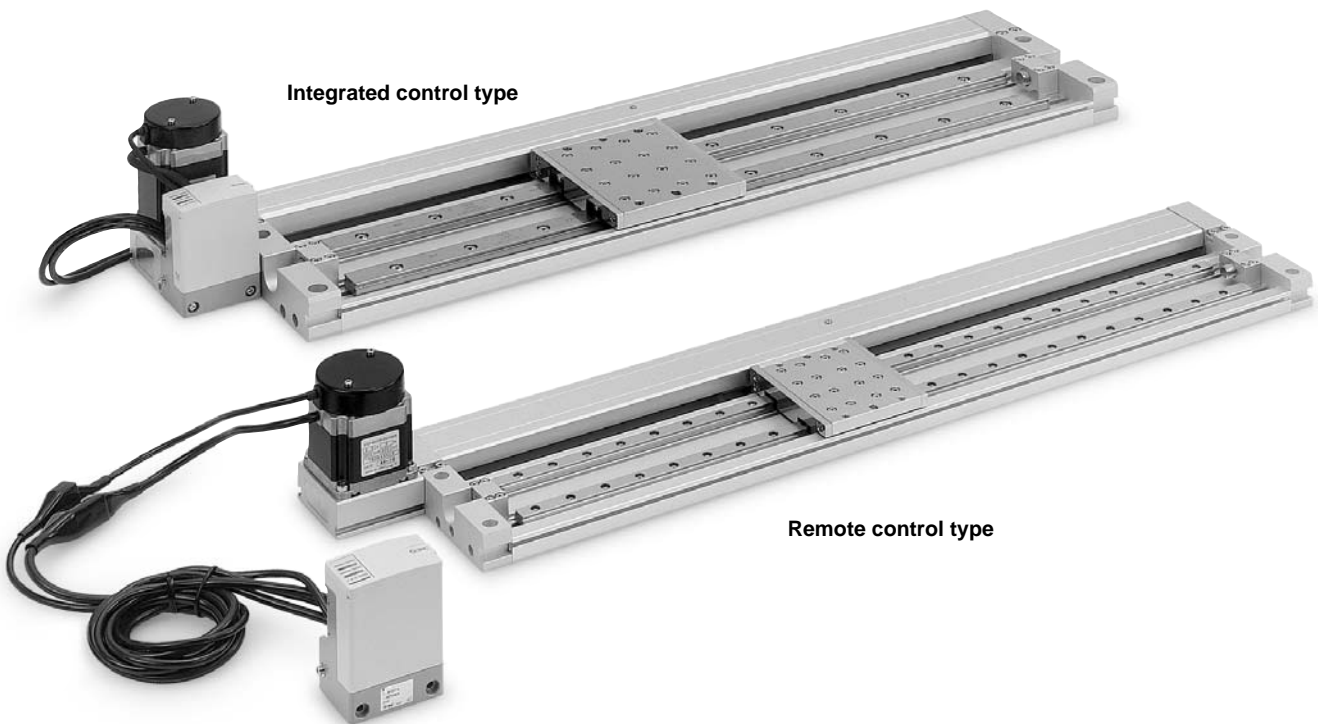
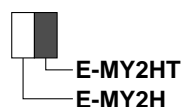
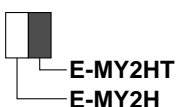
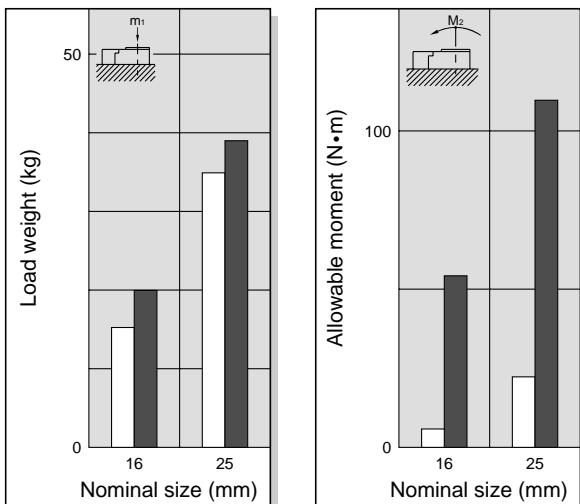


## e-Rodless Actuator High Precision Guide Type / Double Axis Series E-MY2HT

A double axis type is now available with the high precision guide type!



### 4 Times Resistance to Moment (Compared with E-MY2H)



### Variation

Model	Nominal size (mm)	Positioning points		Controller type		Stroke (mm)
		3-point stoppable	5-point stoppable	Integrated control	Remote control	
E-MY2C Cam follower guide	16	●	●	●	●	50 to 1000 (Available in 1 mm increments.)
	25	●	●	●	●	
E-MY2H High precision guide (Single axis)	16	●	●	●	●	
	25	●	●	●	●	
<b>New</b> E-MY2HT High precision guide (Double axis)	16	○	○	○	○	
	25	○	○	○	○	

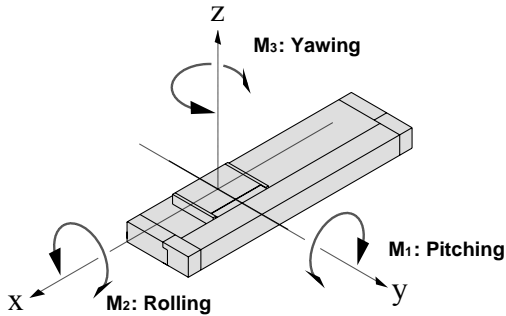
# Series E-MY2HT Model Selection 1

The following steps are for selecting the best-suited E-MY2HT series for your application.

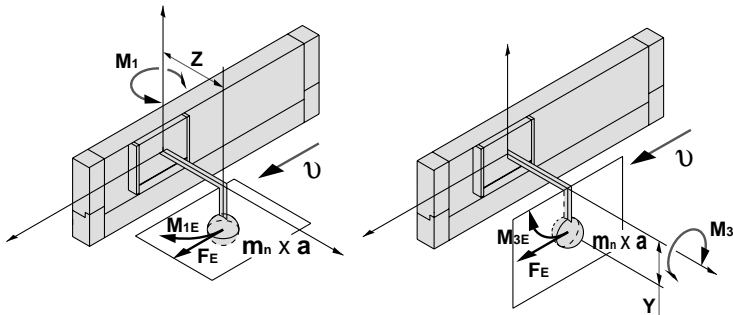
## Types of Moments Applied to Rodless Cylinders

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

### Coordinates and moments



### Dynamic moment



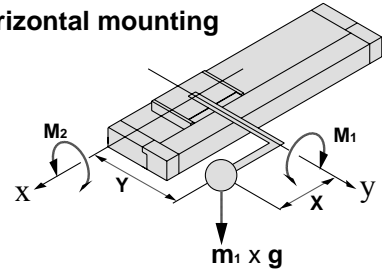
**a:** Set acceleration, **v:** Set speed

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

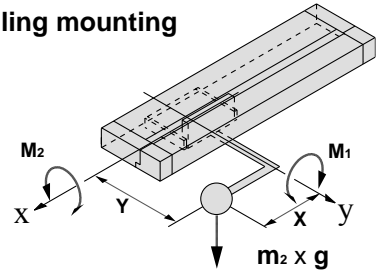
Note) Regardless of the mounting orientation, dynamic moment is calculated with the formulas above.

### Static moment

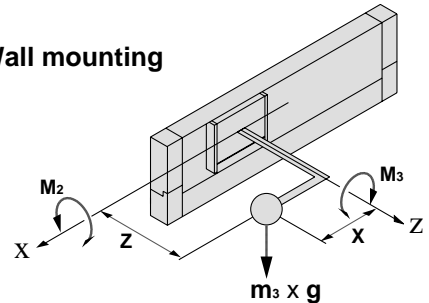
#### Horizontal mounting



#### Ceiling mounting



#### Wall mounting



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

**g:** Gravitational acceleration ( $9.8 \text{ m/s}^2$ )

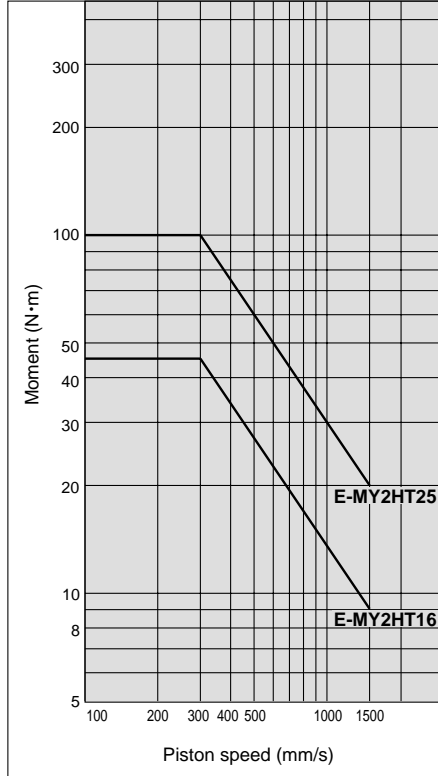


# Series E-MY2HT

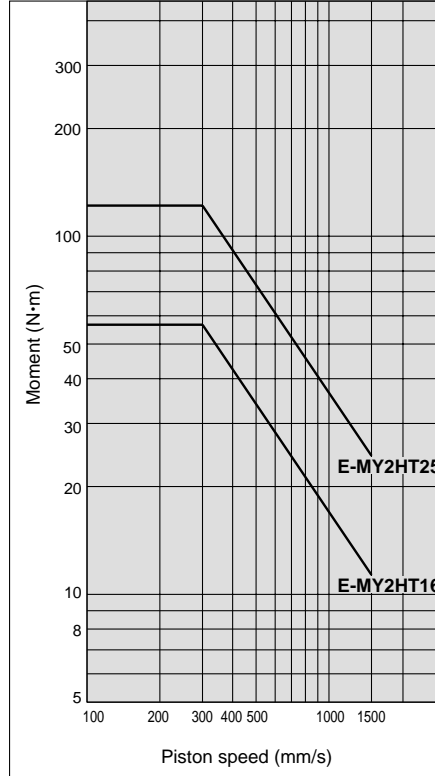
## Maximum Allowable Moment / Maximum Load Weight

### Moment / E-MY2HT (Double axis)

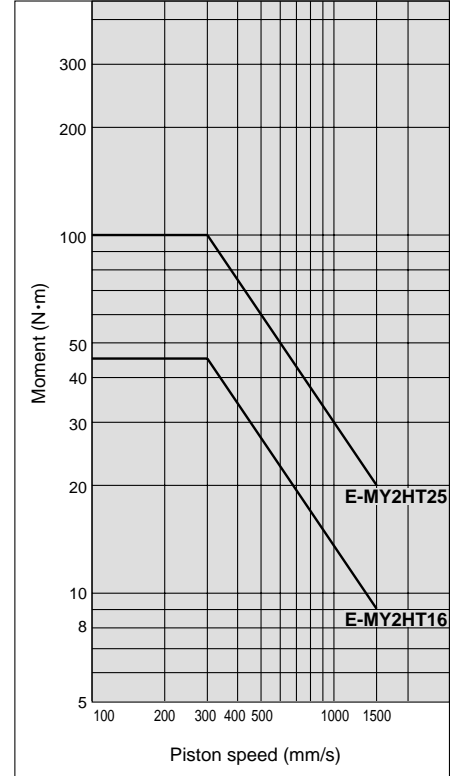
E-MY2HT/M1



E-MY2HT/M2

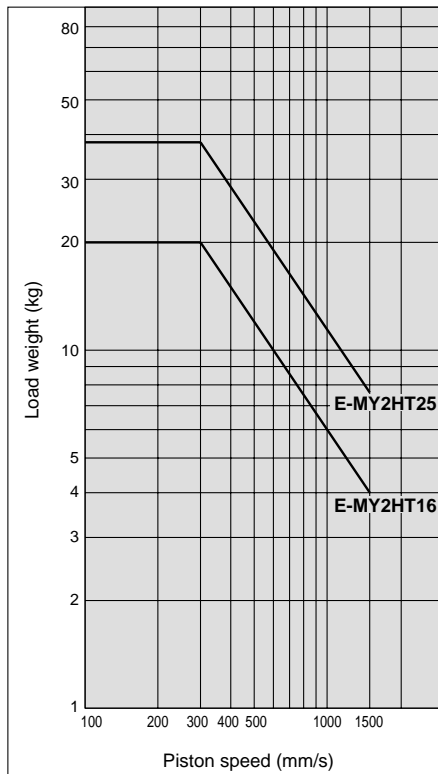


E-MY2HT/M3

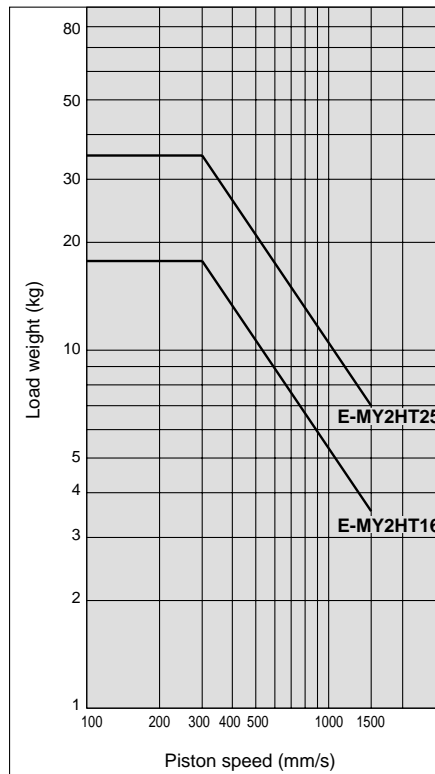


### Load Weight / E-MY2HT (Double axis)

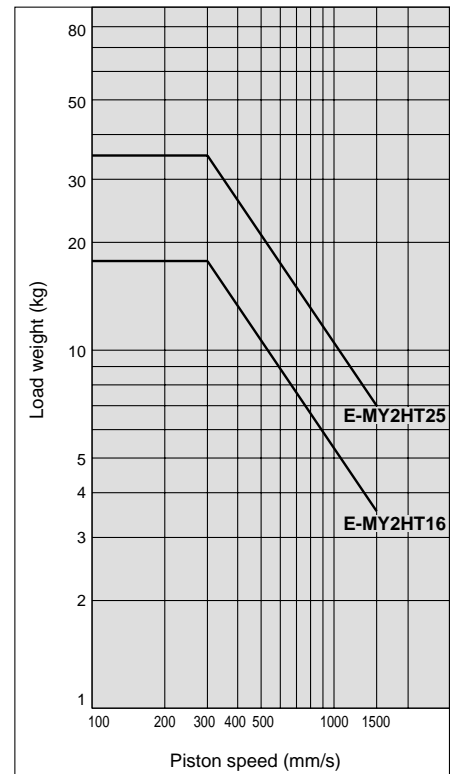
E-MY2HT/m1



E-MY2HT/m2



E-MY2HT/m3



# e-Rodless Actuator

# Series E-MY2HT

High Precision Guide Type (Double Axis) / Nominal Size: 16, 25

## How to Order

**Integrated control type**  
E-MY2HT

**Remote control type**  
E-MY2HT

**16** — **100** **TA** **N** **M** — **M9B**

Refer to "Standard Strokes" table.

**CE compliant**

Nil	—
Q	CE marked

\* No need to add a suffix for the integrated control type. It is provided with a CE compliant product.  
\* Noise filter is provided but not attached for the "Q" spec.

**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 provided but not mounted at the time of shipment.

**Nominal size**

16
25

**Stroke**

Refer to "Standard Strokes" table.

**Motor placement**

TA	On the top, Standard
DA	On the bottom, Standard
TB	On the top, Symmetric
DB	On the bottom, Symmetric

**Output type**

N	NPN
P	PNP

**Number of stoppable points for positioning**

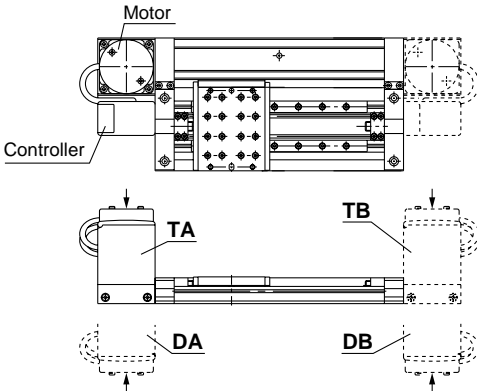
Nil	3-point stoppable type
A	5-point stoppable type

**Cable length**

M	1 m
L	3 m
Z	5 m

\* The remote control type can be selected by adding the above symbols.

\* The arrow marks show the handling side on the controller.



### Standard Strokes

Nominal size	Standard stroke (mm)	Made to Order
		Long stroke (-XB11)
		Stroke range (mm)
16, 25	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600	601 to 1000

\* Strokes are manufacturable in increments of 1 mm, up to 1000 strokes.  
However, when a stroke out of the standard 51 to 599 is required, add "-XB10" at the end of the model number.  
When a stroke exceeds 600 mm, add "-XB11" at the end of model number.

### Applicable Auto Switches / For detailed auto switch specifications, refer to CAT.ES100-51C "e-Rodless Actuator".

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage			Auto switch model		Lead wire length (m) *			Pre-wired connector	Applicable load	
					DC	AC	Electrical entry direction		0.5 (Nil)	3 (L)	5 (Z)	IC circuit		—	
							Perpendicular	In-line							
Reed switch	—	Grommet	Yes	3-wire (NPN equiv.)	—	5 V	—	A96V	A96	●	●	—	—	—	—
				2-wire	24 V	12 V	100 V	A93V	A93	●	●	—	—	—	—
					5 V, 12 V	100 V or less	A90V	A90	●	●	—	—	—	—	—
Solid state switch	Diagnostic indication (2-color display)	Grommet	Yes	3-wire (NPN)	24 V	5 V	—	M9NV	M9N	●	●	○	○	—	Relay PLC
				3-wire (PNP)				M9PV	M9P	●	●	○	○		
				2-wire				M9BV	M9B	●	●	○	○	—	
				3-wire (NPN)				F9NWV	F9NW	●	●	○	○	—	
				3-wire (PNP)				F9PWV	F9PW	●	●	○	○	—	
				2-wire				F9BWV	F9BW	●	●	○	○	—	

\* Lead wire length symbols: 0.5 m Nil (Example) M9N  
3 m L M9NL  
5 m Z M9NZ

\* Solid state switches marked "○" are produced upon receipt of order.

# Series E-MY2HT



**Made to Order**  
(For details, refer to CAT.ES100-51C  
"e-Rodless Actuator".)

Symbol	Specifications
-XB10	Intermediate stroke
-XB11	Long stroke
-X168	Helical insert thread specifications

## Weight

### Actuator Unit Unit: kg

Nominal size	Basic weight	50 mm stroke per additional weight
16	2.30	0.21
25	4.59	0.38

### Remote Controller Unit Unit: kg

Controller body	Cable length		
	1 m	3 m	5 m
0.24	0.09	0.24	0.39

How to calculate/Example: E-MY2H25-300TANM

#### Actuator unit

Basic weight ..... 3.37 kg  
 Additional weight ..... 0.23/50 st  
 Actuator stroke ..... 300 st  
 $3.37 + 0.23 \times 300 \div 50 = 4.75$  kg

#### Remote controller unit

Controller body ..... 0.24 kg  
 Cable length (3 m) ..... 0.24 kg  
 $0.24 + 0.24 = 0.48$  kg

\* For the integrated control type, add 0.24 kg (controller body) to the basic weight.

## Replacement Parts

### Drive Unit Replacement Part No.

Nominal size	Model	
	E-MY2HT	
16	E-MY2BH16-	Stroke *
25	E-MY2BH25-	Stroke *

\* Specify the motor position and output style in \* parts.  
 For the remote control type, enter the symbol for cable length.  
 Example) E-MY2BH16-300TAN

### Option: Remote Controller Mounting Bracket

Description	Part no.
L-bracket	MYE-LB
DIN rail bracket	MYE-DB

## Basic Specifications

Model		E-MY2HT	
Nominal size		16	25
Maximum load weight <sup>Note)</sup>		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 <sup>2</sup> (By selection. Please refer to the table below.)	
Acceleration and deceleration method		Trapezoidal drive	
Moving direction		Horizontal direction	
Positioning points	3-point stoppable type	Both ends (mechanical stoppers), 1 intermediate position	
	5-point stoppable type	Both ends (mechanical stoppers), 3 intermediate positions	
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	Power supply voltage	24 VDC ± 10%
	Current consumption	Rated current 2.5 A (Max. 5 A: 2 s or less) at 24 VDC
Current consumption	Power supply voltage	24 VDC ± 10%
	Current consumption	30 mA at 24 VDC and Output load capacity
Input signal capacity		6 mA or less at 24 VDC/1 circuit (Photo coupler input)
Output signal capacity		30 VDC or less, 20 mA or less/1 circuit (Open drain output)
Emergency detection items		Emergency stop, Output deviation, Power supply deviation, Driving deviation, Temperature deviation, Stroke deviation, Motor deviation, Controller deviation

## Environmental Specifications

Operating temperature range	Integrated controller type		5 to 40°C
	Remote control type	Actuator unit	5 to 50°C
		Remote controller unit	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 all of external terminals and the case: 50 MΩ (500 VDC)	
Noise resistance		1000 Vp-p Pulse width 1 μs, Rise time 1 ns	
CE marking	Integrated control type		Standard
	Remote control type		Available for suffix -Q only (Option)

## 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).

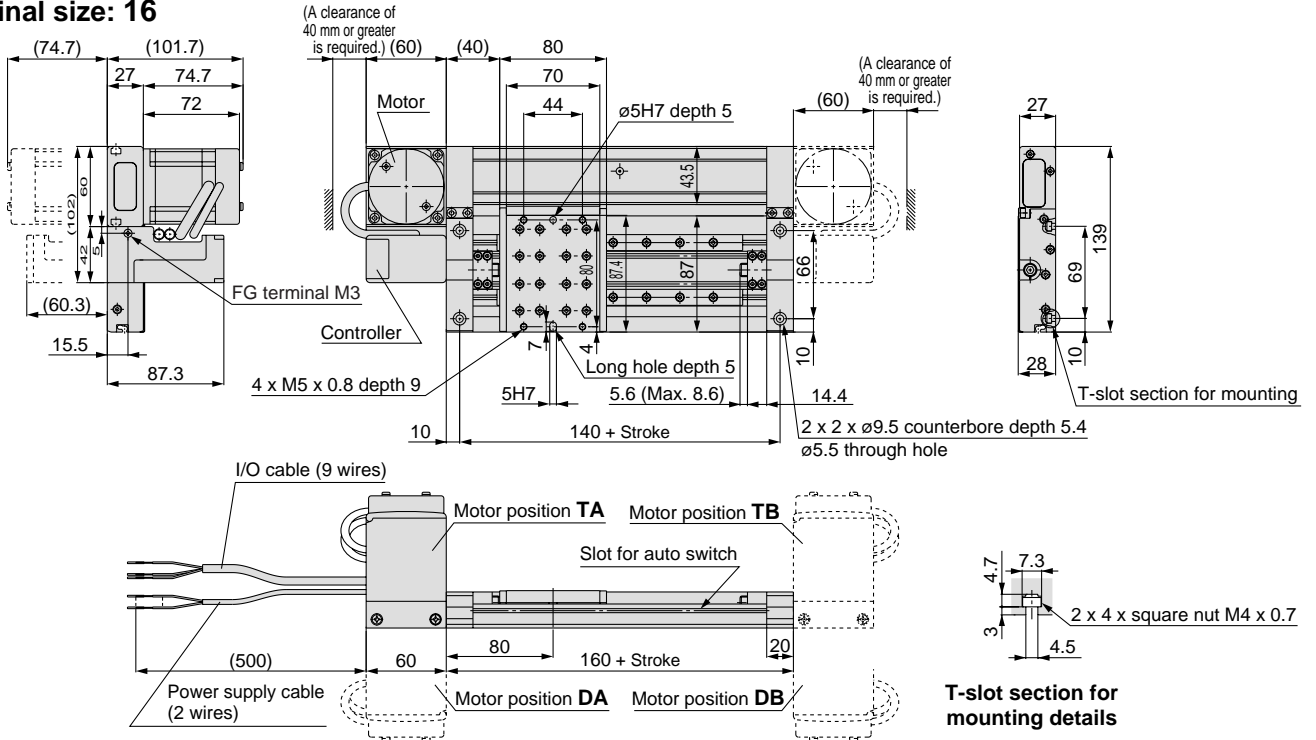
Acceleration setting switch no.	Acceleration [m/s <sup>2</sup> ]
1	0.49
2	0.74
3	0.98
4	1.23
5	1.47
6	1.96
7	2.45
8	2.94
9	3.92
10	4.90

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

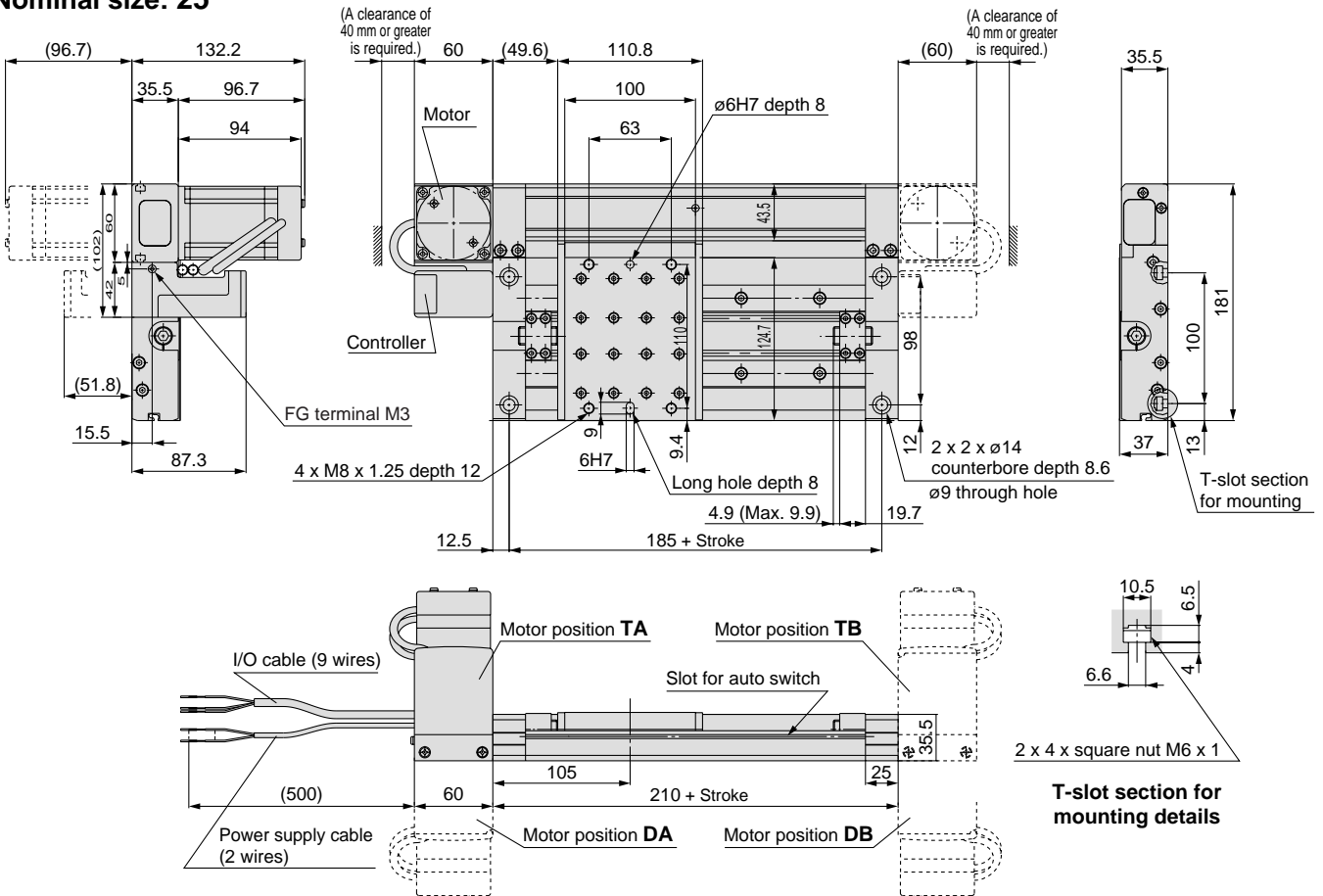
## Dimensions: Integrated Control Type

**E-MY2HT** Nominal size — Stroke

**Nominal size: 16**



**Nominal size: 25**



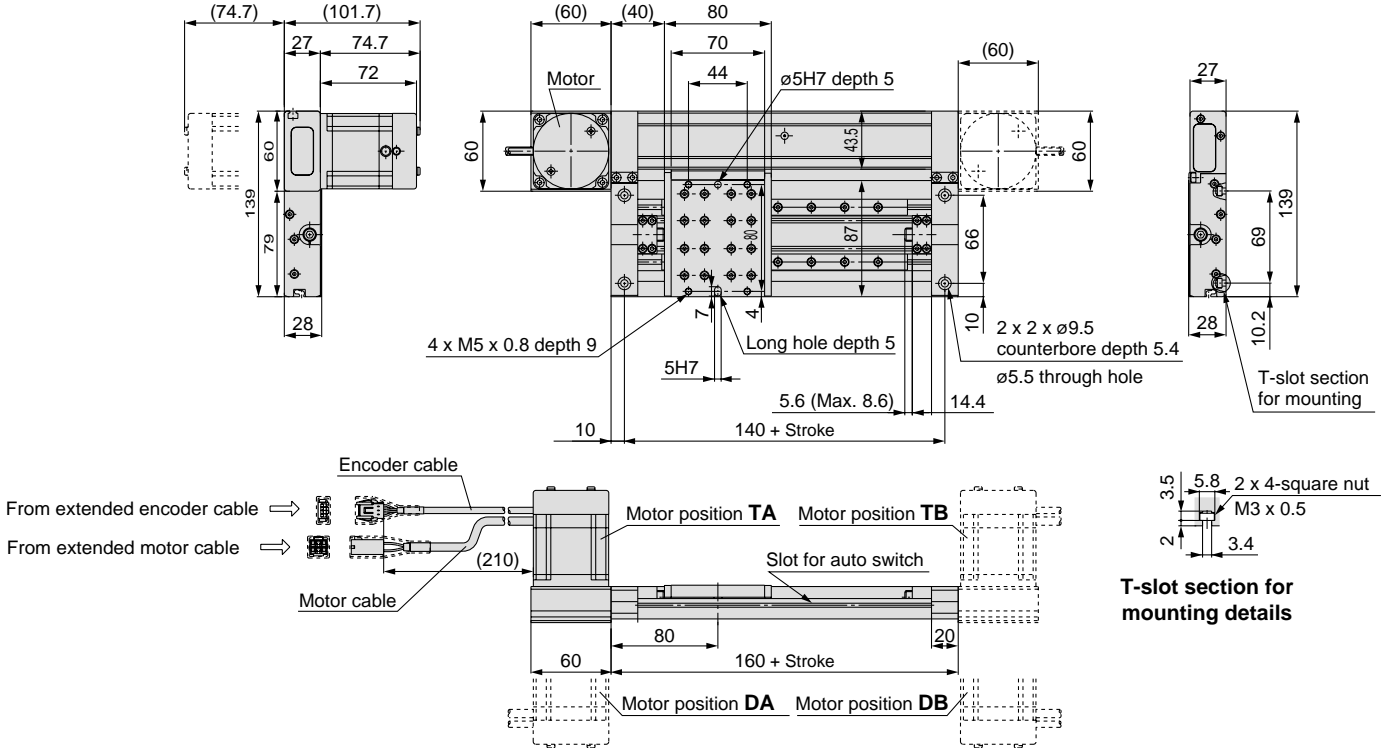
Note) For the 3-point stoppable type, the I/O cable is a 9-core type and for the 5-point stoppable type, a 11-core type is used.

# Series E-MY2HT

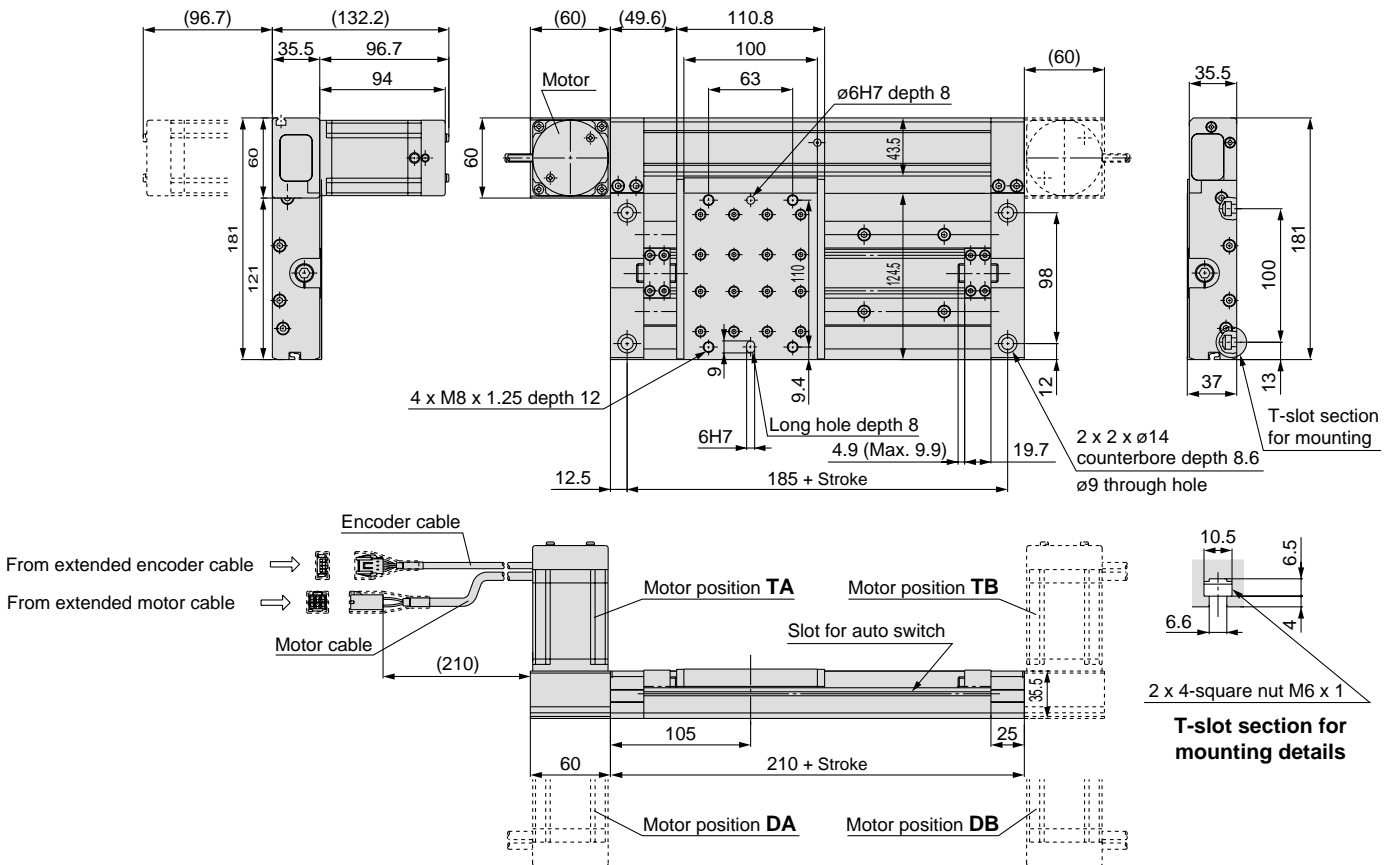
## Dimensions: Remote Control Type (Actuator unit)

E-MY2HT Nominal size Stroke M L Z \* Refer to page 9 for dimensions of a remote controller.

Nominal size: 16



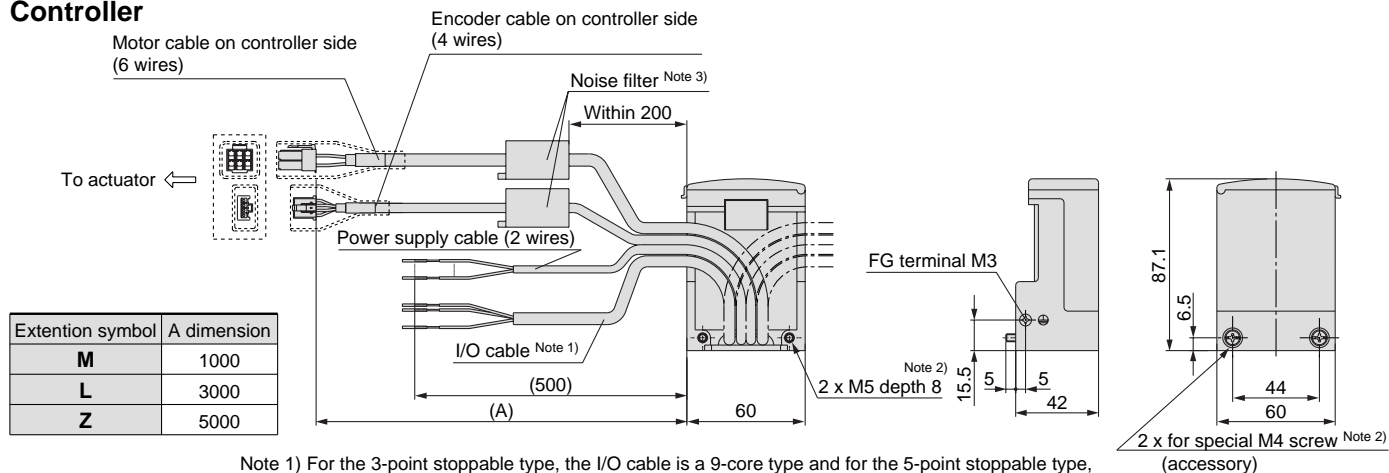
Nominal size: 25



Note) When the CE compliant model is selected, a noise filter is provided but not attached. The cable for the CE compliant models uses the dedicated shielding. Even if a noise filter is attached to a non CE marked products, the products cannot be changed to a CE compliant product.

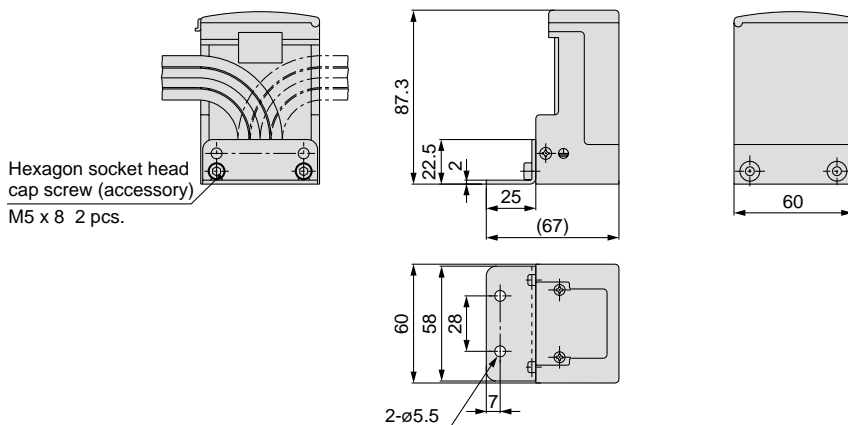
## Dimensions: Remote Control Type (Remote controller unit)

### Controller

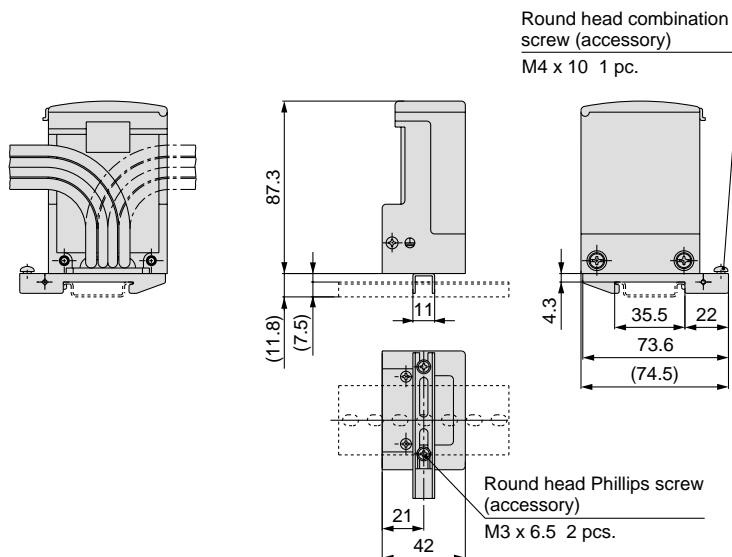


- Note 1) For the 3-point stoppable type, the I/O cable is a 9-core type and for the 5-point stoppable type, a 11-core type is used.
- Note 2) When mounting the remote controller, use the included M4 screw or use the M5 tap.
- Note 3) When the CE compliant model is selected, a noise filter is provided but not attached. The cable for the CE compliant models uses the dedicated shielding. Even if a noise filter is attached to a non CE marked product, the product cannot be changed to a CE compliant product.

### L-bracket/MYE-LB (Option)



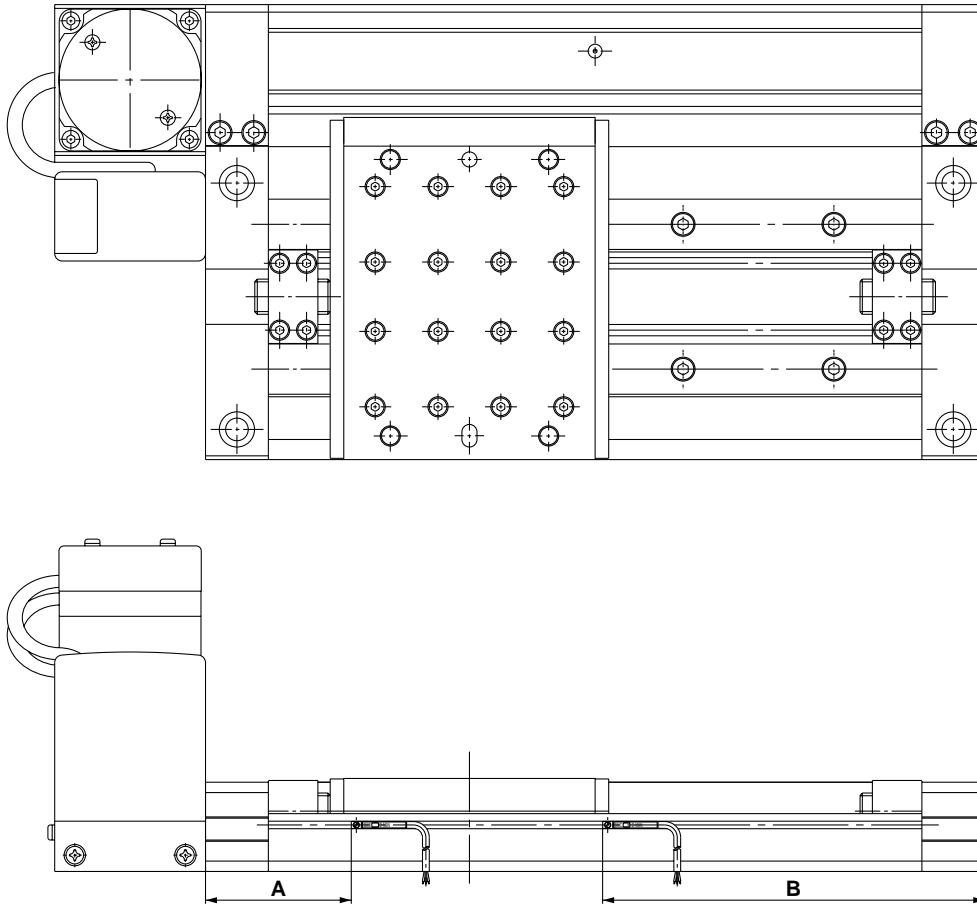
### DIN rail bracket/MYE-DB (Option)



# Series E-MY2HT

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

## 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	



