

### Specification

Model		MESS2		
Size		16	25	
Position repeatability (mm)		±0.02		
Lead (mm)		2	2	8
Maximum speed *1 (mm/s)		≤50	≤100	≤400
Work load *2	Horizontal (kg)	3	6	1.5
	Vertical (kg)	0.8	1.8	0.8
Pushing force *1,3,4 (N)		18 ~ 60	64 ~ 195	18 ~ 48
Stroke (mm)		30 / 50	30 / 50 / 75 / 100	
Motor size (mm)		□20	□28	
Encoder		Incremental A/B/Z (4000PPR)		
Rated voltage		DC 24V±10%		

\*1. The speed and force may change depending on the cable length, load, stroke and mounting conditions.

\*2. The maximum load capacity decreases as the speed increases.

\*3. The accuracy of pushing force is ± 20%.

\*4. Pushing force for MESS2 is from 30% to 90%.

Motor type	Step motor	Transmission	Ball screw + Belt
Environment	Standard	Guide type	Cross roller guide

### Order example

**MESS2 - 16 L02 - 30 - CQ1 03 N 01 - XA00**

Model

Special order no.

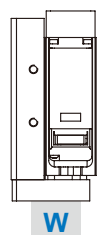
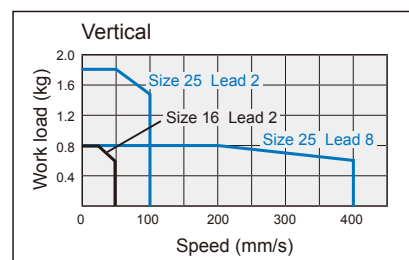
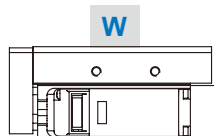
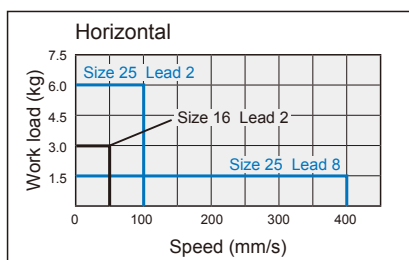
Size	Ball screw lead	Stroke	Controller	I/O type	I/O cable length
16	L02 2 mm	30 30 mm	CQ1 MECQ1	N NPN	01 1.5 m
25	L02 2 mm	50 50 mm	* Please refer to page 4-106.		03 3 m
	L08 8 mm	75* 75 mm			* Standard: 1.5 m
		100* 100 mm			

\* Only for Spec. 25.

Actuator cable length	
01	1.5 m
03	3 m
05	5 m

\* Standard: 3 m

### Speed-work load curve diagram

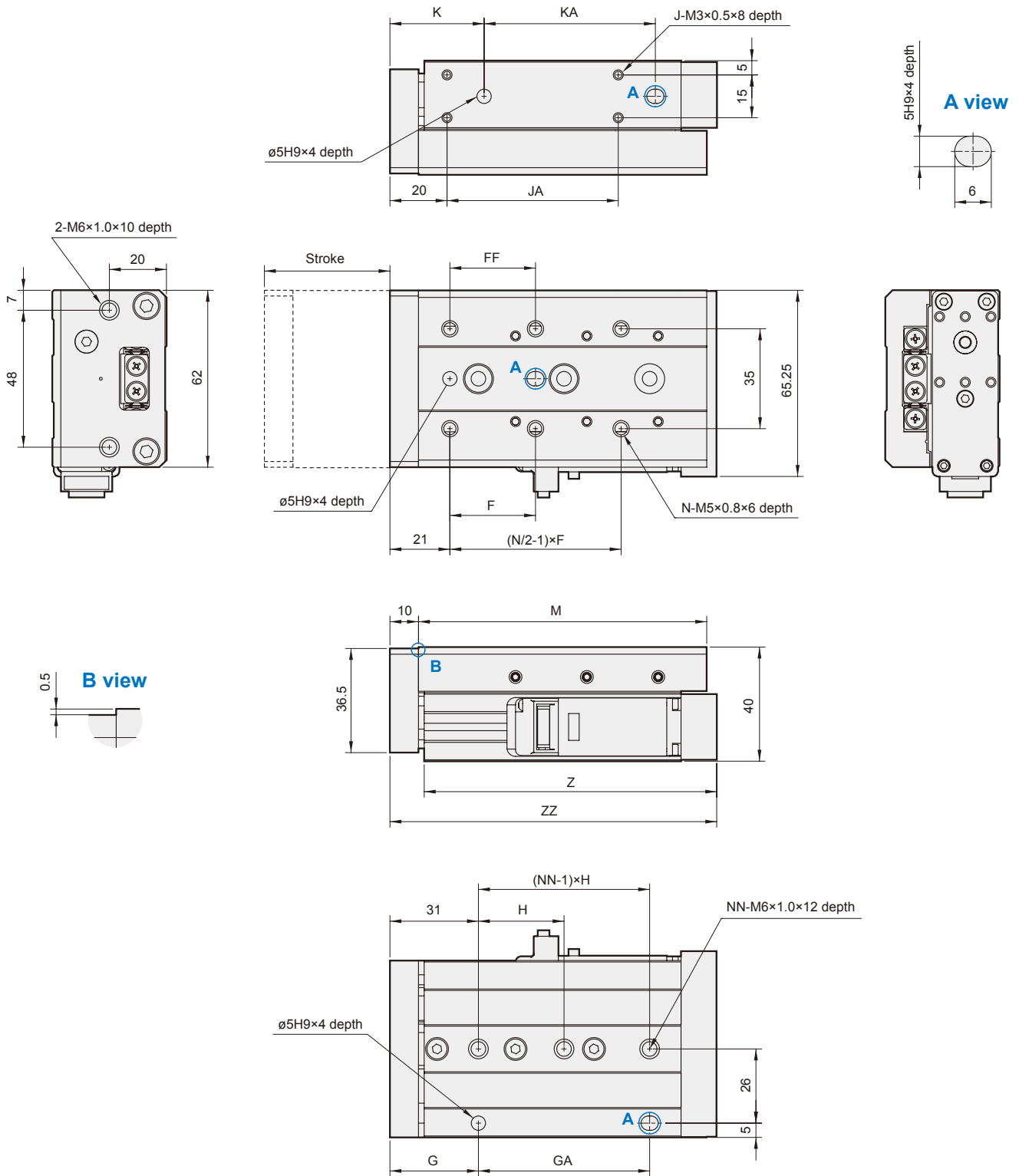


# MESS2 Dimensions $\varnothing 16$

## MINIATURE ELECTRIC CYLINDER (WITH MOTOR)



Mindman



Unit: mm

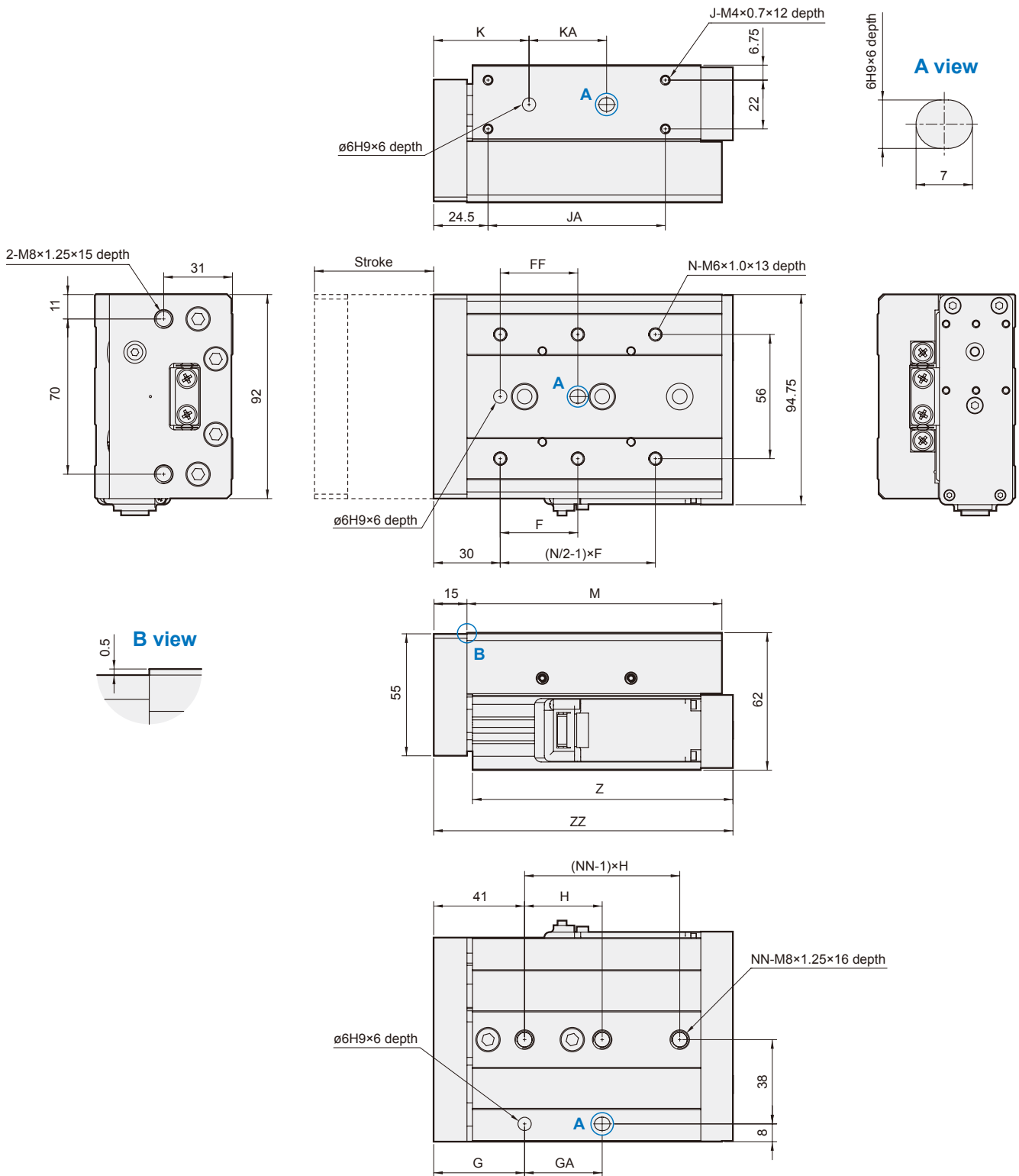
Stroke	F	FF	G	GA	H	J	JA	K	KA	M	N	NN	Z	ZZ	Weight (g)
30	35	35	27	40	40	4	40	29	40	76	4	2	77.5	89.5	634
50	30	30	31	60	30	4	60	33	60	101	6	3	102.5	114.5	812

# MESS2 Dimensions $\varnothing 25$

## MINIATURE ELECTRIC CYLINDER (WITH MOTOR)



Mindman



Unit: mm

Stroke	F	FF	G	GA	H	J	JA	K	KA	M	N	NN	Z	ZZ	Weight (g)
30	50	40	30.5	45	45	4	40	32.5	45	92	4	2	94.5	112	1743
50	35	35	41	35	35	4	80	43	35	115	6	3	117.5	135	2030
75	60	60	41	70	35	6	120	43	70	156	6	4	158.5	176	2680
100	70	70	41	70	35	6	160	43	70	197	6	5	199.5	217	3380



### 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\*

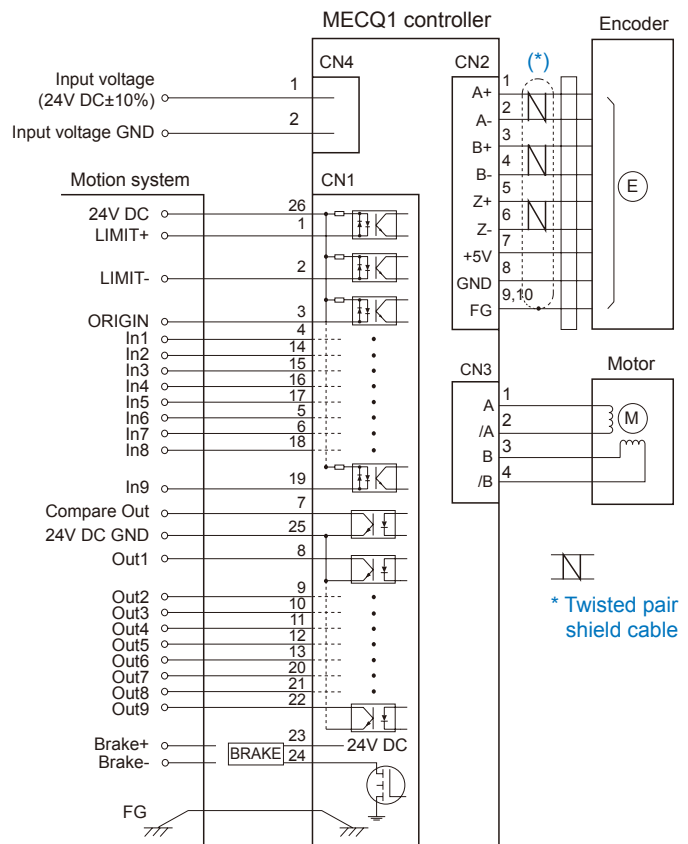
Actuator cable*	Actuator cable*
M015	1.5 m
M03	3 m
M05	5 m

Power connection

P

\* Actuator cable = Encoder cable + motor cable

### External wiring diagram

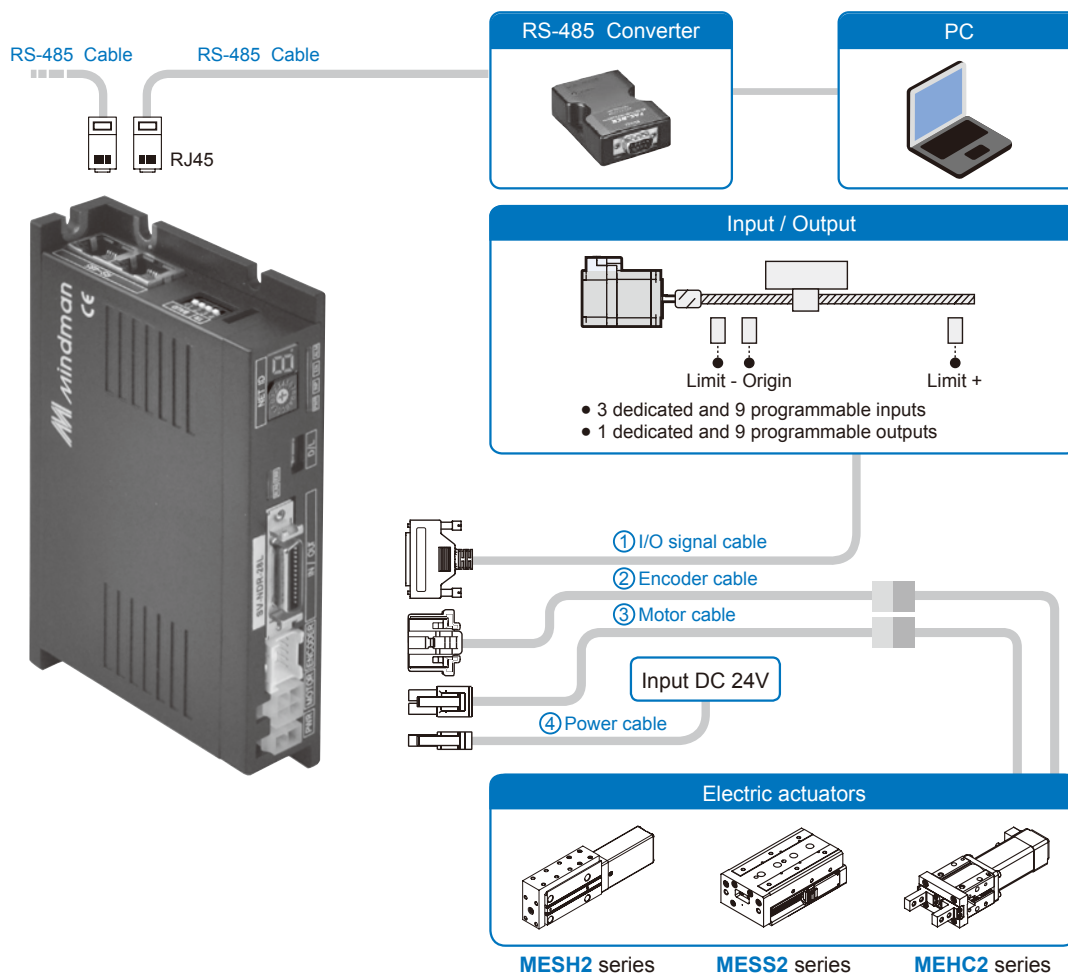


### Caution

- 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			