POWER AIRE

e-Actuator

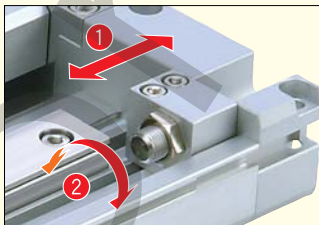# **e-Rodless Actuator**

No need to program

Cam follower guide type
Series E-MY2C
High precision guide type
Series E-MY2H

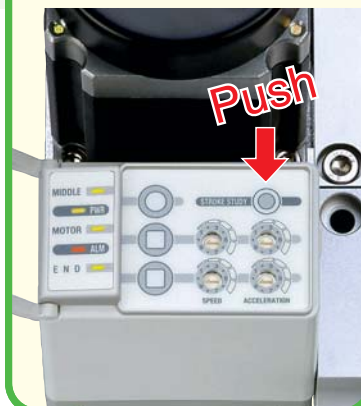## Realizing electric controllability similar to that of an air cylinder by 3 step operation

1

Stroke adjustment
❶ Movable stroke adjusting unit
❷ Small incremental adjustments can be made by using an adjusting bolt
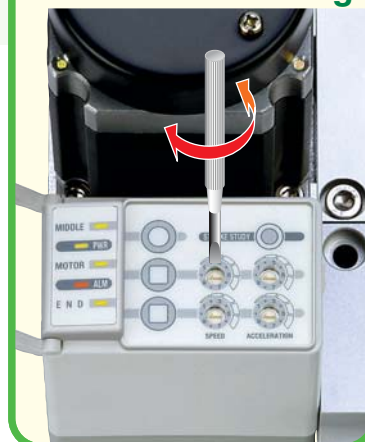
2

Stroke learning
Press STROKE STUDY switch

Push

3
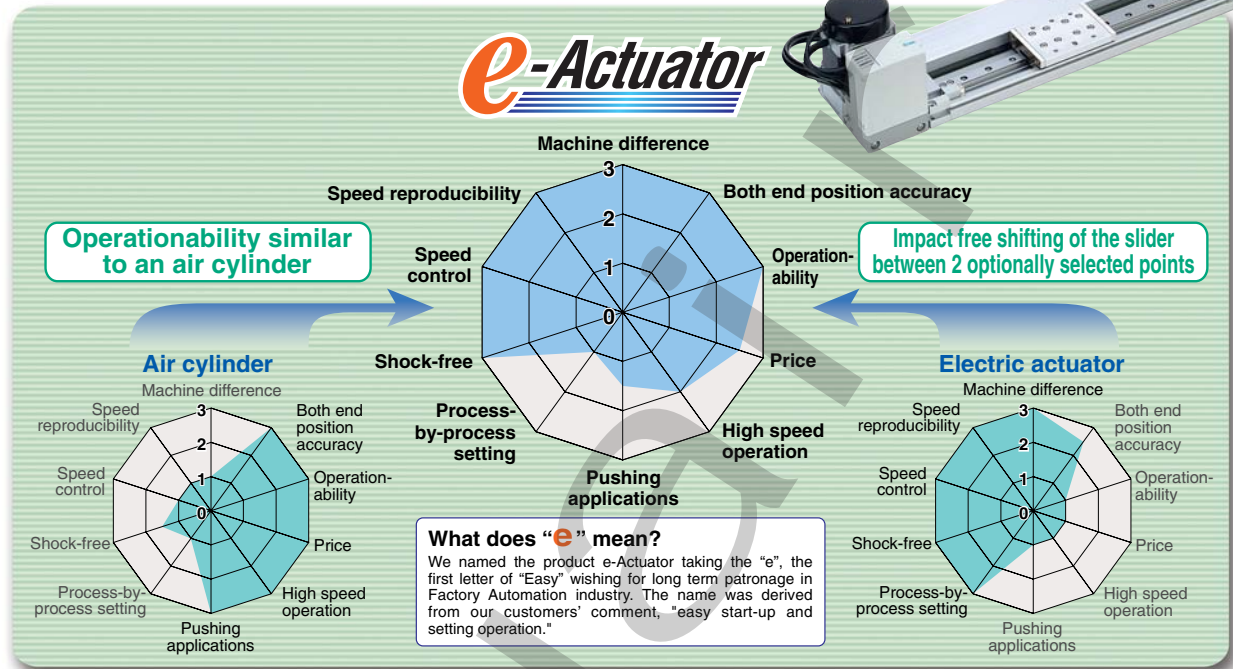
Speed and acceleration setting

Auto operation
Possible to operate by using the same signals as those for a solenoid valve (with a PLC)

POWER AIRE

Having both the operationability of an air cylinder and the speed controllability of an electric actuator

New actuator concept

e-Actuator

Machine difference

Speed reproducibility — Both end position accuracy

Operationability similar to an air cylinder

Speed control — Operation-ability

Impact free shifting of the slider between 2 optionally selected points

Shock-free — Price

Air cylinder

Machine difference

Speed reproducibility — Both end position accuracy

Speed control — Operation-ability

Shock-free — Price

Process-by-process setting — High speed operation

Pushing applications

Process-by-process setting — High speed operation

Pushing applications

Electric actuator

Machine difference

Speed reproducibility — Both end position accuracy

Speed control — Operation-ability

Shock-free — Price

Process-by-process setting — High speed operation

Pushing applications

What does "e" mean?

We named the product e-Actuator taking the "e", the first letter of "Easy" wishing for long term patronage in Factory Automation industry. The name was derived from our customers' comment, "easy start-up and setting operation."
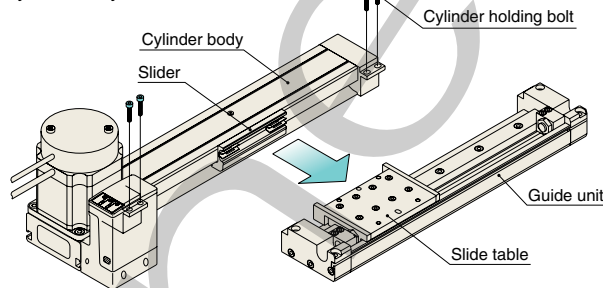
## Stopping at an intermediate point is possible.

Besides positioning both ends, it is possible to set one intermediate stopping point of your choice.

Easy maintenance

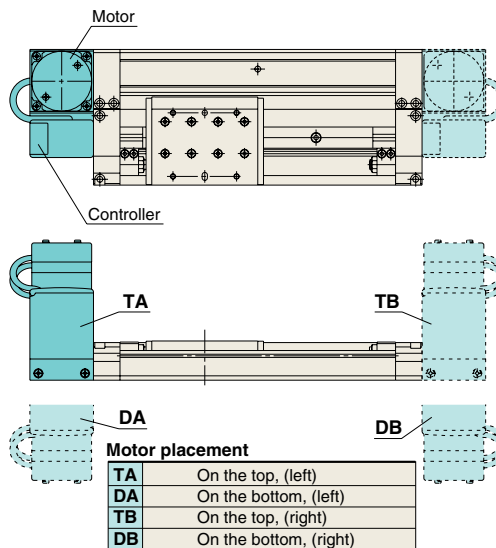The actuating part and the guide unit can be separated from the cylinder body.

Cylinder holding bolt

Cylinder body

Slider

Guide unit

Slide table

Manual operation is possible.

Manual operation button
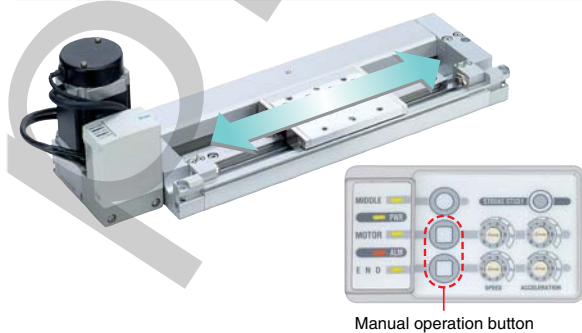
Motor placement: Mounting position of the motor is user selectable and can either be on the top, bottom, left, or right of the actuator.

Motor

Controller

TA — TB

DA — DB

Motor placement

TA	On the top, (left)
DA	On the bottom, (left)
TB	On the top, (right)
DB	On the bottom, (right)

Variations

Series	E-MY2C		E-MY2H	
Guide type	Cam follower guide		High precision guide	
Nominal size	16	25	16	25
Maximum load weight (kg)	5	10	5	10
Stroke (mm)	50 to 1000 (The stroke length is adjustable in increments of 1 mm.)			

Features 1

## *Series E-MY2*
Selection Method

The following are steps for selection of the series E-MY2 best suited to your application.

Model Selection

Cylinder model	Guide type	Slide table general accuracy	Graphs for related allowable values
E-MY2C	**Cam follower guide type**	Slide table accuracy approx. ±0.05 mm *	Refer to page 3
E-MY2H	**High precision guide type (Single axis)**	Slide table accuracy of ±0.05 mm or less required *	Refer to page 4

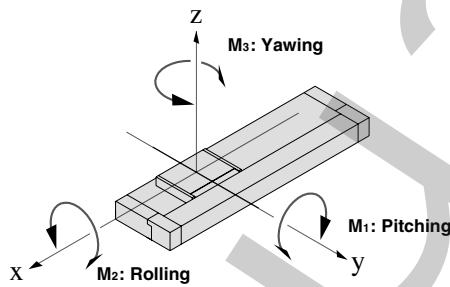Use as a guide for determining the slide table accuracy required. Consult P/A when guaranteed accuracy is required.

* Accuracy indicates displacement of the table (at stroke end) when 50% of the allowable moment shown in the catalog is applied. (reference value)

M_2: Rolling M_1: Pitching

M_3: Yawing
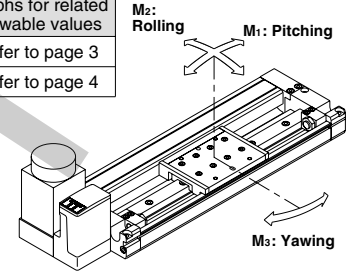
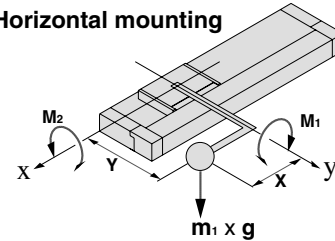## Types of Moment Applied to Rodless Cylinders

Multiple moments may be generated depending on the mounting orientation, load, and position of the center of gravity.
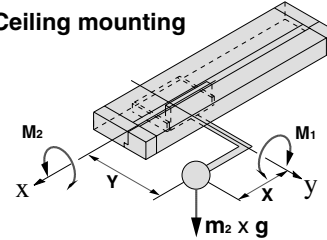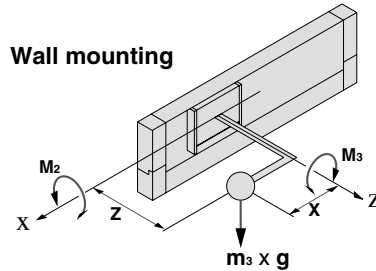
Coordinates and moments

Z
M_3: Yawing
X
M_2: Rolling
M_1: Pitching
y

Static moment

Horizontal mounting

M_2 M_1
x Y X y
m_1 x **g**

Ceiling mounting

M_2 M_1
x Y X y
m_2 x **g**

Wall mounting

M_2 M_3
x Z X Z
m_3 x **g**

Dynamic moment

M_1 Z
υ
M_{1E} m_n x **a**
F_E

M_{3E} m_n x **a** M_3
F_E
Y
υ

a: Set acceleration degree, υ: Set speed

Mounting orientation	Horizontal mounting	Ceiling mounting	Wall mounting
Dynamic load (F_E)	m_n x **a**		
M_{1E}	$\frac{1}{3}$ x F_E x Z		
M_{2E}	**Dynamic moment M_{2E} does not occur.**		
M_{3E}	$\frac{1}{3}$ x F_E x Y		

Note) Regardless of the mounting orientation, dynamic moment is calculated with the formulas above.

Mounting orientation		Horizontal mounting	Ceiling mounting	Wall mounting
Static load (m)		m_1	m_2	m_3
Static moment	M_1	m_1 x **g** x X	m_2 x **g** x X	—
	M_2	m_1 x **g** x Y	m_2 x **g** x Y	m_3 x **g** x Z
	M_3	—	—	m_3 x **g** x X

g: Gravitational acceleration (9.8 m/s²)

1

Series E-MY2

Maximum Allowable Moment/Maximum Load Weight

Model	Nominal size (mm)	Maximum allowable moment (N·m)			Maximum load weight (kg)		
		M_1	M_2	M_3	m_1	m_2	m_3
E-MY2C	16	5	4	3.5	18	16	14
	25	13	14	10	35	35	30
E-MY2H	16	7	6	7	15	13	13
	25	28	26	26	32	30	30

The above values are the maximum allowable values for moment and load weight. Refer to each graph regarding the maximum allowable moment and maximum load weight for a particular slide table speed.
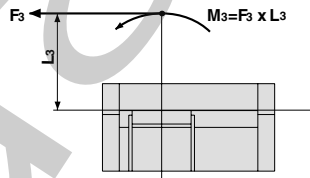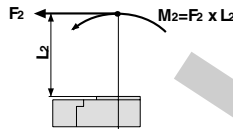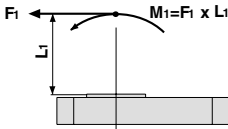
Maximum allowable moment

Select the moment from within the range of operating limits shown in the graphs. Note that the maximum allowable load value may sometimes be exceeded even within the operating limits shown in the graphs. Therefore, also check the allowable load for the selected conditions.

Load weight (kg)

Moment (N·m)

< Calculation of guide load factor >
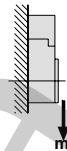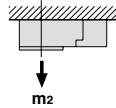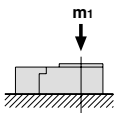
1. Maximum allowable load (1), static moment (2), and dynamic moment (at the time of acceleration/deceleration) (3) must be examined for the selection calculations.
 * Calculate m max for (1) from the maximum load weight (m_1, m_2, m_3) and Mmax for (2) and (3) from the maximum allowable moment graph (M_1, M_2, M_3).

$$\text{Sum of guide load factors} \quad \Sigma\alpha = \frac{\text{Load weight [m]}}{\text{Maximum load weight [m max]}} + \frac{\text{Static moment [M]}^{\text{Note 1)}}}{\text{Allowable static moment [Mmax]}} + \frac{\text{Dynamic moment [M}_E\text{]}^{\text{Note 2)}}}{\text{Allowable dynamic moment [M}_{E\text{max}}\text{]}} \leqq 1$$

Note 1) Moment caused by the load, etc., with actuator in resting condition.
Note 2) Moment caused by the impact load equivalent at the stroke end (at the time of collision to stopper).
Note 3) Depending on the shape of the work piece, multiple moments may occur. When this happens, the sum of the load factors ($\Sigma\alpha$) is the total of all such moments.

2. Reference formulae [Dynamic moment at impact]
Use the following formulas to calculate dynamic moment when taking stopper impact into consideration.
m : Load mass (kg) L_1 : Distance to the load's center of gravity (m)
F : Load (N) M_E: Dynamic moment (N·m)
F_E: Load at acceleration and deceleration (N)
a : Set acceleration (m/s²)
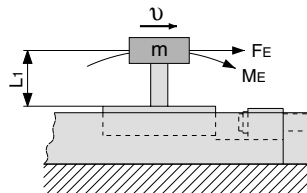υ : Set speed (mm/s)
M : Static moment (N·m)
$F_E = m \cdot a$

$$M_E = \frac{1}{3} \cdot F_E \cdot L_1 \text{ (N·m)}^{\text{Note 4)}}$$

Note 4) Average load coefficient (= $\frac{1}{3}$):
This coefficient is for averaging the Dynamic moment according to service life calculations.

3. Refer to pages 5 and 6 for detailed selection procedures.

Maximum load weight

Select the load weight from within the range of limits shown in the graphs. Note that the maximum allowable moment value may sometimes be exceeded even within the operating limits shown in the graphs. Therefore, also check the allowable moment for the selected conditions.

The graph value is for calculating the guide load factors. Refer to the table below for actual maximum load weight.

| Nominal size	Maximum load weight (kg)
16	5
25	10

⚠ Caution

Please select the required model by taking into consideration the operating condition specifications and any possible specification changes that may occur during operation. Please contact the nearest sales representative for P/A's software model selecting program, which will help selecting the correct model.

Moment / E-MY2C

E-MY2C/M₁
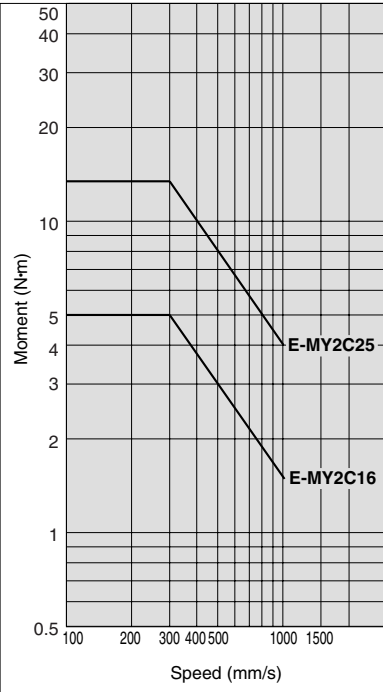
E-MY2C/M₂
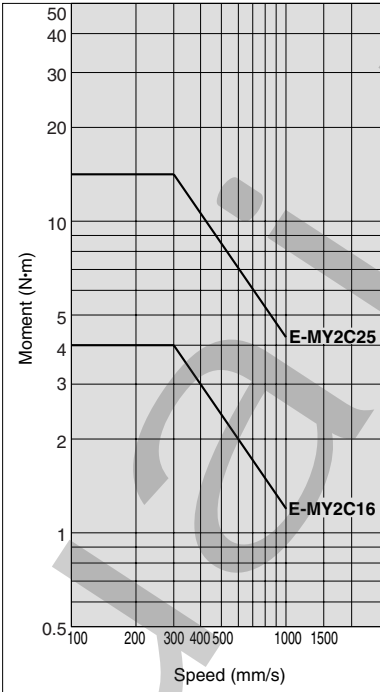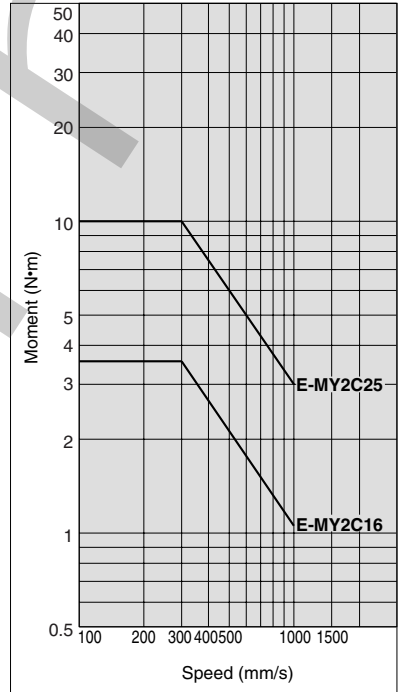
E-MY2C/M₃

Load weight / E-MY2C

E-MY2C/m₁

E-MY2C/m₂

E-MY2C/m₃

3

Series E-MY2

Maximum Allowable Moment/Maximum Load Weight

Moment / E-MY2H

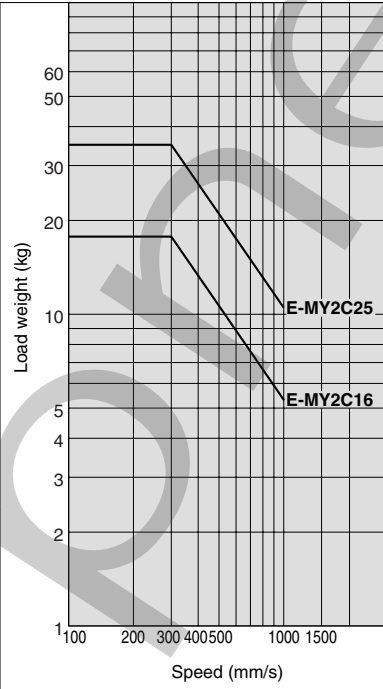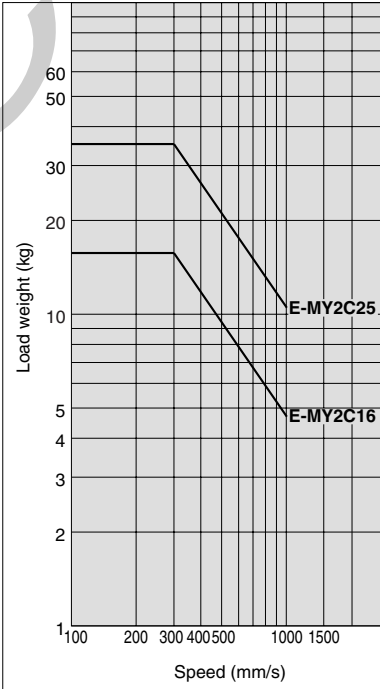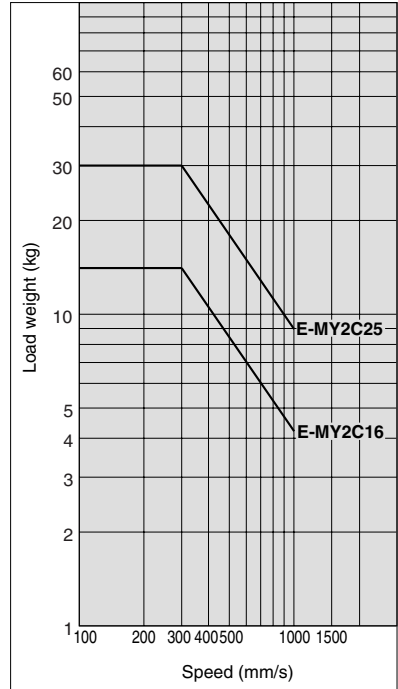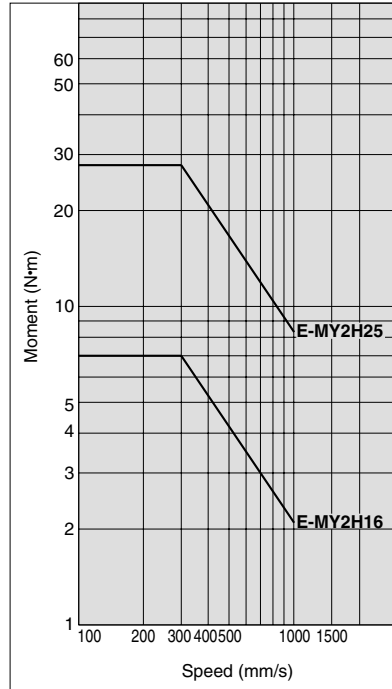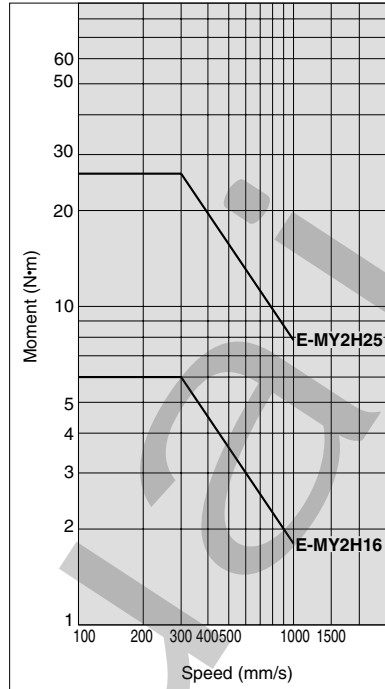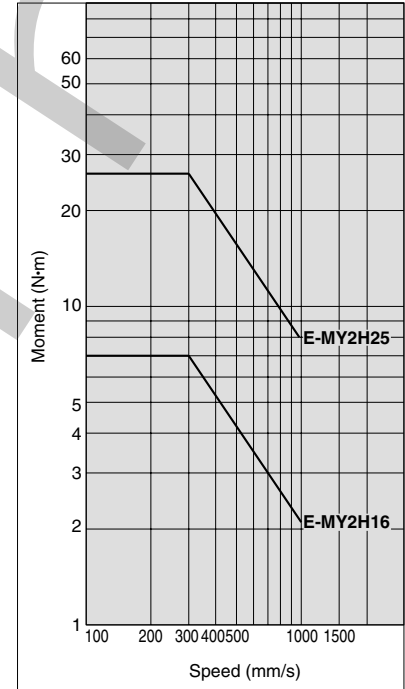**E-MY2H/M₁**

E-MY2H/M₂

E-MY2H/M₃

Load weight / E-MY2H

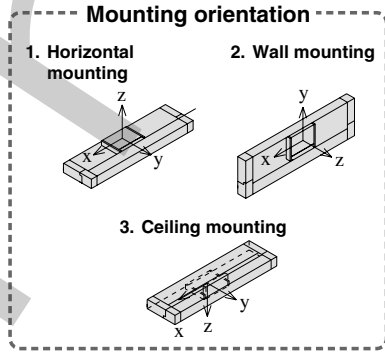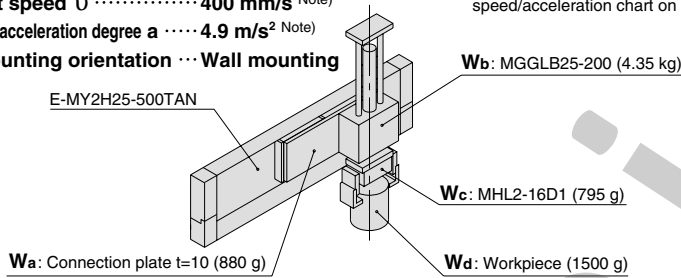**E-MY2H/m₁**

E-MY2H/m₂

E-MY2H/m₃

4

POWER AIRE
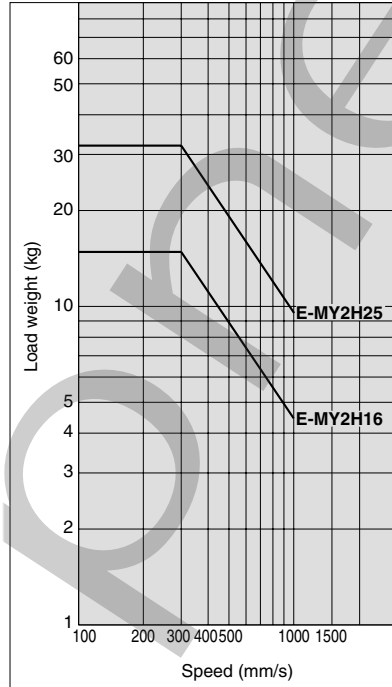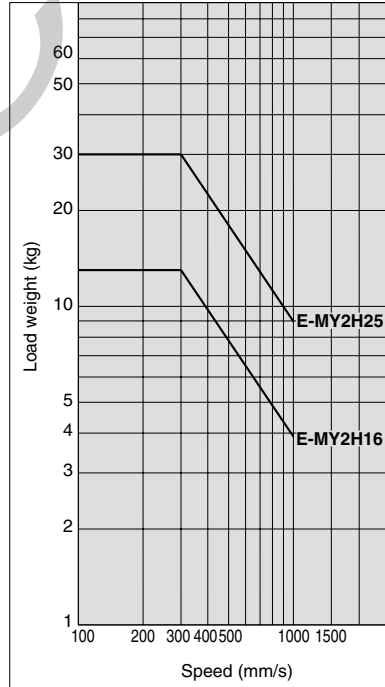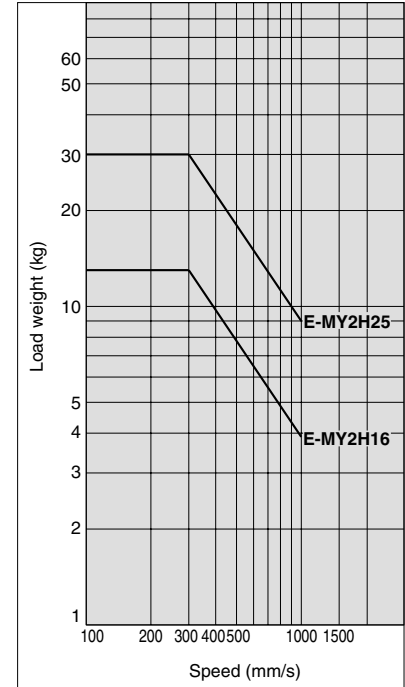
Series E-MY2
Selection Example

Calculation of Guide Load Factor

1 | Operating conditions

Operating cylinder ······ **E-MY2H25-500**
Set speed υ ············· **400 mm/s** [Note]
Set acceleration degree a ····· **4.9 m/s² [Note]**
Mounting orientation ··· **Wall mounting**

E-MY2H25-500TAN

Note) Regarding the speed and acceleration setting, please select from the speed/acceleration chart on p.8.

W_b: MGGLB25-200 (4.35 kg)

W_c: MHL2-16D1 (795 g)

W_a: Connection plate t=10 (880 g)

W_d: Workpiece (1500 g)

Mounting orientation
1. **Horizontal mounting**
2. **Wall mounting**
3. **Ceiling mounting**

2 | Load blocking

42.5
5
111
210

150
65

Z
X
Y
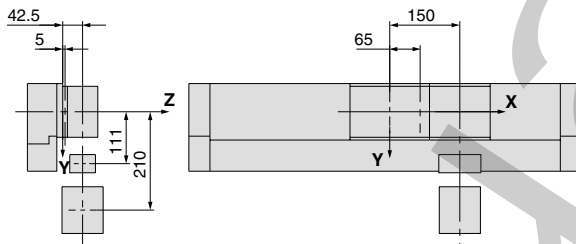
Weight and center of gravity for each workpiece

Work piece no. (Wn)	Weight (mn)	Center of gravity		
		X-axis Xn	Y-axis Yn	Z-axis Zn
W_a	0.88 kg	65 mm	0 mm	5 mm
W_b	4.35 kg	150 mm	0 mm	42.5 mm
W_c	0.795 kg	150 mm	111 mm	42.5 mm
W_d	1.0 kg	150 mm	210 mm	42.5 mm

n = a, b, c, d

3 | Calculation of composite center of gravity

$m_3 = \Sigma m_n$
$= 0.88 + 4.35 + 0.795 + 1.0 = 7.025$ kg

$X = \dfrac{1}{m_3} \times \Sigma (m_n \times x_n)$
$= \dfrac{1}{7.025} (0.88 \times 65 + 4.35 \times 150 + 0.795 \times 150 + 1.0 \times 150) = \textbf{139.4 mm}$

$Y = \dfrac{1}{m_3} \times \Sigma (m_n \times y_n)$
$= \dfrac{1}{7.025} (0.88 \times 0 + 4.35 \times 0 + 0.795 \times 111 + 1.0 \times 210) = \textbf{42.5 mm}$

$Z = \dfrac{1}{m_3} \times \Sigma (m_n \times z_n)$
$= \dfrac{1}{7.025} (0.88 \times 5 + 4.35 \times 42.5 + 0.795 \times 42.5 + 1.0 \times 42.5) = \textbf{37.8 mm}$

4 | Calculation of load factor for static load

m_3: Weight

m_3 max (from 1 of graph MY2H / m_3) = 22.5 (kg) ··

Load factor $\alpha_1 = m_3 / m_3$ max = 7.025 / 22.5 = 0.31

M_2: Moment

M_2 max (from 2 of graph MY2H / M_2) = 19.5 (N·m) ··

$M_2 = m_3 \times g \times Z = 7.025 \times 9.8 \times 37.8 \times 10^{-3} = 2.60$ (N·m)

Load factor $\alpha_2 = M_2 / M_2$ max = 2.60 / 19.5 = 0.13

m_3

Z
m_3

M_2

POWER AIRE
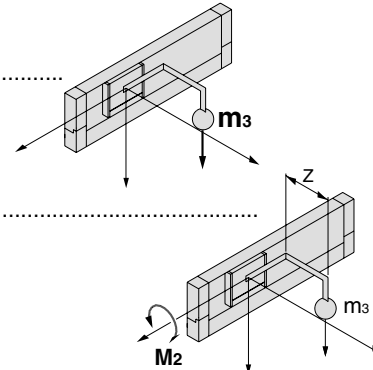
Series E-MY2
Selection Example cont.

M₃: Moment

M_3 max (from 3 of graph MY2H / M₃) = 19.5 (N·m) ··

$M_3 = m_3 \times g \times X = 7.025 \times 9.8 \times 139.4 \times 10^{-3} = 9.59$ (N·m)

Load factor $\alpha_3 = M_3 / M_3$ max = 9.59 / 19.5 = **0.49**
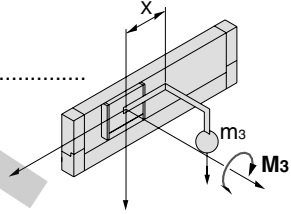
5 Calculation of load factor for dynamic moment

Load F_E at acceleration and deceleration

$F_E = m \times a = 7.025 \times 4.9 = 34.42$ (N)

M₁E: Moment

M_{1E} max (from 4 of graph MY2H / M₁) = 21.0 (N·m) ···

$M_{1E} = \dfrac{1}{3} \times F_E \times Z = \dfrac{1}{3} \times 34.42 \times 37.8 \times 10^{-3} = 0.43$ (N·m)

Load factor $\alpha_4 = M_{1E} / M_{1E}$ max = 0.43 / 21.0 = **0.02**
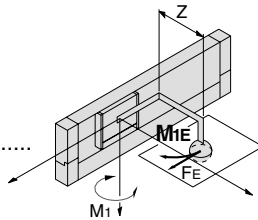
M₃E: Moment

M_{3E} max (from 5 of graph MY2H / M₃) = 19.5 (N·m) ···

$M_{3E} = \dfrac{1}{3} \times F_E \times Y = \dfrac{1}{3} \times 34.42 \times 42.5 \times 10^{-3} = 0.49$ (N·m)

Load factor $\alpha_5 = M_{3E} / M_{3E}$ max = 0.49 / 19.5 = **0.03**
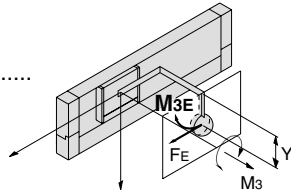
6 Sum and examination of guide load factors

$\Sigma\alpha = \alpha_1 + \alpha_2 + \alpha_3 + \alpha_4 + \alpha_5 = 0.98 \leqq$

The above calculation is within the allowable value and therefore the selected model can be used.
In an actual calculation, when sum of guide load factors $\Sigma\alpha$ in the formula above is more than 1, consider decreasing the speed, increasing the bore size, or changing the product series.

Load weight　　　　　　**Allowable moment**
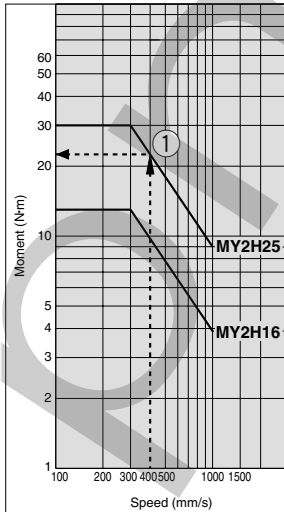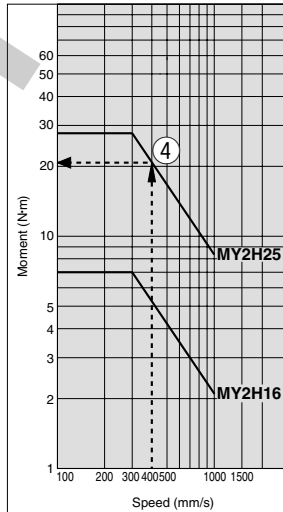
E-MY2H/m₃　　　**E-MY2H/M₁**　　　**E-MY2H/M₂**　　　**E-MY2H/M₃**
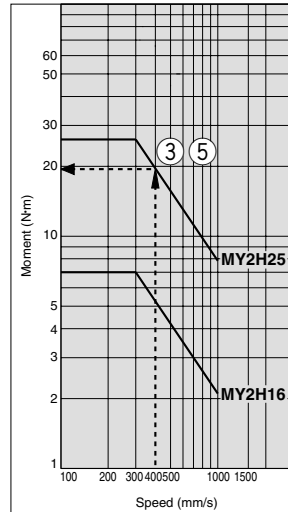
e-Rodless Actuator
Series E-MY2C
Cam follower guide type/Nominal size: 16, 25

How to Order

| **Cam follower guide type** | E-MY2C | 16 | 100 | TA | N | M9B | |

Nominal size

| 16 |
| 25 |

Stroke
Refer to the standard stroke table.

Motor placement

TA	On the top, (left)
DA	On the bottom, (left)
TB	On the top, (right)
DB	On the bottom, (right)

Number of auto switches

Nil	2 pcs.
S	1 pc.
n	n

Auto switch

| Nil | Without auto switch |

* Refer to the table below for auto switch model numbers.
* Auto switch is not mounted and is supplied loose at the time of shipment.

Output type

| N | NPN |
| P | PNP |

Motor

Controller

TB

TA

DA

DB
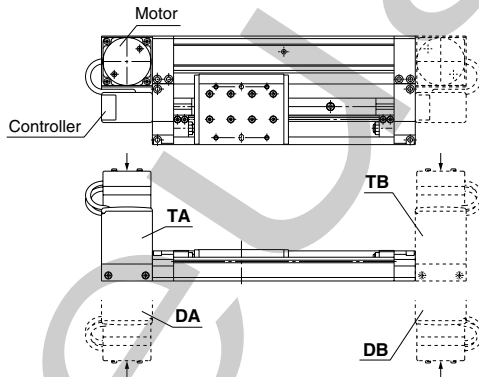
* Arrow mark shows handling side on controller.

Standard stroke

Nominal size	Standard stroke (mm) *	Max. manufacturable stroke (mm)
16, 25	100, 200, 300, 400, 500, 600, 700, 800, 900, 1000	1000

* Strokes are manufacturable in increments of 1 mm, up to the maximum stroke.

Applicable auto switches/For detailed auto switch specifications, refer to page 17 through 21.

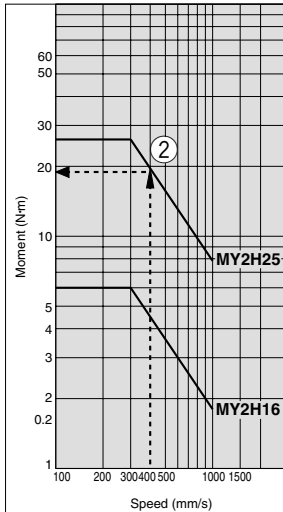| Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage DC	Load voltage AC	Auto switch part no. Perpendicular	Auto switch part no. In-line	0.5 (Nil)	3 (L)	5 (Z)	Prewired connector	Applicable load
Reed switch	—	Grommet	Yes	3-wire (NPN equiv.)	—	5 V	A96V	A96	●	●	—	—	IC circuit
				2-wire	24 V	12 V	100 V	A93V	A93	●	●	—	—	Relay PLC
			—			5 V,12 V	100 V or less	A90V	A90	●	●	—	—	IC circuit	Relay PLC
Solid state switch	—	Grommet	Yes	3-wire (NPN)	5 V 12 V		M9NV	M9N	●	●	○	○	IC circuit
				3-wire (PNP)			M9PV	M9P	●	●	○	○	IC circuit
				2-wire	24 V	12 V	M9BV	M9B	●	●	○	○	—	Relay PLC
	Diagnostic indication (2-color display)			3-wire (NPN)	5 V 12 V		F9NWV	F9NW	●	●	○	○	IC circuit
				3-wire (PNP)			F9PWV	F9PW	●	●	○	○	IC circuit
				2-wire	12 V		F9BWV	F9BW	●	●	○	○	—

* Lead wire length symbols: 0.5 m ·········· Nil (Example) F9NW
3 m ·········· L   F9NWL
5 m ·········· Z   F9NWZ
* Solid state switches marked "○" are produced upon receipt of order.

7

Series E-MY2C

Weight Table

Unit: kg

Nominal size	Basic weight	50 mm stroke per additional weight	Side supporting metal weight (per 1 pair)
16	2.24	0.14	0.01
25	3.95	0.21	0.02

How to calculate/Example: **E-MY2C25-300TAN**

Basic weight ································· 3.52 kg
Additional weight ·························· 0.21/50 st
Actuator stroke ···························· 300 st
3.52 + 0.21 x 300 ÷ 50 ≒ 4.78 kg

Replacement Parts

Drive unit replacement part nos.

Model / Nominal size	E-MY2C
16	E-MY2BH16-│Stroke│∗
25	E-MY2BH25-│Stroke│∗

Specify the motor position and output style in ∗ parts.
Example) E-MY2BH16-300TAN

Specifications

Model		E-MY2C	
Nominal size		16	25
Maximum load weight [Note]		5 kg	10 kg
Transfer speed set range		100 to 1000 mm/s (By selection. Please refer to the table below.)	
Transfer speed acceleration set range		0.49 to 4.90 m/s^2 (By selection. Please refer to the table below.)	
Acceleration and deceleration method		Trapezoidal drive	
Moving direction		Horizontal direction	
Positioning points		Both ends (mechanical stoppers), 1 intermediate position	
Repeated positioning stopping precision	Both ends	±0.01 mm	
	Intermediate stopping position	±0.1 mm	
Intermediate stopping point positioning method		Direct teaching, JOG teaching	
Positioning setting spot		Controller body	
Display		LED for power supply, LED for alarming, LED for positioning completion	
Input signal		Actuation command signal, Emergency stop input signal	
Output signal		Positioning completion signal, Emergency detection signal, Ready signal	

Note) The maximum load weight shows the motor ability. Please consider it together with the guide load factor when selecting a model.

Electrical Specifications

Driving voltage	24 VDC ± 10%
Current consumption	Rated current 2.5 A (Max. 5 A) at 24 VDC
Input signal capacity	Photo coupler input (24 VDC, Max. 6 mA)
Output signal capacity	Open drain output (Max.30 VDC or less, Max. 20 mA)
Emergency detection items	Emergency stop, Output deviation, Power supply deviation, Driving deviation, Temperature deviation Stroke deviation, Motor deviation, Controller deviation

General Specifications

Operating temperature range	5 to 40°C
Operating humidity range	35 to 85%RH (with no condensation)
Storage temperature range	−10 to 60°C (with no condensation and freezing)
Storage humidity range	35 to 85%RH (no condensation)
Withstand voltage	Between all of external terminals and the case: 1000 VAC for 1 minute
Insulation resistance	Between external terminal and case: 50 MΩ (500 VDC)
Noise resistance	1000 Vp-p Pulse width 1 μs, Rise time 1 ns
Acquired certified standard	CE marking

Speed/Acceleration

Speed Setting Switch No.	Speed [mm/s]
1	100
2	200
3	300
4	400
5	500
6	600
7	700
8	800
9	900
10	1000

Note) The factory default setting for the switch is No.1 (100 mm/s).

Speed Setting Switch No.	Acceleration [m/s^2]
1	0.49
2	0.74
3	0.98
4	1.23
5	1.47
6	1.96
7	2.45
8	2.94
9	3.92
10	4.90

Note) The factory default setting for the switch is No.1 (0.49 m/s^2).

Dimensions

E-MY2C | Nominal size | – | Stroke |

Nominal size: 16

(74.7) 101.7
27 74.7
72
60 102 42 5
FG terminal M3
15.5
(60.3) 87.3

(A clearance of 40 or more is required.) 60 (40) 80 70 40

Motor

Controller
4-ø6 counterbore depth 3.5
ø3.5 through

43.5 72.4 43 71 32 40
9.8

4-M4 x 0.7 depth 7
5 16.5 6
Workpiece mounting center line
5.6 (Max. 8.6) 4 14.4
4
152 + Stroke

(A clearance of 40 or more is required.) (60)
27
123 129
22 21.3
28
T-slot section for mounting

I/O cable (9 wires)
Motor position TA
Motor position TB
Slot for auto switch
Power supply cable (2 wires)
(500) 60 80 160 + Stroke 20
Motor position DA
Motor position DB

3.5 5.8
2 3.4
2 x 4-square nut
M3 x 0.5

T-slot section for mounting details

Nominal size: 25

(96.7) 132.2
35.5 96.7
94
60 102 42 5
15.5
(51.8) 87.3

(A clearance of 40 or more is required.) 60 (49.6) 110.8 100 60

Motor

Controller
4-ø9.5 counterbore depth 5.4
ø5.5 through
FG terminal M3

108.7 67 48.7
60
19.5

4-M5 x 0.8 depth 9
5 22.2 7
Workpiece mounting center line
7.1 (Max. 10.1) 5 17.5
198 + Stroke

(A clearance of 40 or more is required.) (60)
35.5
163 170
34 31.8
37
T-slot section for mounting

I/O cable (9 wires)
Motor position TA
Motor position TB
Slot for auto switch
Power supply cable (2 wires)
(500) 60 105 210 + Stroke 25
Motor position DA
Motor position DB

8.5 5.3
3 5.5
2 x 4-square nut
M5 x 0.8

T-slot section for mounting details

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Series *E-MY2C*

Auto Switches/Proper Mounting Position at Stroke End Detection

Note) The operating range is a guide including hysteresis, but is not guaranteed. There may be large variations (as much as ±30%) depending on the ambient environment.

D-A9, D-A9□V (mm)

Nominal size	A	B	Operating range
16	44	116	8
25	54	156	

D-M9, D-M9□V (mm)

Nominal size	A	B	Operating range
16	48	112	3
25	58	152	3.5

D-F9□W, D-F9□WV (mm)

Nominal size	A	B	Operating range
16	48	112	8.5
25	58	152	

Auto Switch Mounting

When mounting the auto switches, they should be inserted into the actuator's switch groove from the direction shown in the drawing on the right. Once in the mounting position, use a flat head watchmakers' screwdriver to tighten the included set screw.

Note) When tightening the set screw, use a watchmakers' screwdriver with a handle diameter of about 5 to 6 mm. The tightening torque should be 0.1 to 0.2 N•m.

ø5 to ø6

10

POWER AIRE

e-Rodless Actuator
Series E-MY2H
High precision guide type/Nominal size: 16, 25

How to Order

High precision guide type	E-MY2H	16	100	TA	N	M9B	

Nominal size

16
25

Stroke

Refer to the standard stroke table.

Motor placement

TA	On the top, (left)
DA	On the bottom, (left)
TB	On the top, (right)
DB	On the bottom, (right)

Motor

Controller

TB

TA

DA

DB

∗ Arrow mark shows handling side on controller.

Number of auto switches
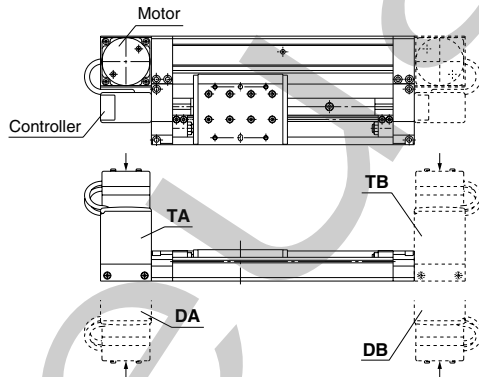
Nil	2 pcs.
S	1 pc.
n	n

Auto switch

Nil	Without auto switch

∗ Refer to the table below for auto switch model numbers.
∗ Auto switch is not mounted and is supplied loose at the time of shipment.

Output type

N	NPN
P	PNP

Standard stroke

Nominal size	Standard stroke (mm) ∗	Max. manufacturable stroke (mm)
16, 25	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600	1000

∗ Strokes are manufacturable in increments of 1 mm, up to the maximum stroke.
  However, when a stroke out of the standard 51 to 599 is required, add "-XB10" at the end of the model no.
  When stroke exceeds 600 mm, add "-XB11" at the end of model no. Refer to page 23 for Made to Order.
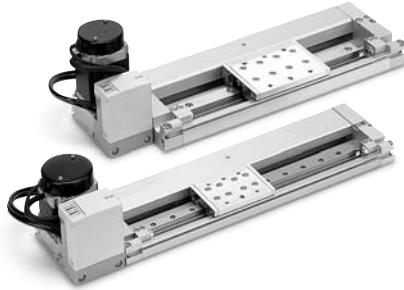
Applicable auto switches/For detailed auto switch specifications, refer to page 17 through 21.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage DC	Load voltage AC	Auto switch part no. Electrical entry direction Perpendicular	Auto switch part no. Electrical entry direction In-line	Lead wire length (m) ∗ 0.5 (Nil)	Lead wire length (m) ∗ 3 (L)	Lead wire length (m) ∗ 5 (Z)	Prewired connector	Applicable load
Reed switch	—	Grommet	Yes	3-wire (NPN equiv.)	—	5 V	A96V	A96	●	●	—	—	IC circuit
Reed switch	—	Grommet		2-wire	24 V	12 V / 100 V	A93V	A93	●	●	—	—	Relay PLC
Reed switch	—	Grommet		2-wire	5 V,12 V	100 V or less	A90V	A90	●	●	—	—	IC circuit Relay PLC
Solid state switch	—	Grommet	Yes	3-wire (NPN)	5 V 12 V	—	M9NV	M9N	●	●	○	○	IC circuit
Solid state switch	—	Grommet	Yes	3-wire (PNP)	5 V 12 V	—	M9PV	M9P	●	●	○	○	IC circuit
Solid state switch	—	Grommet	Yes	2-wire	24 V 12 V	—	M9BV	M9B	●	●	○	○	Relay PLC
Solid state switch	Diagnostic indication (2-color display)	Grommet	Yes	3-wire (NPN)	5 V 12 V	—	F9NWV	F9NW	●	●	○	○	IC circuit
Solid state switch	Diagnostic indication (2-color display)	Grommet	Yes	3-wire (PNP)	5 V 12 V	—	F9PWV	F9PW	●	●	○	○	IC circuit Relay PLC
Solid state switch	Diagnostic indication (2-color display)	Grommet	Yes	2-wire	12 V	—	F9BWV	F9BW	●	●	○	○	—

∗ Lead wire length symbols: 0.5 m ·········· Nil   (Example) F9NW
                            3 m ·········· L   F9NWL
                            5 m ·········· Z   F9NWZ
∗ Solid state switches marked "○" are produced upon receipt of order.

POWER AIRE

Series *E-MY2H*

Specifications

Model	E-MY2H	
Nominal size	16	25
Maximum load weight Note)	5 kg	10 kg
Transfer speed set range	100 to 1000 mm/s (By selection. Please refer to the table below.)	
Transfer speed acceleration set range	0.49 to 4.90 m/s² (By selection. Please refer to the table below.)	
Acceleration and deceleration method	Trapezoidal drive	
Moving direction	Horizontal direction	
Positioning points	Both ends (mechanical stoppers), 1 intermediate position	
Repeated positioning stopping precision Both ends	±0.01 mm	
Intermediate stopping position	±0.1 mm	
Intermediate stopping point positioning method	Direct teaching, JOG teaching	
Positioning setting spot	Controller body	
Display	LED for power supply, LED for alarming, LED for positioning completion	
Input signal	Actuation command signal, Emergency stop input signal	
Output signal	Positioning completion signal, Emergency detection signal, Ready signal	

Note) The maximum load weight shows the motor ability. Please consider it together with the guide load factor when selecting a model.

Electrical Specifications

Driving voltage	24 VDC ± 10%
Current consumption	Rated current 2.5 A (Max. 5 A) at 24 VDC
Input signal capacity	Photo coupler input (24 VDC, Max. 6 mA)
Output signal capacity	Open drain output (Max.30 VDC or less, Max. 20 mA)
Emergency detection items	Emergency stop, Output deviation, Power supply deviation, Driving deviation, Temperature deviation Stroke deviation, Motor deviation, Controller deviation

Weight Table

Unit: kg

Nominal size	Basic weight	50 mm stroke per additional weight
16	2.11	0.14
25	3.61	0.23

How to calculate/Example: **E-MY2H25-300TAN**

Basic weight ··································· 3.61 kg
Additional weight ··························· 0.23/50 st
Actuator stroke ······························ 300 st
3.61 + 0.23 x 300 ÷ 50 ≒ 4.99kg

General Specifications

Operating temperature range	5 to 40°C
Operating humidity range	35 to 85%RH (with no condensation)
Storage temperature range	−10 to 60°C (with no condensation and freezing)
Storage humidity range	35 to 85%RH (no condensation)
Withstand voltage	Between all of external terminals and the case: 1000 VAC for 1 minute
Insulation resistance	Between external terminal and case: 50 MΩ (500 VDC)
Noise resistance	1000 Vp-p Pulse width 1 μs, Rise time 1 ns
Acquired certified standard	CE marking

Replacement Parts

Drive unit replacement part nos.

Model / Nominal size	E-MY2C
16	E-MY2BH16-[Stroke] *
25	E-MY2BH25-[Stroke] *

Specify the motor position and output style in * parts.
Example) E-MY2BH16-300TAN

Speed/Acceleration

Speed Setting Switch No.	Speed [mm/s]
1	100
2	200
3	300
4	400
5	500
6	600
7	700
8	800
9	900
10	1000

Note) The factory default setting for the switch is No.1 (100 mm/s).

Speed Setting Switch No.	Acceleration [m/s²]
1	0.49
2	0.74
3	0.98
4	1.23
5	1.47
6	1.96
7	2.45
8	2.94
9	3.92
10	4.90

Note) The factory default setting for the switch is No.1 (0.49 m/s²).

Dimensions

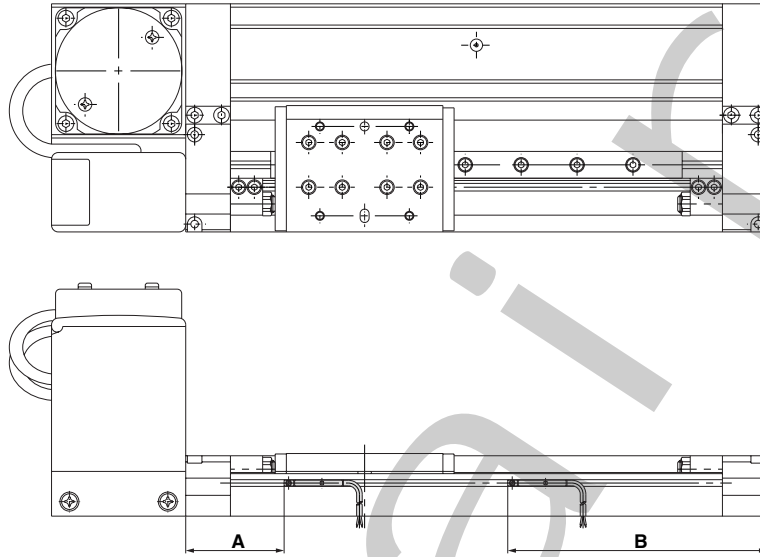### E-MY2H [Nominal size] – [Stroke]

Nominal size: 16

ø4H7 depth 5
Motor
Long hole depth 5
5.6 (Max. 8.6)
152 + Stroke
Controller
2-ø6.5 counterbore depth 3.3
FG terminal M3
4-M4 x 0.7 depth 7
2 x 2-ø3.3 through hole
T-slot section for mounting

I/O cable (9 wires)
Motor position TA
Motor position TB
Slot for auto switch
Power supply cable (2 wires)
(500)
60
80
160 + Stroke
20
Motor position DA
Motor position DB
2 x 4-square nut M3 x 0.5

T-slot section for mounting details

Nominal size: 25

2-ø5H7 depth 5
Motor
Controller
2-ø9.5 counterbore depth 5.4
4-M5 x 0.8 depth 9
Long hole depth 5
198 + Stroke
2 x 2-ø5.5 through hole
FG terminal M3
T-slot section for mounting

I/O cable (9 wires)
Motor position TA
Motor position TB
Slot for auto switch
Power supply cable (2 wires)
(500)
60
105
210 + Stroke
25
Motor position DA
Motor position DB
2 x 4-square nut M5 x 0.8

T-slot section for mounting details

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Series E-MY2H

Auto Switches/Proper Mounting Position at Stroke End Detection

D-A9, D-A9□V (mm)

Nominal size	A	B	Operating range
16	44	116	8.5
25	54	156	

D-M9, D-M9□V (mm)

Nominal size	A	B	Operating range
16	48	112	3
25	58	152	4

D-F9□W, D-F9□WV (mm)

Nominal size	A	B	Operating range
16	48	112	8.5
25	58	152	

Auto Switch Mounting

When mounting the auto switches, they should be inserted into the actuator's switch groove from the direction shown in the drawing on the right. Once in the mounting position, use a flat head watchmakers' screwdriver to tighten the included set screw.

Note) When tightening the set screw, use a watchmakers' screwdriver with a handle diameter of about 5 to 6 mm. The tightening torque should be 0.1 to 0.2 N•m.

ø5 to ø6

14
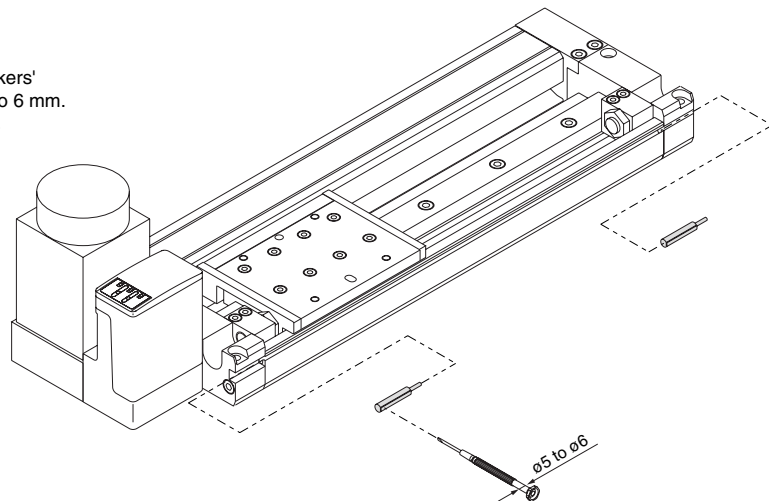
e-Rodless Actuator *Series E-MY2*

Names and Functions of Individual Part
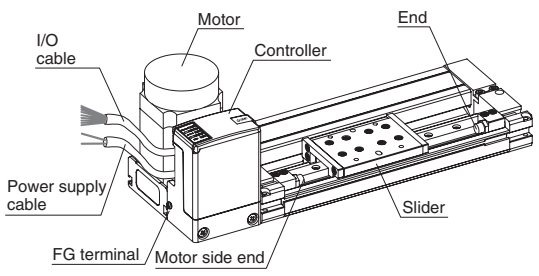
Description	Content/Function
Slider	Moving part within the actuator
Motor	Motor activating the actuator
Power supply cable	Power supply cable for providing power to the actuator
I/O cable	I/O cable for transmitting a positioning completion signal and driving instructions
Controller part	The unit part to control and set the actuator, and indicate its status
FG terminal	The terminal to connect the FG cable

Controller detail
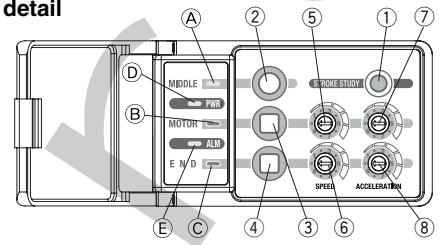
Switch

Description	Content/Function
①	Stroke learning switch
②	Switch to move the actuator to intermediate position and set the intermediate position
③	Switch to move the work piece to the motor side end
④	Switch to move the work piece to the opposite end of the motor side
⑤	Rotary switch to set moving speed to the motor side end
⑥	Rotary switch to set moving speed to the other end
⑦	Rotary switch to set moving acceleration to the motor side end
⑧	Rotary switch to set moving acceleration to the other end

Indicator light

Symbol	Description	Content
Ⓐ	MIDDLE Indicator light (Green)	Middle positioning completion indication light
Ⓑ	MOTOR Indicator light (Green)	Motor side end positioning completion indication light
Ⓒ	END Indicator light (Green)	End positioning completion indication light
Ⓓ	PWR Indicator light (Green)	Lights when power supply is energized
Ⓔ	ALM Indicator light (Red)	Lights when alarm output is on

Examples of Internal circuit and wiring

Based on the condition that wiring is done using power supply cable and I/O cable

Power supply cable 2 wires AWG20 (20 lines/0.16 mm²)

Symbol	Color	Signal name	Contents
DC (+)	Brown	Vcc	Power supply cables for driving the actuator
DC (−)	Blue	GND	

I/O cable 9 wires AWG28 (7 wires/0.127mm²)

Symbol	Color	Signal name	Contents
DC (+)	Brown	Vcc	Power supply cables for signal
DC (−)	Blue	GND	
OUT1	Pink	READY output	Signal indicating the controller is operationable
OUT2	Orange	Positioning completion output 1	Signal indicating that positioning is completed
OUT3	Yellow	Positioning completion output 2	
OUT4	Green	Alarm output	Signal indicating an alarm has been generated
IN1	Purple	Actuation instruction input 1	Instruction signal to actuator
IN2	Grey	Actuation instruction input 2	
IN3	White	Emergency stop	Signal providing emergency stop instruction (The emergency stop is activated when contact is opened)

This product can be used without connecting I/O cables, however please use caution and install a power supply switch for the actuator. In case of an emergency, please turn it off.

**I/O Cable Signals**

Output signal

Actuator status	Symbol		
	OUT1	OUT2	OUT3
Completion of motor side end positioning	○	○	●
Completion of end positioning	○	●	○
Completion of intermediate positioning	○	○	○
During movement	●	●	●

Input signal

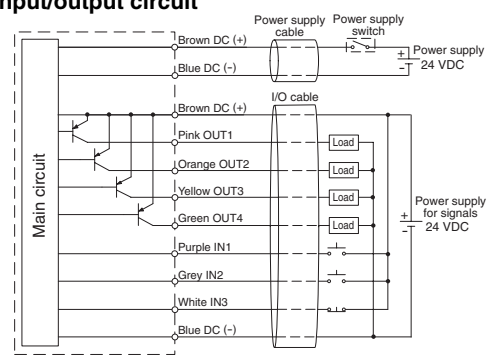| Command	Symbol	
	IN1	IN2
Motor side actuation instruction	○	●
End side actuation instruction	●	○
Intermediate actuation instruction	○	○

○ indicates on status, and ● indicates off status.

NPN input/output circuit
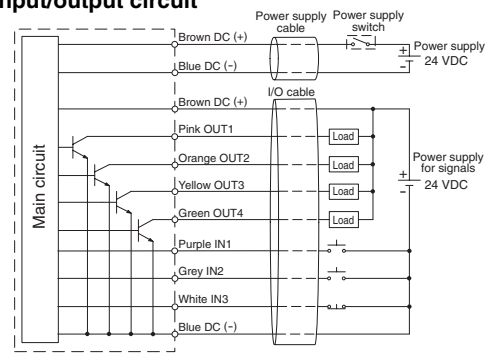
PNP input/output circuit

15

Series E-MY2

Error Display and Problem Solving

When an error indication is displayed, please refer to the following instructions.

Item	Display	Contents	Solution
Emergency stop	MIDDLE / PWR / MOTOR / ALM / END	Either the emergency stop input (IN3) is opened, or the power supply for the signal is cut-off.	Confirm the power supply signal is energized and release the emergency stop input (IN3). (Refer to the circuit diagram on page 15.)
Abnormal external output	MIDDLE / PWR / MOTOR / ALM / END	External output is shorting.	In case of common power supply, turn off the power supply and check the wiring condition of load. Restart the power supply. (Refer to the circuit diagram on page 15.)
			In case of an independent power supply, turn off the power supply for the signals and check the wiring condition of load. Restart the power supply and press the MIDDLE button. (Refer to the circuit diagram on page 15.)
Power supply abnormality	MIDDLE / PWR / MOTOR / ALM / END	The power supply voltage is excessive or lower than the limit for operation.	Check the power supply voltage and adjust it if necessary, then press the MIDDLE button.
Drive abnormality	MIDDLE / PWR / MOTOR / ALM / END	Maximum output is continued for a prolonged period of time.	Check the work weight and confirm that no foreign materials are attached to the actuator. After confirming, press the MIDDLE button.
Temperature abnormality	MIDDLE / PWR / MOTOR / ALM / END	Internal temperature of the controller is high.	Lower the surrounding temperature of the actuator in use, and then press the MIDDLE button.

Item	Display	Contents	Solution
Abnormal stroke	MIDDLE / PWR / MOTOR / ALM / END	The motor is revolving at excessive speed or stops before target is achieved.	If any foreign materials are observed, remove them and then press the MIDDLE button.
			Check to see whether the stroke adjusting unit is loose. If required, readjust the stroke and perform the stroke learning again. Note 1)
			If the stroke learning has not been performed after the stroke is adjusted, please perform it. Note 1)
Motor abnormality	MIDDLE / PWR / MOTOR / ALM / END	The motor does not revolve properly or over current is detected.	Press the MIDDLE button.
Controller abnormality	MIDDLE / PWR / MOTOR / ALM / END	The CPU is malfunctioning or the memory content is abnormal.	Turn off the power supply and restart it.

∗ When the cause of the error is eliminated and the error indicator is off, the actuator returns to the original state, as it was when it was first powered on, except as stated in Note 1. Therefore, upon receiving the first drive command input signal, the actuator returns to the original position.

Note 1) The product is in the same condition as when the stroke learning process is completed. The slider is stopped at the motor side end and the motor indication light is on.

∗ If the error can not be corrected, turn off the power supply to stop operation, and contact your P/A sales representative.

Indication light status

Off	
On	

16
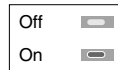
Series E-MY2
Auto Switch Specifications

Auto Switch Common Specifications

Type	Reed switch	Solid state switch
Leakage current	None	3-wire: 100 μA or less 2-wire: 0.8 mA or less
Operating time	1.2 ms	1 ms or less
Impact resistance	300 m/s^2	1000 m/s^2
Insulation resistance	50 MΩ or more at 500 VDC Mega (between lead wire and case)	
Withstand voltage	1000 VAC for 1 minute (between lead wire and case)	
Ambient temperature	−10 to 60°C	
Enclosure	IEC529 standard IP67, JISC0920 waterproof construction	

Lead wire length

Lead wire length indication

(Example) D-M9P[L]

Lead wire length

Nil	0.5 m
L	3 m
Z	5 m

Note 1) Applicable auto switch with 5 m lead wire "Z"
　　　　Reed switch: None
　　　　Solid state switch: Manufactured upon receipt of order as standard.
Note 2) To designate solid state switches with flexible specifications, add "-61" after the lead wire length.
∗ Oil resistant flexible cab-tire cord is used for D-M9□ as standard. There is no need to place the suffix -61 to the end of part number.

(Example) D-F9PWVL-[61]

Flexible specification

Auto Switch Hysteresis

The hysteresis is the difference between the position of the auto switch as it turns "on" and as it turns "off". A part of operating range (one side) includes this hysteresis.

Switch operation position (ON)

Hysteresis

Note) (Reed switch: 2 mm or less / Solid state switch: 1 mm or less)

Switch operation position (OFF)

Note) Hysteresis may fluctuate due to the operating environment.
　　　Please contact P/A if hysteresis causes an operational problem.
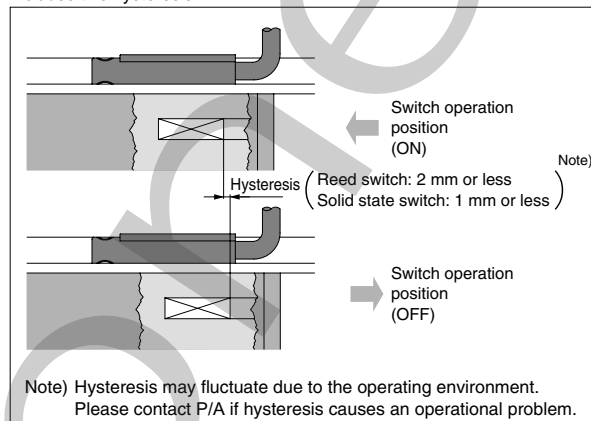
Contact Protection Boxes: CD-P11, CD-P12

<Applicable switch model>
D-A9•A9□V
The auto switches above do not have a built-in contact protection circuit. Therefore, please use a contact protection box with the switch for any of the following cases:
① **Where the operation load is an inductive load.**
② **Where the wiring length to load is greater than 5 m.**
③ **Where the load voltage is 100 VAC.**
The contact life may be shortened. (Due to permanent energizing conditions.)

Specifications

Part No.	CD-P11		CD-P12
Load voltage	100 VAC	200 VAC	24 VDC
Maximum load current	25 mA	12.5 mA	50 mA

∗ Lead wire length —— Switch conneciton side 0.5 m
　　　　　　　　　　　Load connection side　　 0.5 m

Internal circuits

CD-P11

Surge absorber　　Choke coil　　OUT Brown
　　　　　　　　　　　　　　　　～
　　　　　　　　　　　　　　　　OUT Blue

CD-P12

Choke coil
Zener diode　　　　　　OUT (+) Brown
　　　　　　　　　　　　OUT (−) Blue
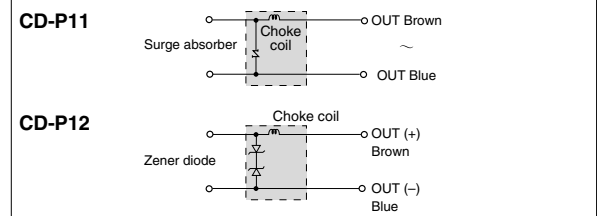
Dimension
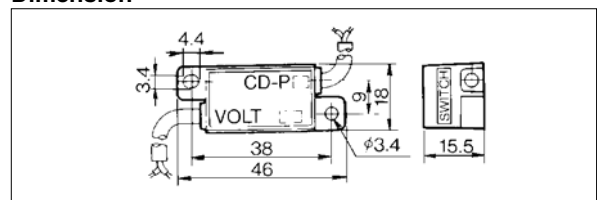
Connection

To connect a switch unit to a contact protection box, connect the lead wire from the side of the contact protection box marked SWITCH to the lead wire coming out of the switch unit. Keep the switch as close as possible to the contact protection box, with a lead wire length of no more than 1 meter.

POWER AIRE

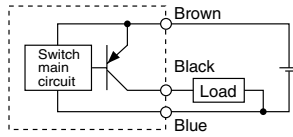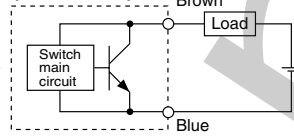# Series E-MY2
Auto Switch Connections and Example
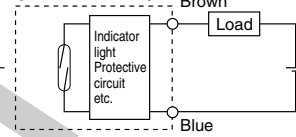
Basic Wiring
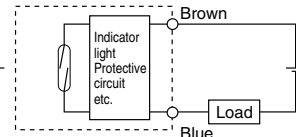
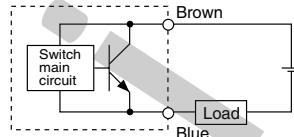**Solid state 3-wire, NPN**
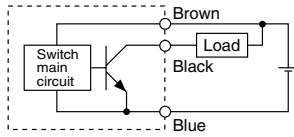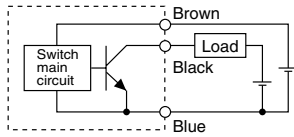

Solid state 3-wire, PNP

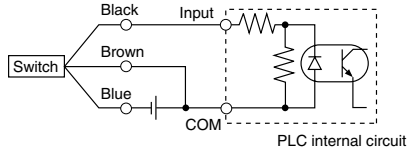**2-wire (Solid state)**

2-wire (Reed switch)

(Power supplies for switch and load are separate.)

Example of Connection to PLC (Programmable Logic Controller)
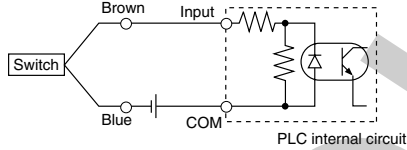
• **Sink input specifications 3-wire, NPN**

PLC internal circuit

• **Souce input specifications 3-wire, PNP**

PLC internal circuit
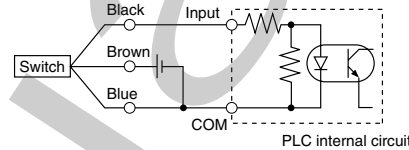
Connect according to the applicable PLC input specifications, as the connection method will vary depending on the PLC input specifications.

2-wire

PLC internal circuit

2-wire

PLC internal circuit
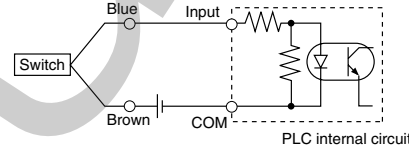
Connection Example for AND (Serial) and OR (Parallel)

• **3-wire**
AND connection for NPN output (using relays)
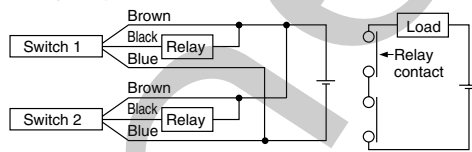
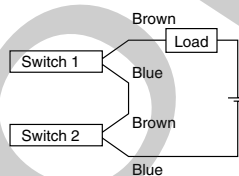**AND connection for NPN output (performed with switches only)**
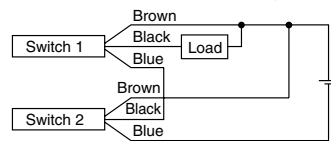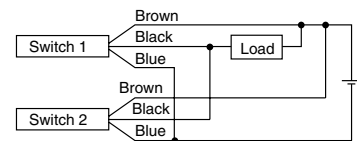
The indicator lights will light up when both switches are turned ON.

OR connection for NPN output

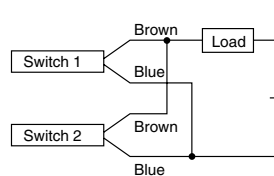**2-wire with 2-switch AND connection**

When two switches are connected in series, a load may malfunction because the load voltage will decline when in the ON state.
The indicator lights will light up if both of the switches are in the ON state.

Load voltage at ON = (Power supply voltage − Internal voltage drop) x 2 pcs.

= 24 V - 4 V x 2 pcs.

= 16 V

Example: Power supply is 24 VDC.
Internal voltage drop in switch is 4 V.

2-wire with 2-switch OR connection

Load voltage at OFF = Leakage current x 2 pcs. x Load impedance

= 1 mA x 2 pcs. x 3 kΩ

= 6 V

Example: Load impedance is 3 kΩ.
Leakage current from switch is 1 mA.

(Solid state)
When two switches are connected in parallel, a malfunction may occur because the load voltage will increase when in the OFF state.

(Reed switch)
Because there is no current leakage, the load voltage will not increase when turned OFF. However, depending on the number of switches in the ON state, the indicator lights may sometimes dim or not light because of the dispersion and reduction of the current flowing to the switches.

POWER AIRE

Reed switch/Direct mounting type
D-A90(V)/D-A93(V)/D-A96(V)

Auto Switch Specifications

For details about certified products conforming to international standards, visit us at www.poweraire.com.

PLC: Abbreviation for Programmable Logic Controller

D-A90/D-A90V (without indicator light)

Auto switch part no.	D-A90/D-A90V		
Applicable load	IC circuit, Relay, PLC		
Load voltage	24 V AC/DC or less	48 V AC/DC or less	100 V AC/DC or less
Maximum load current	50 mA	40 mA	20 mA
Contact protection circuit	None		
Internal resistance	1 Ω or less (including lead wire length of 3 m)		

D-A93/D-A93V/D-A96/D-A96V (with indicator light)

Auto switch part no.	D-A93/D-A93V		D-A96/D-A96V
Applicable load	Relay, PLC		IC circuit
Load voltage	24 VDC	100 VAC	4 to 8 VDC
Load current range and max. load current Note 3)	5 to 40 mA	5 to 20 mA	20 mA
Contact protection circuit	None		
Internal voltage drop	D-A93 — 2.4 V or less (to 20 mA)/3 V or less (to 40 mA) D-A93V — 2.7 V or less		0.8 V or less
Indicator light	Red LED lights when ON		

●Lead wires
D-A90(V)/D-A93(V) — Oilproof vinyl heavy insulation cable: ø2.7, 0.18 mm² x 2 cores (Brown, Blue), 0.5 m
D-A96(V) — Oilproof vinyl heavy insulation cable: ø2.7, 0.15 mm² x 3 cores (Brown, Black, Blue), 0.5 m
Note 1) Refer to page 17 for reed switch common specifications and lead wire length.
Note 2) Refer to page 17 for lead wire lengths.
Note 3) Under a 5 mA condition, the indicating light visibility becomes low and at a 2.5 mA condition, it may be unreadable. However, as long as the contact ouput is over a 1 mA condition, there will be no problem.

Weight Table

Unit: g

Model	D-A90	D-A90V	D-A93	D-A93V	D-A96	D-A96V
Lead wire length: 0.5 m	6	6	6	6	8	8
Lead wire length: 3 m	30	30	30	30	41	41

Unit: mm

Dimensions

D-A90/D-A93/D-A96

D-A90V/D-A93V/D-A96V

( ): dimensions for D-A93.

Grommet
Electrical entry direction: In-line

⚠Caution
Operating Precautions

Fix the switch with the existing screw installed on the switch body. The switch may be damaged if a screw other than the one supplied, is used.
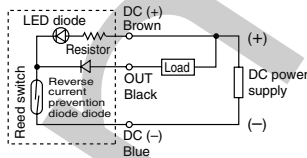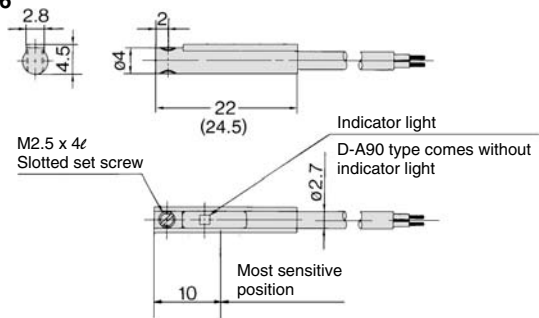
Auto Switch Internal Circuit

D-A90 (V)
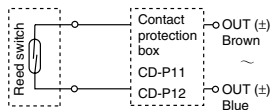
D-A93 (V)
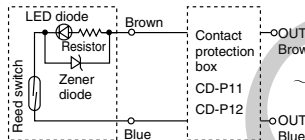
D-A96 (V)

Note) ① In a case where the operation load is an inductive load.
② In a case where the wiring load is greater than 5 m.
③ In a case where the load voltage is 100 VAC.
Please use the auto switch with a contact protection box any of the above mentioned cases. (For details about the contact protection box, refer to page 17.)

Solid State Switch/Direct Mounting Style
D-M9N(V)/D-M9P(V)/D-M9B(V)

Grommet

- **2-wire load current is reduced (2.5 to 40 mA)**
- **Lead-free**
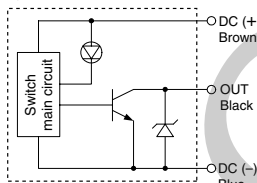- **UL certified (style2844) lead cable is used.**
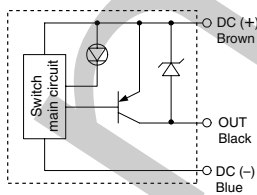
⚠Caution

Operating Precautions

Fix the switch with the existing screw installed on the switch body. The switch may be damaged if a screw other than the one supplied, is used.
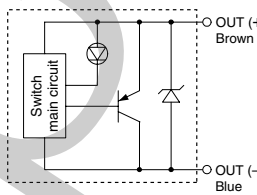
Auto Switch Internal Circuit

D-M9N, D-M9NV

D-M9P, D-M9PV

D-M9B, D-M9BV

Auto Switch Specifications

For details about certified products conforming to international standards, visit us at www.poweraire.com.

PLC: Abbreviation of Programmable Logic Controller

D-M9□, D-M9□V (With indicator light)						
Auto switch part no.	D-M9N	D-M9NV	D-M9P	D-M9PV	D-M9B	D-M9BV
Electrical entry direction	In-line	Perpendicular	In-line	Perpendicular	In-line	Perpendicular
Wiring type	3-wire				2-wire	
Output type	NPN		PNP		—	
Applicable load	IC circuit, Relay, PLC				24 VDC relay, PLC	
Power supply voltage	5, 12, 24 VDC (4.5 to 28 V)				—	
Current consumption	10 mA or less				—	
Load voltage	28 VDC or less		—		24 VDC (10 to 28 VDC)	
Load current	40 mA or less				2.5 to 40 mA	
Internal voltage drop	0.8 V or less				4 V or less	
Leakage current	100 µA or less at 24 VDC				0.8 mA or less	
Indicator light	Red LED lights when ON.					

● Lead wires
Oilproof vinyl heavy insulation cable: ø2.7 x 3.2 ellipse, 0.15 mm²,
D-M9B(V)   0.15 mm² x 2 cores
D-M9N(V), D-M9P(V)   0.15 mm² x 3 cores
Note 1) Refer to page 17 for solid state switch common specifications.
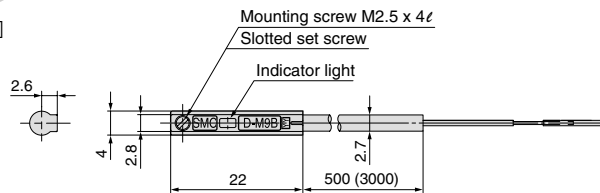Note 2) Refer to page 17 for lead wire lengths.

Weight Table

Unit: g

Auto switch part no.		D-M9N(V)	D-M9P(V)	D-M9B(V)
Lead wire length (m)	0.5	8	8	7
	3	41	41	38
	5	68	68	63

Dimensions

Unit: mm

D-M9□

Mounting screw M2.5 x 4ℓ
Slotted set screw
Indicator light

2.6

4
2.8

22

2.7

500 (3000)

3.2

6
Most sensitive position

22

500 (3000)

D-M9□V

Mounting screw M2.5 x 4ℓ
Slotted set screw
Indicator light

2

8

3.2

4

4.6

2.8

6
Most sensitive position

20

500 (3000) (5000)

2.7

9.5

2.6

POWER AIRE
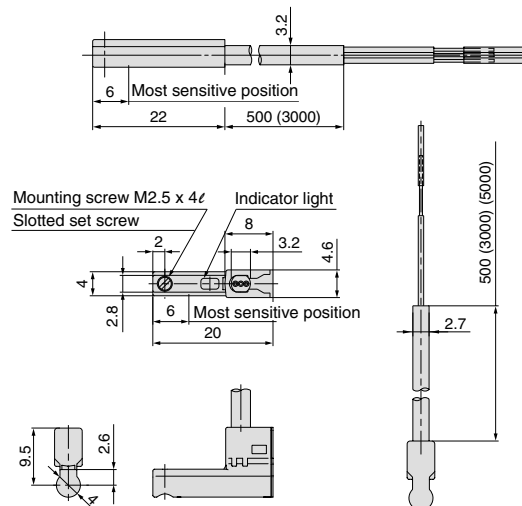
2-color Indication Type, Solid State Switch/Direct Mounting Type
D-F9NW(V)/D-F9PW(V)/D-F9BW(V)

Grommet
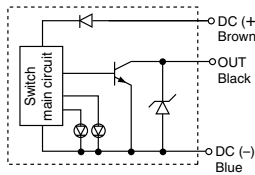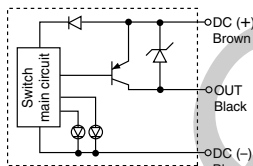
⚠Caution

Operating Precautions

Fix the switch with the existing screw installed on the switch body. The switch may be damaged if a screw other than the one supplied, is used.
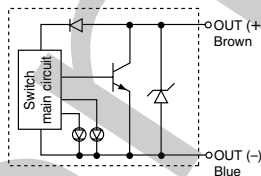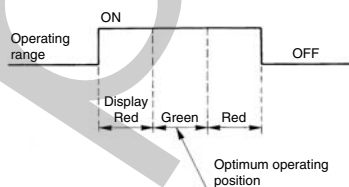
Auto Switch Internal Circuit

D-F9NW/F9NWV

- DC (+) Brown
- OUT Black
- DC (−) Blue

D-F9PW/F9PWV

- DC (+) Brown
- OUT Black
- DC (−) Blue

D-F9BW/F9BWV

- OUT (+) Brown
- OUT (−) Blue

Indicator light/Display method

Auto Switch Specifications

For details about certified products conforming to international standards, visit us at www.poweraire.com.

PLC: Abbreviation for Programmable Logic Controller

D-F9□W/D-F9□WV (with indicator light)

Auto switch part no.	D-F9NW	D-F9NWV	D-F9PW	D-F9PWV	D-F9BW	D-F9BWV
Electrical entry direction	In-line	Perpendicular	In-line	Perpendicular	In-line	Perpendicular
Wiring type	3-wire				2-wire	
Output type	NPN		PNP		—	
Applicable load	IC circuit, Relay, PLC				24 VDC relay, PLC	
Power supply voltage	5, 12, 24 VDC (4.5 to 28 VDC)				—	
Current consumption	10 mA or less				—	
Load voltage	28 VDC or less		—		24 VDC (10 to 28 VDC)	
Load current	40 mA or less		80 mA or less		5 to 40 mA	
Internal voltage drop	1.5 V or less (0.8 V or less at 10 mA load current)		0.8 V or less		4 V or less	
Leakage current	100 µA or less at 24 VDC				0.8 mA or less	
Indicator light	Operating position .... Red LED lights up Optimum operating position .... Green LED lights up					

● Lead wires
Oilproof vinyl heavy insulation cable: ø2.7, 0.15 mm² x 3 cores (Brown, Black Blue), 0.18 mm² x 2 cores (Brown, Blue), 0.5 m
Note 1) Refer to page 17 for reed switch common specifications.
Note 2) Refer to page 17 for lead wire lengths.
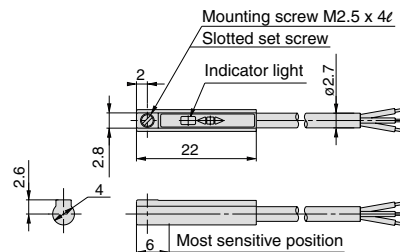
Weight Table

Unit: g

Auto switch part no.		D-F9NW(V)	D-F9PW(V)	D-F9BW(V)
Lead wire length (m)	0.5	7	7	7
	3	34	34	32
	5	56	56	52

Dimensions

Unit: mm

D-F9□W

Mounting screw M2.5 x 4ℓ
Slotted set screw
Indicator light
Most sensitive position

D-F9□WV

Mounting screw M2.5 x 4ℓ
Slotted set screw
Indicator light
Most sensitive position

21
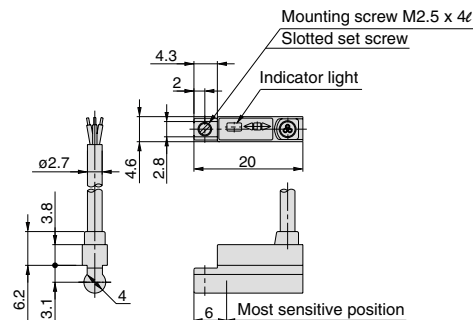
Series E-MY2
Made to Order Specifications
Please contact P/A for detailed dimensions, specifications, and lead times.

Order made application list
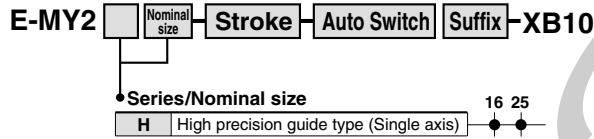
		Intermediate stroke XB10	Long stroke XB11	Helical insert threads X168
E-MY2C	Cam follower guide type	Can be adjusted on a regular basis	Can be adjusted on a regular basis	●
E-MY2H	High precision guide type (Single axis)	●	●	●

1 Intermediate stroke -XB10

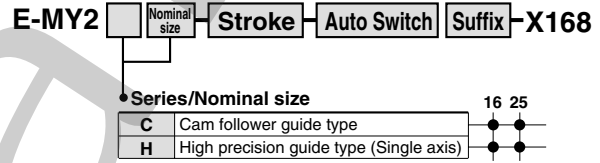Within the standard stroke range, the stroke length in the middle range can be adjusted by 1 mm increments.

■ Stroke range: 51 to 599 mm

E-MY2 [ ] [Nominal size] – Stroke – Auto Switch – Suffix –XB10

● Series/Nominal size

		16	25
H	High precision guide type (Single axis)	●	●

Example) E-MY2H25-599TAN-M9B-XB10

2 Long stroke -XB11

Available with long strokes exceeding the standard stroke range. The stroke length can be adjusted by 1 mm increments.

■ Stroke range: 601 to 1000 mm

E-MY2 [ ] [Nominal size] – Stroke – Auto Switch – Suffix –XB11

● Series/Nominal size

		16	25
H	High precision guide type (Single axis)	●	●

Example) E-MY2H25-999TAN-M9B-XB11

3 Helical insert thread specifications -X168

The mounting threads of the slider are changed to helical insert threads. The thread size is standard size.
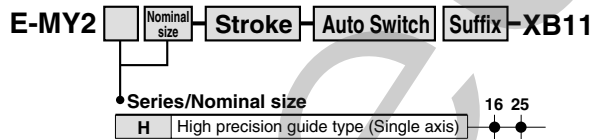
E-MY2 [ ] [Nominal size] – Stroke – Auto Switch – Suffix –X168

● Series/Nominal size

		16	25
C	Cam follower guide type	●	●
H	High precision guide type (Single axis)	●	●

Example) E-MY2H25-300TAN-M9B-X168