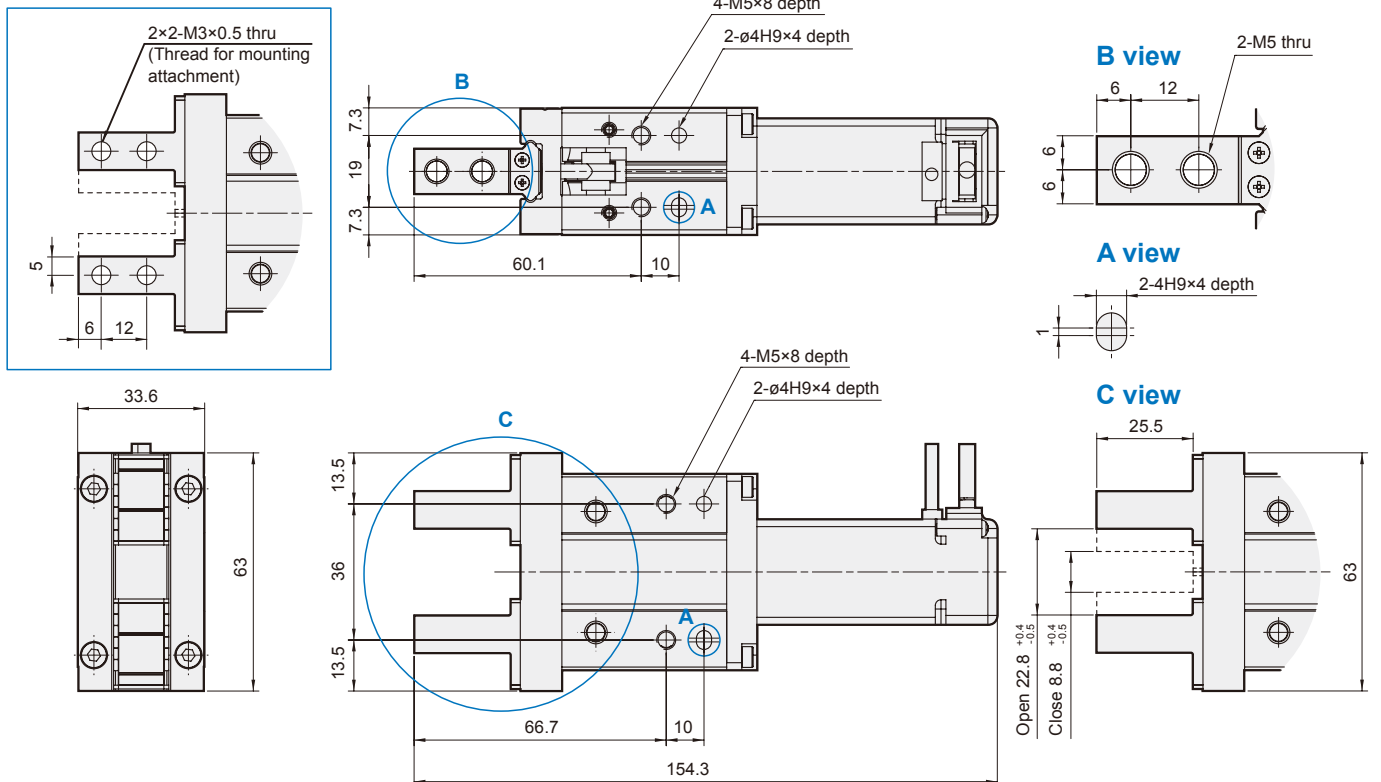


### 1: Standard type with side tapping



### N Narrow type

#### N1: Narrow type with side tapping





### Specification

Model	MECQ1	
Input voltage	DC 24V ±10%	
Number of axis	Control 16 axes by daisy-chaining through RS-485 port	
Dimension (mm)	W134 × H83 × D26.5	
Motor size	□20 / □28 / □35 / □42 / □56	
Encoder	Incremental A/B/Z (4000PPR)	
Operation mode	I/O trigger, Communication control	
Motion control mode	ABS mode	
	INC mode	
	Continuous mode	
	Push mode	
Position	Number of rows	256
	Rows setting	I/O, Software

### Order example

**MECQ1 – 20L**

Controller

Motor size

Motor size	Motor size
20L	□20
28L	□28
35L	□35
42L	□42
56L	□56

### Accessories

**MECQ1 – S015**

Controller

Cable length

I/O signal cable

Cable length	Cable length
S015	1.5 m
S03	3 m

Actuator cable\*

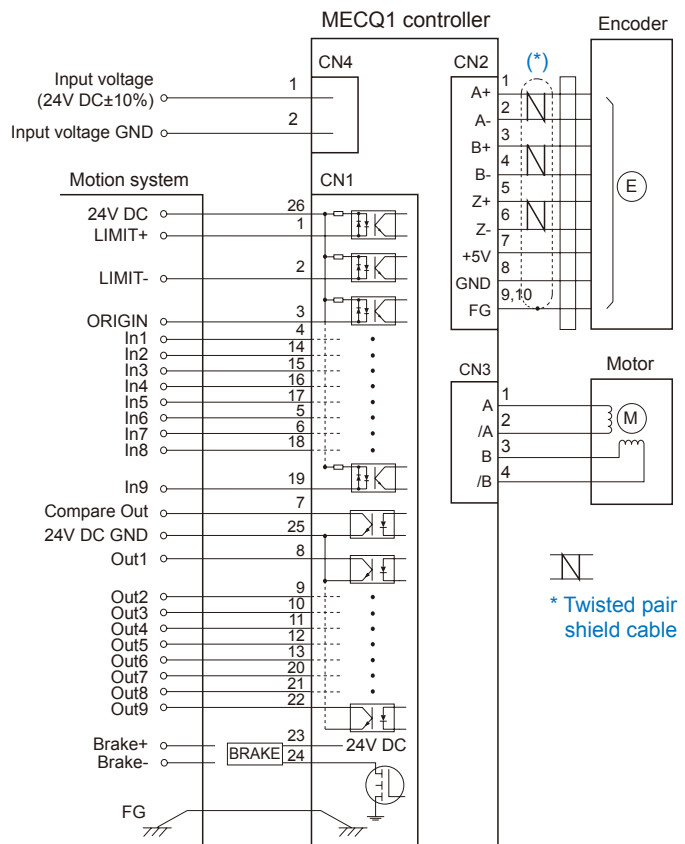
Actuator cable*	Actuator cable*
M015	1.5 m
M03	3 m
M05	5 m

Power connection

P

\* Actuator cable = Encoder cable + motor cable

### External wiring diagram

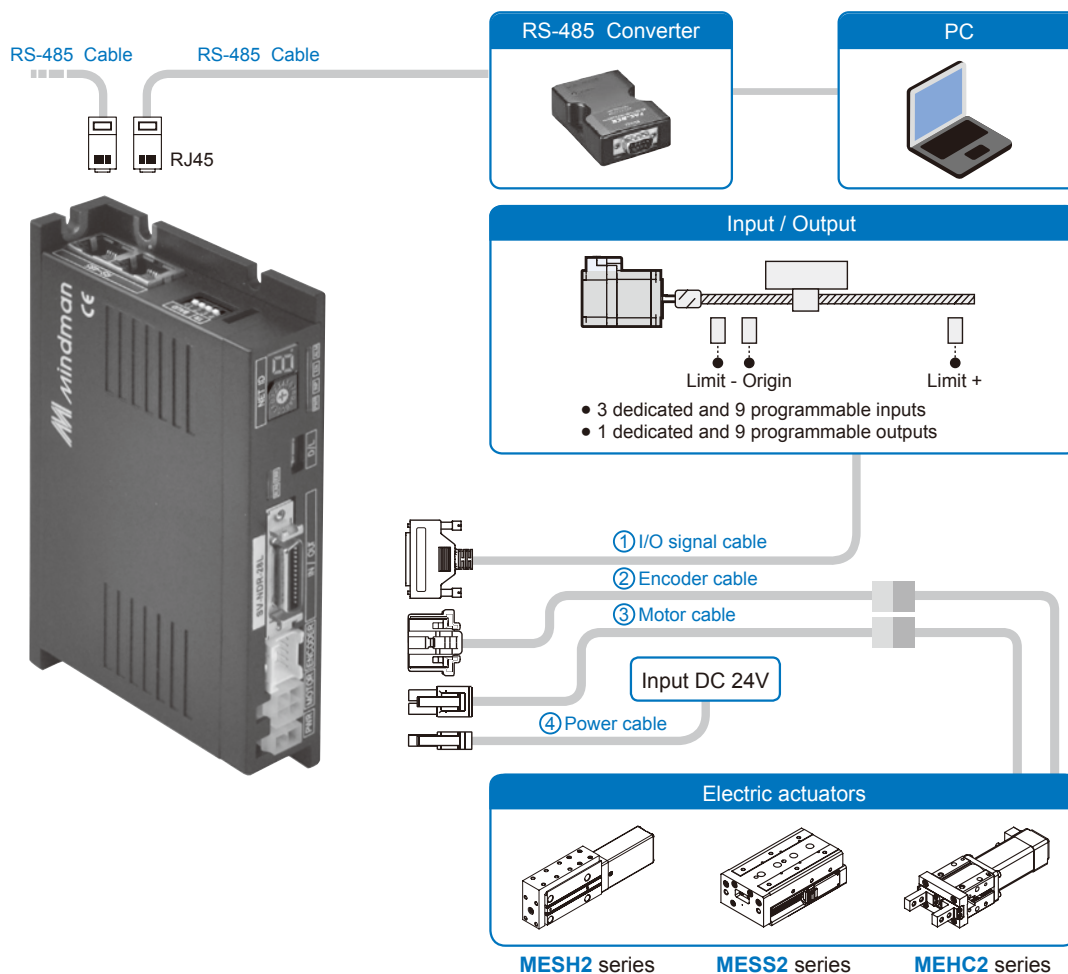


### Caution

- Please refer to the manual when connects motor extension cable.
- Careful connection will be required to protect any damages.

# MECQ1 Motor controller – System configuration

## ELECTRIC CYLINDER CONTROLLER



### Accessories

No.	Purpose	Item	Note	Exterior		
①	I/O signal cable	Shell	10326-52FO-008	Isolation		
		Connector	10126-3000PE			
②	Encoder cable	Drive side	Housing	51353-1000	Isolation + Flexible	
		Terminal	56134-9000			
	Encoder side	Housing	SMP-09V-NC			
	Terminal	SHF-001T-0.8BS				
③	Motor cable	Drive side	Housing	5557-04R	Flexible	
		Terminal	5556T			
	Motor side	Housing	5557-04R			
	Terminal	5556T				
④	Power connection	Housing	5557-02R	Housing and terminal only		
		Terminal	5556T			