

Mechanically Jointed Rodless Cylinder/Basic Type

MY3A/3B Series

∅16, ∅20, ∅25, ∅32, ∅40, ∅50, ∅63

How to Order

Basic MY3 **B** **16** - **300** - **M9BW** -

Type

A	Short type (Rubber bumper)
B	Standard type (Air cushion)

Cylinder bore size

16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm

Port thread type

Symbol	Type	Bore size
Nil	M5	∅16, ∅20
	Rc	∅25, ∅32, ∅40 ∅50, ∅63
TN	NPT	
TF	G	

Cylinder stroke (mm)

Bore size	Standard stroke*1	Long stroke	Maximum manufacturable stroke
16, 20, 25 32, 40, 50 63	100, 200, 300, 400, 500, 600 700, 800, 900, 1000, 1200, 1400, 1600, 1800, 2000 *1 The stroke can be manufactured in 1 mm increments from 1 mm stroke.	Strokes of 2001 to 3000 mm (1 mm increments) exceeding the standard stroke	3000

Made to Order
Refer to page 1425 for details.

Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

Auto switch

Nil	Without auto switch (Built-in magnet)
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* Refer to the table below for auto switch model numbers.

Stroke adjustment unit symbol
Refer to "Stroke adjustment unit" on page 1425.
* Stroke adjustment unit is not available for MY3A.

Ordering example

* Long stroke can be ordered the same as the standard stroke. MY3A20-3000L-M9BW

Note) Please be advised that with stroke 49 or less, there are cases where auto switch mounting is not possible and the performance of the air cushion may decline.

Applicable Auto Switches/Refer to pages 1575 to 1701 for further information on auto switches.

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	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)	5 (Z)		Relay, PLC	IC circuit				
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9NV	M9N	●	●	●	○			○	IC circuit	Relay, PLC	
				3-wire (PNP)				M9PV	M9P	●	●	●	○						
				2-wire				M9BV	M9B	●	●	●	○						
	Diagnostic indication (2-color indicator)			3-wire (NPN)	5 V, 12 V	M9NWV	M9NW	●	●	●	○	○	○						
				3-wire (PNP)		M9PWV	M9PW	●	●	●	○	○							
				2-wire		M9BWV	M9BW	●	●	●	○	○							
	Water resistant (2-color indicator)			3-wire (NPN)	5 V, 12 V	M9NAV *1	M9NA *1	○	○	●	○	○	○						
				3-wire (PNP)		M9PAV *1	M9PA *1	○	○	●	○	○							
				2-wire		M9BAV *1	M9BA *1	○	○	●	○	○							
Reed auto switch	—	Grommet	Yes	3-wire (NPN equiv.)	24 V	5 V	—	A96V	A96	●	—	●	—	—	IC circuit	—			
				2-wire				100 V	A93V *2	A93	●	●	●				●	—	—
									100 V or less	A90V	A90	●	—				●		

*1 Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance.

Consult with SMC regarding water resistant types with the above model numbers.

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

* Lead wire length symbols: 0.5 m Nil (Example) M9NW
1 m M (Example) M9NWM
3 m L (Example) M9NWL
5 m Z (Example) M9NWX

* Solid state auto switches marked with "O" are produced upon receipt of order.
* Separate switch spacers (BM93-016) are required for retrofitting of auto switches.

* There are other applicable auto switches than listed above. For details, refer to page 1451.

* Refer to pages 1648 and 1649 for the details of auto switches with a pre-wired connector.

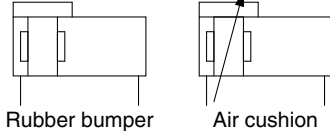
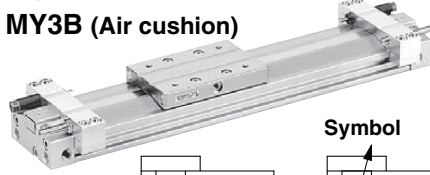
* Auto switches are shipped together (not assembled). (Refer to page 1451 for the details of auto switch mounting.)

Mechanically Jointed Rodless Cylinders **MY3A/3B Series**

MY3A (Rubber bumper)



MY3B (Air cushion)



Made to Order: Individual Specifications
(For details, refer to page 1452.)

Symbol	Specifications
-X168	Helical insert thread

Made to Order

[Click here for details](#)

Symbol	Specifications
-XB22	Shock absorber soft type RJ series type

Specifications

Bore size (mm)	16, 20	25, 32	40	50, 63
Fluid	Air			
Action	Double acting			
Operating pressure range	0.2 to 0.8 MPa	0.15 to 0.8 MPa		
Proof pressure	1.2 MPa			
Ambient and fluid temperature	5 to 60°C			
Cushion	Rubber bumper (MY3A) / Air cushion (MY3B)			
Lubrication	Not required (Non-lube)			
Stroke length tolerance	1000 mm or less $^{+1.8}_0$, From 1001 mm $^{+2.8}_{-0}$ Note)			
Port size (Rc, NPT, G)	M5 x 0.8	1/8	1/4	3/8

Note) The tolerance of the MY3A is a value with no pressurization. When a rubber bumper is used, the stroke of the MY3A varies according to the operating pressure.

To find the stroke length tolerance at each operating pressure, double the additional stroke due to pressure on each side (pages 1418 and 1419) and add it.

Piston Speed

Bore size (mm)	16	20	25	32	40	50	63
Without stroke adjustment unit (MY3A)	80 to 500 mm/s						
Without stroke adjustment unit (MY3B)	80 to 1000 mm/s						
Stroke adjustment unit (L and H unit/MY3B)	80 to 1000 mm/s ($\phi 16, \phi 20$ L unit: 80 to 800 mm/s)						
External shock absorber (low reaction type)*	80 to 1500 mm/s						

* Refer to "External Shock Absorber Selection" on pages 1422 and 1423.

When the RB series is used, operate at a piston speed that will not exceed the absorption capacity of the air cushion and stroke adjustment unit.

* Because of its structure, the fluctuation of this cylinder's operating speed is greater than rod type cylinders. For applications that require constant speed, select an applicable equipment for the level of demand.

Stroke Adjustment Unit Specifications

Bore size (mm)		16, 20		25, 32		40, 50		63	
Unit symbol		L	H	L	H	L	H	L	H
Shock absorber model		RB0806	RB1007	RB1007	RB1412	RB1412	RB2015	RB2015	RB2725
Shock absorber soft type RJ series (-XB22) model		RJ0806H	RJ1007H	RJ1007H	RJ1412H	RJ1412H	—	—	—
Stroke adjustment range by intermediate fixing spacer (mm)	Without spacer	0 to -10		0 to -12		0 to -16		0 to -24	
	With short spacer	-10 to -20		-12 to -24		-16 to -32		-24 to -48	
	With long spacer	-20 to -30		-24 to -36		-32 to -48		-48 to -72	

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

Stroke Adjustment Unit Symbol

		Right side stroke adjustment unit							
		Without unit	L: With low load shock absorber + Adjustment bolt			H: With high load shock absorber + Adjustment bolt			
Left side stroke adjustment unit	Without unit	Nil	SL	SL6	SL7	SH	SH6	SH7	
	L: With low load shock absorber + Adjustment bolt	Without unit	LS	L	LL6	LL7	LH	LH6	LH7
		With short spacer	L6S	L6L	L6	L6L7	L6H	L6H6	L6H7
	With long spacer	L7S	L7L	L7L6	L7	L7H	L7H6	L7H7	
	H: With high load shock absorber + Adjustment bolt	Without unit	HS	HL	HL6	HL7	H	HH6	HH7
		With short spacer	H6S	H6L	H6L6	H6L7	H6H	H6	H6H7
With long spacer	H7S	H7L	H7L6	H7L7	H7H	H7H6	H7		

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

Shock Absorber Specifications

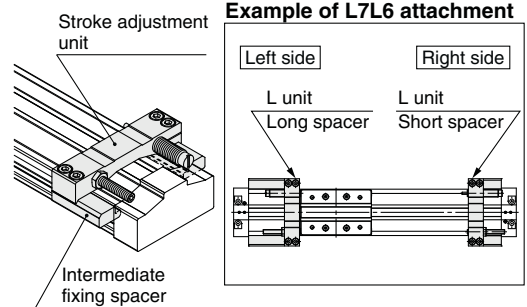
Type	RB 0806	RB 1007	RB 1412	RB 2015	RB 2725	
Max. energy absorption (J)	0.84	2.4	10.1	29.8	46.6	
Stroke absorption (mm)	6	7	12	15	25	
Max. collision speed (mm/s)	1000					
Max. operating frequency (cycle/min)	80	70	45	25	10	
Spring force (N)	Extended	1.96	4.22	6.86	8.34	8.83
	Compressed	4.22	6.86	15.98	20.50	20.01
Operating temperature range (°C)	5 to 60					

Note) The shock absorber service life is different from that of the MY3A/3B cylinders depending on operating conditions. Allowable operating cycle under the specifications set in this catalog is shown below.

1.2 million times RB08□□
2 million times RB10□□ to RB2725

Note) Specified service life (suitable replacement period) is the value at room temperature (20 to 25°C). The period may vary depending on the temperature and other conditions. In some cases the absorber may need to be replaced before the allowable operating cycle above.

Stroke adjustment unit mounting diagram



MY1B

MY1H

MY1B

MY1M

MY1C

MY1H

MY1 HT

MY1 □W

MY2C

MY2 H/HT

MY3A MY3B

MY3M

D-□

-X□

Technical Data

MY3A/3B Series

Theoretical Output

Unit: N

Bore size (mm)	Piston area (mm ²)	Operating pressure (MPa)						
		0.2	0.3	0.4	0.5	0.6	0.7	0.8
16	200	40	60	80	100	120	140	160
20	314	62	94	125	157	188	219	251
25	490	98	147	196	245	294	343	392
32	804	161	241	322	402	483	563	643
40	1256	251	377	502	628	754	879	1005
50	1962	392	588	784	981	1177	1373	1569
63	3115	623	934	1246	1557	1869	2180	2492

Note) Theoretical output (N) = Pressure (MPa) x Piston area (mm²)

Weight

Unit: kg

Model	Bore size (mm)	Basic weight	Additional weight per 50 mm stroke	Weight of moving parts	Stroke adjustment unit weight (per unit)	
					L unit weight	H unit weight
MY3A	16	0.21	0.06	0.06	/	/
	20	0.39	0.09	0.12		
	25	0.62	0.11	0.20		
	32	1.25	0.18	0.37		
	40	2.31	0.25	0.67		
	50	3.72	0.40	1.07		
MY3B	16	0.22	0.06	0.06	0.04	0.05
	20	0.49	0.09	0.12	0.06	0.08
	25	0.71	0.11	0.20	0.10	0.15
	32	1.39	0.18	0.37	0.14	0.22
	40	2.41	0.25	0.67	0.26	0.30
	50	4.10	0.40	1.08	0.38	0.52
63	7.04	0.56	2.16	0.57	0.92	

Calculation method/Example: **MY3B25-300L**

Basic weight 0.71 kg Cylinder stroke 300 st

Additional weight 0.11/50 st

L unit weight 0.1 kg

0.71 + 0.11 x 300 ÷ 50 + 0.1 x 2 = 1.57 kg

Option

Stroke Adjustment Unit Part No.

MY3B-A 25 L2-6N

Stroke adjustment unit

Bore size

16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm

Unit no.

Symbol	Stroke adjustment unit	Mounting position
L1	L unit	Left
L2		Right
H1	H unit	Left
H2		Right

Note) Refer to page 1425 for details about adjustment range.

Intermediate fixing spacer

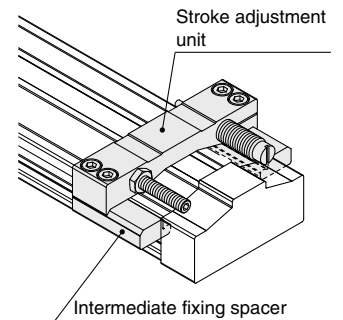
Nil	Without spacer
6	Short spacer
7	Long spacer

Spacer delivery type

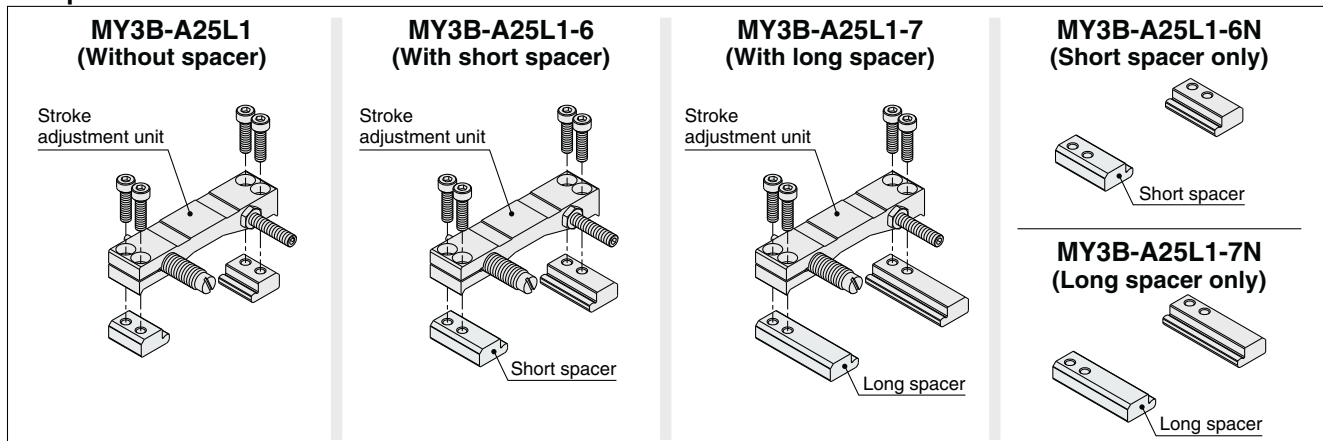
Nil	Unit installed
N	Spacer only

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

* Spacers are shipped for a set of two.



Component Parts



MY1B

MY1H

MY1B

MY1M

MY1C

MY1H

MY1
HT

MY1
W

MY2C

MY2
H/HT

MY3A
MY3B

MY3M

D-

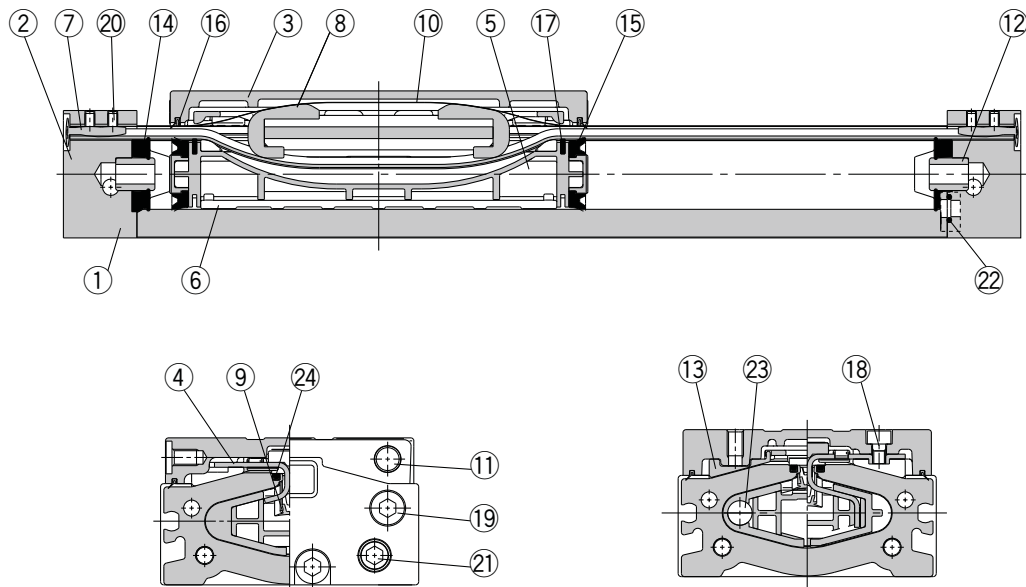
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Technical
Data

MY3A/3B Series

Construction: $\varnothing 16$, $\varnothing 20$, $\varnothing 25$, $\varnothing 32$, $\varnothing 40$, $\varnothing 50$, $\varnothing 63$

MY3A



Component Parts

No.	Description	Material	Note
1	Cylinder tube	Aluminum alloy	Hard anodized
2	Head cover	Aluminum alloy	Hard anodized
3	Slide table	Aluminum alloy	Electroless nickel plated
4	Piston yoke	Stainless steel	
5	Piston	Polyamide	
6	Wear ring	Polyacetal	
7	Belt clamp	Polybutylene terephthalate	
8	Belt separator	Polyacetal	
11	Stopper	Carbon steel	Electroless nickel plated

No.	Description	Material	Note
12	Seal ring	Aluminum alloy	Anodized
13	Bearing	Polyacetal	
17	Inner wiper	Special resin	
18	Hexagon socket head cap screw	Chrome molybdenum steel	Chromated
19	Hexagon socket head cap screw	Chrome molybdenum steel	Chromated
20	Hexagon socket head set screw	Chrome molybdenum steel	Chromated
21	Hexagon socket head plug	Carbon steel	Chromated
23	Magnet	—	
24	Seal magnet	Rubber magnet	

Replacement Parts/Seal

No.	Description	Material	Qty.	MY3A16	MY3A20	MY3A25	MY3A32	MY3A40	MY3A50	MY3A63
9	Seal belt	Urethane Polyamide	1	MY3A16-16C- Stroke	MY3A20-16C- Stroke	MY3A25-16C- Stroke	MY3A32-16C- Stroke	MY3A40-16C- Stroke	MY3A50-16C- Stroke	MY3A63-16A- Stroke
10	Dust seal band	Stainless steel	1	MY3A16-16B- Stroke	MY3A20-16B- Stroke	MY3A25-16B- Stroke	MY3A32-16B- Stroke	MY3A40-16B- Stroke	MY3A50-16B- Stroke	MY3A63-16B- Stroke
16	Scraper	Polyamide	1	MYA16-15- R6656	MYA20-15- AC594	MYA25-15- R6657	MYA32-15- AC595	MYA40-15- R6658	MYA50-15- AC596	MYA63-15- R6659
14	Gasket bumper	NBR	2							
15	Piston seal	NBR	2	MY3A16-PS	MY3A20-PS	MY3A25-PS	MY3A32-PS	MY3A40-PS	MY3A50-PS	MY3A63-PS
22	O-ring	NBR	4							

* Seal kit includes 14, 15, and 22. Order the seal kit based on each bore size.

* Seal kit includes a grease pack (10 g).

When 9 and 10 are shipped as single units, a grease pack is included (10 g per 1000 strokes).

Order with the following part number when only the grease pack is needed.

Grease pack part number: GR-S-010 (10 g), GR-S-020 (20 g)

* For instructions on how to replace replacement parts/seals, refer to the operation manual.

MY1B

MY1H

MY1B

MY1M

MY1C

MY1H

MY1
HT

MY1
W

MY2C

MY2
H/HT

MY3A
MY3B

MY3M

D-

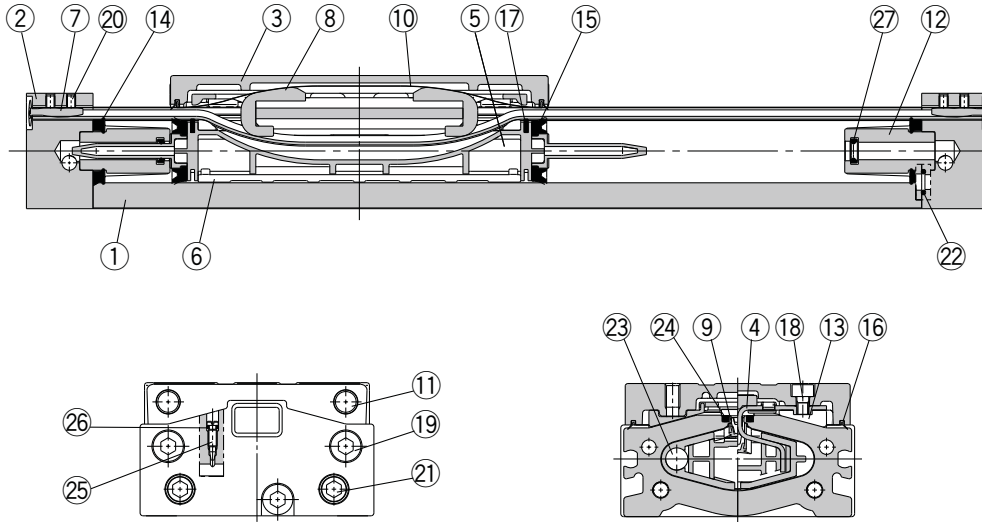
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Technical
Data

MY3A/3B Series

Construction: $\varnothing 16$, $\varnothing 20$, $\varnothing 25$, $\varnothing 32$, $\varnothing 40$, $\varnothing 50$, $\varnothing 63$

MY3B



Component Parts

No.	Description	Material	Note
1	Cylinder tube	Aluminum alloy	Hard anodized
2	Head cover	Aluminum alloy	Hard anodized
3	Slide table	Aluminum alloy	Electroless nickel plated
4	Piston yoke	Stainless steel	
5	Piston	Polyamide	
6	Wear ring	Polyacetal	
7	Belt clamp	Polybutylene terephthalate	
8	Belt separator	Polyacetal	
11	Stopper	Carbon steel	Electroless nickel plated
12	Cushion boss	Aluminum alloy	Chromated
13	Bearing	Polyacetal	

No.	Description	Material	Note
17	Inner wiper	Special resin	
18	Hexagon socket head cap screw	Chrome molybdenum steel	Chromated
19	Hexagon socket head cap screw	Chrome molybdenum steel	Chromated
20	Hexagon socket head set screw	Chrome molybdenum steel	Chromated
21	Hexagon socket head plug	Carbon steel	Chromated
23	Magnet	—	
24	Seal magnet	Rubber magnet	
25	Cushion needle	Rolled steel	Nickel plated

Replacement Parts/Seal

No.	Description	Material	Qty.	MY3B16	MY3B20	MY3B25	MY3B32	MY3B40	MY3B50	MY3B63
9	Seal belt	Urethane Polyamide	1	MY3B16-16C- [Stroke]	MY3B20-16C- [Stroke]	MY3B25-16C- [Stroke]	MY3B32-16C- [Stroke]	MY3B40-16C- [Stroke]	MY3B50-16C- [Stroke]	MY3B63-16A- [Stroke]
10	Dust seal band	Stainless steel	1	MY3B16-16B- [Stroke]	MY3B20-16B- [Stroke]	MY3B25-16B- [Stroke]	MY3B32-16B- [Stroke]	MY3B40-16B- [Stroke]	MY3B50-16B- [Stroke]	MY3B63-16B- [Stroke]
16	Scraper	Polyamide	1	MYA16-15- R6656	MYA20-15- AC594	MYA25-15- R6657	MYA32-15- AC595	MYA40-15- R6658	MYA50-15- AC596	MYA63-15- R6659
26	O-ring	NBR	2	KA00309 ($\varnothing 4 \times \varnothing 1.8 \times \varnothing 1.1$)	KA00309 ($\varnothing 4 \times \varnothing 1.8 \times \varnothing 1.1$)	KA00309 ($\varnothing 4 \times \varnothing 1.8 \times \varnothing 1.1$)	KA00309 ($\varnothing 4 \times \varnothing 1.8 \times \varnothing 1.1$)	KA00320 ($\varnothing 7.15 \times \varnothing 3.75 \times \varnothing 1.7$)	KA00320 ($\varnothing 7.15 \times \varnothing 3.75 \times \varnothing 1.7$)	KA00402 ($\varnothing 8.3 \times \varnothing 4.5 \times \varnothing 1.9$)
14	Tube gasket	NBR	2	MY3B16-PS	MY3B20-PS	MY3B25-PS	MY3B32-PS	MY3B40-PS	MY3B50-PS	MY3B63-PS
15	Piston seal	NBR	2							
22	O-ring	NBR	4							
27	Cushion seal	NBR	2							

* Seal kit includes (14), (15), (22) and (27). Order the seal kit based on each bore size.

* Seal kit includes a grease pack (10 g).

When (9) and (10) are shipped as single units, a grease pack is included (10 g per 1000 strokes).

Order with the following part number when only the grease pack is needed.

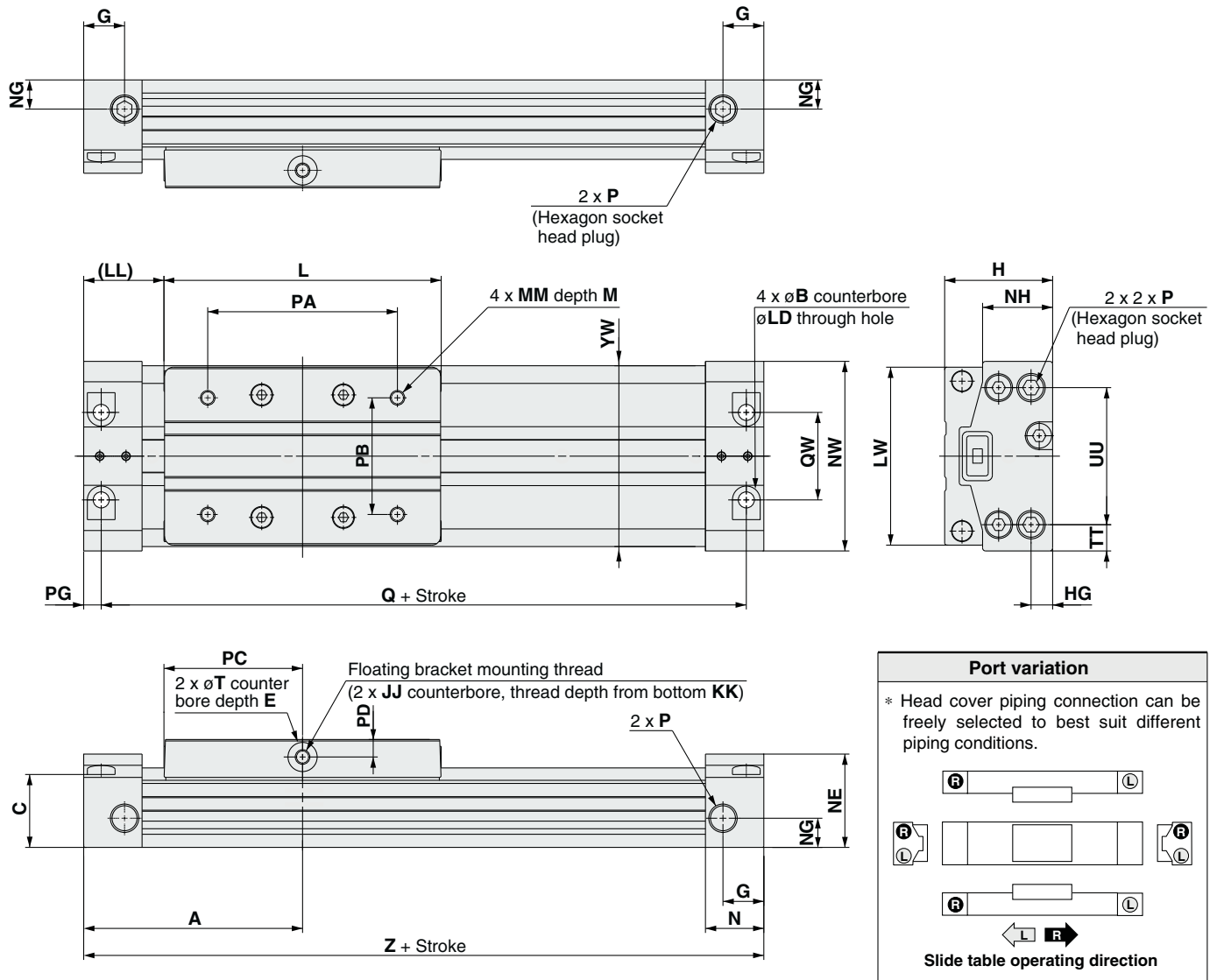
Grease pack part number: GR-S-010 (10 g), GR-S-020 (20 g)

* For instructions on how to replace replacement parts/seals, refer to the operation manual.

Short Type: $\varnothing 16, \varnothing 20, \varnothing 25, \varnothing 32, \varnothing 40, \varnothing 50, \varnothing 63$

MY3A Bore size – Stroke

* Refer to "Specific Product Precautions" on page 1453 for mounting.



MY1B

MY1H

MY1B

MY1M

MY1C

MY1H

MY1 HT

MY1

W

MY2C

MY2 H/HT

MY3A

MY3B

MY3M

Model	A	B	C	E	G	H	HG	JJ	KK	L	LD	LL	LW	M	MM	N
MY3A16	55	6	18	2	9.5	27	5	M4 x 0.7	5	65	3.5	22.5	41	6	M4 x 0.7	13.5
MY3A20	64	7.5	22	2	9.5	32	6.5	M4 x 0.7	8.5	80	4.5	24	51	6	M4 x 0.7	15.5
MY3A25	75	9.5	25	2	14	37	7.4	M5 x 0.8	7.5	95	5.5	27.5	61	8	M5 x 0.8	20
MY3A32	96.5	11	32.5	2	14	45	9	M5 x 0.8	7.5	128	6.6	32.5	76	8	M5 x 0.8	22.5
MY3A40	120	14	38	2	18	54	12	M6 x 1	12	160	8.6	40	90	12	M6 x 1	27
MY3A50	137	14	49	3	16	67	14	M6 x 1	15.5	190	9	42	112	12	M6 x 1	27
MY3A63	160	17	60	3	20.5	84	16.5	M8 x 1.25	22	220	11	50	134	16	M8 x 1.25	31

Model	NE	NG	NH	NW	P	PA	PB	PC	PD	PG	Q	QW	T	TT	UU	YW	Z
MY3A16	22.5	8	17.2	43	M5 x 0.8	44	26	32.5	4	4	102	19	7	6.5	30	42	110
MY3A20	27.5	10	20.8	53	M5 x 0.8	54	30	40	5	4.5	119	23	8	9	35	52	128
MY3A25	32	10	24	65	Rc, NPT, G1/8	64	40	47.5	6	6	138	30	10	9	47	62	150
MY3A32	39	14	31	79	Rc, NPT, G1/8	92	44	64	6	7	179	33	10	13.5	52	77	193
MY3A40	46	15	37	94	Rc, NPT, G1/4	112	60	80	7.5	8.5	223	40	14	14	66	92	240
MY3A50	58	25	47.5	116	Rc, NPT, G3/8	142	66	95	8.5	8.5	257	44	15	21	74	114	274
MY3A63	70	29	58	139	Rc, NPT, G3/8	162	84	110	10	10	300	64	16	20	99	136	320

D-

-X

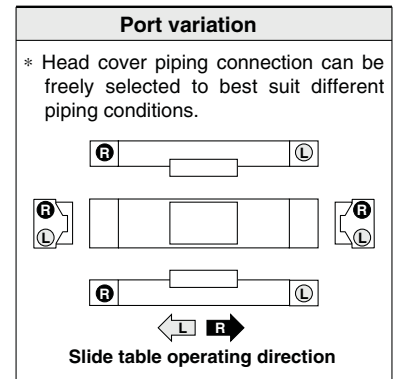
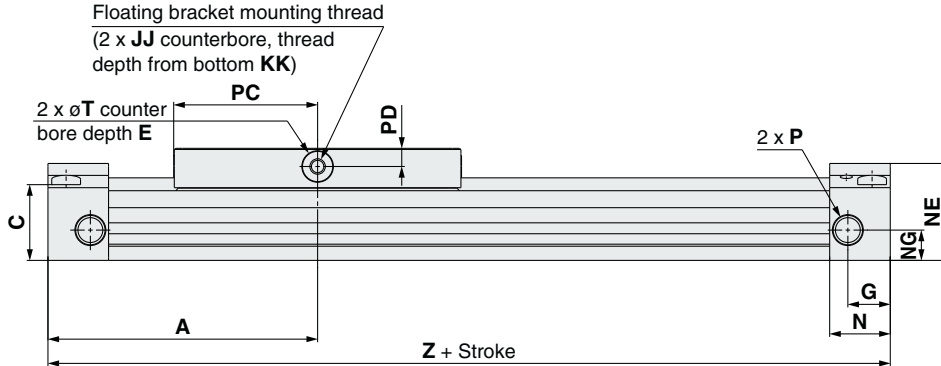
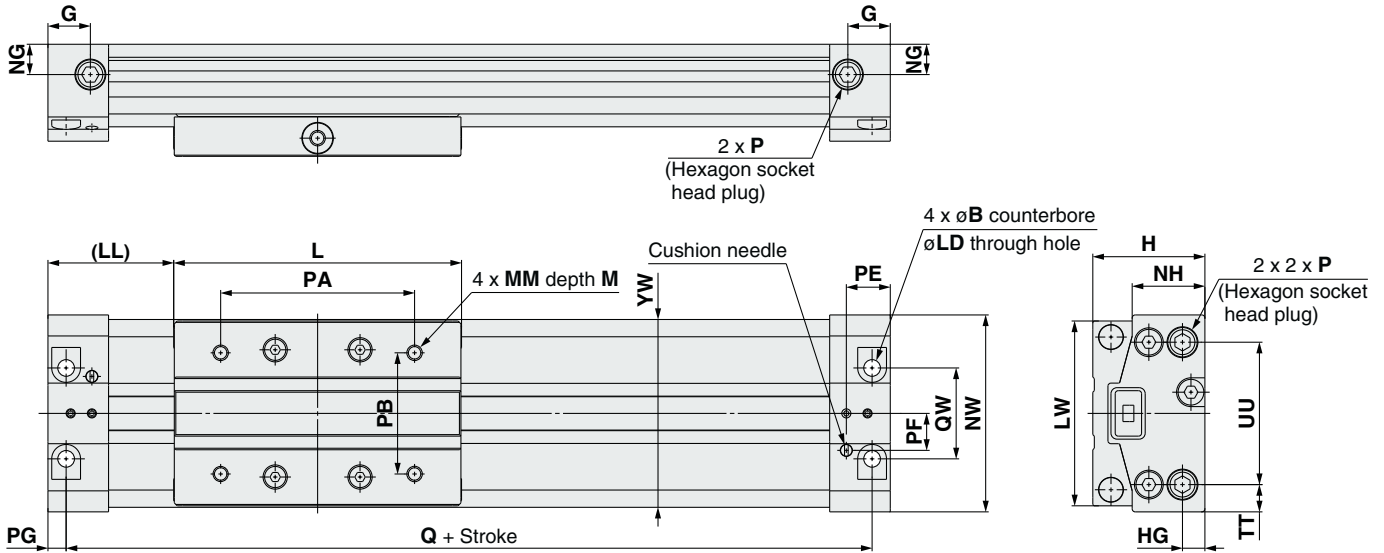
Technical Data

MY3A/3B Series

Standard Type: $\varnothing 16, \varnothing 20, \varnothing 25, \varnothing 32, \varnothing 40, \varnothing 50, \varnothing 63$

MY3B Bore size – Stroke

* Refer to "Specific Product Precautions" on page 1453 for mounting.



Model	A	B	C	E	G	H	HG	JJ	KK	L	LD	LL	LW	M	MM	N
MY3B16	61	6	18	2	9.5	27	5	M4 x 0.7	5	65	3.5	28.5	41	6	M4 x 0.7	13.5
MY3B20	74	7.5	22	2	9.5	32	6.5	M4 x 0.7	8.5	80	4.5	34	51	6	M4 x 0.7	15.5
MY3B25	89	9.5	25	2	14	37	7.4	M5 x 0.8	7.5	95	5.5	41.5	61	8	M5 x 0.8	20
MY3B32	112.5	11	32.5	2	14	45	9	M5 x 0.8	7.5	128	6.6	48.5	76	8	M5 x 0.8	22.5
MY3B40	138	14	38	2	18	54	12	M6 x 1	12	160	8.6	58	90	12	M6 x 1	27
MY3B50	155	14	49	3	16	67	14	M6 x 1	15.5	190	9	60	112	12	M6 x 1	27
MY3B63	178	17	60	3	20.5	84	16.5	M8 x 1.25	22	220	11	68	134	16	M8 x 1.25	31

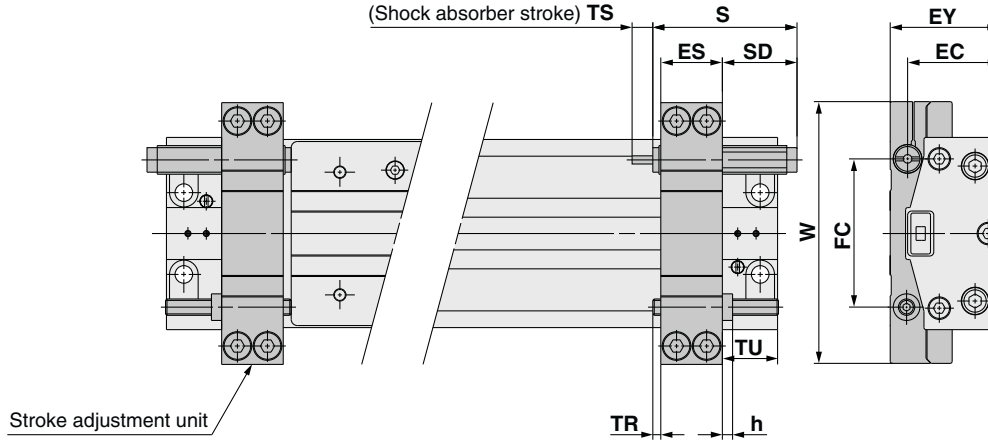
Model	NE	NG	NH	NW	P	PA	PB	PC	PD	PE	PF	PG	Q	QW	T	TT	UU	YW	Z
MY3B16	22.5	8	17.2	43	M5 x 0.8	44	26	32.5	4	9.7	8.5	4	114	19	7	6.5	30	42	122
MY3B20	27.5	10	20.8	53	M5 x 0.8	54	30	40	5	11.2	10	4.5	139	23	8	9	35	52	148
MY3B25	32	10	24	65	Rc, NPT, G1/8	64	40	47.5	6	14.5	12.2	6	166	30	10	9	47	62	178
MY3B32	39	14	31	79	Rc, NPT, G1/8	92	44	64	6	16	15	7	211	33	10	13.5	52	77	225
MY3B40	46	15	37	94	Rc, NPT, G1/4	112	60	80	7.5	19.5	16.5	8.5	259	40	14	14	66	92	276
MY3B50	58	25	47.5	116	Rc, NPT, G3/8	142	66	95	8.5	20.5	20	8.5	293	44	15	21	74	114	310
MY3B63	70	29	58	139	Rc, NPT, G3/8	162	84	110	10	23.5	27.5	10	336	64	16	20	99	136	356

Standard Type: $\varnothing 16, \varnothing 20, \varnothing 25, \varnothing 32, \varnothing 40, \varnothing 50, \varnothing 63$

Stroke adjustment unit

Low load shock absorber + Adjustment bolt

MY3B – **L**

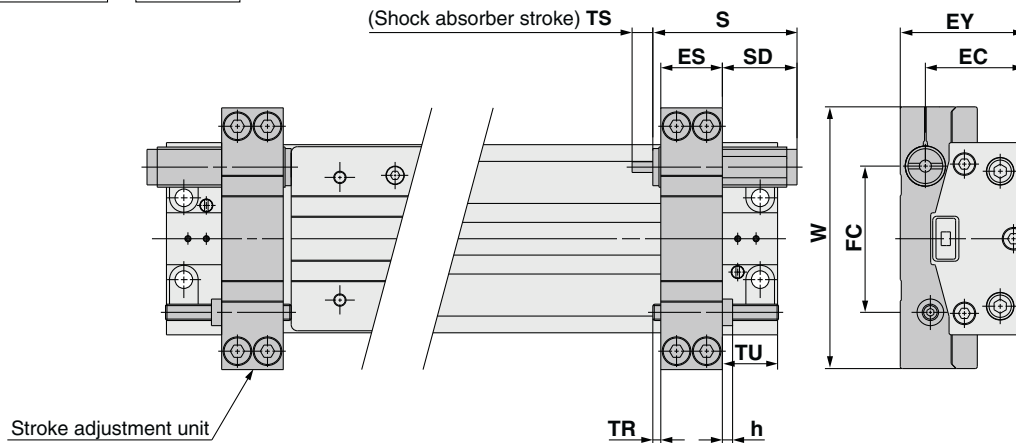


Applicable cylinder	ES	EC	EY	FC	h	S	SD	TS	TR	TU	W	Shock absorber model
MY3B16	14.1	21.5	26.5	34.5	2.4	40.8	25.8	6	0.9	25	62	RB0806
MY3B20	14.1	26.5	31.5	41	2.4	40.8	22.3	6	4.4	21.5	72	RB0806
MY3B25	20.1	29.8	36.5	51.5	3.6	46.7	25.2	7	1.4	28.5	90	RB1007
MY3B32	20.1	37.5	44.5	60	3.6	46.7	20.7	7	5.9	24	105	RB1007
MY3B40	30.1	45	53.5	72.5	5	67.3	36.3	12	0.9	39	128	RB1412
MY3B50	30.1	56.5	66.5	88	5	67.3	34.3	12	2.9	37	150	RB1412
MY3B63	36.1	70.5	83.5	108	6	73.2	36.2	15	0.9	43	178	RB2015

Note) When the stroke adjustment unit is used, the fitting type, which can be connected with the port on the body front and the back, will be limited. Refer to page 1411 for details.

Heavy-loaded shock absorber + Adjustment bolt

MY3B – **H**



Applicable cylinder	ES	EC	EY	FC	h	S	SD	TS	TR	TU	W	Shock absorber model
MY3B16	14.1	23	29.5	34.5	2.4	46.7	31.7	7	0.9	25	62	RB1007
MY3B20	14.1	27.5	34	41	2.4	46.7	28.2	7	4.4	21.5	72	RB1007
MY3B25	20.1	31.8	41	52.2	3.6	67.3	45.8	12	1.4	28.5	90	RB1412
MY3B32	20.1	39.5	49	60.5	3.6	67.3	41.3	12	5.9	24	105	RB1412
MY3B40	30.1	48	60.5	73.5	5	73.2	42.2	15	0.9	39	128	RB2015
MY3B50	30.1	58.5	71	88.5	5	73.2	40.2	15	2.9	37	150	RB2015
MY3B63	36.1	74.5	91	108	6	99	62	25	0.9	43	178	RB2725

Note) When the stroke adjustment unit is used, the fitting type, which can be connected with the port on the body front and the back, will be limited. Refer to page 1411 for details.

MY1B

MY1H

MY1B

MY1M

MY1C

MY1H

MY1 HT

MY1 W

MY2C

MY2 H/HT

MY3A

MY3B

MY3M

D-

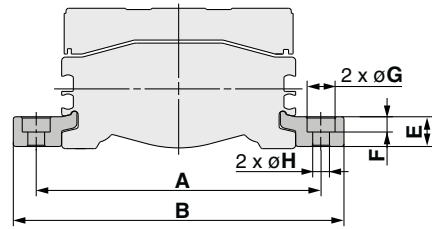
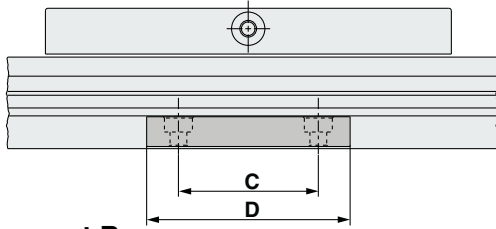
-X

Technical Data

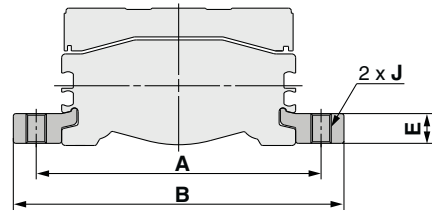
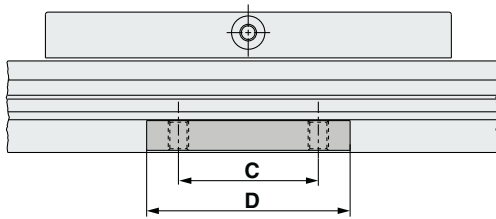
MY3A/3B Series

Side Support

Side support A MY-S□A



Side support B MY-S□B

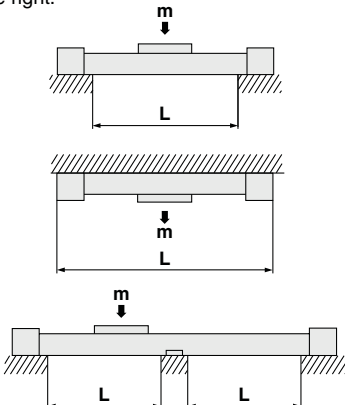


Model	Applicable cylinder	A	B	C	D	E	F	G	H	J
MY-S16 ^A _B	MY3A16-MY3B16	53	63.6	15	26	4.9	3	6.5	3.4	M4 x 0.7
MY-S20 ^A _B	MY3A20-MY3B20	65	77.6	25	38	5.9	3.5	8	4.5	M5 x 0.8
MY-S25 ^A _B	MY3A25-MY3B25	77	91	35	50	8	5	9.5	5.5	M6 x 1
MY-S32 ^A _B	MY3A32-MY3B32	97	115	45	64	11.7	6	11	6.6	M8 x 1.25
	MY3A40-MY3B40	112	130							
MY-S50 ^A _B	MY3A50-MY3B50	138	160	55	80	14.8	8.5	14	9	M10 x 1.5
	MY3A63-MY3B63	160	182							

Note) A set of side supports consists of a left support and a right support.

Guide for Using Side Support

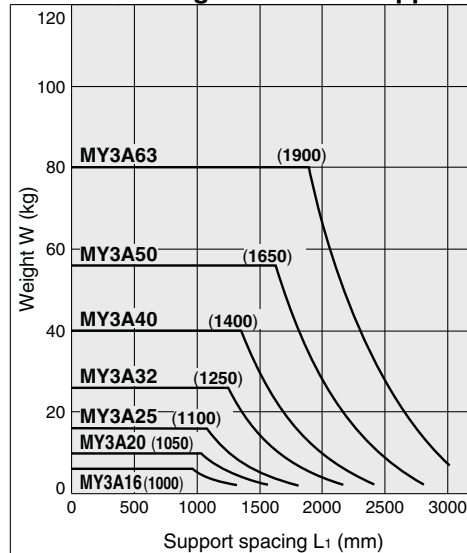
For long stroke operation, the cylinder tube may be deflected depending on its own weight and the load weight. In such a case, use a side support in the middle section. The spacing (L) of the support must be no more than the values shown in the graph on the right.



⚠ Caution

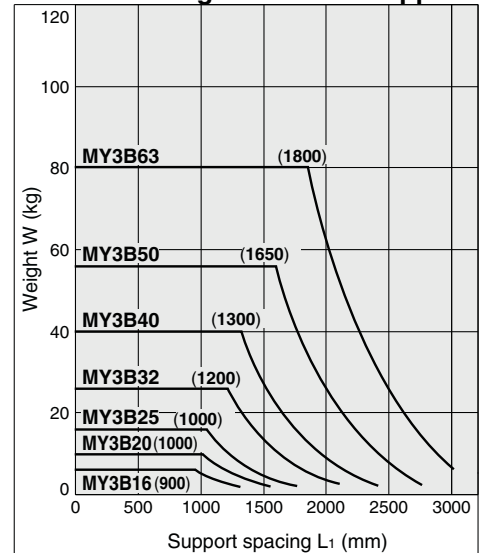
- ① If the cylinder mounting surfaces are not measured accurately, using a side support may cause poor operation. Therefore, be sure to level the cylinder tube when mounting. Also, for long stroke operation involving vibration and impact, use of a side support is recommended even if the spacing value is within the allowable limits shown in the graph.
- ② Support brackets are not for mounting; use them solely for providing support.

Guide for Using MY3A Side Support



Note) A side support must be used to keep the spacing from exceeding the value inside the parentheses.

Guide for Using MY3B Side Support



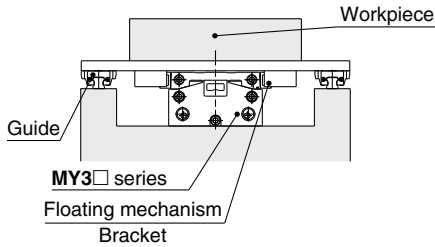
Note) A side support must be used to keep the spacing from exceeding the value inside the parentheses.

Floating Bracket

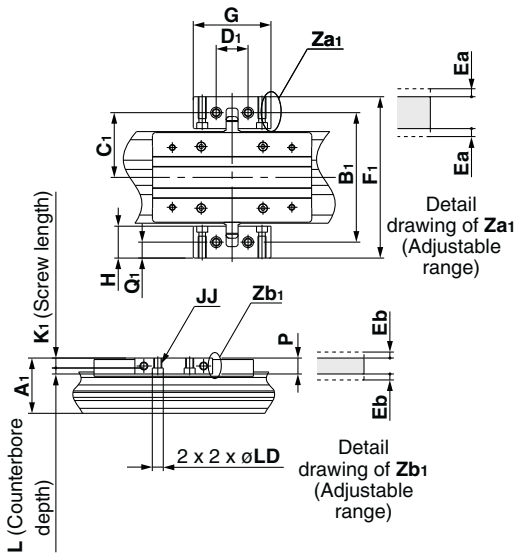
Facilitates connection to other guide systems.

Application

Mounting direction ① (to minimize the installation height)

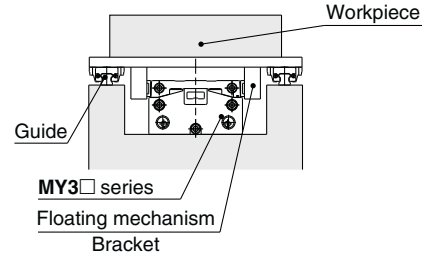


Mounting Example

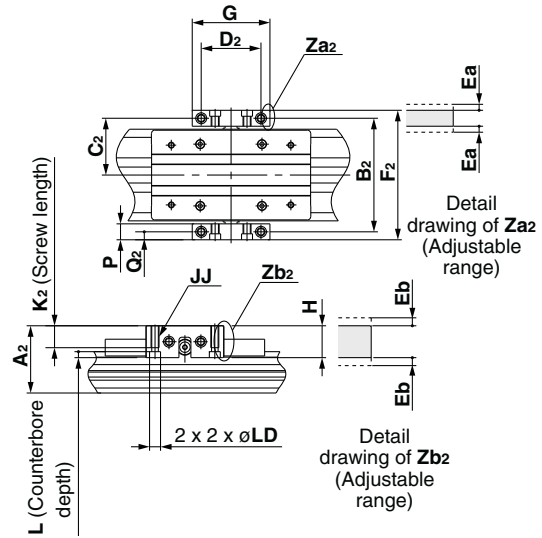


Application

Mounting direction ② (to minimize the installation width)



Mounting Example



MY3 Floating Bracket Mounting Dimensions

Model	Applicable cylinder	Common						Adjustment range	
		G	H	JJ	L	P	LD	Ea	Eb
MYAJ16	MY3□16	38	20	M4 x 0.7	4.5	10	6	1	1
MYAJ20	MY3□20	50	21	M4 x 0.7	4	10	6.5	1	1
MYAJ25	MY3□25	55	22	M6 x 1	5.5	12	9.5	1	1
MYAJ32	MY3□32	60	22	M6 x 1	5.5	12	9.5	1	1

Model	Applicable cylinder	Mounting direction ①						
		A1	B1	C1	D1	F1	K1	Q1
MYAJ16	MY3□16	29	68	34	18	88	5.5	10
MYAJ20	MY3□20	34	81	40.5	20	102	6	10.5
MYAJ25	MY3□25	38.5	90	45	24	112	6.5	11
MYAJ32	MY3□32	47	106	53	30	128	6.5	11

Model	Applicable cylinder	Mounting direction ②						
		A2	B2	C2	D2	F2	K2	Q2
MYAJ16	MY3□16	36	58	29	30	68	10	5
MYAJ20	MY3□20	41	70	35	35	80	10	5
MYAJ25	MY3□25	46	80	40	40	92	14	6
MYAJ32	MY3□32	54	96	48	46	108	14	6

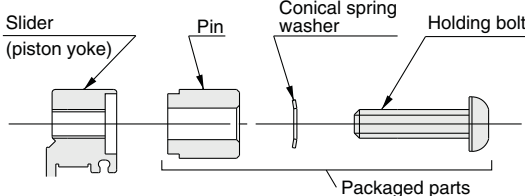
Note) Floating brackets are shipped as a set of left and right brackets.

Model	Applicable cylinder	Common						Adjustment range	
		G	H	JJ	L	P	LD	Ea	Eb
MYAJ40	MY3□40	72	32	M8 x 1.25	6.5	16	11	1	1
MYAJ50	MY3□50	90	36	M8 x 1.25	6.5	16	11	1	1
MYAJ63	MY3□63	100	40	M10 x 1.5	9	19	14	1	1

Model	Applicable cylinder	Mounting direction ①						
		A1	B1	C1	D1	F1	K1	Q1
MYAJ40	MY3□40	56	130	65	32	162	9.5	16
MYAJ50	MY3□50	69	156	78	40	192	9.5	18
MYAJ63	MY3□63	86	186	93	50	226	10	20

Model	Applicable cylinder	Mounting direction ②						
		A2	B2	C2	D2	F2	K2	Q2
MYAJ40	MY3□40	68	114	57	55	130	19	8
MYAJ50	MY3□50	81	136	68	70	152	20	8
MYAJ63	MY3□63	100	166	83	80	185	23	9.5

Installation of Holding Bolts



Tightening Torque for Holding Bolts

Model	Tightening torque	Model	Tightening torque
MYAJ16	1.5	MYAJ40	5
MYAJ20	1.5	MYAJ50	5
MYAJ25	3	MYAJ63	13
MYAJ32	3		

MYAJ (1 set) Component Parts

Description	Qty.
Bracket	2
Pin	2
Conical spring washer	2
Holding bolts	2

MY1B

MY1H

MY1B

MY1M

MY1C

MY1H

MY1 HT

MY1 □W

MY2C

MY2 H/HT

MY3A

MY3B

MY3M

D-□

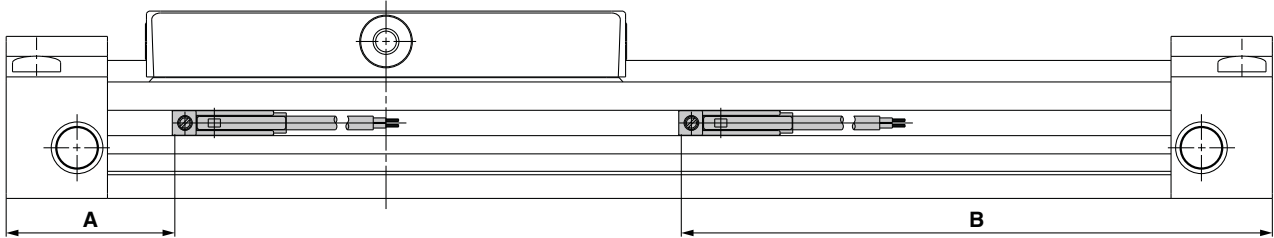
-X□

Technical Data

MY3 Series

Auto Switch Specifications

Auto Switch Proper Mounting Position (at Stroke End Detection)



Auto Switch Proper Mounting Position

MY3A

Auto switch model	(mm)			
	D-M9□ D-M9□V D-M9□W D-M9□WV D-M9□A D-M9□AV		D-A9□ D-A9□V	
Bore size	A	B	A	B
16	26	84	22	88
20	26	102	22	106
25	33	117	29	121
32	40.5	152.5	36.5	156.5
40	46.5	193.5	42.5	197.5
50	47	227	43	231
63	57.5	262.5	53.5	266.5

Note) The values in the table indicate the position of the auto switch's front end. Adjust the auto switch after confirming the operating conditions in the actual setting.

MY3B/MY3M

Auto switch model	(mm)			
	D-M9□ D-M9□V D-M9□W D-M9□WV D-M9□A D-M9□AV		D-A9□ D-A9□V	
Bore size	A	B	A	B
16	32	90	28	94
20	36	112	32	116
25	47	131	43	135
32	56.5	168.5	52.5	172.5
40	64.5	211.5	60.5	215.5
50	65	245	61	249
63	75.5	280.5	71.5	284.5

Operating Range

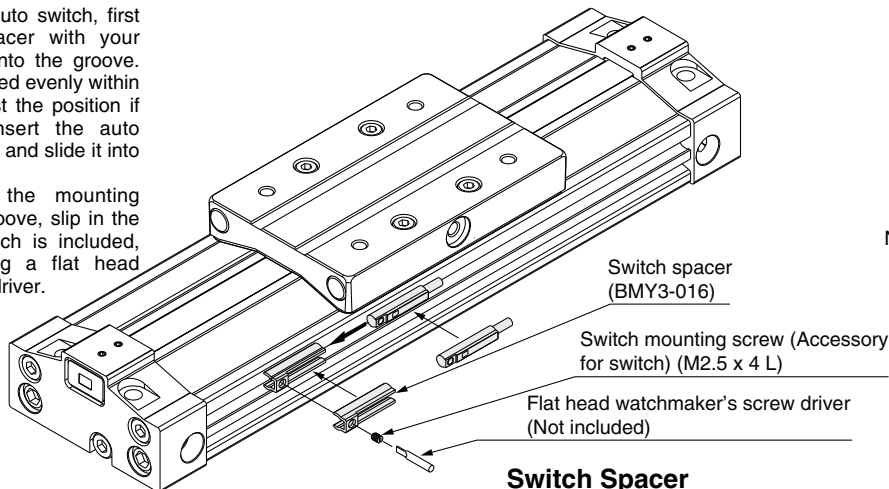
Auto switch model	(mm)						
	Bore size						
	16	20	25	32	40	50	63
D-M9□/M9□V D-M9□W/M9□WV D-M9□A/M9□AV	3.5	5	6	6.5	8	8	8
D-A9□/A9□V	6.5	9.5	10.5	12	15	13.5	14

* Since the operating range is provided as a guideline including hysteresis, it cannot be guaranteed. (Assuming approximately ±30% dispersion.) It may vary substantially depending on an ambient environment.

Auto Switch Mounting

When mounting an auto switch, first hold the switch spacer with your fingers and push it into the groove. Confirm that it is aligned evenly within the groove and adjust the position if necessary. Then, insert the auto switch into the groove and slide it into the spacer.

After deciding on the mounting position within the groove, slip in the mounting screw, which is included, and tighten it, using a flat head watchmaker's screw driver.



Note) Use a watchmaker's screw driver with a handle diameter of 5 to 6 mm to fasten the auto switch mounting screws. The tightening torque should be approximately 0.1 to 0.15 N·m.

Switch Spacer

Applicable bore size (mm)	16	20	25	32	40	50	63
Switch spacer	BMY3-016						

Besides the models listed in How to Order, the following auto switches are applicable.

- * For solid state auto switches, auto switches with a pre-wired connector are also available. Refer to pages 1648 and 1649 for details.
- * Normally closed (NC = b contact) solid state auto switches (D-M9□E(V)) are also available. Refer to page 1592-1 for details.

MY1B

MY1H

MY1B

MY1M

MY1C

MY1H

MY1 HT

MY1 □W

MY2C

MY2 H/HT

MY3A

MY3B

MY3M

D-□

-X□

Technical Data

MY3 Series

Made to Order: Individual Specifications

Please contact SMC for detailed dimensions, specifications and delivery lead times.

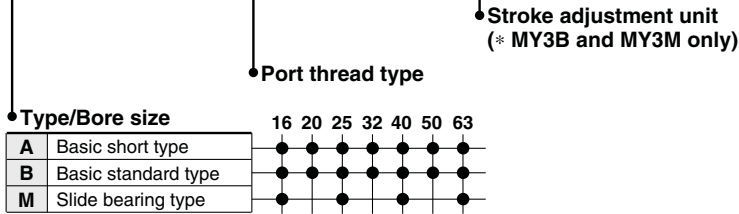


1 Helical Insert Threads

-X168

The mounting threads of the slider are changed to helical insert threads.
The thread size is the same as standard.

MY3 **B** Bore size - Stroke - Auto switch Symbol - X168



Example) MY3B16-300L-M9B-X168