Mechanically Jointed Rodless Cylinder Linear Guide Type MY1H Series ø25, ø32, ø40 RoHS

How to Order



Strokes are manufacturable in 1 mm increments, up to the maximum stroke. However, add "-XB10" to the end of the part number for non-standard strokes from 51 to 599. Also when exceeding a 600 mm stroke, specify "-XB11" at the end of the part number. (Except ø10)

 Stroke adjustment unit symbol For stroke adjustment unit, refer to page 1209. Intermediate fixing spacer is not available for

> Applicable load IC circuit

IC circuit Relay, PLĆ

IC circuit

IC circuit

Relay,

PLC

end lock mounting side.

| App | licable Auto Sw | vitches/F | Refe | er to pages 157 | 5 to 1701 | for furthe | r informat | ion on auto sv | witches. | | | | | | |
|------|------------------------|--------------|-----------|-----------------|----------------------------------|-------------|------------|-------------------|----------|---------------------|------------------------|----------|----------|-------------|---------|
| | | Electrical | ight | Mining a | | oad voltage | | Auto switch model | | Lead wire length (m | | | | (m) | Den mir |
| Туре | Special function | entry | Indicator | (Output) | D | oc | AC | Perpendicular | In-line | 0.5 (Nil) | 1 (M) | 3 (L) | 5 (Z) | None (N) | connec |
| £ | | | | 3-wire (NPN) | | 5 V 10 V | | M9NV | M9N | • | • | • | 0 | 0 | 0 |
| Ę | | | | 3-wire (PNP) | ire (PNP) 2-wire ire (NPN) | 5 V, 12 V | | M9PV | M9P | | • | • | 0 | 0 | 0 |
| SW | | | | 2-wire | | 12 V | | M9BV | M9B | • | • | • | 0 | 0 | 0 |
| 욕 | Discussed in discriber | on Grommet Y | | 3-wire (NPN) | | 5 V, 12 V | M9NWV | M9NW | • | • | • | 0 | 0 | 0 | |
| a | Diagnostic Indication | | Yes | 3-wire (PNP) | 24 V | | — | M9PWV | M9PW | | • | • | 0 | 0 | 0 |
| ate | (2-color indicator) | | | 2-wire | 1 | 12 V | | M9BWV | M9BW | • | • | • | 0 | 0 | 0 |
| 1st | | | | 3-wire (NPN) | | 5 V 10 V | | M9NAV*1 | M9NA*1 | 0 | $\left \circ \right $ | • | 0 | - | 0 |
| ë | (2-color indicator) | | | 3-wire (PNP) | | 5 V, 12 V | | M9PAV*1 | M9PA*1 | 0 | $\left[\circ \right]$ | | 0 | - | 0 |
| _ | | | | | | | | | | | _ | | _ | | |

uto 2-wire 24 V 12 V A90V A90 IC circuit No 100 V or less . ٠ *1 Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance.

12 V

5 V

M9BAV*1

A96V

A93V*2

Please consult with SMC regarding water resistant types with the above model numbers.

*2 1 m type lead wire is only applicable to D-A93.

(2-color indicator)

* Lead wire length symbols: 0.5 m Nil (Example) M9NW

Grommet

* Solid state auto switches marked with "O" are produced upon receipt of order.

M9BA*

A96

A93

- ... M (Example) M9NWM 1 m (Example) M9NWL 3 m ---- L
- (Example) M9NWZ 5 m --. 7

* Mounting bracket (BMY3-016) is separately required to retrofit the above auto switches.

2-wire

3-wire

Yes (NPN equivalent)

* There are other applicable auto switches other than listed above. For details, refer to page 1220.

- * For details about auto switches with pre-wired connector, refer to pages 1648 and 1649.
- * Auto switches are shipped together, (but not assembled). (For details about auto switch mounting, refer to page 1220.)

Sol

Reed to switch



100 V

Mechanically Jointed Rodless Cylinder Linear Guide Type **MY1H Series** -55

Specifications

| Bor | e size (mm) | 25 | 32 | 40 | | | |
|------------------------|----------------------|----------------|---------------|----|--|--|--|
| Fluid | | 1 | Air | | | | |
| Action | | | Double acting | | | | |
| Operating | pressure range | 0.1 to 0.8 MPa | | | | | |
| Proof pres | ssure | | 1.2 MPa | | | | |
| Ambient ar | nd fluid temperature | 5 to 60°C | | | | | |
| Cushion | | Air cushion | | | | | |
| Lubricatio | on 💦 | Non-lube | | | | | |
| Stroke len | igth tolerance | +1.8 | | | | | |
| Piping Front/Side port | | Rc1/8 Rc1/4 | | | | | |
| port size | Bottom port | ø | ø8 | | | | |

| 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1 | With er Lock Specifications | nd lock | | Symbol Air cushion |
|--|-----------------------------------|------------|-----------------|-----------------------|
| | Bore size (mm) | 25 | 32 | 40 |
| | Lock position | One end | (Selectable), E | Both ends |
| | Holding force (Max.) (N) | 270 | 450 | 700 |
| | Fine stroke adjustment range (mm) | 0 to -11 5 | 0 to _12 | 0 to _16 |

| Order | Made to Order: Individual Specifications (For details, refer to page 1221.) |
|--------|--|
| Symbol | Specifications |

-X168 Helical insert thread

Made to Order

Click here for details

| Symbol | Specifications | | | | | | |
|--------|--|--|--|--|--|--|--|
| -XB10 | Intermediate stroke (Using exclusive body) | | | | | | |
| -XB11 | Long stroke | | | | | | |
| -XB22 | Shock absorber/soft type RJ series mounted | | | | | | |
| -XC56 | With knock pin holes | | | | | | |

.

| Stroke adju | ustment Unit S | pecificati | ons | | | | | | | |
|---------------------------------------|-------------------|----------------------------|---|---|----------------------------|---|---|----------------------------|-----------------------------------|-----------------------------------|
| Bore size (mm) | | 25 | | | 32 | | | 40 | | |
| Unit symbol | | Α | | н | Α | L | Н | Α | L | H |
| Configuration Shock absorber model | | With adjustment bolt | RB1007 + with adjustment bolt | RB1412 + with adjustment bolt | With adjustment bolt | RB1412 + with adjustment bolt | RB2015 + with adjustment bolt | With adjustment bolt | RB1412 + adjustment bolt | RB2015 + adjustment bolt |
| Stroke adjust- | Without spacer | 0 to -11.5 | | | 0 to -12 | | | 0 to -16 | | |
| intermediate | With short spacer | -11.5 to -23 | | | -12 to -24 | | | -16 to -32 | | |
| (mm) | With long spacer | | -23 to -34.5 | | -24 to -36 | | | -32 to -48 | | |

SMC

* Stroke adjustment range is applicable for one side when mounted on a cylinder.

Stroke Adjustment Unit Symbol

| | | | | Right side stroke adjustment unit | | | | | | | | | |
|----------|----------------------------------|---------------------|---------|-----------------------------------|-------------------|------------------|--|----------------------|---|-----|-------------------|------------------|---|
| | | Without | A: With | | adjustment bolt | | L: With low load shock absorber + adjustment bolt | | H: With high load shock absorb + adjustment bolt | | k absorber | | |
| | | | unit | | With short spacer | With long spacer | | With short spacer | With long spacer | | With short spacer | With long spacer | 1 |
| ŧ | Wit | hout unit | Nil | SA | SA6 | SA7 | SL | SL6 | SL7 | SH | SH6 | SH7 | |
| E I | A: With a | djustment bolt | AS | Α | AA6 | AA7 | AL | AL6 | AL7 | AH | AH6 | AH7 | |
| ner | | With short spacer | A6S | A6A | A6 | A6A7 | A6L | A6L6 | A6L7 | A6H | A6H6 | A6H7 | P |
| ustr | | With long spacer | A7S | A7A | A7A6 | A7 | A7L | A7L6 | A7L7 | A7H | A7H6 | A7H7 | 1 |
| adj | L: With low lo | ad shock absorber + | LS | LA | LA6 | LA7 | L | LL6 | LL7 | LH | LH6 | LH7 | |
| ş | adjustment | With short spacer | L6S | L6A | L6A6 | L6A7 | L6L | L6 | L6L7 | L6H | L6H6 | L6H7 | |
| stu | DOIL | With long spacer | L7S | L7A | L7A6 | L7A7 | L7L | L7L6 | L7 | L7H | L7H6 | L7H7 | |
| de l | H: With high load shock absorber | | HS | HA | HA6 | HA7 | HL | HL6 | HL7 | Η | HH6 | HH7 | |
| Left sid | adjustment | With short spacer | H6S | H6A | H6A6 | H6A7 | H6L | H6L6 | H6L7 | H6H | H6 | H6H7 | |
| | bolt | With long spacer | H7S | H7A | H7A6 | H7A7 | H7L | H7L6 | H7L7 | H7H | H7H6 | H7 | |

* Intermediate fixing spacer is not available for end lock mounting side.

* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

Shock Absorber Model for L and H Units

| Tura | Stroke | Bore size (mm) | | | | |
|----------------------------|-----------------|----------------|------|------|--|--|
| Туре | adjustment unit | 25 | 32 | 40 | | |
| Standard | L | RB1007 | RB1 | 412 | | |
| (Shock absorber/RB series) | н | RB1412 | RB2 | 2015 | | |
| Shock absorber/soft type | L | RJ1007H | RJ14 | 412H | | |
| RJ series mounted (-XB22) | н | RJ1412H | _ | - | | |

* The shock absorber service life is different from that of the MY1H cylinder depending on operating conditions. Refer to the RB/RJ series Specific Product Precautions for the replacement period

* Shock absorber/soft type RJ series mounted (-XB22) is made to order. For details, refer to page 1752.

Piston Speed

Ν

| 0 | | 23 10 40 | | | | | | |
|--|-------------------|--------------------------|--|--|--|--|--|--|
| Without stroke a | djustment unit | 100 to 1000 mm/s | | | | | | |
| Stroke | A unit | 100 to 1000 mm/s Note 1) | | | | | | |
| adjustment unit | L unit and H unit | 100 to 1500 mm/s Note 2) | | | | | | |
| ote 1) Be aware that when the stroke adjustment range is increased with the adjustment bolt, | | | | | | | | |
| the air cushion capacity decreases. Also, when exceeding the air cushion stroke ranges | | | | | | | | |
| on page 1211, the piston speed should be 100 to 200 mm/s. | | | | | | | | |

Note 2) The piston speed is 100 to 1000 mm/s for centralized piping.

Backlash

Manual release

Note 3) Use at a speed within the absorption capacity range. Refer to page 1211.

Stroke adjustment unit mounting diagram

1 mm or less

Possible (Non-lock type)

25 to 40

H/HT МҮЗА MY3B

MY1B

MY1H

MY1B

MY1M

MY1C MY1H MY1

MY3M



xample of L6L7 attachment



Shock Absorber Specifications

| Мо | del | RB 1007 | RB 1412 | RB 2015 |
|---------------------|-------------------|------------|------------|------------|
| Max. absorbe | ed energy (J) | 5.9 | 19.6 | 58.8 |
| Stroke abso | 7 | 12 | 15 | |
| Max. collision | 1500 | 1500 | 1500 | |
| Max. operating freq | uency (cycle/min) | 70 | 45 | 25 |
| Spring | Extended | 4.22 | 6.86 | 8.34 |
| force (N) | Retracted | 6.86 | 15.98 | 20.50 |
| Operating temper | rature range (°C) | 5 to 60 | | |
| | | | | |

*The shock absorber service life is different from that of the MY1H cylinder depending on operating conditions. Refer to the RB series Specific Product Precautions for the replacement period.

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Technical

Data