

Air Slide Table

ø6, ø8, ø12, ø16, ø20, ø25

New

RoHS

Reduced in height

10%* reduction 27 mm*
(Conventional model: 30 mm*)

Product weight

22%* reduction 298 g*
(Conventional model: 380 g*)

Allowable kinetic energy

64%* improvement 0.09 J*
(Conventional model: 0.055 J*)

*Comparison between the double ported type and conventional MXQ12-30 (without adjuster)



Reduced in height and weight with thinner table

- Thin table made of the special stainless steel
- Durable material with the same strength as the conventional model

2 combinations of the guide and cylinder bore size available

Double ported type

Page 2

Increase flexibility of wiring and piping with piping ports and auto switch mounting grooves on both sides.

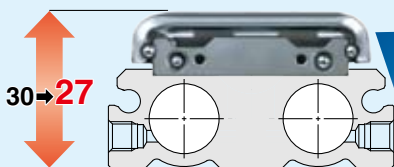
Bore size ø12

Bore size ø8

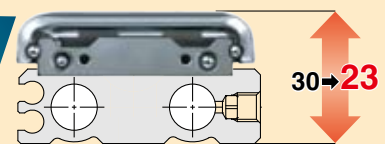
Low thrust with high rigidity type

Page 30

Combination with a cylinder of one bore size smaller increases rigidity according to thrust. Possible to reduce in height.



For MXQ12A



For MXQ8B

Single side ported type

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Better visibility for auto switches. Indicator LED can be checked from one side when used with short stroke.

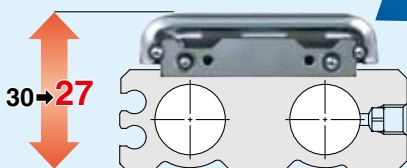
Bore size ø12

Bore size ø12

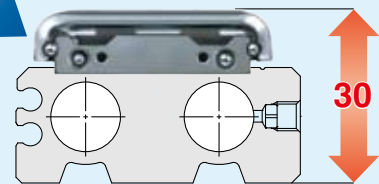
Height interchangeable type

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Height interchangeable as the conventional MXQ series.



For MXQ12C



For MXQ12

1 guide!

4 bodies!

Series **MXQ**



CAT.ES20-211A

Select the best actuator with guide according to the application.

Low thrust with high rigidity type

MXQ□B

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30

Guide rigidity according to thrust improved

■ **Guide rigidity improved by 50%**
(For MXQ8B and MXQ8A)

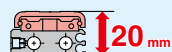
■ **Cylinder can be downsized when load is light!**

- Reduced in height
- Reduced in air consumption
- Light weight

Bore
size

—

ø6



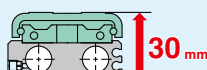
Standard/Symmetric type
(Figure shows standard model.)

ø8



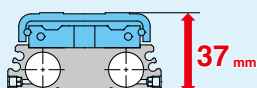
Standard/Symmetric type
(Figure shows standard model.)

ø12

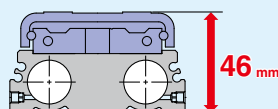


Standard/Symmetric type
(Figure shows standard model.)

ø16



ø20



Size ø16 and ø20 have two auto switch mounting grooves on both sides.

Single side ported type

MXQ□C

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■ Compact body with good switch visibility
Applicable to ø8 and ø12 only

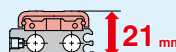
■ Compact design, Two auto switch mounting grooves on one side

Bore
size

ø6

Not available.
Use the MXQ□, height interchangeable type.

ø8



Standard/Symmetric type
(Figure shows standard model.)

ø12



Standard/Symmetric type
(Figure shows standard model.)

ø16

ø20

Not available.
Use the MXQ□A, double ported type.

ø25

Height interchangeable type

MXQ□

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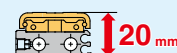
■ Same height as the conventional model

■ Visibility of auto switches improved

■ Interchangeable in mounting with the conventional model

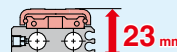
Bore
size

ø6



Standard/Symmetric type
(Figure shows standard model.)

ø8



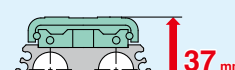
Standard/Symmetric type
(Figure shows standard model.)

ø12

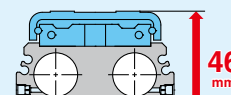


Standard/Symmetric type
(Figure shows standard model.)

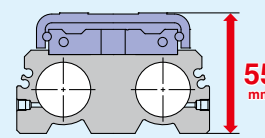
ø16



ø20



ø25

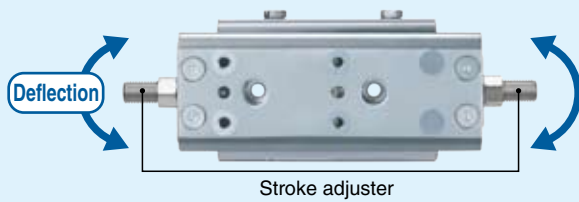


Size ø16, ø20, ø25 have two auto switch mounting grooves on both sides.

Series MXQ

Stroke adjuster (Option)

Stroke adjuster is positioned in the center.
Play at the stroke end reduced.



Allowable kinetic energy improved

Allowable kinetic energy improved by reducing weight of the movable parts

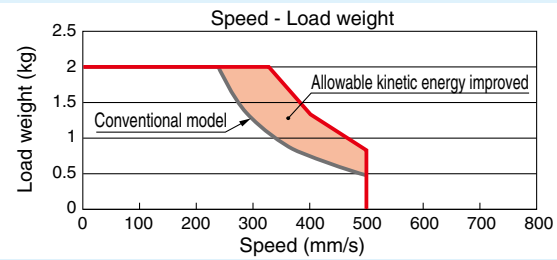
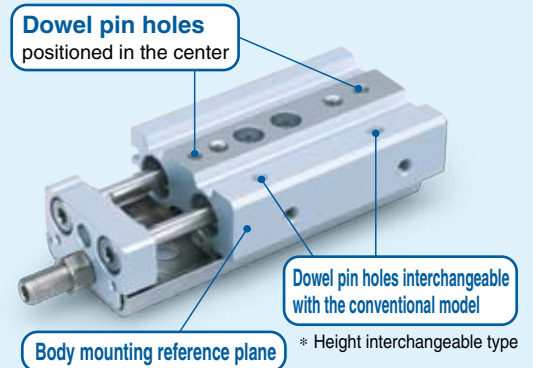
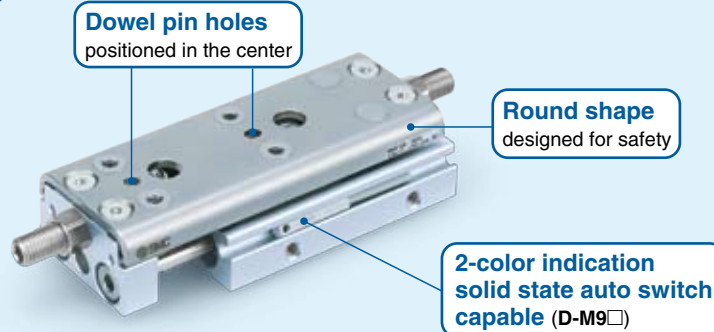


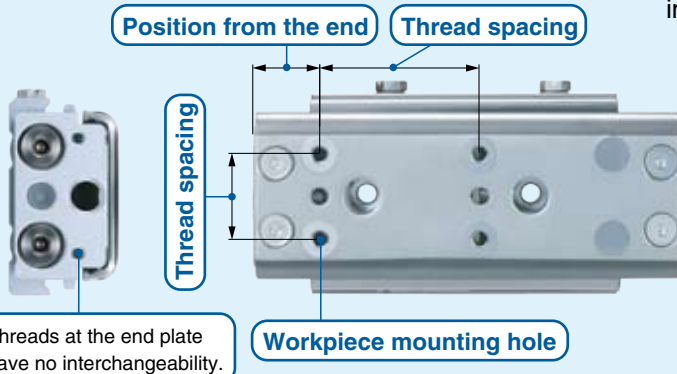
Table configuration for better function and easier maintenance



The mounting dimensions are equivalent to the conventional MXQ series.

Workpiece mounting

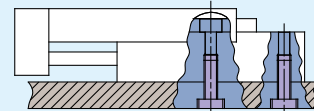
- Mounting screw O.D. and thread positions have interchangeability with the conventional **MXQ** series.



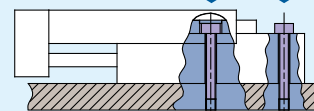
Body mounting

- Two methods of mounting available
- Body mounting threads and spacing have interchangeability with the conventional **MXQ** series.

Lateral mounting (Body tapped)



Lateral mounting (Through hole)



Various stroke adjusters (Option)

Metal Stopper with Bumper

High accuracy with the integrated construction of the bumper and metal stopper: Repeated positioning accuracy ± 0.05 or less
Improved cycle time
Operating speed **300** mm/sec
(Conventional model: 200 mm/sec)
(Compared with a stopper of the conventional **MXQ** series)

Shock Absorber

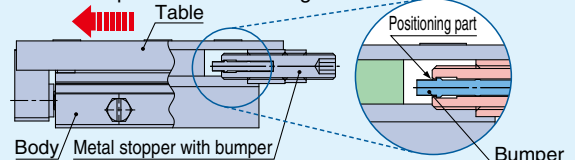
Soft type: RJ series
Suitable for operation which requires gentle stop such as a light weight workpiece transfer or low speed transfer.

Rubber Stopper

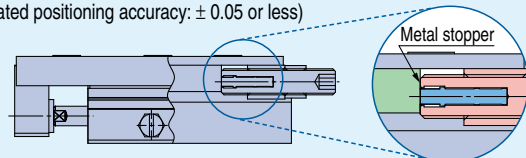
Impact reduced by 1/2 compared with the model without stroke adjuster

Operating Principle/Metal Stopper with Bumper

- Bumper absorbs impact at an initial stage.



- Bumper goes into the adjustment bolt, and the metal stopper performs highly accurate positioning at the end of the adjustment bolt.
(Repeated positioning accuracy: ± 0.05 or less)

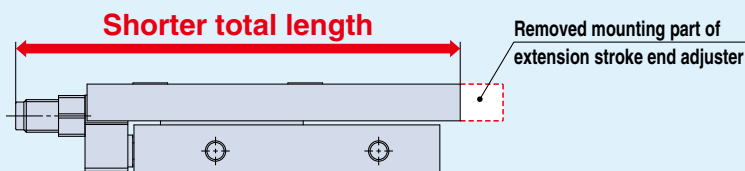


Shorter total length type for table is now available.

Total length shortened **8.5 mm**

70 mm (Basic type 78.5 mm) (For MXQ8A-20)

* Extension stroke end adjuster cannot be mounted.



Series Variations

Bore size (mm)	Series						Standard stroke (mm)										Adjuster option	Functional option
	Double ported type Series MXQ□A	Single side ported type Series MXQ□C		Height interchangeable type Series MXQ□		10	20	30	40	50	75	100	125	150				
		Standard type	Symmetric type	Standard type	Symmetric type													
6															Metal stopper with bumper Rubber stopper Shock absorber	With buffer With end lock Axial piping		
8																		
12																		
16																		
20																		
25																		

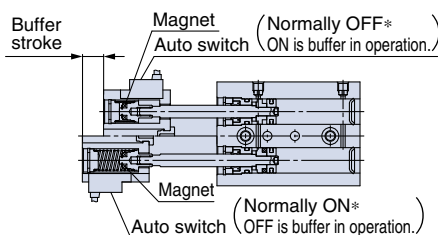
Bore size (mm)	Low thrust with high rigidity type Series MX□□B		Standard stroke (mm)										Adjuster option
	Standard type	Symmetric type	10	20	30	40	50	75	100	125	150		
6	●	●	●	●	●	●	●	●				Metal stopper with bumper Rubber stopper Shock absorber	
8	●	●	●	●	●	●	●	●	●				
12	●	●	●	●	●	●	●	●	●	●			
16	●		●	●	●	●	●	●	●	●	●		
20	●		●		●	●	●	●	●	●	●		

Functional Option

With buffer mechanism

- Protects workpieces and tools, etc., by eliminating impact at the extension stroke end.
- Buffer unit is auto switch capable.

Buffer mechanism operating condition

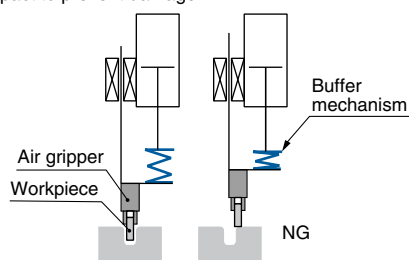


Normal condition

* By changing the mounting angle of auto switches, setting of normally ON/OFF can be changed.

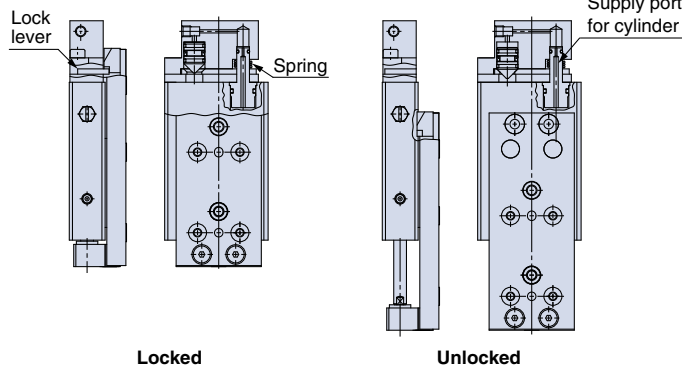
Application Example

In workpiece insertion processes when there is a problem such as faulty positioning, the buffer mechanism absorbs the shock from the workpiece impact to prevent damage.



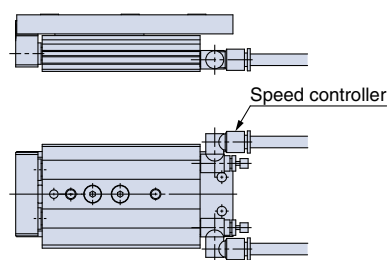
With end lock

- Holds the cylinder's home position to prevent dropping of the workpiece even if the air supply is cut off.



Axial piping

- Centralized piping in axial direction to maintain clear space around the body



Double ported type

Series *MXQ□A*



When the features as shown below are required for ø8 and ø12 sizes, refer to the MXQ□C, single side ported type as well.

- Two auto switch mounting grooves are required on one side.
(Two auto switches can be mounted on one side when stroke is short.)
- Lower height than the MXQ□A is required (for ø8).

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Low thrust with high rigidity type

Series *MXQ□B*



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Single side ported type

Series *MXQ□C*



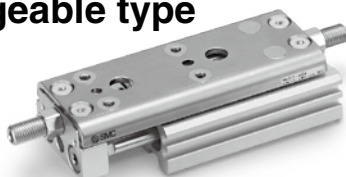
When the features as shown below are required for ø8 and ø12 sizes, refer to the MXQ□A, double ported type as well.

- Auto switch mounting groove and air piping are provided on both sides
(for increased flexibility in piping and wiring).

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Height interchangeable type

Series *MXQ□*



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Air Slide Table

Double ported type

Series MXQ□A

ø6, ø8, ø12, ø16, ø20, ø25

RoHS

How to Order

MXQ 12 A - 30 ZA - M9BW -

• **Bore size**

• **Body option: Double ported type**

• **Standard stroke (mm)**

• **Made to Order**
Refer to page 3 for details.

• **Number of auto switches**

• **Functional option**

• **Auto switch**

* For applicable auto switches, refer to the table below.

Adjuster option/Functional option combinations

Symbol	Adjuster type	Adjuster mounting position ^{Note 1)}		Functional option combination					
		Extension stroke end	Retraction stroke end	Nil	1	2	3	4	5
Z	Without adjuster			○	○	○	○	○	○
ZA	Metal stopper with bumper	●	●	○	×	×	○	×	×
ZB	(Not available for ø6)	●	●	○	×	×	○	×	×
ZC		●	●	○	×	×	○	×	×
ZD	Rubber stopper	●	●	○	×	×	○	×	×
ZE		●	●	○	×	×	○	×	×
ZF		●	●	○	×	×	○	×	×
ZG		●	●	○	×	×	○	×	×
ZH	Shock absorber (RJ)	●	●	○	×	×	○	×	×
ZJ		●	●	○	×	×	○	×	×
ZN	^{Note 5)} Without adjuster			○	○ ^{Note 6)}	×	○	×	○ ^{Note 6)}
ZP	Shorter total length type			○	×	×	○	×	×
ZQ				○	×	×	○	×	×
ZS				○	×	×	○	×	×

Note 1) ●: Shipped together with the product, but not assembled. Without any symbols for the adjuster mounting position, the adjuster can be mounted afterward.

Note 2) For buffer mechanism, buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.

Note 3) When retraction stroke end adjuster with buffer mechanism is needed, use the centralized adjuster specification (-X27). End lock or axial piping option cannot be mounted to the centralized adjuster specification model.

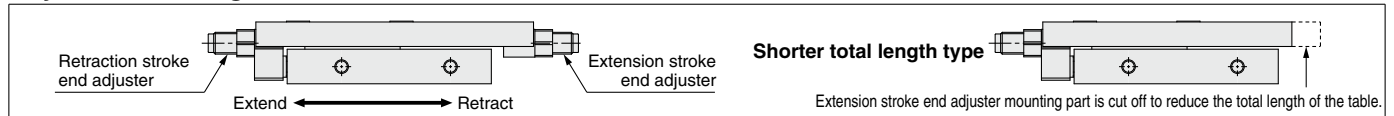
Note 4) Extension stroke end adjuster with end lock mechanism is available as long adjustment nut and bolt specification (-X28). The adjustment nut cannot be tightened with the standard adjuster.

Note 5) Extension stroke end adjuster mounting holes are removed to reduce the total length.

Note 6) Shorter total length type can be used, but the retraction stroke end adjuster cannot be mounted afterward.

Note 7) For axial piping of the MXQ□A, piping port on the both sides cannot be used.

Adjuster Mounting Position



Applicable Auto Switches/Refer to the Best Pneumatics No. 3 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)	
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	24 V	5V, 12 V	—	M9NV	M9N	●	●	●	○	○	IC	Relay, PLC	
				3-wire (PNP)				M9PV	M9P	●	●	●	○	○			
				2-wire				M9BV	M9B	●	●	●	○	○			
	Diagnostic indication (2-color indication)			3-wire (NPN)				5 V, 12 V	M9NWV	M9NW	●	●	●	○	○		IC
				3-wire (PNP)					M9PWV	M9PW	●	●	●	○	○		
				2-wire					M9BWV	M9BW	●	●	●	○	○		
	Water resistant (2-color indication)			3-wire (NPN)	5V, 12 V	M9NAV***			M9NA***	○	○	●	○	○	IC		
				3-wire (PNP)		M9PAV***			M9PA***	○	○	●	○	○			
				2-wire		M9BAV***			M9BA***	○	○	●	○	○			

*** Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance. Please contact SMC regarding water resistant types with the above model numbers.

* 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 "○" are produced upon receipt of order.

* Since there are other applicable auto switches than listed, refer to page 85 for details.

* For details about auto switches with pre-wired connector, refer to the Best Pneumatics No. 3.

* Auto switches are shipped together, (but not assembled).



Specifications

Bore size (mm)	6	8	12	16	20	25
Piping port size	M5 x 0.8					
Fluid	Air					
Action	Double acting					
Operating pressure	0.15 to 0.7 MPa ^{Note)} (End lock: 0.35 to 0.7 MPa)					
Proof pressure	1.05 MPa					
Ambient and fluid temperature	-10 to 60°C					
Operating speed range (Average operating speed)	50 to 500 mm/s (Metal stopper with bumper: 50 to 300 mm/s) * in the standard stroke table: 50 to 300 mm/s					
Cushion (Without stroke adjuster)	Internal rubber bumper					
Cushion (With stroke adjuster)	Metal stopper with bumper, Rubber stopper, Shock absorber					
Lubrication	Non-lube					
Auto switch	Solid state auto switch (2-wire, 3-wire) 2-color indication solid state auto switch (2-wire, 3-wire)					
Stroke length tolerance	+2 to 0 mm					

Note) Refer to page 4 for the minimum operating pressure for metal stopper with bumper. If the operating pressure is lower than the minimum operating pressure, repeated accuracy becomes worse.
Minimum operating pressure of metal stopper with bumper: Pressure required to fully compress the protrusion of the bumper to get in contact with the metal part.
Operating pressure for the bore size 20 cylinder with shock absorber is 0.15 to 0.6 MPa.

Standard Stroke

Model	Standard stroke (mm)
MXQ6A	10, 20, 30, 40, 50
MXQ8A	10, 20, 30, 40, 50, 75
MXQ12A	10, 20, 30, 40, 50, 75, 100
MXQ16A	10, 20, 30, 40, 50, 75, 100, 125
MXQ20A	10, 20, 30, 40, 50, 75, 100, 125, 150
MXQ25A	10, 20, 30, 40, 50, 75, 100, 125, 150*

Note) * Operating speed range is 50 to 300 mm/s. (Without stroke adjuster)



Made to Order
(For details, refer to pages 87 to 91.)

Symbol	Specifications
-X7	PTFE grease
-X9	Grease for food processing equipment
-X11	Long adjustment bolt (Longer adjustment range by 10 mm)
-X12	Long adjustment bolt (Longer adjustment range by 20 mm)
-X27	Centralized adjuster
-X28	Long adjustment nut and bolt
-X33	Without built-in auto switch magnet
-X39	Fluororubber seal
-X42	Anti-corrosive guide unit
-X45	EPDM seal

Theoretical Output

The dual rod ensures an output twice that of existing cylinders.

(N)

Bore size (mm)	Rod size (mm)	Operating direction	Piston area (mm ²)	Operating pressure (MPa)					
				0.2	0.3	0.4	0.5	0.6	0.7
6	3	OUT	57	11	17	23	29	34	40
		IN	42	8	13	17	21	25	29
8	4	OUT	101	20	30	40	51	61	71
		IN	75	15	23	30	38	45	53
12	6	OUT	226	45	68	90	113	136	158
		IN	170	34	51	68	85	102	119
16	6	OUT	402	80	121	161	201	241	281
		IN	346	69	104	138	173	207	242
20	8	OUT	628	126	188	251	314	377	440
		IN	528	106	158	211	264	317	369
25	10	OUT	982	196	295	393	491	589	687
		IN	825	165	247	330	412	495	577

Weight

Model	Standard stroke (mm)									Reduction of the shorter total length type	Additional weight of adjuster option		Extra for option			
	10	20	30	40	50	75	100	125	150		Extension stroke end	Retraction stroke end	End lock	Buffer	Axial piping	
MXQ6A	130	130	170	190	210	—	—	—	—	-6	10	8	40	30	No addition	
MXQ8A	140	160	180	210	270	290	—	—	—	-6	10	8	60	30		
MXQ12A	270	290	310	370	400	540	610	—	—	-12	20	16	80	70		
MXQ16A	480	510	550	630	670	810	1,000	1,100	—	-21	40	30	150	120		
MXQ20A	840	840	870	950	1,100	1,300	1,600	1,900	2,000	-33	70	50(80)	400	190		
MXQ25A	1,400	1,400	1,500	1,500	1,900	2,000	2,300	2,900	3,100	-60	110	80	700	310		

Note) Value in the () is the additional weight for the shock absorber.

Maximum Load Weight

Model	Without adjuster	Adjuster option			
	Internal rubber bumper	Rubber stopper	Metal stopper with bumper	Shock absorber (RJ)	
				Horizontal	Vertical
MXQ6A	0.6	0.6	—	0.6	
MXQ8A	1	1	1	1	
MXQ12A	2	2	2	1.5	1
MXQ16A	4	4	4	4	2.5
MXQ20A	6	6	6	6	
MXQ25A	9	9	9	9	6

Allowable Kinetic Energy

(J)				
Model	Without adjuster	Adjuster option		
	Internal rubber bumper	Rubber stopper	Metal stopper with bumper	Shock absorber (RJ)
MXQ6A	0.026	0.051	—	0.14
MXQ8A	0.033	0.053	0.016	0.17
MXQ12A	0.09	0.11	0.034	0.24
MXQ16A	0.1	0.18	0.07	0.61
MXQ20A	0.2	0.34	0.10	1.2
MXQ25A	0.32	0.51	0.15	1.3

Optional Specifications

With End Lock

Model	MXQ6A	MXQ8A	MXQ12A	MXQ16A	MXQ20A	MXQ25A
Operating pressure range (MPa)	0.35 to 0.7					
Holding force (N)	12	12	23	45	70	110

With Buffer Mechanism

Model		MXQ6A	MXQ8A	MXQ12A	MXQ16A	MXQ20A	MXQ25A
Operating speed range (mm/s)		50 to 500 (Horizontal mounting 50 to 300)					
Buffer stroke (mm)		5			10		
Buffer stroke load (N)	Stroke at 0 (mm)	3	5	9	16	25	40
	Maximum stroke	6	8	15	24	38	59

Applicable Auto Switch to Buffer

Type	Model	Specifications	Electrical entry direction
Solid state auto switch	D-M9BV	With light, 2-wire	Vertical
	D-M9NV	With light, 3-wire, Output: NPN	
	D-M9PV	With light, 3-wire, Output: PNP	

Adjusters

Metal Stopper with Bumper

Applicable slide table	MXQ8A	MXQ12A	MXQ16A	MXQ20A	MXQ25A
Model (Metal stopper with bumper only)	MXQA-A877	MXQA-A1287	MXQA-A1687	MXQA-A2087	MXQA-A2587
Max. absorbed energy (J)	0.018	0.04	0.08	0.12	0.18
Stroke absorption (mm)	2	2.8	3.6	4.4	5.5
Full compression force of bumper (N)	20	42	65	97	154
Min. operating pressure of metal stopper with bumper* (MPa)	0.3	0.3	0.2	0.2	0.2
Weight (g)	7	14	25	42	65
Mounting screw size (mm)	M6 x 0.75	M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

* Pressure required to fully compress the protrusion of the bumper when mounted horizontally to get in contact with the metal part. Consider the additional weight of the load when mounted in the vertical direction. * Not available for ø6.

Rubber Stopper

Applicable slide table	MXQ6A	MXQ8A	MXQ12A	MXQ16A	MXQ20A	MXQ25A
Model (Rubber stopper only)	MXQA-A827		MXQA-A1227	MXQA-A1627	MXQA-A2027	MXQA-A2527
Max. absorbed energy (J)	0.06		0.12	0.2	0.4	0.6
Weight (g)	7		14	25	42	65
Mounting screw size (mm)	M6 x 0.75		M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

Shock Absorber (RJ)

Applicable slide table	MXQ6A	MXQ8A	MXQ12A	MXQ16A	MXQ20A	MXQ25A
Model (Shock absorber only)	RJ0603N		RJ0805N	RJ1006N	RJ1007HN	RJ1410N
Max. absorbed energy (J)	0.35		0.5	1.5	3	3.7
Stroke absorption (mm)	3		5	6	7	10
Collision speed (mm/s)	50 to 500					
Max. operating frequency (cycle/min)	80		80	70		45
Max. allowable thrust (N)	150		245	422		814
Spring force (Extended) (N)	1.3		2.8	5.4		6.4
Spring force (Compressed) (N)	3.9		4.9	8		15
Weight (g)	5.5		15	23		65
Mounting screw size (mm)	M6 x 0.75		M8 x 1	M10 x 1		M14 x 1.5

Double ported type
MXQ□ALow thrust with high rigidity type
MXQ□BSingle side ported type
MXQ□CHeight interchangeable type
MXQ□Common Adjuster
OptionsAuto Switch
Mounting

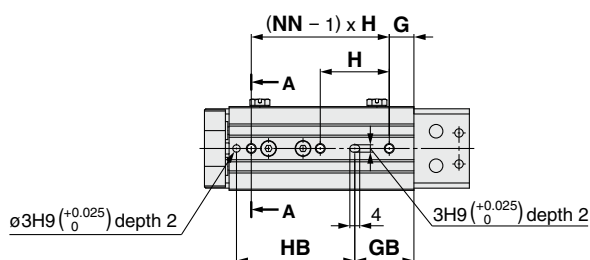
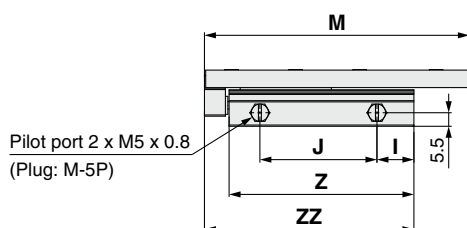
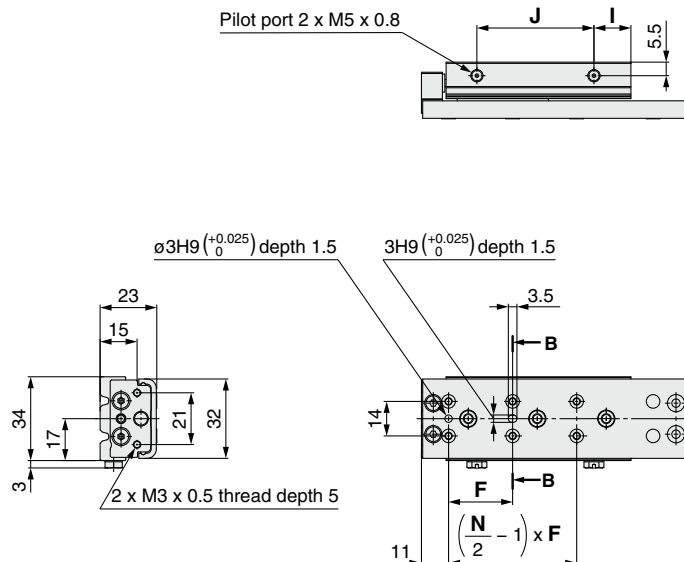
Made to Order

Model Selection

Series MXQ□A

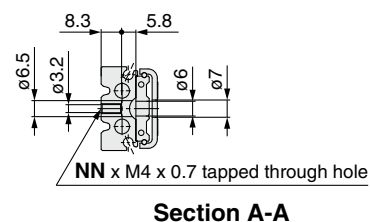
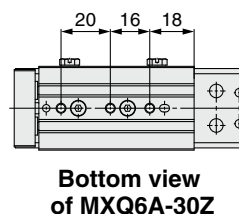
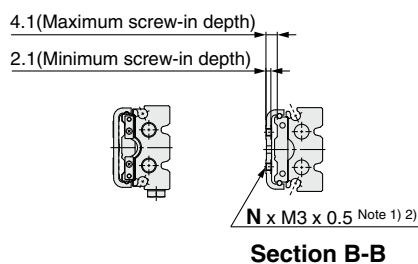
Dimensions: MXQ **6A** [Standard]

MXQ **6A**-□Z Standard type



Note 1) If long bolts are used, they can touch the guide block and cause a malfunction etc. Use a screw which has the intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to pages 125 and 126 for details.

Note 2) Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet etc. This could cause an auto switch malfunction.



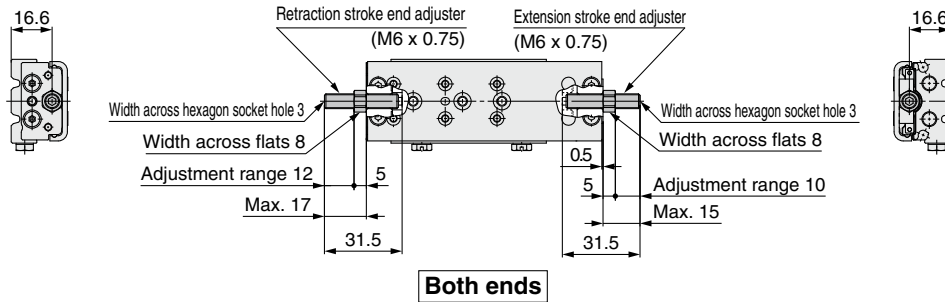
Dimensions

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ6A-10Z	22	18	9	23	38	10	27.5	64.5	4	2	50	60
MXQ6A-20Z	25	15	9	26	38	10	27.5	74.5	4	2	50	60
MXQ6A-30Z	21	—	12	—	48	13	37.5	95.5	6	3	63	73
MXQ6A-40Z	26	10	24	28	48	15	47.5	107.5	6	3	75	85
MXQ6A-50Z	27	20	34	28	48	15	57.5	117.5	6	3	85	95

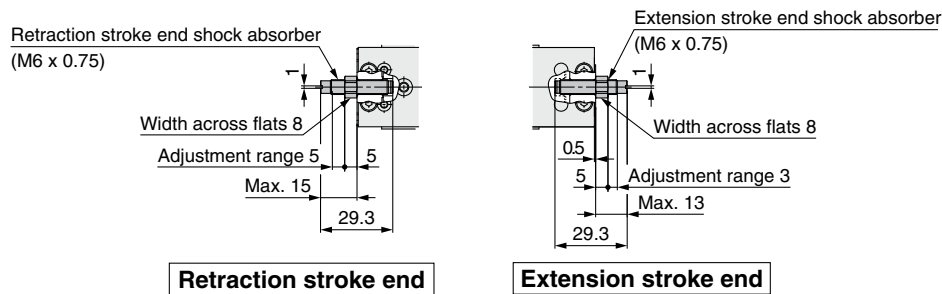
Dimensions: MXQ **6A** [Adjuster Option]

MXQ **6A**-□ With adjuster option (ø6)

Rubber stopper **ZD** : Both ends, **ZE** : Extension stroke end, **ZF** : Retraction stroke end, **ZP** : Retraction stroke end (Shorter total length type)

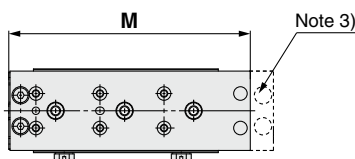


Shock absorber (RJ) **ZG** : Both ends, **ZH** : Extension stroke end, **ZJ** : Retraction stroke end, **ZQ** : Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ **6A**-□**ZN** Shorter total length type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward.
(Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)	
Model	M
MXQ6A-10ZN	55
MXQ6A-20ZN	65
MXQ6A-30ZN	86
MXQ6A-40ZN	98
MXQ6A-50ZN	108

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

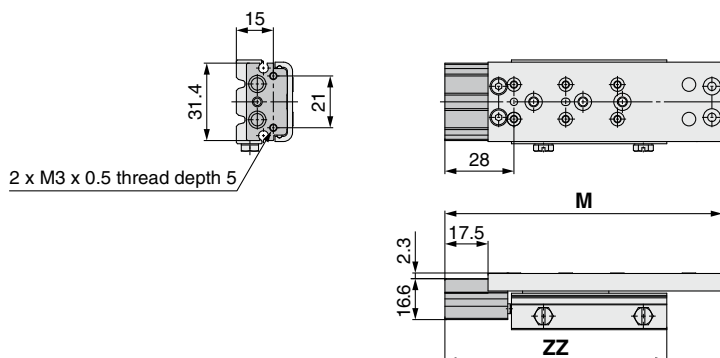
Made to Order

Model Selection

Series MXQ□A

Dimensions: MXQ **6A** [Functional Option]

MXQ **6A**-□□1 With buffer (ø6)

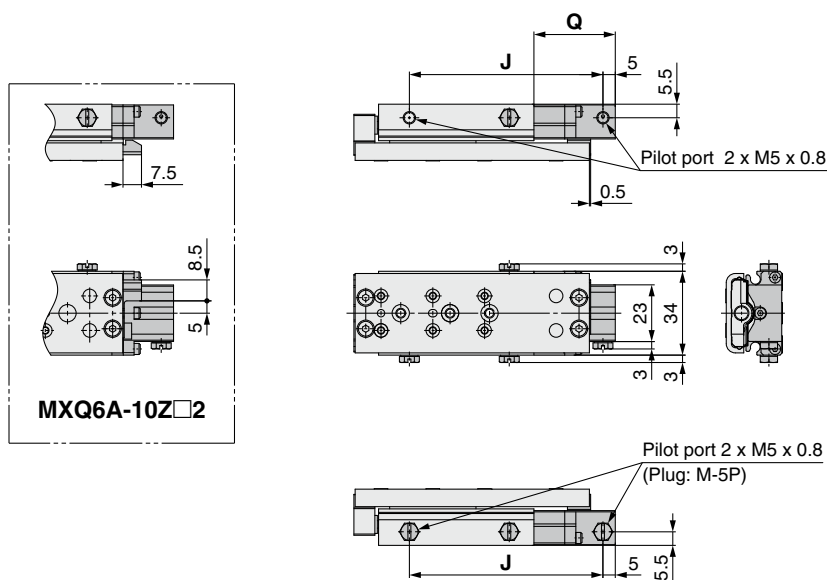


Dimensions (mm)

Model	Standard type	Shorter total length type	ZZ
MXQ6A-10□1	81.5	72	77
MXQ6A-20□1	91.5	82	
MXQ6A-30□1	112.5	103	90
MXQ6A-40□1	124.5	115	102
MXQ6A-50□1	134.5	125	112

* Dimensions other than listed above are the same as those for the standard type.

MXQ **6A**-□Z2 With end lock, without adjuster (ø6)



Dimensions (mm)

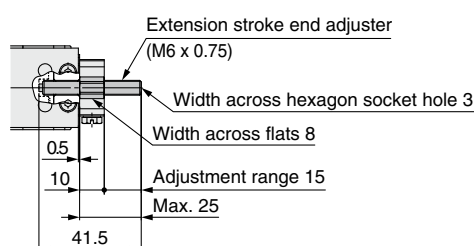
Model	J	Q
MXQ6A-10Z□2	57.5	25
MXQ6A-20Z□2		
MXQ6A-30Z□2	78.5	33
MXQ6A-40Z□2	90.5	
MXQ6A-50Z□2	100.5	

* Dimensions other than listed above are the same as those for the standard type.

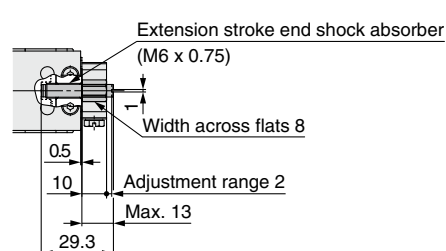
MXQ **6A**-□□2 With end lock, extension stroke end adjuster (ø6)

Select the long adjustment nut and bolt specification (-X28) when an end lock and extension stroke end adjuster are used together.
The stroke adjustment range is different from the adjuster of the standard product.
Retraction stroke end adjuster cannot be mounted to the end lock.

Rubber stopper: **ZE**



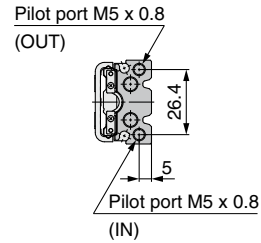
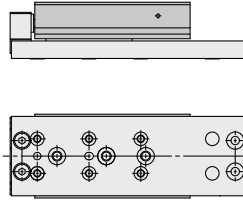
Shock absorber (RJ): **ZH**



* Dimensions other than listed above are the same as those for the standard type.

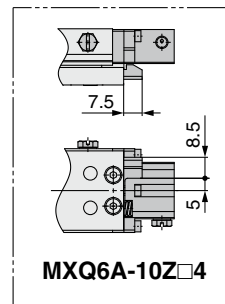
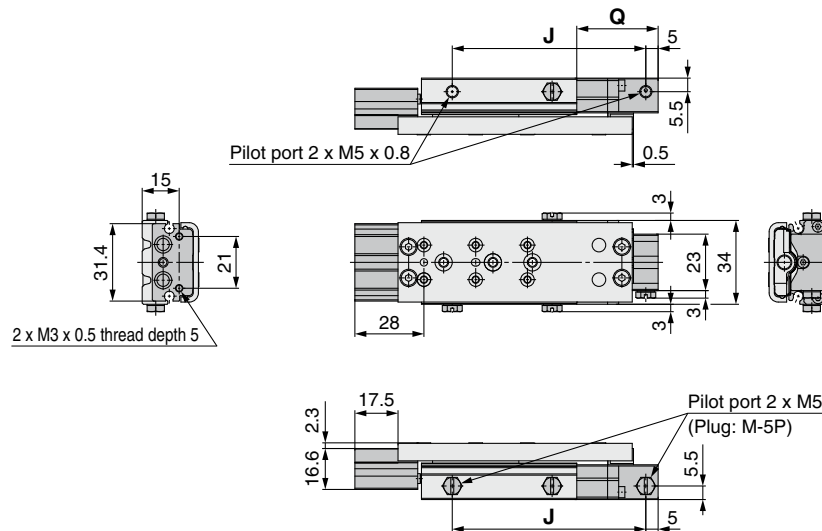
Dimensions: MXQ **6A** [Functional Option]

MXQ **6A-□□3** Axial piping (ø6)



* Dimensions other than listed above are the same as those for the standard type.

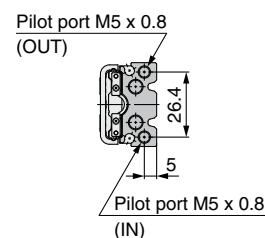
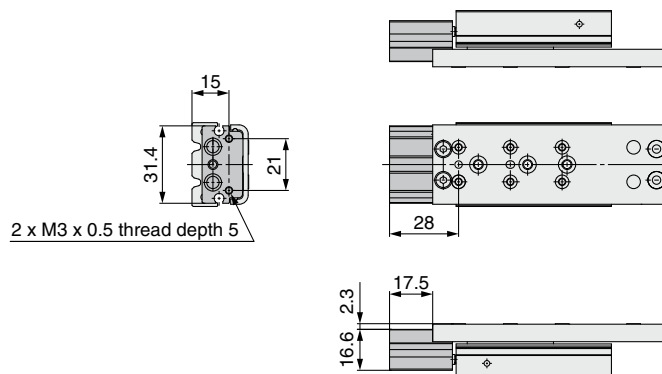
MXQ **6A-□□4** With buffer, end lock (ø6)



Dimensions (mm)		
Model	J	Q
MXQ6A-10Z□4	57.5	25
MXQ6A-20Z□4		
MXQ6A-30Z□4	78.5	33
MXQ6A-40Z□4	90.5	
MXQ6A-50Z□4	100.5	

* Dimensions other than listed above are the same as those for the standard type.

MXQ **6A-□□5** With buffer, axial piping (ø6)

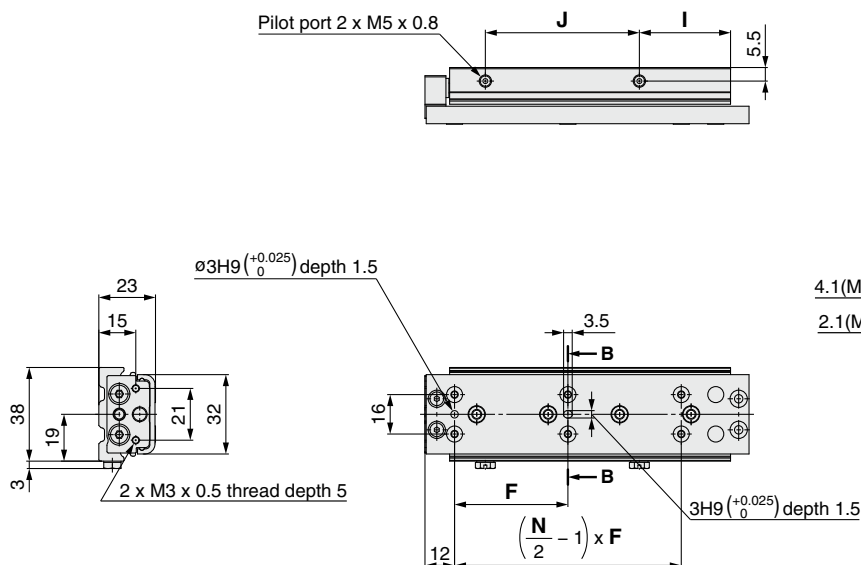


* Dimensions other than listed above are the same as those for the standard type.

Series MXQ□A

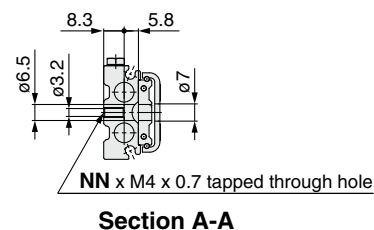
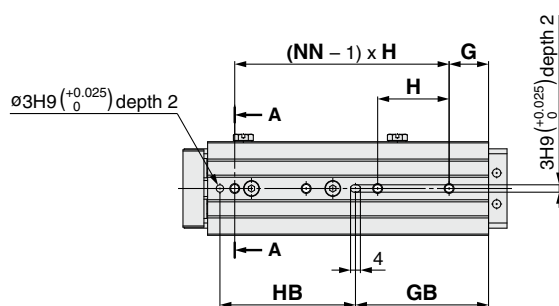
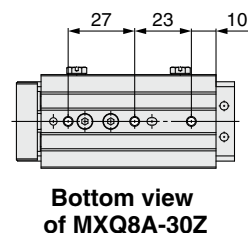
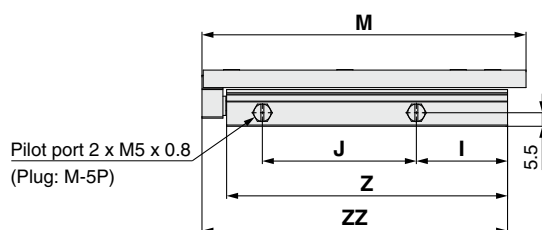
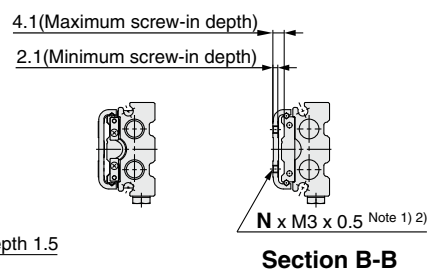
Dimensions: MXQ **8A** [Standard]

MXQ **8A**-□Z Standard type



Note 1) If long bolts are used, they can touch the guide block and cause a malfunction etc. Use a screw which has the intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to pages 125 and 126 for details.

Note 2) Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet etc. This could cause an auto switch malfunction.



Dimensions

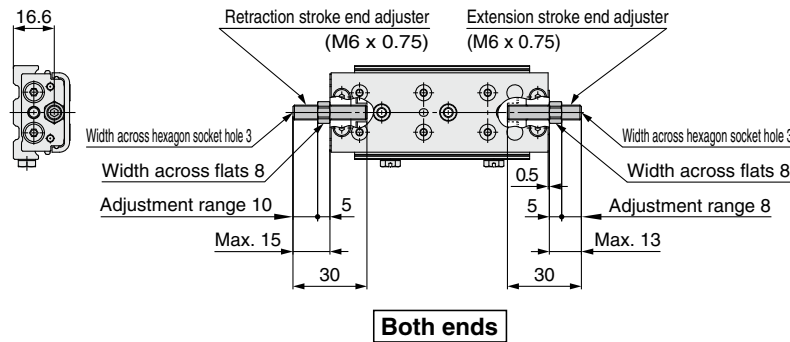
(mm)

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ8A-10Z	25	15	9	25	37	10	26.5	68.5	4	2	51	61
MXQ8A-20Z	25	22	16	28	40	14	32.5	78.5	4	2	61	71
MXQ8A-30Z	26	—	26	—	40	14.5	42	88.5	6	3	71	81
MXQ8A-40Z	32	14	27	31	55	20	52.5	104.5	6	3	87	97
MXQ8A-50Z	46	16	54	29	55	37	62.5	131.5	6	4	114	124
MXQ8A-75Z	50	15	56	30	55	10	91.5	156.5	6	4	116	126

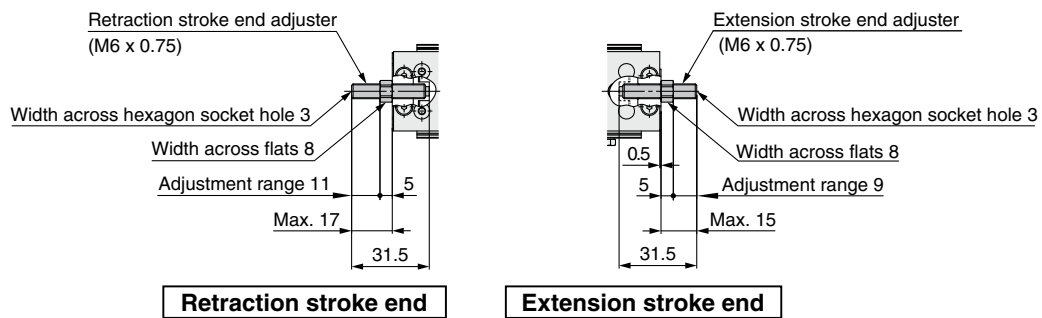
Dimensions: MXQ **8A** [Adjuster Option]

MXQ **8A**-□ With adjuster option (ø8)

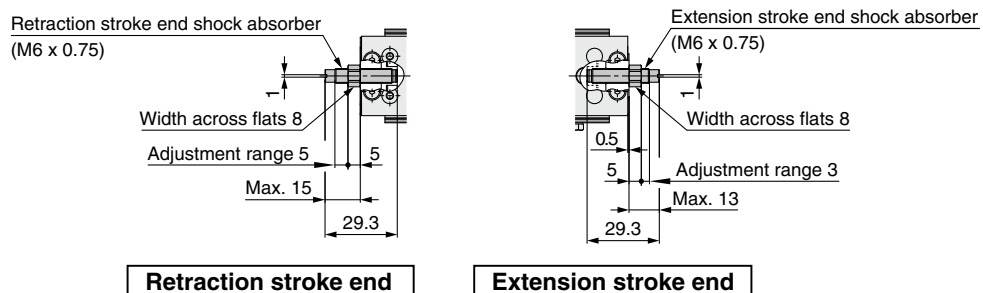
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)



Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

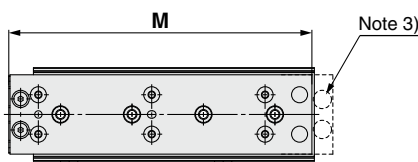


Shock absorber (RJ) **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ **8A**-□**ZN** Shorter total length type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)

Model	M
MXQ8A-10ZN	60
MXQ8A-20ZN	70
MXQ8A-30ZN	80
MXQ8A-40ZN	96
MXQ8A-50ZN	123
MXQ8A-75ZN	148

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

Auto Switch
Mounting

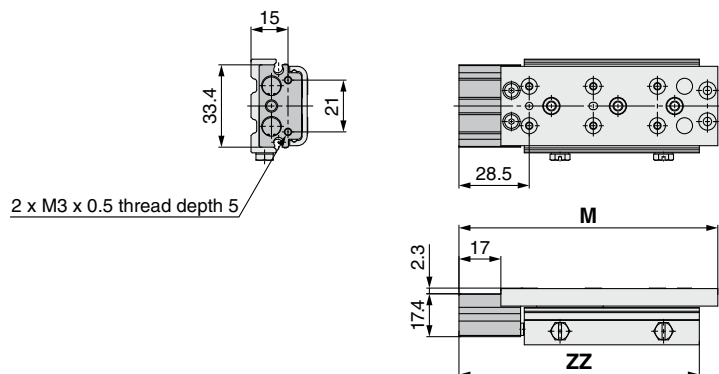
Made to Order

Model Selection

Series MXQ□A

Dimensions: MXQ **8A** [Functional Option]

MXQ **8A**-□□1 With buffer (ø8)

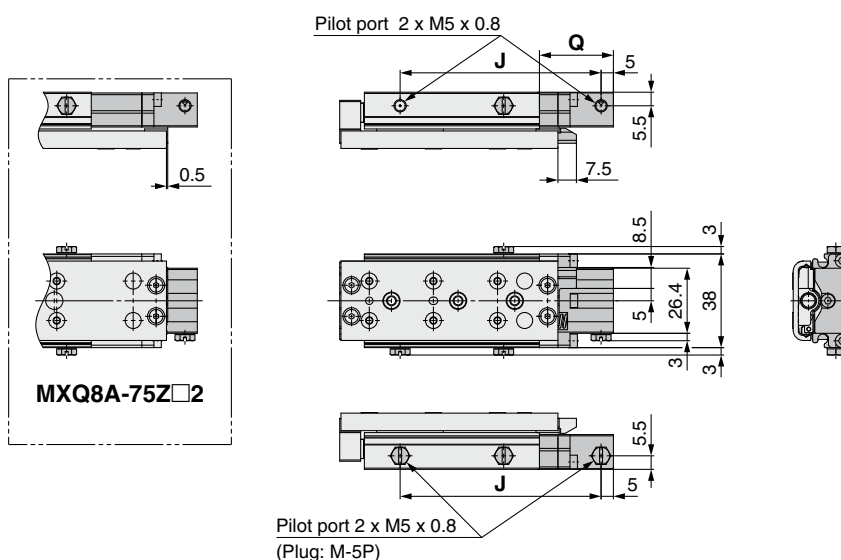


Dimensions (mm)

Model	Standard type	Shorter total length type	ZZ
	M	M	
MXQ8A-10□1	85	76.5	77.5
MXQ8A-20□1	95	86.5	87.5
MXQ8A-30□1	105	96.5	97.5
MXQ8A-40□1	121	112.5	113.5
MXQ8A-50□1	148	139.5	140.5
MXQ8A-75□1	173	164.5	142.5

* Dimensions other than listed above are the same as those for the standard type.

MXQ **8A**-□□2 With end lock (ø8)



Dimensions (mm)

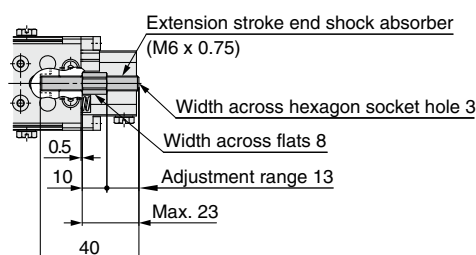
Model	J	Q
MXQ8A-10Z□2	61.5	30
MXQ8A-20Z□2	71.5	
MXQ8A-30Z□2	81.5	
MXQ8A-40Z□2	97.5	
MXQ8A-50Z□2	124.5	43
MXQ8A-75Z□2	139.5	

* Dimensions other than listed above are the same as those for the standard type.

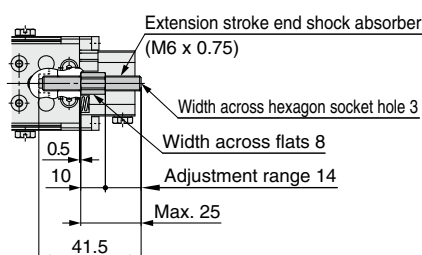
MXQ **8A**-□□2 With end lock, extension stroke end adjuster (ø8)

Select the long adjustment nut and bolt specification (-X28) when an end lock and extension stroke end adjuster are used together.
The stroke adjustment range is different from the adjuster of the standard product.
Retraction stroke end adjuster cannot be mounted to the end lock.

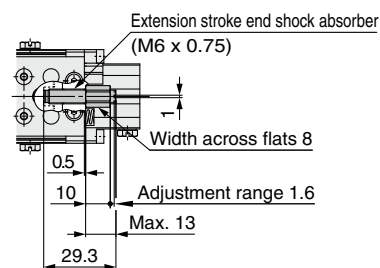
Metal stopper with bumper: **ZB**



Rubber stopper: **ZE**



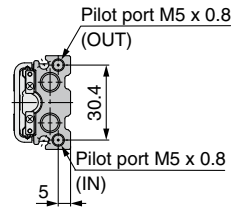
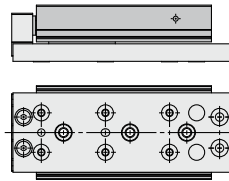
Shock absorber (RJ): **ZH**



* Dimensions other than listed above are the same as those for the standard type.

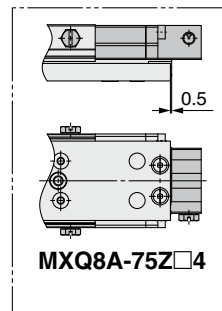
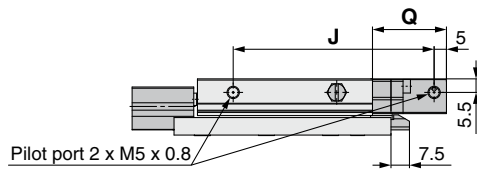
Dimensions: MXQ **8A** [Functional Option]

MXQ **8A**-□□**3** Axial piping (ø8)

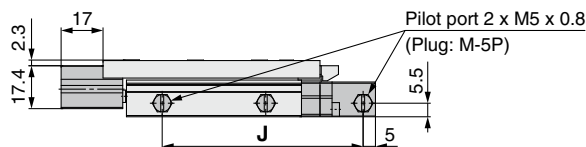
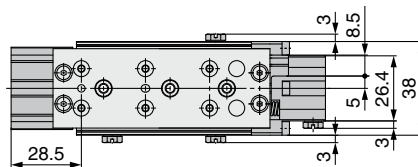
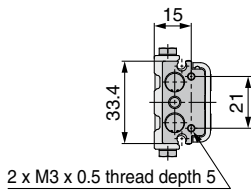


* Dimensions other than listed above are the same as those for the standard type.

MXQ **8A**-□□**4** With buffer, end lock (ø8)

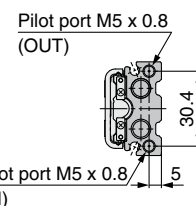
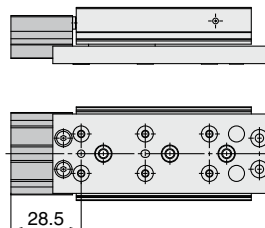
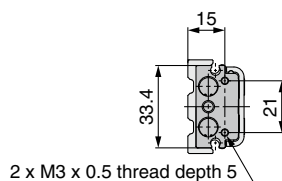


Dimensions (mm)		
Model	J	Q
MXQ8A-10Z□4	61.5	30
MXQ8A-20Z□4	71.5	
MXQ8A-30Z□4	81.5	
MXQ8A-40Z□4	97.5	
MXQ8A-50Z□4	124.5	43
MXQ8A-75Z□4	139.5	

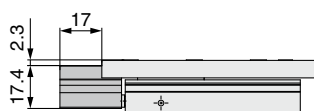


* Dimensions other than listed above are the same as those for the standard type.

MXQ **8A**-□□**5** With buffer, axial piping (ø8)



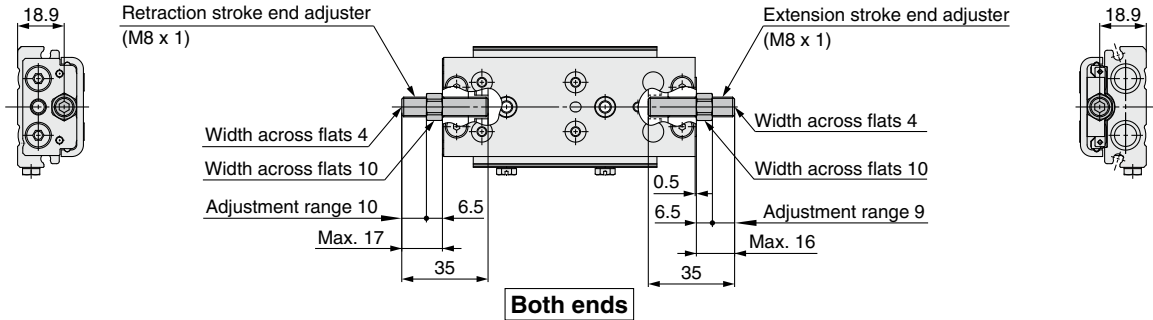
* Dimensions other than listed above are the same as those for the standard type.



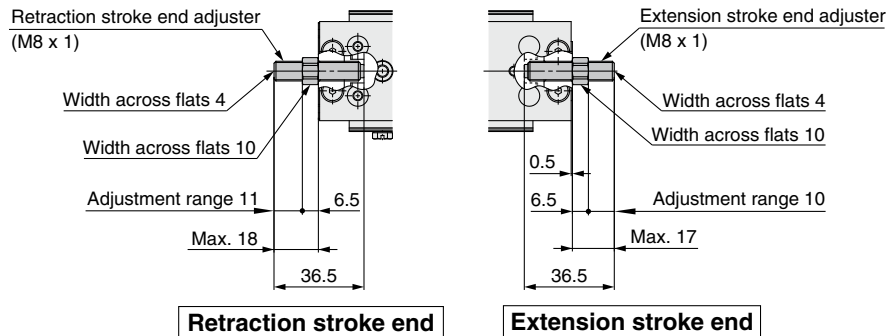
Dimensions: MXQ **12A** [Adjuster Option]

MXQ **12A**-□ With adjuster option (ø12)

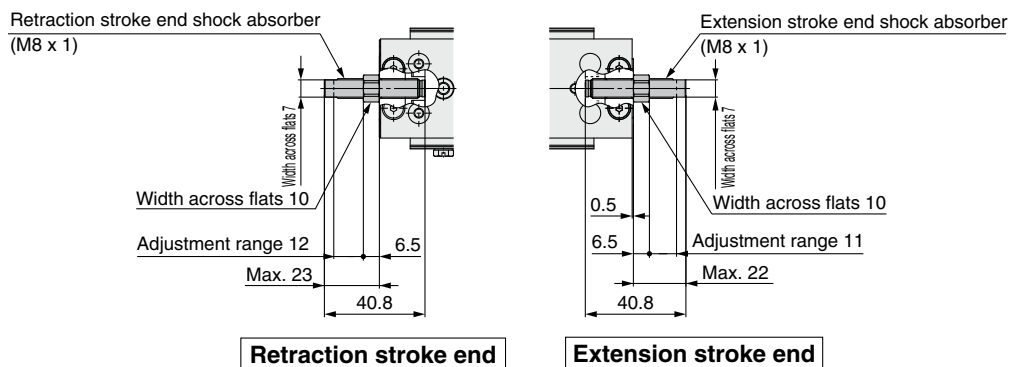
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)



Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

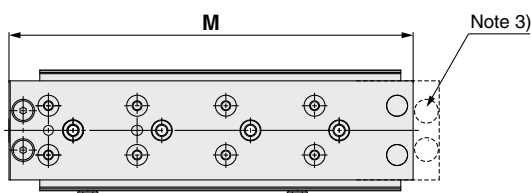


Shock absorber (RJ) **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ **12A**-□**ZN** Shorter total length type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward.
(Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)	
Model	M
MXQ12A-10ZN	72
MXQ12A-20ZN	82
MXQ12A-30ZN	92
MXQ12A-40ZN	110
MXQ12A-50ZN	120
MXQ12A-75ZN	164
MXQ12A-100ZN	189

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

Auto Switch
Mounting

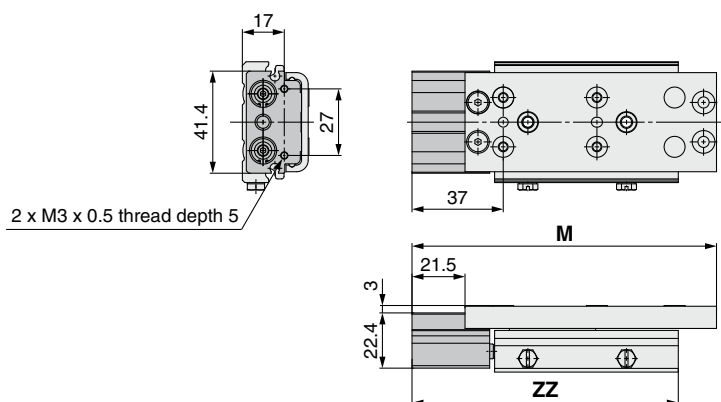
Made to Order

Model Selection

Series MXQ□A

Dimensions: MXQ **12A** [Functional Option]

MXQ 12A-□□1 With buffer (ø12)

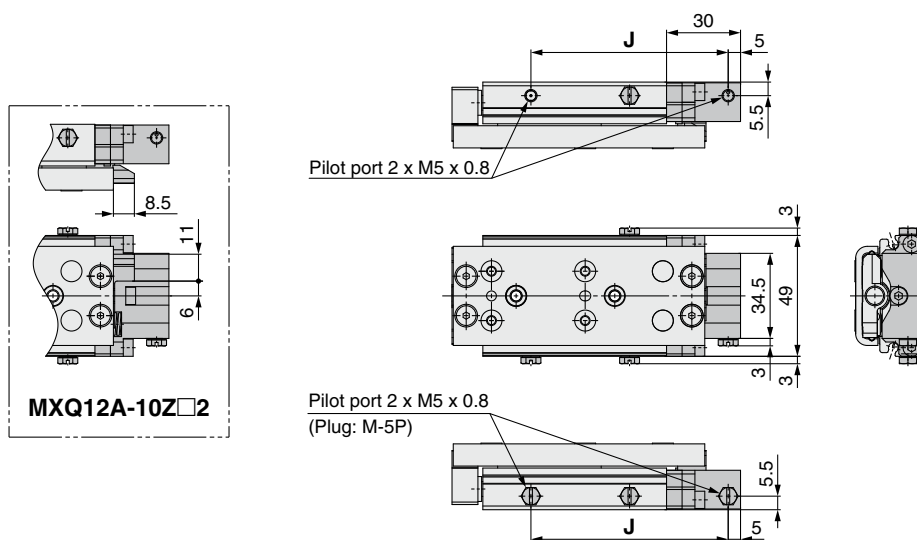


Dimensions (mm)

Model	Standard type	Shorter total length type	ZZ
	M	M	
MXQ12A-10□1	103.5	93	96
MXQ12A-20□1	113.5	103	98
MXQ12A-30□1	123.5	113	108
MXQ12A-40□1	141.5	131	126
MXQ12A-50□1	151.5	141	136
MXQ12A-75□1	195.5	185	180
MXQ12A-100□1	220.5	210	205

* Dimensions other than listed above are the same as those for the standard type.

MXQ 12A-□□2 With end lock (ø12)



Dimensions (mm)

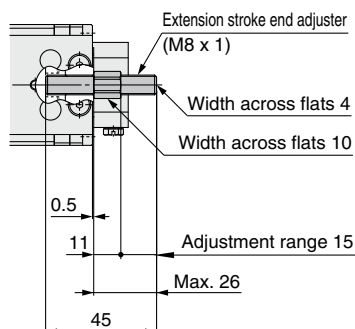
Model	J
MXQ12A-10Z□2	68
MXQ12A-20Z□2	70
MXQ12A-30Z□2	80
MXQ12A-40Z□2	98
MXQ12A-50Z□2	108
MXQ12A-75Z□2	152
MXQ12A-100Z□2	177

* Dimensions other than listed above are the same as those for the standard type.

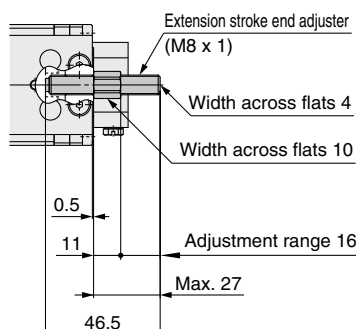
MXQ 12A-□□2 With end lock, extension stroke end adjuster (ø12)

Select the long adjustment nut and bolt specification (-X28) when an end lock and extension stroke end adjuster are used together. The stroke adjustment range is different from the adjuster of the standard product. Retraction stroke end adjuster cannot be mounted to the end lock.

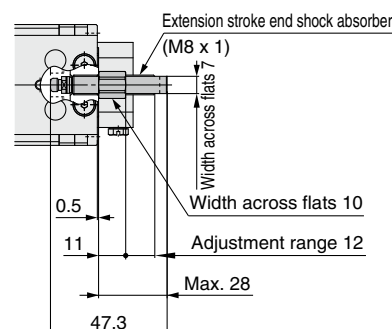
Metal stopper with bumper: **ZB**



Rubber stopper: **ZE**



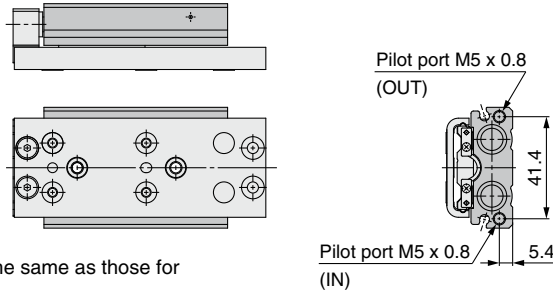
Shock absorber (RJ): **ZH**



* Dimensions other than listed above are the same as those for the standard type.

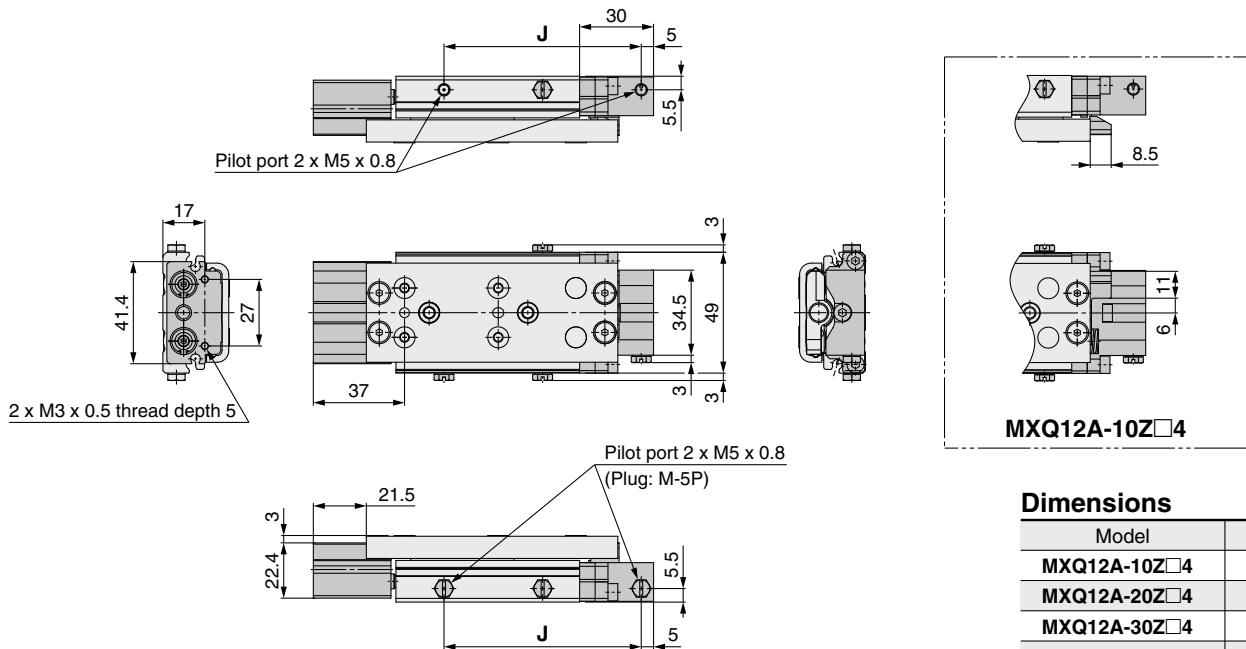
Dimensions: MXQ **12A** [Functional Option]

MXQ **12A-□□3** Axial piping (ø12)



* Dimensions other than listed above are the same as those for the standard type.

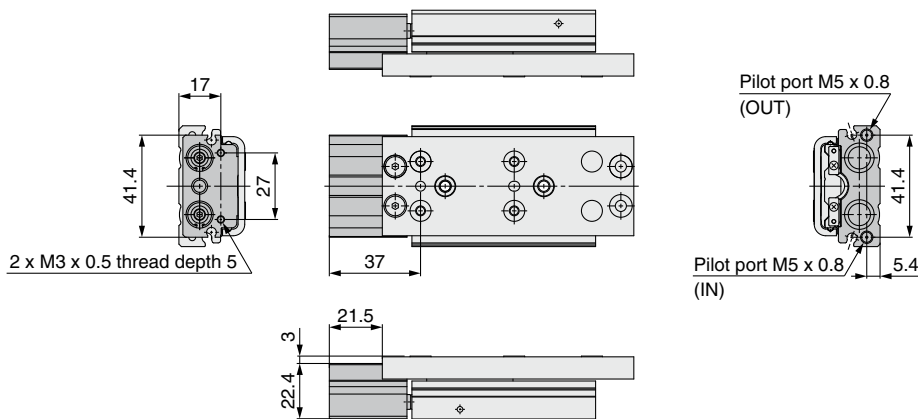
MXQ **12A-□□4** With buffer, end lock (ø12)



Dimensions (mm)	
Model	J
MXQ12A-10Z□4	68
MXQ12A-20Z□4	70
MXQ12A-30Z□4	80
MXQ12A-40Z□4	98
MXQ12A-50Z□4	108
MXQ12A-75Z□4	152
MXQ12A-100Z□4	177

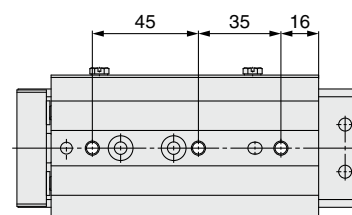
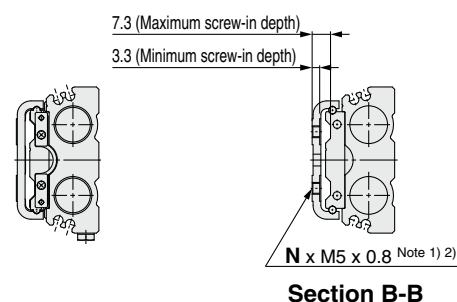
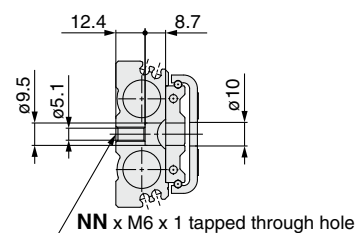
* Dimensions other than listed above are the same as those for the standard type.

MXQ **12A-□□5** With buffer, axial piping (ø12)



* Dimensions other than listed above are the same as those for the standard type.

16A [Standard]

[illegible]

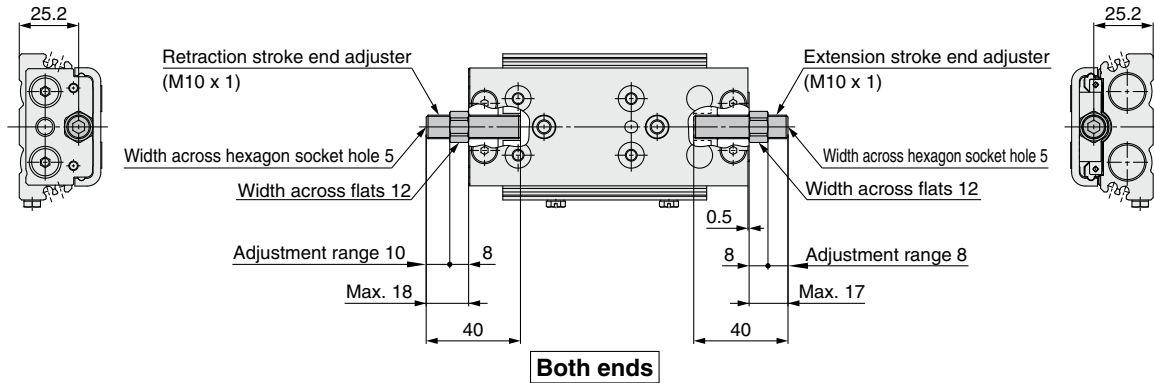
(mm)



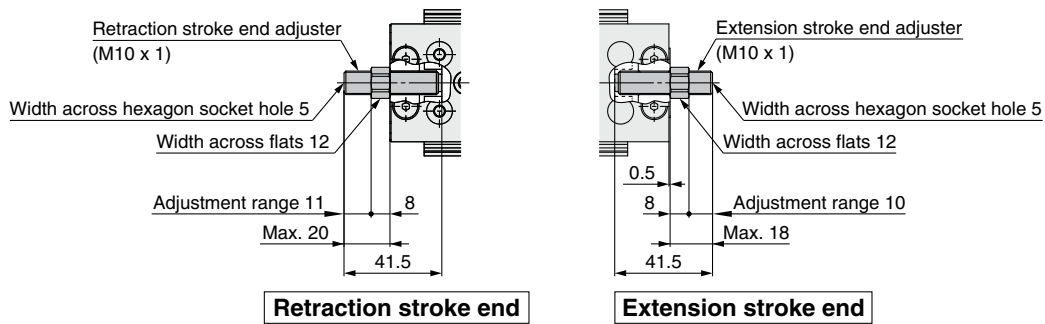
Dimensions: MXQ **16A** [Adjuster Option]

MXQ 16A-□□ With adjuster option (ø16)

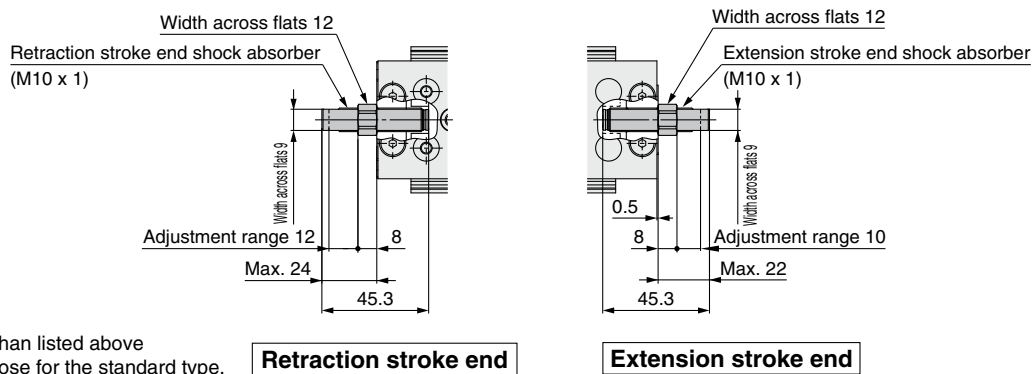
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)



Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

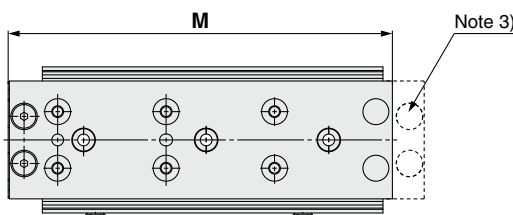


Shock absorber (RJ) **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ 16A-□ZN Shorter total length type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward.
(Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

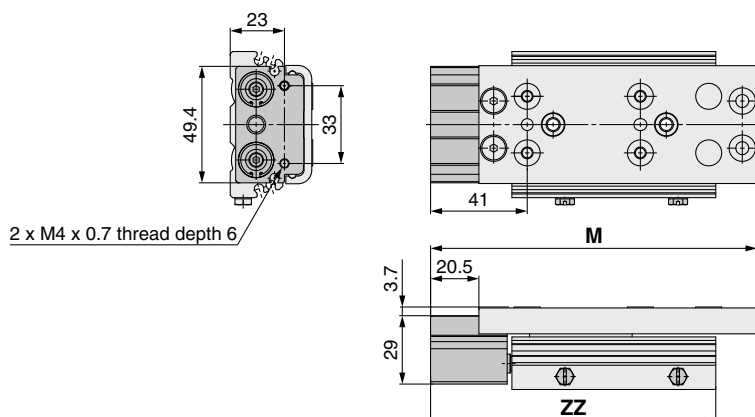
Dimensions (mm)

Model	M
MXQ16A-10ZN	85
MXQ16A-20ZN	95
MXQ16A-30ZN	105
MXQ16A-40ZN	122
MXQ16A-50ZN	132
MXQ16A-75ZN	163
MXQ16A-100ZN	207
MXQ16A-125ZN	232

Series MXQ□A

Dimensions: MXQ **16A [Functional Option]**

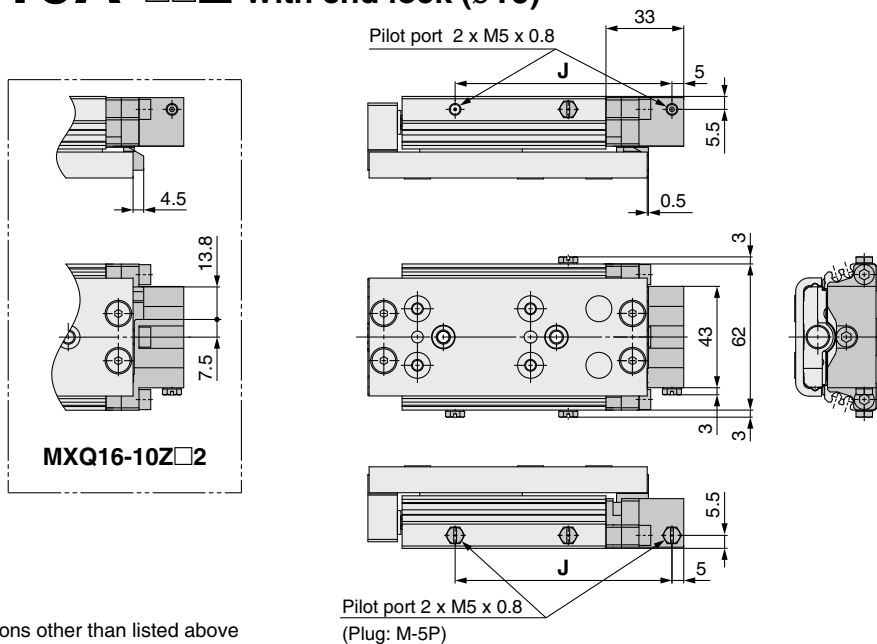
MXQ 16A-□□1 With buffer (ø16)



Dimensions (mm)

Model	Standard type	Shorter total length type	ZZ
	M	M	
MXQ16A-10□1	118.5	105	107
MXQ16A-20□1	128.5	115	111
MXQ16A-30□1	138.5	125	121
MXQ16A-40□1	155.5	142	138
MXQ16A-50□1	165.5	152	148
MXQ16A-75□1	196.5	183	179
MXQ16A-100□1	240.5	227	223
MXQ16A-125□1	265.5	252	248

MXQ 16A-□□2 With end lock (ø16)



Dimensions (mm)

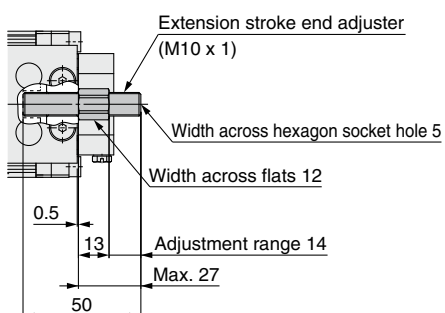
Model	J
MXQ16A-10Z□2	78
MXQ16A-20Z□2	82
MXQ16A-30Z□2	92
MXQ16A-40Z□2	109
MXQ16A-50Z□2	119
MXQ16A-75Z□2	150
MXQ16A-100Z□2	194
MXQ16A-125Z□2	219

* Dimensions other than listed above are the same as those for the standard type.

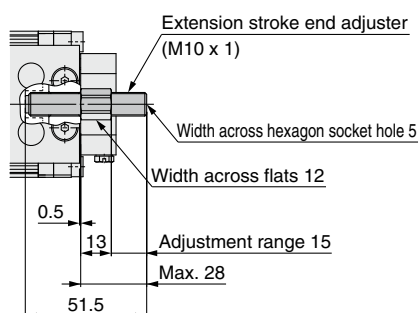
MXQ 16A-□□2 With end lock, extension stroke end adjuster (ø16)

Select the long adjustment nut and bolt specification (-X28) when an end lock and extension stroke end adjuster are used together.
The stroke adjustment range is different from the adjuster of the standard product.
Retraction stroke end adjuster cannot be mounted to the end lock.

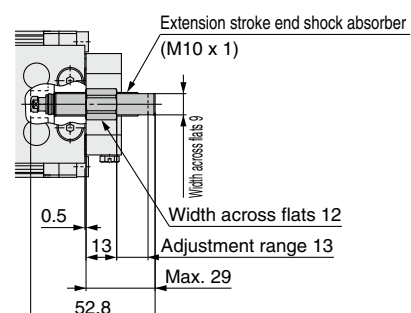
Metal stopper with bumper: ZB



Rubber stopper: **ZE**

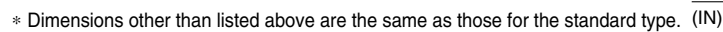


Shock absorber (RJ): ZH



* Dimensions other than listed above are the same as those for the standard type.

MXQ 16A-□□3 Axial piping (ø16)



Technical drawings of the MXQ16A-10Z□4 valve. The drawings include a side view, a top view, and a front view. The side view shows a length of 33mm and a width of 5mm. The top view shows a length of 62mm and a width of 41mm. The front view shows a length of 13.8mm and a width of 7.5mm. The valve is labeled MXQ16A-10Z□4.

* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)	
Model	J
MXQ16A-10Z□4	78
MXQ16A-20Z□4	82
MXQ16A-30Z□4	92
MXQ16A-40Z□4	109
MXQ16A-50Z□4	119
MXQ16A-75Z□4	150
MXQ16A-100Z□4	194
MXQ16A-125Z□4	219

Technical drawing of the 3000 series hydraulic valve, showing front, top, and side views with dimensions and port specifications.

Front View Dimensions:

- Overall width: 23
- Overall height: 49.4
- Port spacing: 33
- Port specification: 2 x M4 x 0.7 thread depth 6

Top View Dimensions:

- Overall width: 41
- Overall height: 20.5

Side View Dimensions:

- Overall height: 29
- Port spacing: 3.7

Port Specifications:

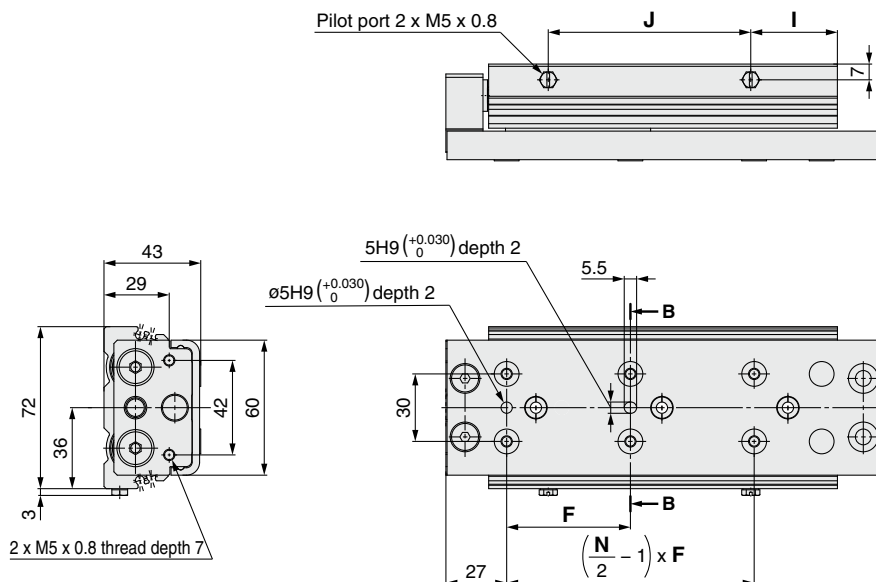
- Pilot port M5 x 0.8 (OUT)
- Pilot port M5 x 0.8 (IN)
- Port spacing: 5.2
- Port diameter: 5.5

* Dimensions other than listed above are the same as those for the standard type.

Series MXQ□A

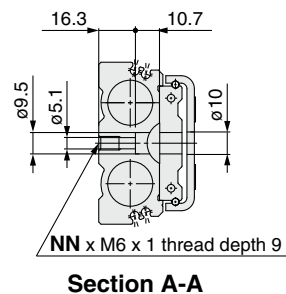
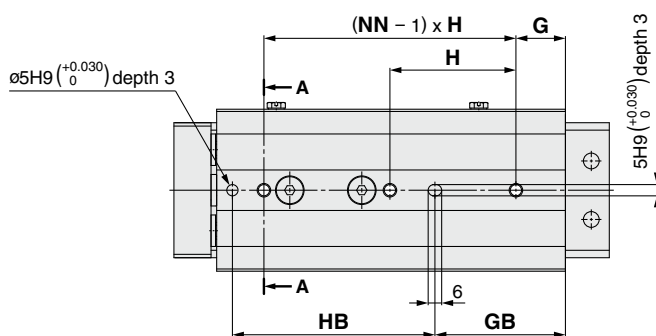
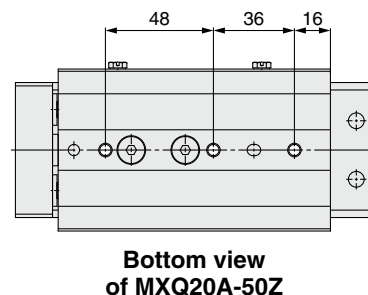
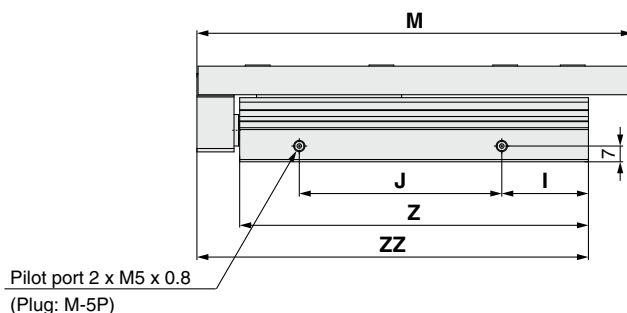
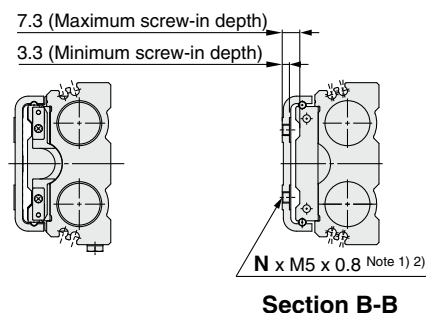
Dimensions: MXQ **20A** [Standard]

MXQ **20A-□Z** Standard type



Note 1) If long bolts are used, they can touch the guide block and cause a malfunction etc. Use a screw which has the intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to pages 125 and 126 for details.

Note 2) Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet etc. This could cause an auto switch malfunction.



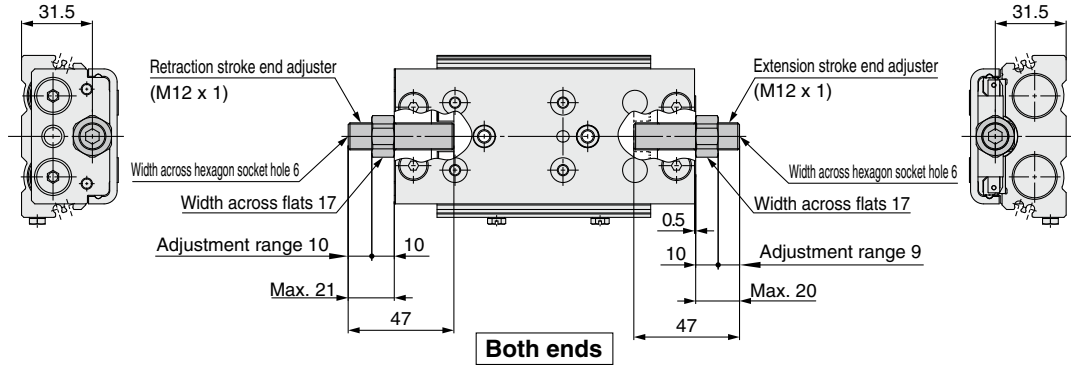
Dimensions

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ20A-10Z	45	18	8	46	70	24.5	34	113.5	4	2	85	104
MXQ20A-20Z	40	18	8	46	70	24.5	34	123.5	4	2	85	104
MXQ20A-30Z	48	28	18	46	70	22.5	46	133.5	4	2	95	114
MXQ20A-40Z	58	28	18	56	80	22.5	56	143.5	4	2	105	124
MXQ20A-50Z	42	—	34	—	80	30.5	64	159.5	6	3	121	140
MXQ20A-75Z	55	22	58	56	90	38.5	90	193.5	6	3	155	174
MXQ20A-100Z	50	16	108	56	90	63.5	115	266.5	8	4	205	224
MXQ20A-125Z	55	32	133	59	90	63.5	140	291.5	8	4	230	249
MXQ20A-150Z	62	48	158	62	90	63.5	165	316.5	8	4	255	274

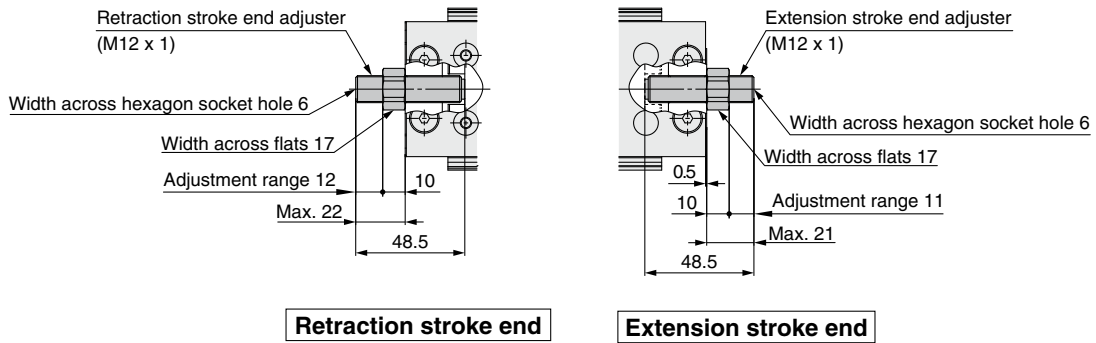
Dimensions: MXQ **20A** [Adjuster Option]

MXQ **20A**-□ With adjuster option (ø20)

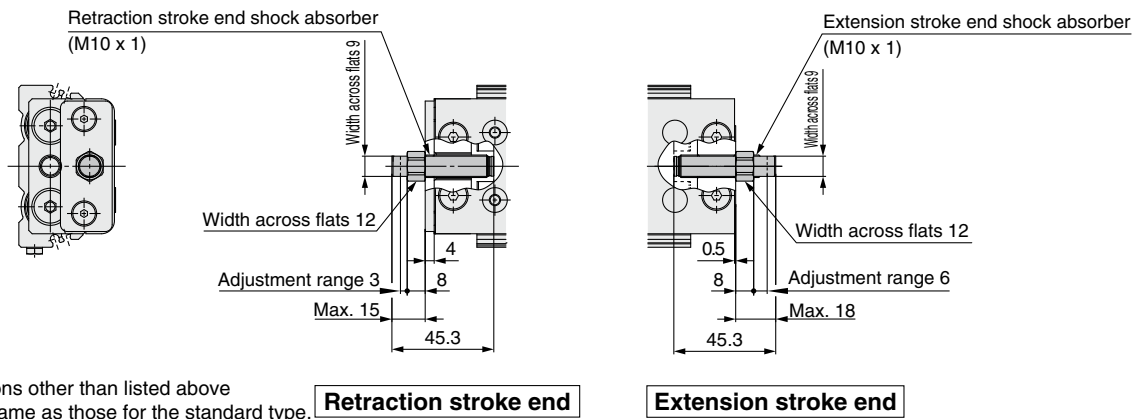
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)



Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

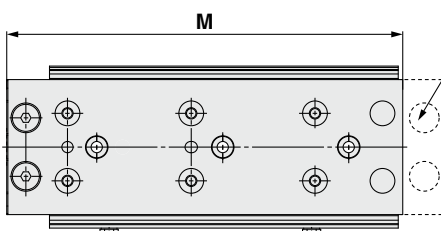


Shock absorber (RJ) **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ **20A**-□ **ZN** Shorter total length type



Note 3)

Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

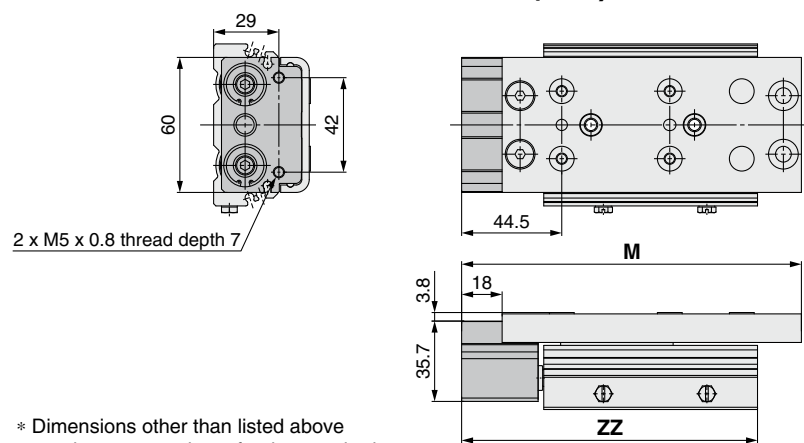
Dimensions (mm)

Model	M
MXQ20A-10ZN	96
MXQ20A-20ZN	106
MXQ20A-30ZN	116
MXQ20A-40ZN	126
MXQ20A-50ZN	142
MXQ20A-75ZN	176
MXQ20A-100ZN	249
MXQ20A-125ZN	274
MXQ20A-150ZN	299

Series MXQ□A

Dimensions: MXQ **20A [Functional Option]**

MXQ 20A-□□1 With buffer (ø20)

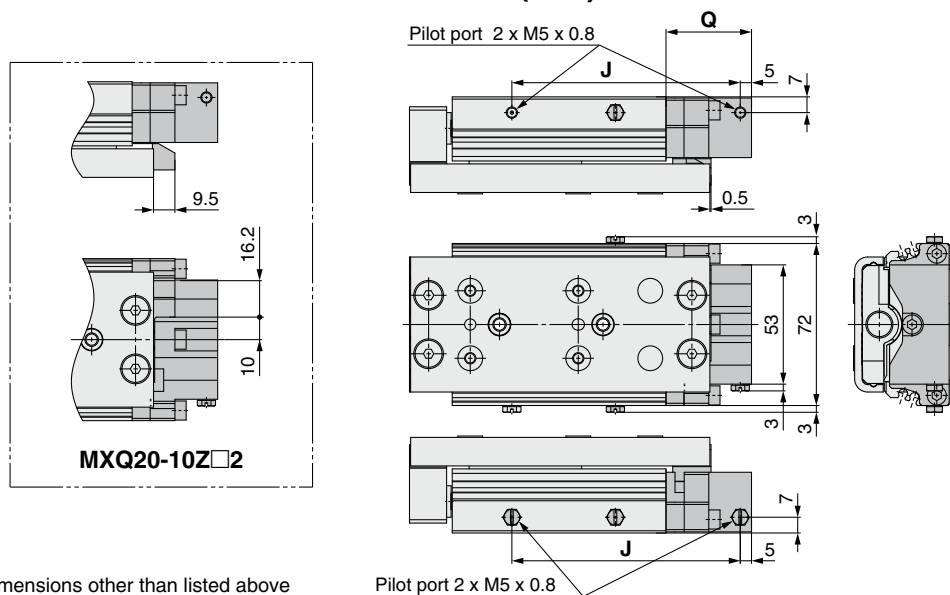


* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)

Model	Standard type	Shorter total length type	ZZ
	M	M	
MXQ20A-10□1	131	113.5	121.5
MXQ20A-20□1	141	123.5	
MXQ20A-30□1	151	133.5	131.5
MXQ20A-40□1	161	143.5	141.5
MXQ20A-50□1	177	159.5	157.5
MXQ20A-75□1	211	193.5	191.5
MXQ20A-100□1	284	266.5	241.5
MXQ20A-125□1	309	291.5	266.5
MXQ20A-150□1	334	316.5	291.5

MXQ 20A-□□2 With end lock (ø20)



* Dimensions other than listed above are the same as those for the standard type. (Plug: M-5P)

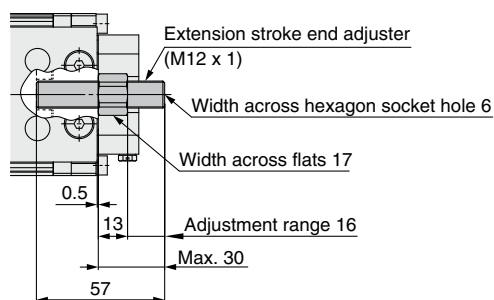
Dimensions (mm)

Model	J	Q
MXQ20A-10Z□□2	91.5	38
MXQ20A-20Z□□2		
MXQ20A-30Z□□2	101.5	
MXQ20A-40Z□□2	111.5	
MXQ20A-50Z□□2	127.5	
MXQ20A-75Z□□2	161.5	61
MXQ20A-100Z□□2	234.5	
MXQ20A-125Z□□2	259.5	
MXQ20A-150Z□□2	284.5	

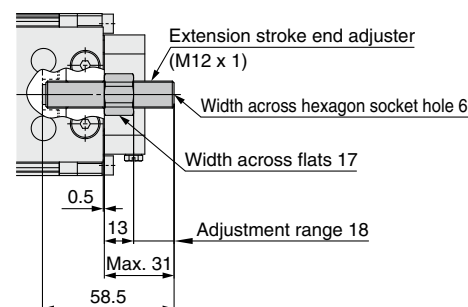
MXQ 20A-□□2 With end lock, extension stroke end adjuster (ø20)

Select the long adjustment nut and bolt specification (-X28) when an end lock and extension stroke end adjuster are used together. The stroke adjustment range is different from the adjuster of the standard product.
Retraction stroke end adjuster cannot be mounted to the end lock.

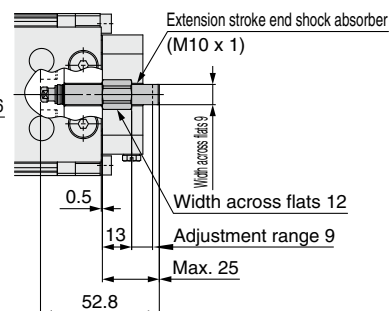
Metal stopper with bumper: ZB



Rubber stopper: **ZE**



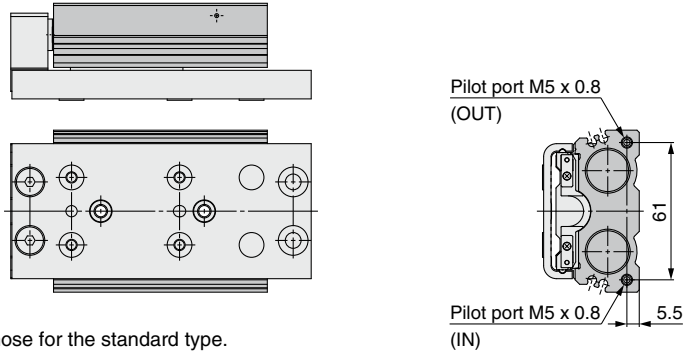
Shock absorber (RJ): **ZH**



* Dimensions other than listed above are the same as those for the standard type.

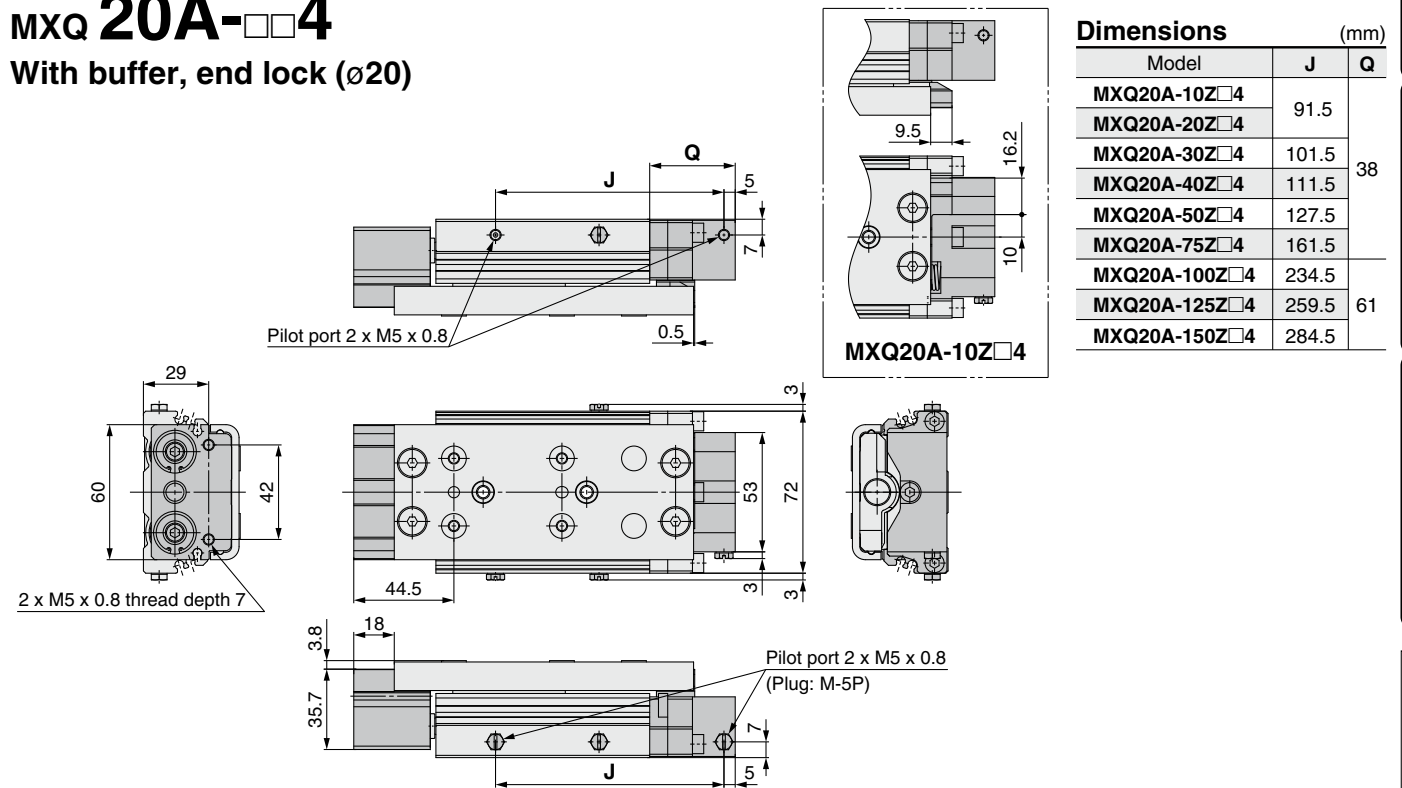
Dimensions: MXQ **20A** [Functional Option]

MXQ **20A-□□3** Axial piping (ø20)



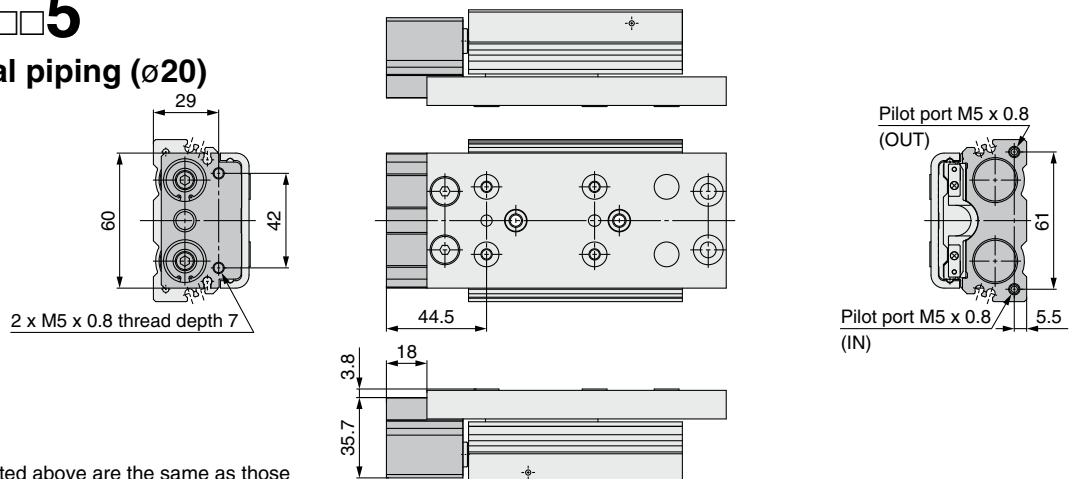
* Dimensions other than listed above are the same as those for the standard type.

MXQ **20A-□□4** With buffer, end lock (ø20)



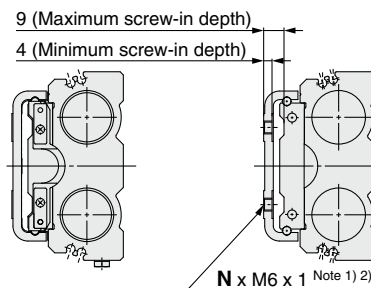
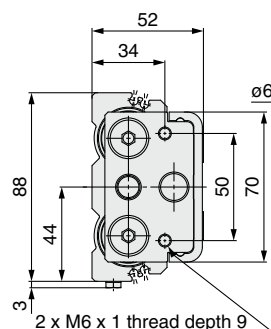
* Dimensions other than listed above are the same as those for the standard type.

MXQ **20A-□□5** With buffer, axial piping (ø20)

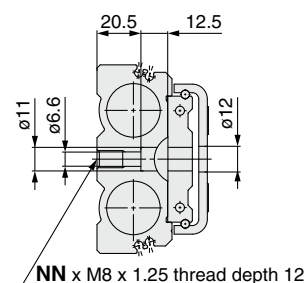


* Dimensions other than listed above are the same as those for the standard type.

25A [Standard]



Technical drawing of a shaft-hub assembly. The drawing shows a shaft (light gray) inserted into a hub (dark gray). The shaft has a diameter of 10. The hub has a bore diameter of 10. The dimensions are labeled as follows: M is the total length of the shaft; J is the length of the shaft section within the hub; I is the length of the hub section; Z is the total length of the hub; and 10 is the diameter of the shaft and hub bore.



Technical drawing of a shaft with dimensions and keyway. The shaft has a total length of 141 mm. The dimensions are: 65 mm for the first section, 50 mm for the second section, and 26 mm for the third section. The shaft has a keyway with a width of 10 mm. The shaft is shown in a cross-section view with a keyway on the right side.

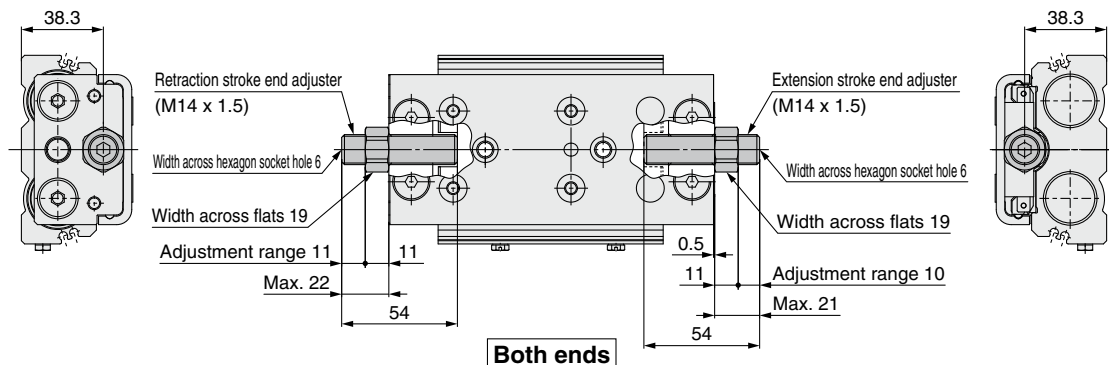
(mm)

25

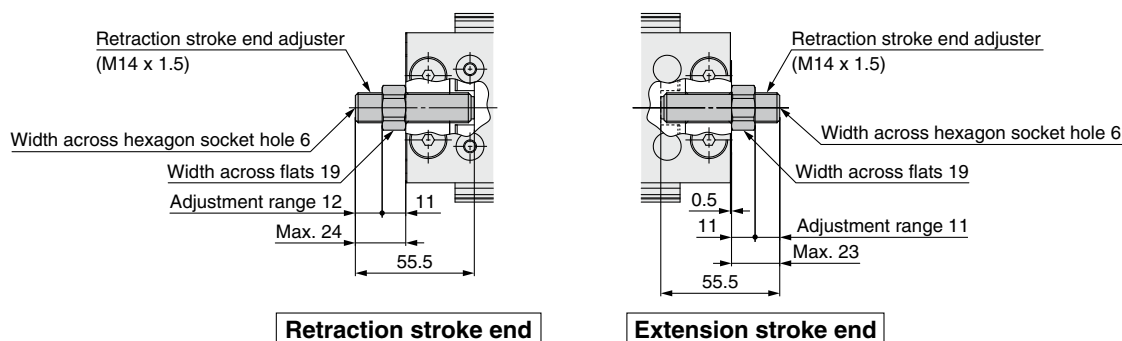
Dimensions: MXQ **25A** [Adjuster Option]

MXQ 25A- **With adjuster option (ø25)**

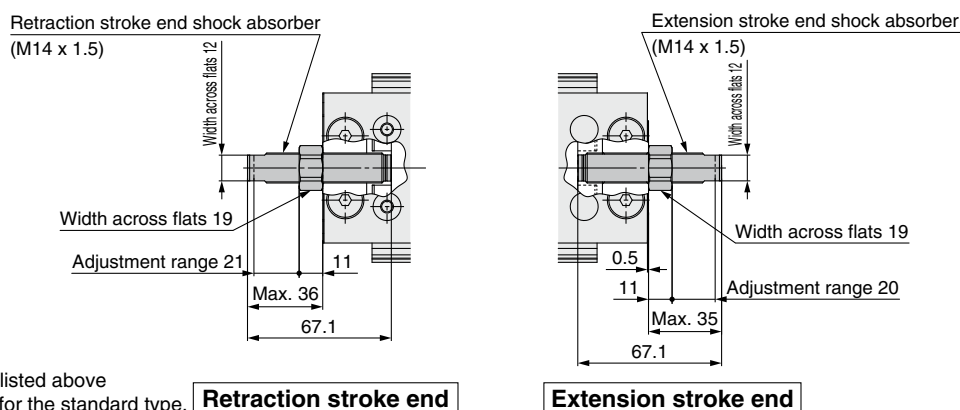
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)



Rubber stopper **ZD** : Both ends, **ZE** : Extension stroke end, **ZF** : Retraction stroke end, **ZP** : Retraction stroke end (Shorter total length type)

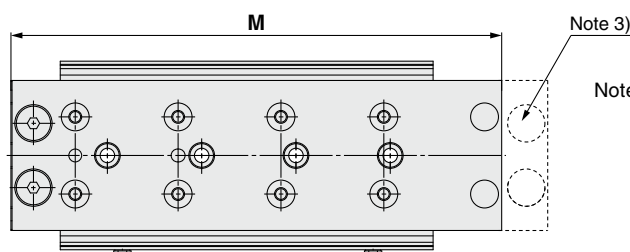


Shock absorber (RJ) **ZG** : Both ends, **ZH** : Extension stroke end, **ZJ** : Retraction stroke end, **ZQ** : Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ 25A-□ZN Shorter total length type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward.
(Retraction stroke end adjuster can be mounted afterward.)

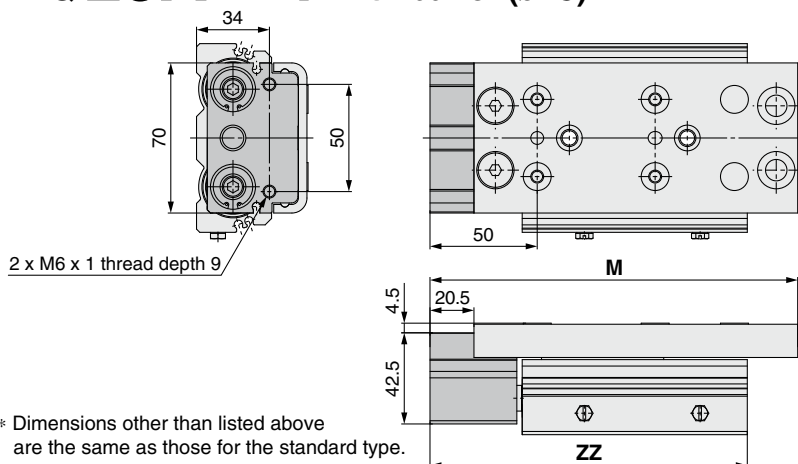
* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)	
Model	M
MXQ25A-10ZN	110
MXQ25A-20ZN	120
MXQ25A-30ZN	130
MXQ25A-40ZN	140
MXQ25A-50ZN	163
MXQ25A-75ZN	188
MXQ25A-100ZN	229
MXQ25A-125ZN	293
MXQ25A-150ZN	318

Series MXQ□A

Dimensions: MXQ **25A [Functional Option]**

MXQ 25A-□□1 With buffer (ø25)

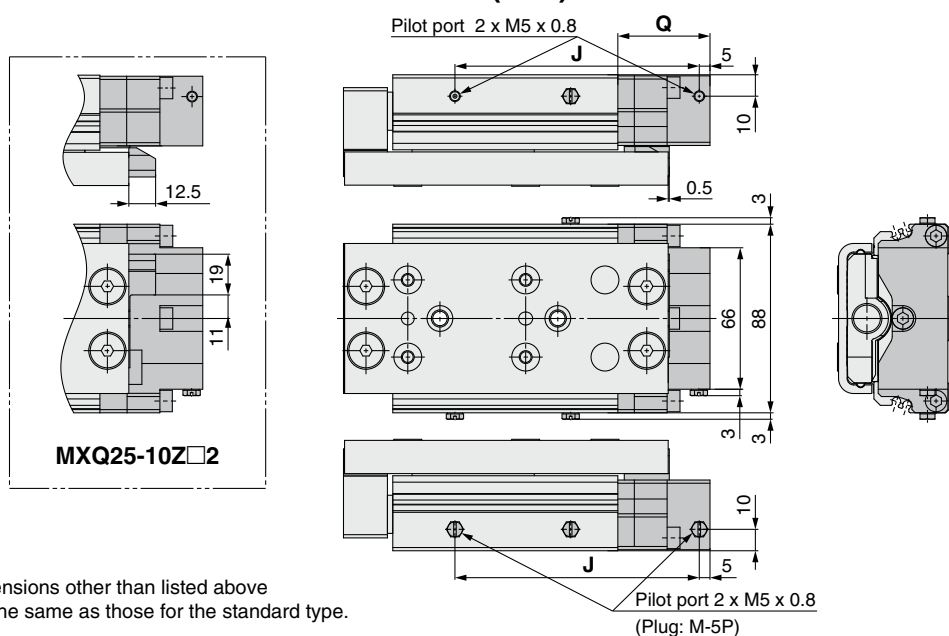


* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)

Model	Standard type	Shorter total length type	ZZ
	M	M	
MXQ25A-10□1	151.5	130	138
MXQ25A-20□1	161.5	140	
MXQ25A-30□1	171.5	150	148
MXQ25A-40□1	181.5	160	158
MXQ25A-50□1	204.5	183	181
MXQ25A-75□1	229.5	208	206
MXQ25A-100□1	270.5	249	217
MXQ25A-125□1	334.5	313	281
MXQ25A-150□1	359.5	338	306

MXQ 25A-□□2 With end lock (ø25)



* Dimensions other than listed above are the same as those for the standard type.

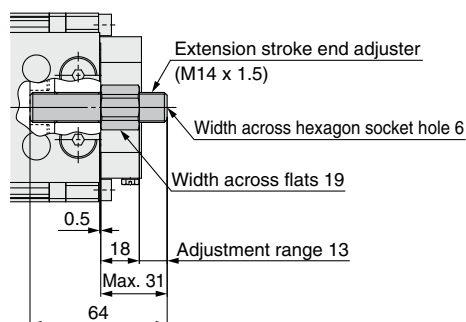
Dimensions (mm)

Model	J	Q
MXQ25A-10Z□2	109	48
MXQ25A-20Z□2	104	43
MXQ25A-30Z□2	114	
MXQ25A-40Z□2	124	
MXQ25A-50Z□2	147	
MXQ25A-75Z□2	172	
MXQ25A-100Z□2	213	73
MXQ25A-125Z□2	277	
MXQ25A-150Z□2	302	

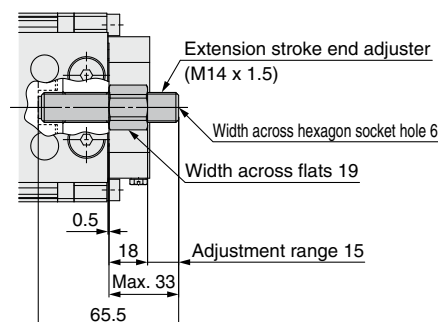
MXQ 25A-□□2 With end lock, extension stroke end adjuster (ø25)

Select the long adjustment nut and bolt specification (-X28) when an end lock and extension stroke end adjuster are used together.
The stroke adjustment range is different from the adjuster of the standard product.
Retraction stroke end adjuster cannot be mounted to the end lock.

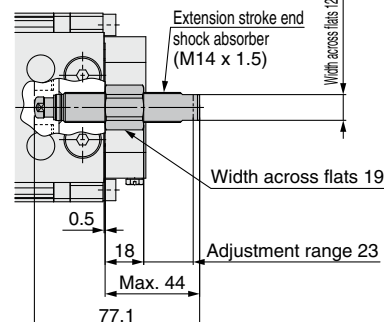
Metal stopper with bumper: ZB



Rubber stopper: ZE



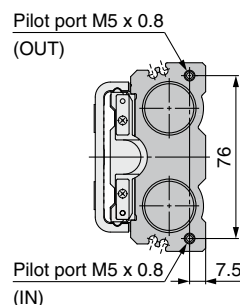
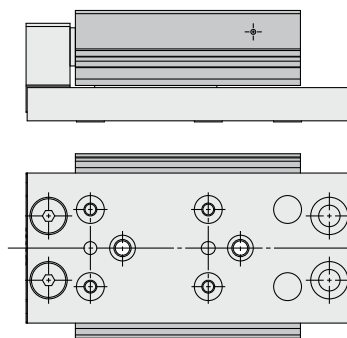
Shock absorber (RJ): ZH



* Dimensions other than listed above are the same as those for the standard type.

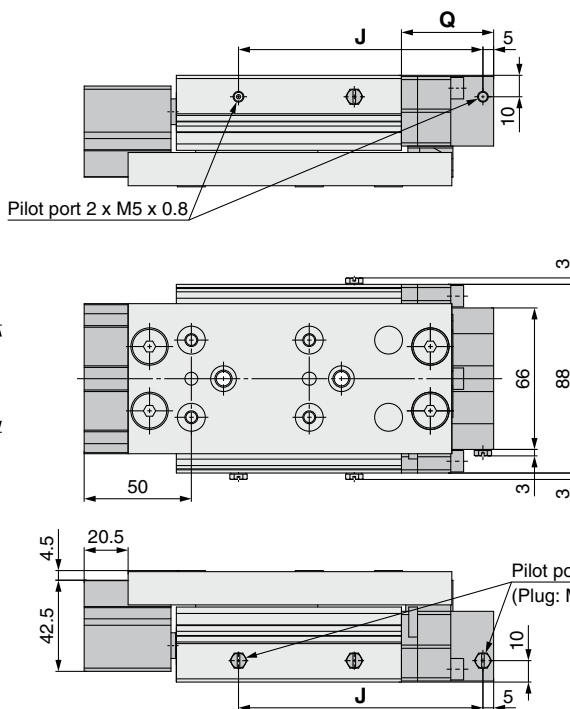
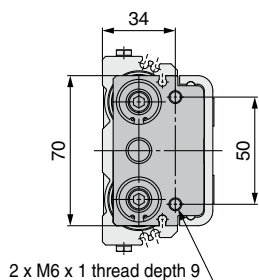
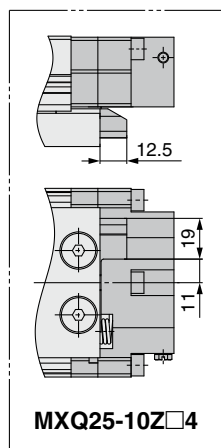
Dimensions: MXQ **25A** [Functional Option]

MXQ **25A**-□□**3** Axial piping (ø25)



* Dimensions other than listed above are the same as those for the standard type.

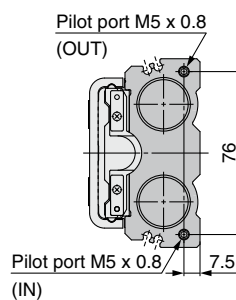
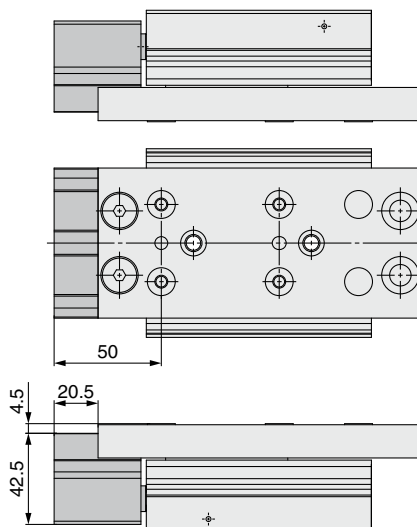
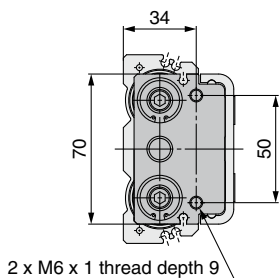
MXQ **25A**-□□**4** With buffer, end lock (ø25)



Dimensions (mm)		
Model	J	Q
MXQ25A-10Z□4	109	48
MXQ25A-20Z□4	104	
MXQ25A-30Z□4	114	
MXQ25A-40Z□4	124	43
MXQ25A-50Z□4	147	
MXQ25A-75Z□4	172	
MXQ25A-100Z□4	213	
MXQ25A-125Z□4	277	73
MXQ25A-150Z□4	302	

* Dimensions other than listed above are the same as those for the standard type.

MXQ **25A**-□□**5** With buffer, axial piping (ø25)



* Dimensions other than listed above are the same as those for the standard type.

Air Slide Table

Low thrust with high rigidity type

Series MXQ□B

ø6, ø8, ø12, ø16, ø20

RoHS

How to Order

MXQ 12 B - 30 ZA - M9BW - -

Bore size	Body option		Standard stroke (mm)
	Standard type B	Symmetric type BL	
6	Port Switch mounting groove	Switch mounting groove Port	10, 20, 30, 40, 50, 75
8			10, 20, 30, 40, 50, 75, 100
12			10, 20, 30, 40, 50, 75, 100, 125
16	Port Switch mounting groove Switch mounting groove	— (Note)	10, 20, 30, 40, 50, 75, 100, 125, 150
20			10, 20, 30, 40, 50, 75, 100, 125, 150

Note) No setting, as the standard model has the piping ports and auto switch mounting grooves on both sides.

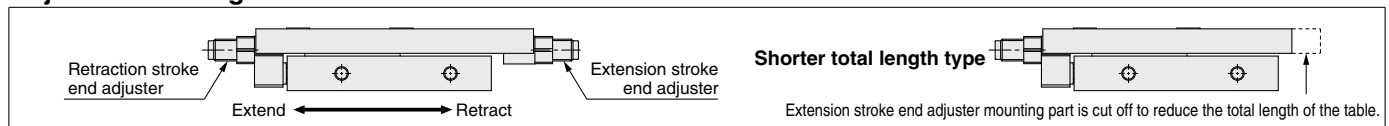
Adjuster option

Symbol	Adjuster type	Adjuster mounting position Note 1)	
		Extension stroke end	Retraction stroke end
Z	Without adjuster	●	●
ZA	Metal stopper with bumper (Not available for ø6)	●	●
ZB		●	●
ZC		●	●
ZD	Rubber stopper	●	●
ZE		●	●
ZF		●	●
ZG	Shock absorber (RJ)	●	●
ZH		●	●
ZJ		●	●
ZN	Shorter overall length type Note 2)	Without adjuster	●
ZP		Rubber stopper	●
ZQ		Shock absorber (RJ)	●
ZS		Metal stopper with bumper	●

Note 1) ●: Shipped together with the product, but not assembled. Without any symbols for the adjuster mounting position, the adjuster can be mounted afterward.

Note 2) Extension stroke end adjuster mounting part is cut off to reduce the total length of the table.

Adjuster Mounting Position



Applicable Auto Switches/Refer to the Best Pneumatics No. 3 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)					
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	24 V	—	M9NV	M9N	●	●	●	○	○	IC	Relay, PLC		
				3-wire (PNP)			M9PV	M9P	●	●	●	○	○				
				2-wire			M9BV	M9B	●	●	●	○	○				
	Diagnostic indication (2-color indication)			3-wire (NPN)	24 V		—	M9NWV	M9NW	●	●	●	○	○		IC	
				3-wire (PNP)				M9PWV	M9PW	●	●	●	○	○			
				2-wire				M9BWV	M9BW	●	●	●	○	○			
	Water resistant (2-color indication)			3-wire (NPN)	24 V			—	M9NAV***	M9NA***	○	○	●	○		○	IC
				3-wire (PNP)					M9PAV***	M9PA***	○	○	●	○		○	
				2-wire					M9BAV***	M9BA***	○	○	●	○		○	
				2-wire							○	○	○	○		○	

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

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

* Lead wire length symbols: 0.5 m Nil (Example) M9NW
1 m M (Example) M9NWM
3 m L (Example) M9NWL
5 m Z (Example) M9NWZ

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

* Since there are other applicable auto switches than listed, refer to page 85 for details.

* For details about auto switches with pre-wired connector, refer to the Best Pneumatics No. 3.

* Auto switches are shipped together, (but not assembled).

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

Made to Order

Model Selection



Specifications

Bore size (mm)	6	8	12	16	20
Piping port size	M5 x 0.8				
Fluid	Air				
Action	Double acting				
Operating pressure	0.15 to 0.7 MPa ^{Note)}				
Proof pressure	1.05 MPa				
Ambient and fluid temperature	-10 to 60°C				
Operating speed range (Average operating speed)	50 to 500 mm/s (Metal stopper with bumper: 50 to 200 mm/s) * in the standard stroke table: 50 to 300 mm/s				
Cushion (Without stroke adjuster)	Internal rubber bumper				
Cushion (With stroke adjuster)	Metal stopper with bumper, Rubber stopper, Shock absorber				
Lubrication	Non-lube				
Auto switch	Solid state auto switch (2-wire, 3-wire) 2-color indication solid state auto switch (2-wire, 3-wire)				
Stroke length tolerance	+2 to 0 mm				

Note) Refer to page 32 for the minimum operating pressure for metal stopper with bumper. If the operating pressure is lower than the minimum operating pressure, repeated accuracy becomes worse.
Minimum operating pressure of metal stopper with bumper: Pressure required to fully compress the protrusion of the bumper to get in contact with the metal part.

Standard Stroke

Model	Standard stroke (mm)
MXQ6B	10, 20, 30, 40, 50*, 75*
MXQ8B	10, 20, 30, 40, 50, 75*, 100*
MXQ12B	10, 20, 30, 40, 50, 75, 100, 125
MXQ16B	10, 20, 30, 40, 50, 75, 100*, 125*, 150*
MXQ20B	10, 20, 30, 40, 50, 75, 100, 125*, 150*

Note) * Operating speed range is 50 to 300 mm/s. (Without stroke adjuster)



Made to Order
(For details, refer to pages 87 to 91.)

Symbol	Specifications
-X7	PTFE grease
-X9	Grease for food processing equipment
-X11	Long adjustment bolt (Longer adjustment range by 10 mm)
-X12	Long adjustment bolt (Longer adjustment range by 20 mm)
-X28	Long adjustment nut and bolt
-X33	Without built-in auto switch magnet
-X39	Fluororubber seal
-X42	Anti-corrosive guide unit
-X45	EPDM seal

Theoretical Output

The dual rod ensures an output twice that of existing cylinders. (N)

Bore size (mm)	Rod size (mm)	Operating direction	Piston area (mm ²)	Operating pressure (MPa)						
				0.2	0.3	0.4	0.5	0.6	0.7	
6	3	OUT	57	11	17	23	29	34	40	
		IN	42	8	13	17	21	25	29	
8	4	OUT	101	20	30	40	51	61	71	
		IN	75	15	23	30	38	45	53	
12	6	OUT	226	45	68	90	113	136	158	
		IN	170	34	51	68	85	102	119	
16	6	OUT	402	80	121	161	201	241	281	
		IN	346	69	104	138	173	207	242	
20	8	OUT	628	126	188	251	314	377	440	
		IN	528	106	158	211	264	317	369	

Weight

(g)

Model	Standard stroke (mm)									Reduction of the extension stroke end adjuster non-mounting type	Additional weight of adjuster option	
	10	20	30	40	50	75	100	125	150		Extension stroke end	Retraction stroke end
MXQ6B	120	140	150	180	230	260	—	—	—	−6	10	8
MXQ8B	220	240	260	310	330	450	500	—	—	−12	20	16
MXQ12B	420	450	480	550	580	700	890	970	—	−21	40	30
MXQ16B	710	730	770	820	920	1,100	1,400	1,700	1,800	−33	70	50(80)
MXQ20B	1,200	1,200	1,300	1,300	1,600	1,700	2,000	2,600	2,700	−60	110	80

Note) Value in the () is the additional weight for the shock absorber.

Maximum Load Weight

Model	Without adjuster Internal rubber bumper	Adjuster option			
		Rubber stopper	Metal stopper with bumper	Shock absorber (RJ)	
				Horizontal	Vertical
MXQ6B	0.6	1	—	1	
MXQ8B	1	2	1	1.5	1
MXQ12B	2	4	2	4	2.5
MXQ16B	4	6	4	6	
MXQ20B	6	9	6	9	6

Allowable Kinetic Energy

Model	Without adjuster Internal rubber bumper	Adjuster option		
		Rubber stopper	Metal stopper with bumper	Shock absorber (RJ)
MXQ6B	0.025	0.053	—	0.17
MXQ8B	0.046	0.11	0.013	0.24
MXQ12B	0.095	0.18	0.03	0.61
MXQ16B	0.16	0.34	0.06	1.2
MXQ20B	0.32	0.51	0.095	1.3

Optional Specifications

Adjusters

Metal Stopper with Bumper

Applicable slide table	MXQ8B	MXQ12B	MXQ16B	MXQ20B
Model (Metal stopper with bumper only)	MXQB-A887	MXQB-A1287	MXQB-A1687	MXQB-A2087
Max. absorbed energy (J)	0.018	0.04	0.08	0.12
Stroke absorption (mm)	2	2.8	3.6	4.4
Full compression force of bumper (N)	20	42	65	97
Min. operating pressure of metal stopper with bumper* (MPa)	0.3	0.3	0.2	0.2
Weight (g)	14	25	42	65
Mounting screw size (mm)	M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

* Pressure required to fully compress the protrusion of the bumper when mounted horizontally to get in contact with the metal part. Consider the additional weight of the load when mounted in the vertical direction. * Not available for ø6.

Rubber Stopper

Applicable slide table	MXQ6B	MXQ8B	MXQ12B	MXQ16B	MXQ20B
Model (Rubber stopper only)	MXQA-A827	MXQA-A1227	MXQA-A1627	MXQA-A2027	MXQA-A2527
Max. absorbed energy (J)	0.06	0.12	0.2	0.4	0.6
Weight (g)	7	14	25	42	65
Mounting screw size (mm)	M6 x 0.75	M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

Shock Absorber (RJ)

Applicable slide table	MXQ6B	MXQ8B	MXQ12B	MXQ16B	MXQ20B
Model (Shock absorber only)	RJ0603N	RJ0805N	RJ1006N	RJ1007HN	RJ1410N
Max. absorbed energy (J)	0.35	0.5	1.5	3	3.7
Stroke absorption (mm)	3	5	6	7	10
Collision speed (mm/s)	300 to 500	50 to 500			
Max. operating frequency (cycle/min)	80	80	70	45	
Max. allowable thrust (N)	150	245	422	814	
Spring force (Extended) (N)	1.3	2.8	5.4	6.4	
Spring force (Compressed) (N)	3.9	4.9	8	15	
Weight (g)	5.5	15	23	65	
Mounting screw size (mm)	M6 x 0.75	M8 x 1	M10 x 1	M14 x 1.5	

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

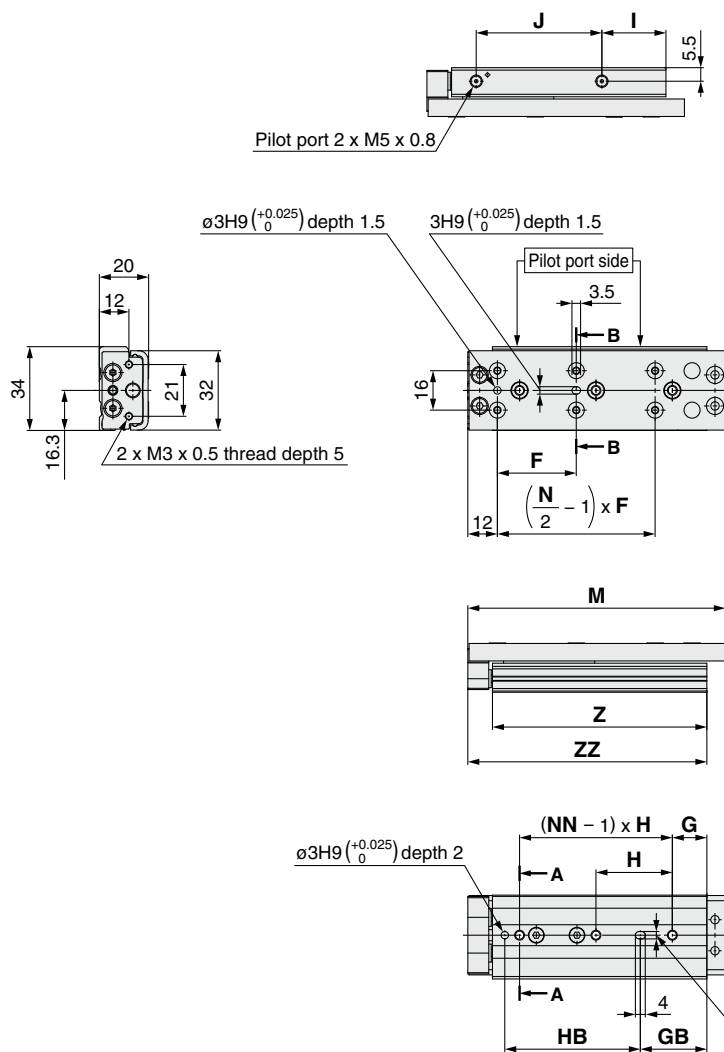
Auto Switch
Mounting

Made to Order

Model Selection

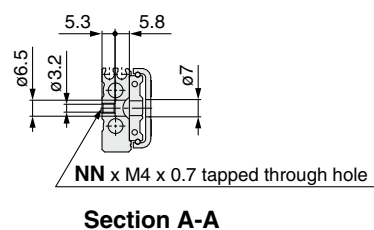
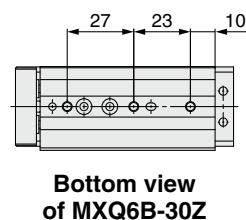
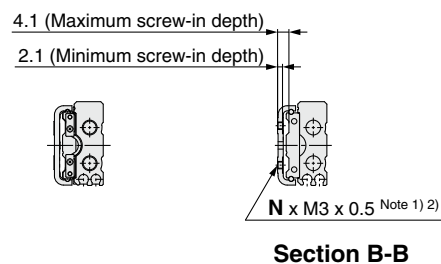
Dimensions: MXQ **6B** [Standard]

MXQ **6B**-□Z Standard type



Note 1) If long bolts are used, they can touch the guide block and cause a malfunction etc. Use a screw which has the intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to pages 125 and 126 for details.

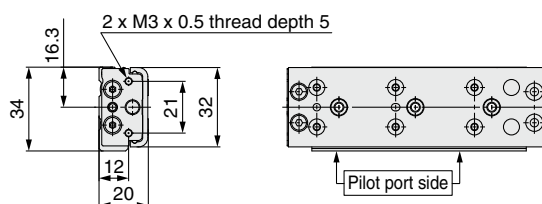
Note 2) Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet etc. This could cause an auto switch malfunction.



Dimensions

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ6B-10Z	25	15	9	25	37	10	31	68.5	4	2	51	61
MXQ6B-20Z	25	22	16	28	40	17	34	78.5	4	2	61	71
MXQ6B-30Z	26	—	26	—	40	20	41	88.5	6	3	71	81
MXQ6B-40Z	32	14	27	31	55	26	51	104.5	6	3	87	97
MXQ6B-50Z	46	16	54	29	55	40	64	131.5	6	4	114	124
MXQ6B-75Z	50	15	56	30	55	20	86	156.5	6	4	116	126

MXQ **6BL**-□Z Symmetric type

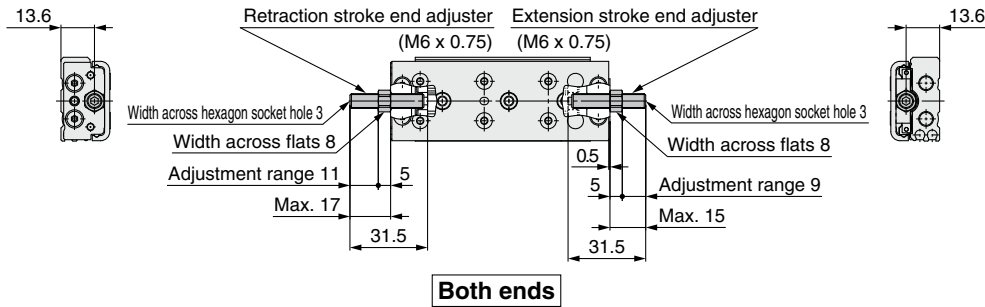


* Dimensions other than listed above are the same as those for the standard type.

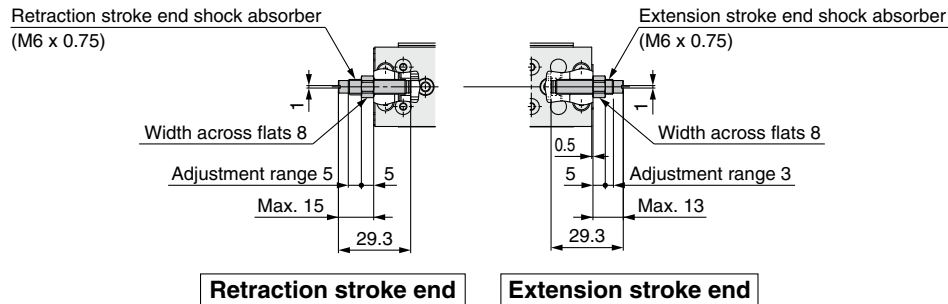
Dimensions: MXQ **6B** [Adjuster Option]

MXQ **6B**-□ With adjuster option (ø6)

Rubber stopper **ZD** : Both ends, **ZE** : Extension stroke end, **ZF** : Retraction stroke end, **ZP** : Retraction stroke end (Shorter total length type)

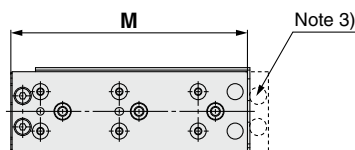


Shock absorber (RJ) **ZG** : Both ends, **ZH** : Extension stroke end, **ZJ** : Retraction stroke end, **ZQ** : Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ **6B**-□**ZN** Shorter total length type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward.
(Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)

Model	M
MXQ6B-10ZN	60
MXQ6B-20ZN	70
MXQ6B-30ZN	80
MXQ6B-40ZN	96
MXQ6B-50ZN	123
MXQ6B-75ZN	148

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

Auto Switch
Mounting

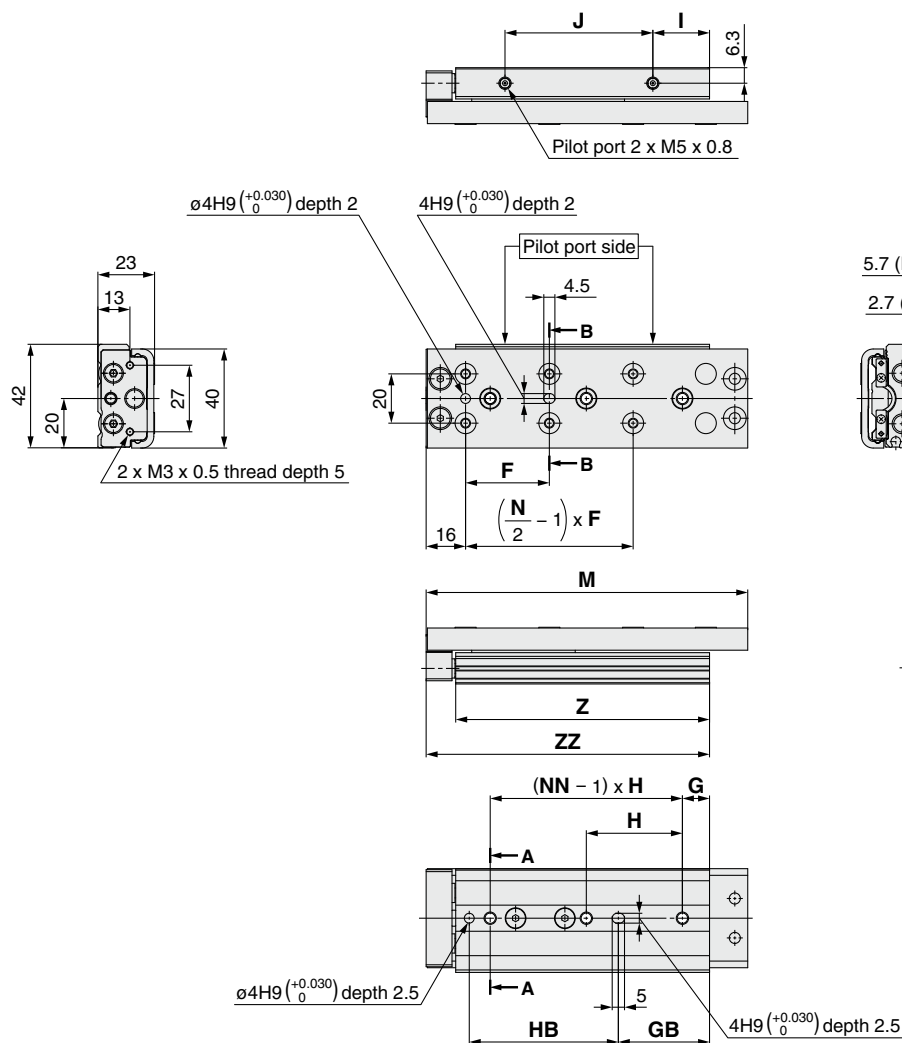
Made to Order

Model Selection

Series MXQ□B

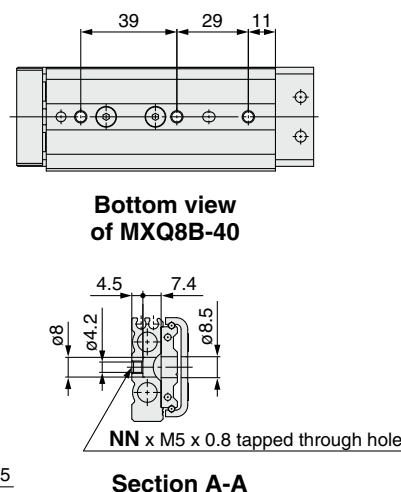
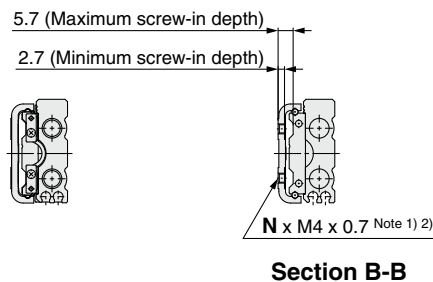
Dimensions: MXQ **8B** [Standard]

MXQ **8B**-□Z Standard type



Note 1) If long bolts are used, they can touch the guide block and cause a malfunction etc. Use a screw which has the intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to pages 125 and 126 for details.

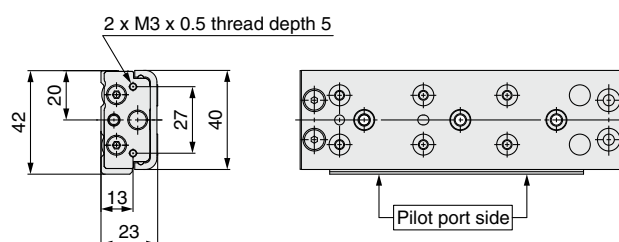
Note 2) Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet etc. This could cause an auto switch malfunction.



Dimensions

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ8B-10Z	28	17	11	32	46	11	32	82.5	4	2	63	75
MXQ8B-20Z	28	19	11	32	48	13	32	92.5	4	2	65	77
MXQ8B-30Z	38	21	11	40	58	15	40	102.5	4	2	75	87
MXQ8B-40Z	34	—	27	—	60	23	50	120.5	6	3	93	105
MXQ8B-50Z	34	11	37	39	60	23	60	130.5	6	3	103	115
MXQ8B-75Z	36	25	41	36	100	42	85	174.5	8	4	147	159
MXQ8B-100Z	36	14	66	36	100	42	110	199.5	10	5	172	184

MXQ **8BL**-□Z Symmetric type

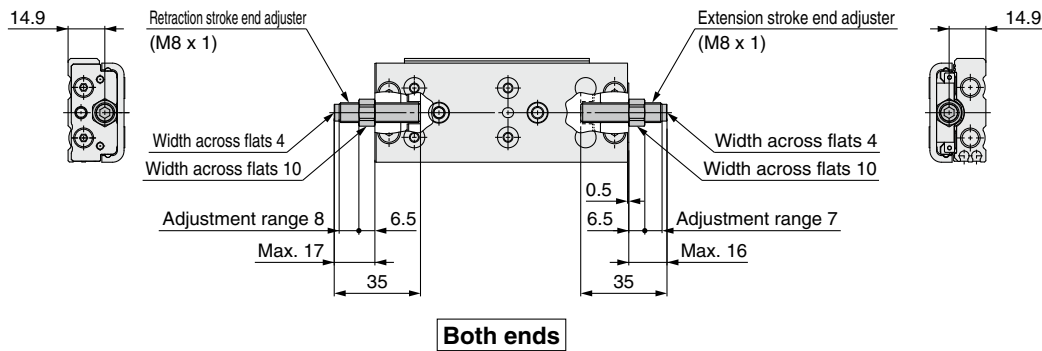


* Dimensions other than listed above are the same as those for the standard type.

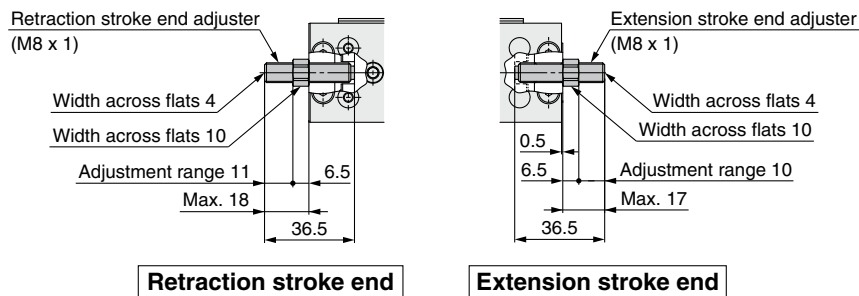
Dimensions: MXQ **8B** [Adjuster Option]

MXQ **8B**-□ With adjuster option (ø8)

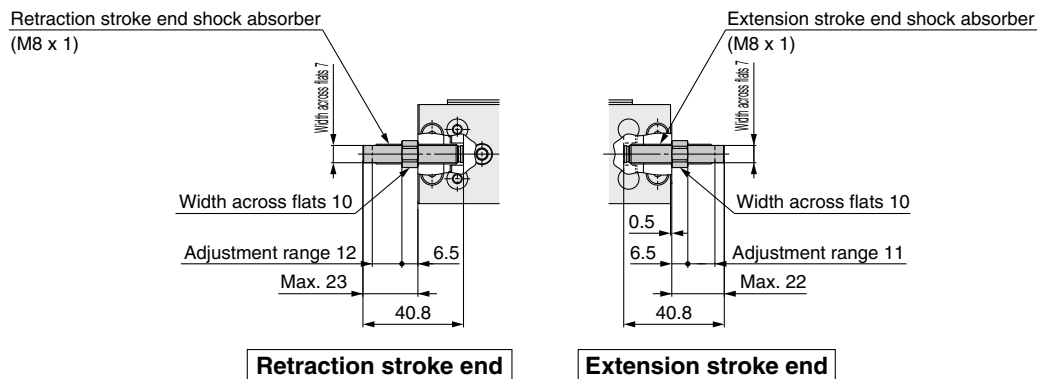
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)



Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

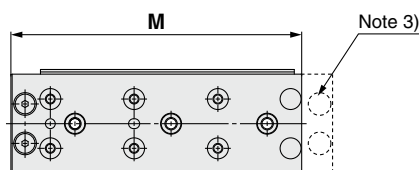


Shock absorber (RJ) **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ **8B**-□**ZN** Shorter total length type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward.
(Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)	
Model	M
MXQ8B-10ZN	72
MXQ8B-20ZN	82
MXQ8B-30ZN	92
MXQ8B-40ZN	110
MXQ8B-50ZN	120
MXQ8B-75ZN	164
MXQ8B-100ZN	189

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

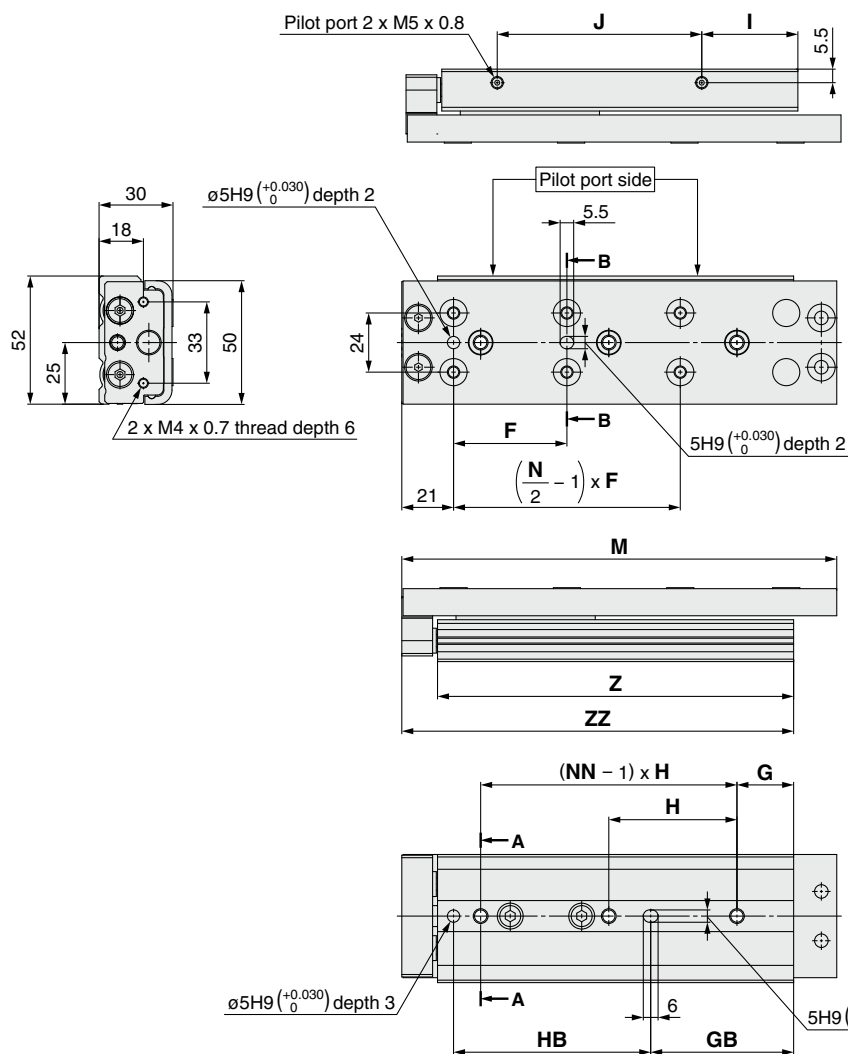
Auto Switch Mounting

Made to Order

Model Selection

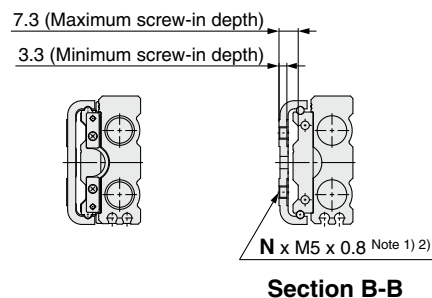
Dimensions: MXQ **12B** [Standard]

MXQ **12B**-□Z Standard type

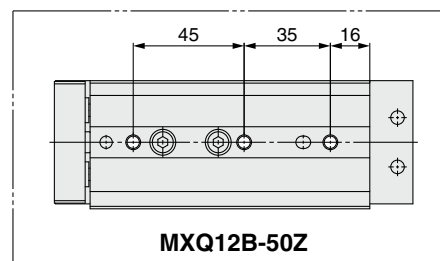


Note 1) If long bolts are used, they can touch the guide block and cause a malfunction etc. Use a screw which has the intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to pages 125 and 126 for details.

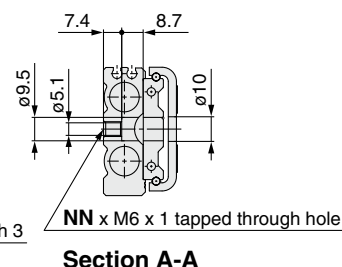
Note 2) Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet etc. This could cause an auto switch malfunction.



Section B-B



MXQ12B-50Z

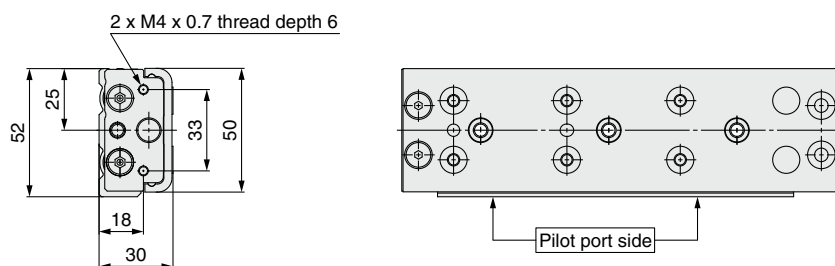


Section A-A

Dimensions

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ12B-10Z	38	16	8	39	58	21	29	98.5	4	2	72.5	87
MXQ12B-20Z	38	20	12	39	58	25	29	108.5	4	2	76.5	91
MXQ12B-30Z	48	21	30	48	50	26.5	37.5	118.5	4	2	86.5	101
MXQ12B-40Z	58	28	17	58	80	33.5	47.5	135.5	4	2	103.5	118
MXQ12B-50Z	40	—	27	—	80	33	58	145.5	6	3	113.5	128
MXQ12B-75Z	46	23	58	52	80	39	83	176.5	6	3	144.5	159
MXQ12B-100Z	44	39	102	44	80	57	109	220.5	8	4	188.5	203
MXQ12B-125Z	44	20	127	44	80	57	134	245.5	10	5	213.5	228

MXQ **12BL**-□Z Symmetric type

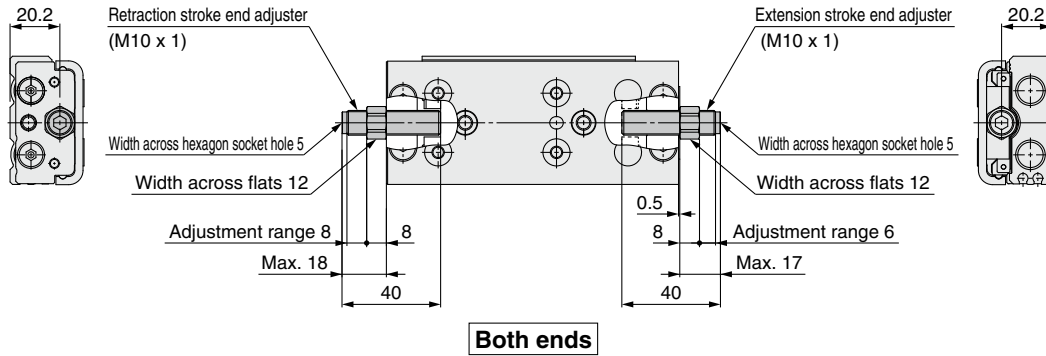


* Dimensions other than listed above are the same as those for the standard type.

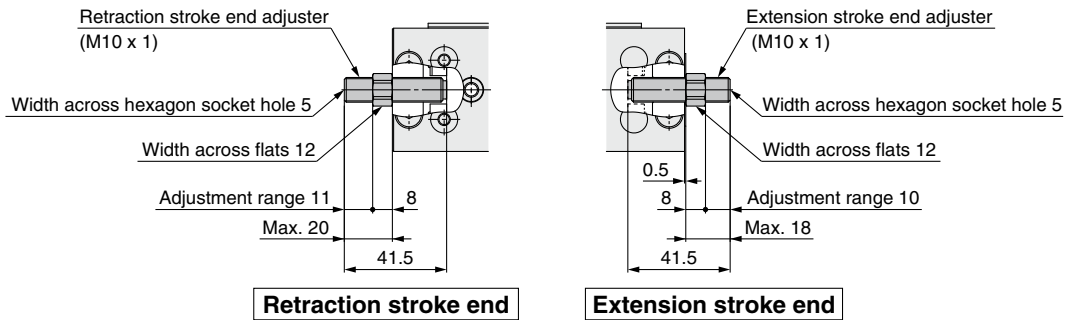
Dimensions: MXQ **12B** [Adjuster Option]

MXQ 12B-□□ With adjuster option (ø12)

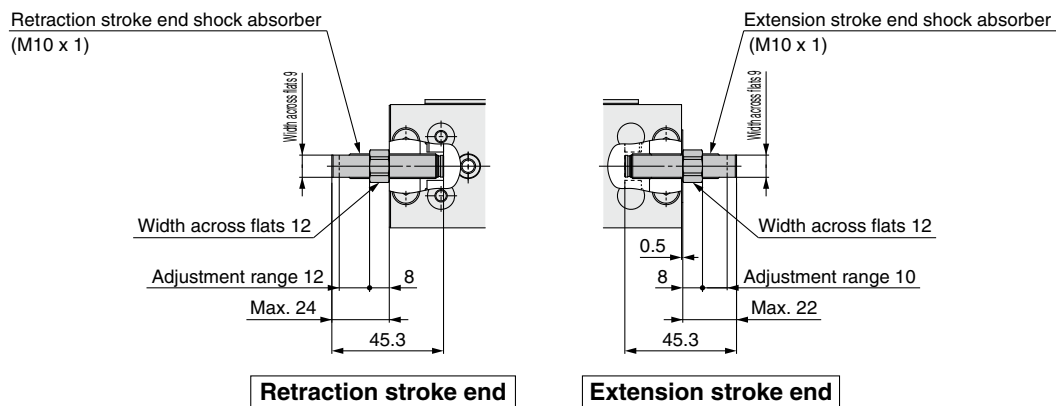
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)



Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

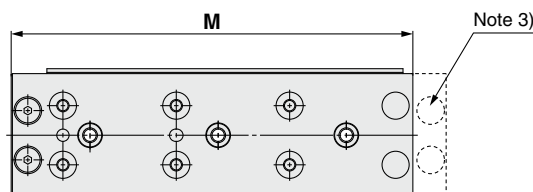


Shock absorber (RJ) **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ 12B-□**ZN** Shorter total length type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward.
(Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)	
Model	M
MXQ12B-10ZN	85
MXQ12B-20ZN	95
MXQ12B-30ZN	105
MXQ12B-40ZN	122
MXQ12B-50ZN	132
MXQ12B-75ZN	163
MXQ12B-100ZN	207
MXQ12B-125ZN	232

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

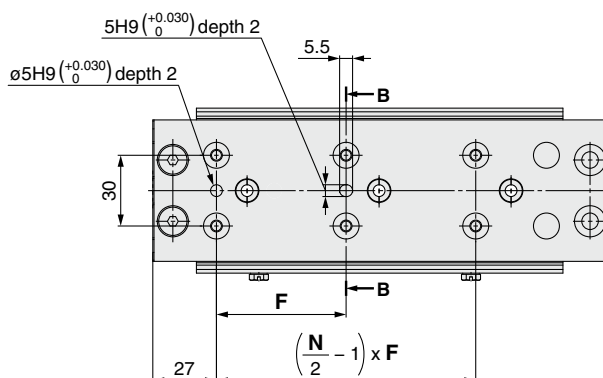
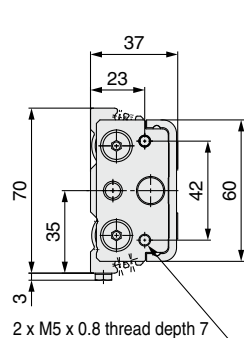
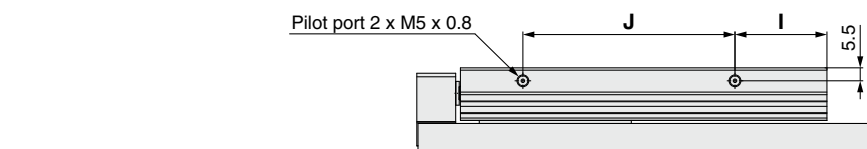
Auto Switch Mounting

Made to Order

Model Selection

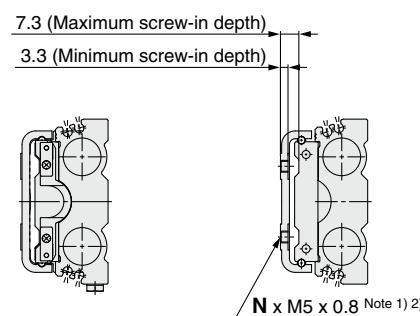
Dimensions: MXQ **16B** [Standard]

MXQ **16B**-□Z Standard type

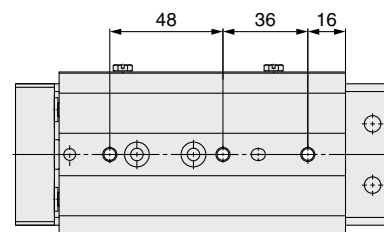
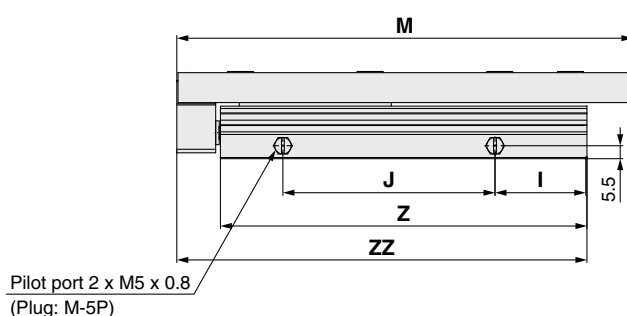


Note 1) If long bolts are used, they can touch the guide block and cause a malfunction etc. Use a screw which has the intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to pages 125 and 126 for details.

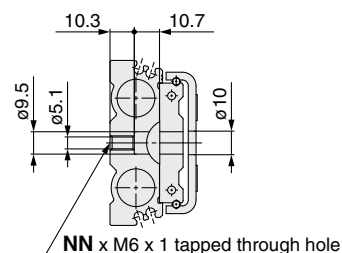
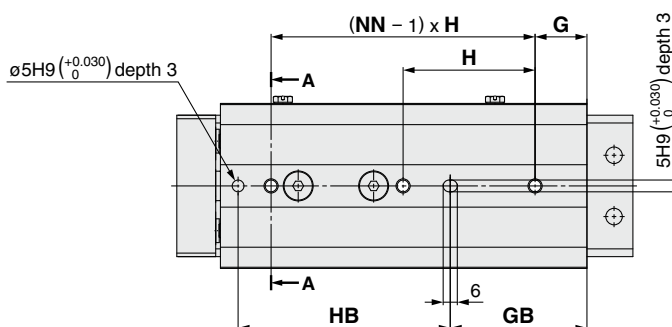
Note 2) Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet etc. This could cause an auto switch malfunction.



Section B-B



Bottom view of MXQ16B-50Z



Section A-A

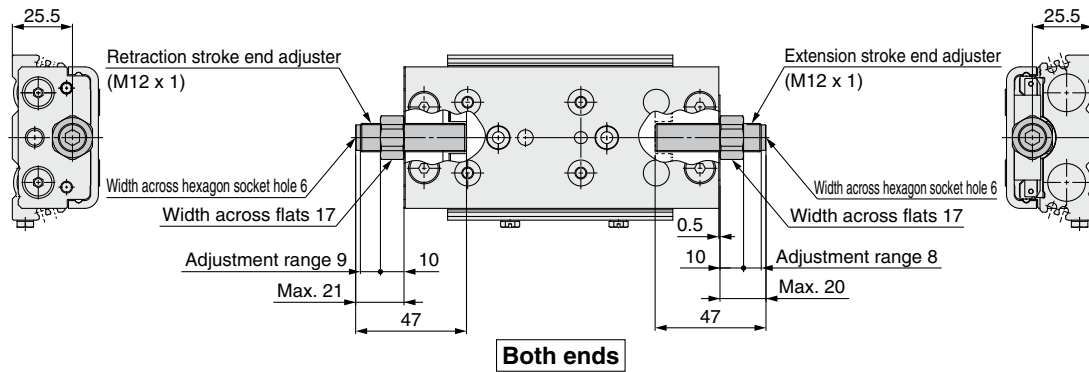
Dimensions

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ16B-10Z	45	18	8	46	70	40	18.5	113.5	4	2	85.5	104
MXQ16B-20Z	40	18	8	46	70	28.5	30	123.5	4	2	85.5	104
MXQ16B-30Z	48	28	18	46	70	22.5	46	133.5	4	2	95.5	114
MXQ16B-40Z	58	28	18	56	80	22.5	56	143.5	4	2	105.5	124
MXQ16B-50Z	42	—	34	—	80	35.5	59	159.5	6	3	121.5	140
MXQ16B-75Z	55	22	58	56	90	44.5	84	193.5	6	3	155.5	174
MXQ16B-100Z	50	16	108	56	90	66.5	112	266.5	8	4	205.5	224
MXQ16B-125Z	55	32	133	59	90	68.5	135	291.5	8	4	230.5	249
MXQ16B-150Z	62	48	158	62	90	68.5	160	316.5	8	4	255.5	274

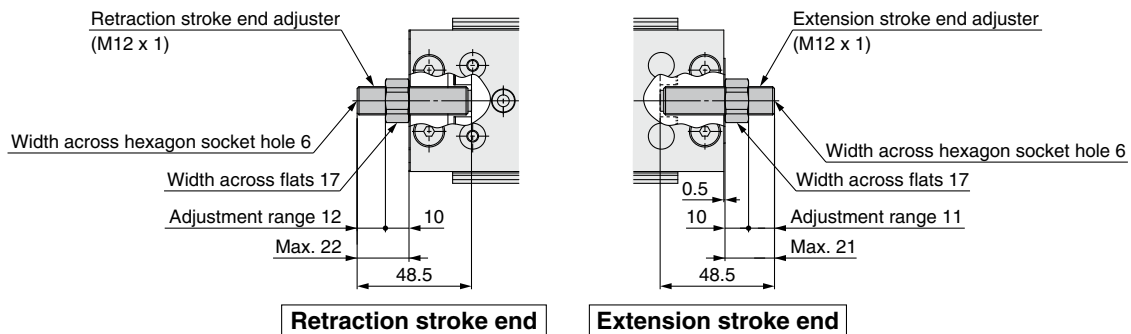
Dimensions: MXQ **16B** [Adjuster Option]

MXQ **16B**-□ With adjuster option (ø16)

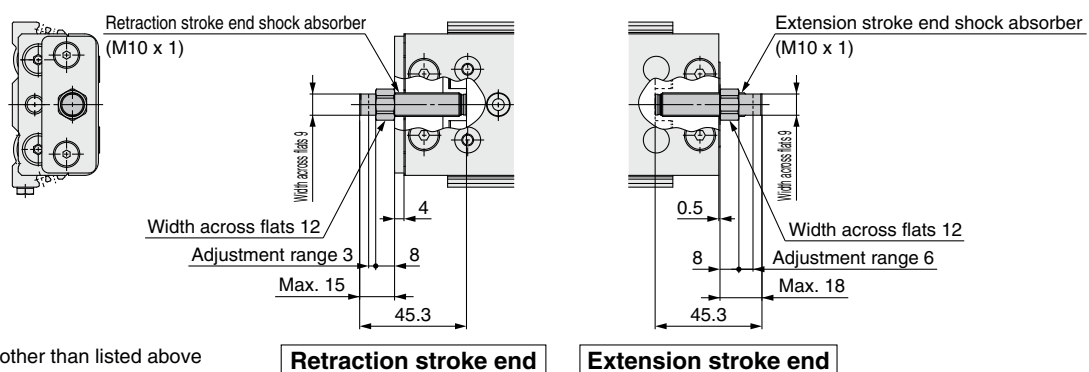
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)



Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

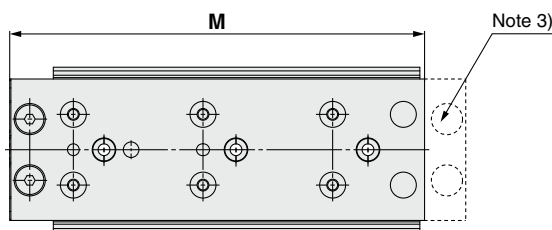


Shock absorber (RJ) **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ **16B**-□**ZN** Shorter total length type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)	
Model	M
MXQ16B-10ZN	96
MXQ16B-20ZN	106
MXQ16B-30ZN	116
MXQ16B-40ZN	126
MXQ16B-50ZN	142
MXQ16B-75ZN	176
MXQ16B-100ZN	249
MXQ16B-125ZN	274
MXQ16B-150ZN	299

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

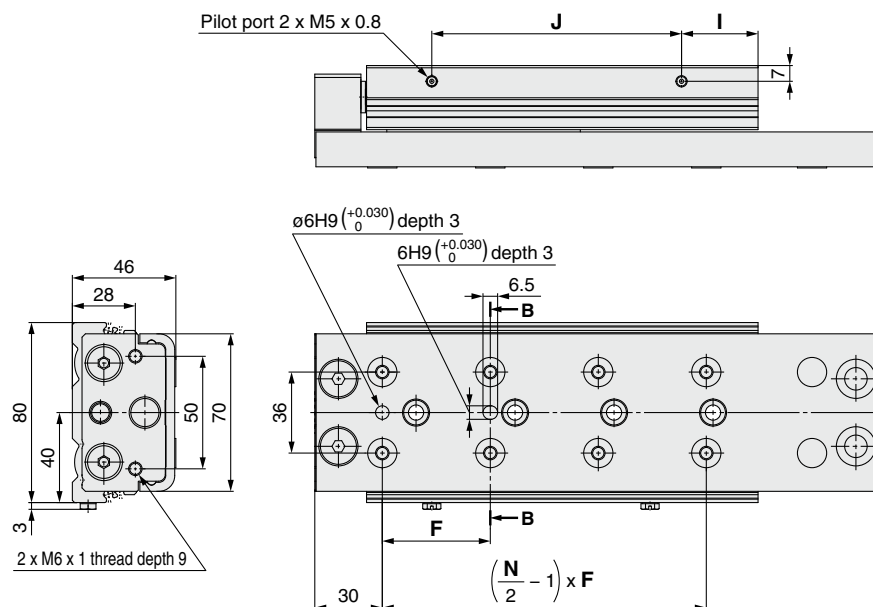
Auto Switch Mounting

Made to Order

Model Selection

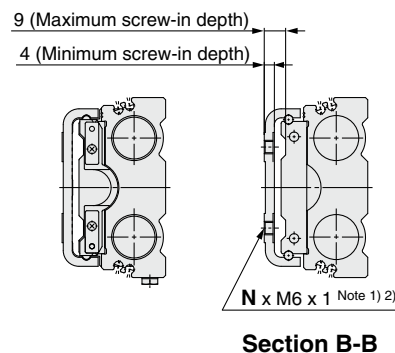
Dimensions: MXQ **20B** [Standard]

MXQ **20B**-□Z Standard type

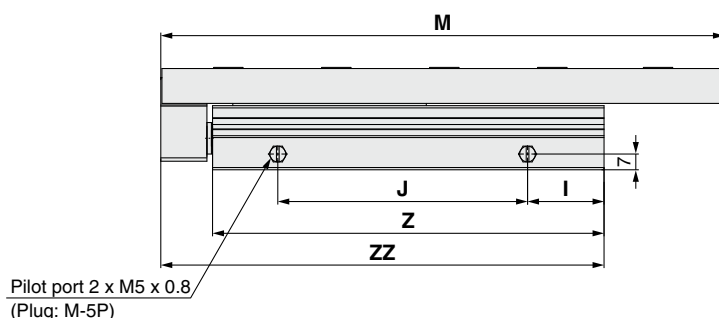


Note 1) If long bolts are used, they can touch the guide block and cause a malfunction etc. Use a screw which has the intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to pages 125 and 126 for details.

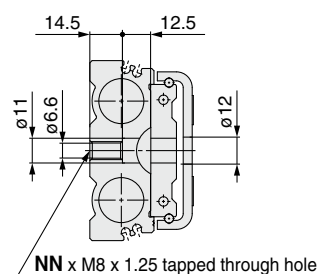
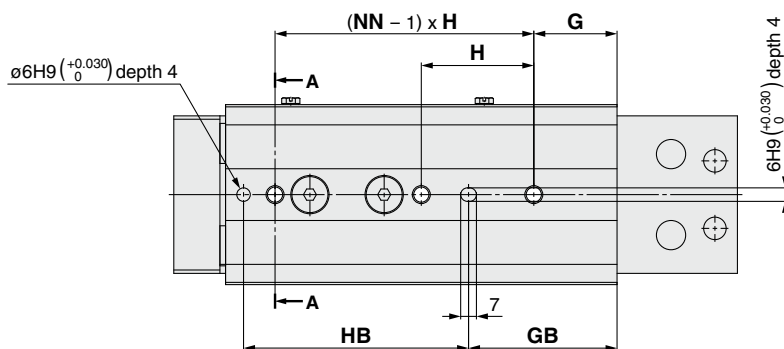
Note 2) Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet etc. This could cause an auto switch malfunction.



Section B-B



Bottom view of MXQ20B-75Z



Section A-A

Dimensions

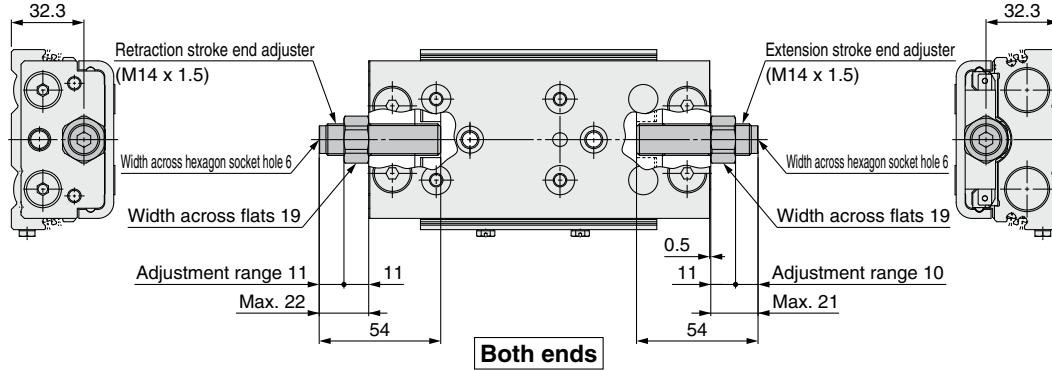
(mm)

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ20B-10Z	55	18	7	55	80	30	36	131.5	4	2	95	118
MXQ20B-20Z	46	18	7	55	80	30	36	141.5	4	2	95	118
MXQ20B-30Z	55	28	17	55	80	34	42	151.5	4	2	105	128
MXQ20B-40Z	65	28	17	65	90	34	52	161.5	4	2	115	138
MXQ20B-50Z	75	36	20	80	110	47	62	184.5	4	2	138	161
MXQ20B-75Z	60	—	45	—	110	48	86	209.5	6	3	163	186
MXQ20B-100Z	48	20	46	44	120	34	111	250.5	8	4	174	197
MXQ20B-125Z	60	18	60	66	170	73	136	314.5	8	4	238	261
MXQ20B-150Z	65	43	85	66	170	73	161	339.5	8	4	263	286

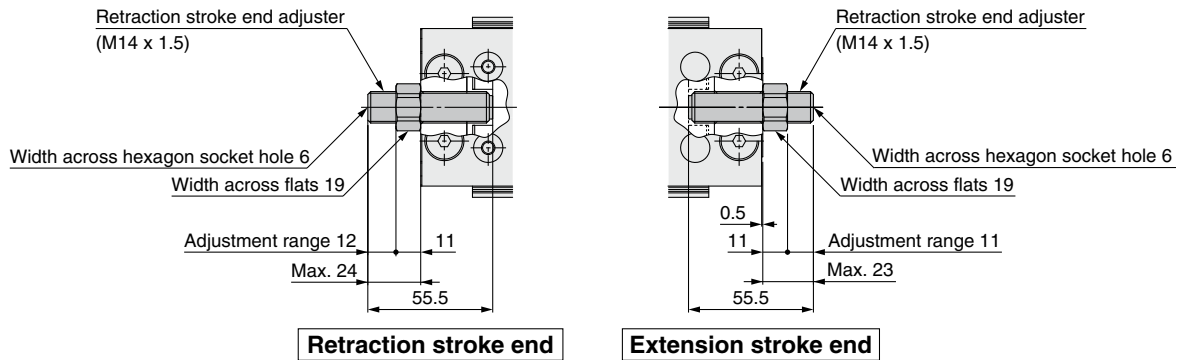
Dimensions: MXQ **20B** [Adjuster Option]

MXQ **20B**-□ With adjuster option (ø20)

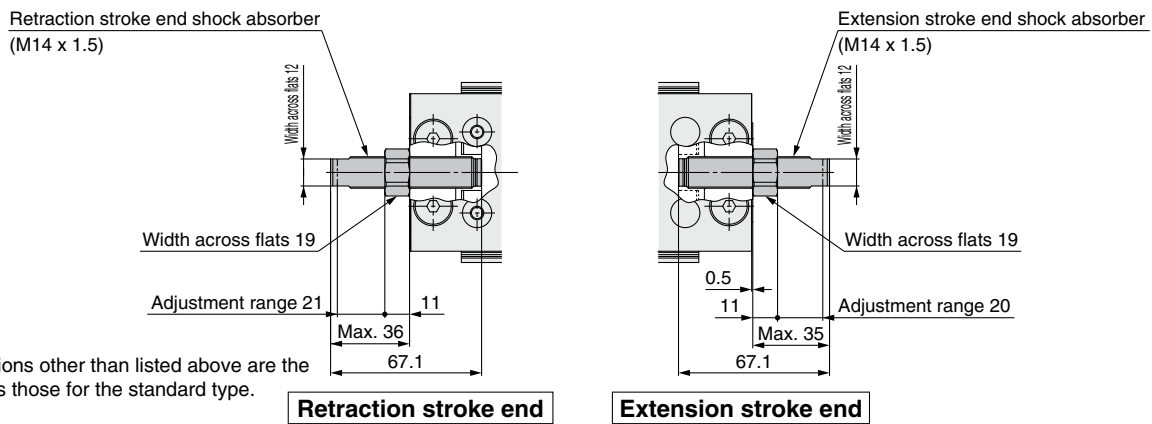
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)



Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

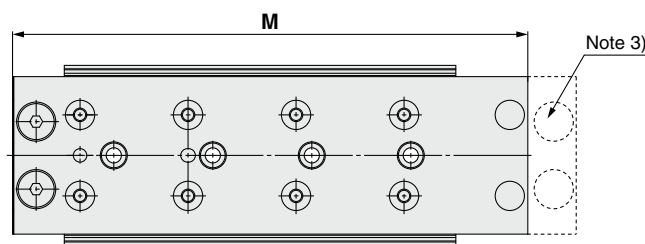


Shock absorber (RJ) **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ **20B**-□**ZN** Shorter total length type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)	
Model	M
MXQ20B-10ZN	110
MXQ20B-20ZN	120
MXQ20B-30ZN	130
MXQ20B-40ZN	140
MXQ20B-50ZN	163
MXQ20B-75ZN	188
MXQ20B-100ZN	229
MXQ20B-125ZN	293
MXQ20B-150ZN	318

Air Slide Table

Single side ported type

Series MXQ□C

ø8, ø12

RoHS

How to Order

MXQ 12 C - 30 ZA - M9BW -

• Bore size

• Body option

• Standard stroke (mm)

• Auto switch

• Functional option

• Made to Order
Refer to page 45 for details.

• Number of auto switches

Symbol	Functional option
Nil	Without functional option
1	With buffer
2	With end lock
3	Axial piping
4	With buffer, end lock
5	With buffer, axial piping

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

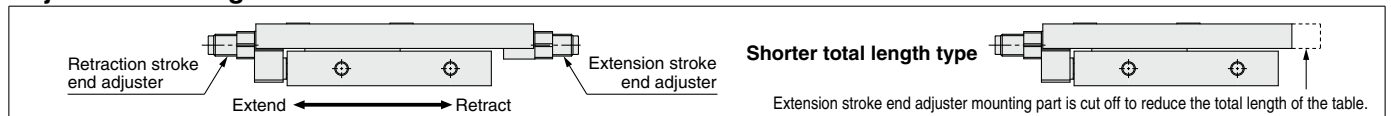
Adjuster option/Functional option combinations

Symbol	Adjuster type	Adjuster mounting position Note 1)		Functional option combination					
		Extension stroke end	Retraction stroke end	Nil	1	2	3	4	5
Z	Without adjuster			Without functional option	Buffer Note 2) 3)	End lock Note 4)	Axial piping	Buffer and end lock Note 2) 4)	Buffer and axial piping Note 2)
ZA	Metal stopper with bumper (Not available for ø6)	●	●	○	×	×	○	×	×
ZB		●	●	○	×	×	○	×	×
ZC		●	●	○	×	×	○	×	×
ZD	Rubber stopper	●	●	○	×	×	○	×	×
ZE		●	●	○	×	×	○	×	×
ZF		●	●	○	×	×	○	×	×
ZG	Shock absorber (RJ)	●	●	○	×	×	○	×	×
ZH		●	●	○	×	×	○	×	×
ZJ		●	●	○	×	×	○	×	×
ZN	Note 5) Without adjuster			○	○ Note 6)	×	○	×	○ Note 6)
ZP	Shorter overall length type	Rubber stopper	●	○	×	×	○	×	×
ZQ		Shock absorber (RJ)	●	○	×	×	○	×	×
ZS		Metal stopper with bumper	●	○	×	×	○	×	×

- Note 1) ●: Shipped together with the product, but not assembled. Without any symbols for the adjuster mounting position, the adjuster can be mounted afterward.
- Note 2) For buffer mechanism, buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
- Note 3) When retraction stroke end adjuster with buffer mechanism is needed, use the centralized adjuster specification (-X27). End lock or axial piping option cannot be mounted to the centralized adjuster specification model.

- Note 4) Extension stroke end adjuster with end lock mechanism is available as long adjustment nut and bolt specification (-X28). The adjustment nut cannot be tightened with the standard adjuster.
- Note 5) Extension stroke end adjuster mounting holes are removed to reduce the total length.
- Note 6) Shorter total length type can be used, but the retraction stroke end adjuster cannot be mounted afterward.

Adjuster Mounting Position



Applicable Auto Switches/Refer to the Best Pneumatics No. 3 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)
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9NV	M9N	●	●	●	○	○	IC	Relay, PLC
				3-wire (PNP)				M9PV	M9P	●	●	●	○	○		
				2-wire				M9BV	M9B	●	●	●	○	○		
	Diagnostic indication (2-color indication)			3-wire (NPN)	5 V, 12 V	M9NWV		M9NW	●	●	●	○	○	IC		
				3-wire (PNP)		M9PWV		M9PW	●	●	●	○	○			
				2-wire		M9BWV		M9BW	●	●	●	○	○			
	Water resistant (2-color indication)			3-wire (NPN)	5V, 12 V	M9NAV***		M9NA***	○	○	●	○	○	IC		
				3-wire (PNP)		M9PAV***		M9PA***	○	○	●	○	○			
				2-wire		M9BAV***		M9BA***	○	○	●	○	○			

*** Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance. Please contact SMC regarding water resistant types with the above model numbers.

- * Lead wire length symbols: 0.5 m Nil (Example) M9NV 1 m M (Example) M9NWM 3 m L (Example) M9NWL 5 m Z (Example) M9NWZ
- * Solid state auto switches marked with "○" are produced upon receipt of order.
- * Since there are other applicable auto switches than listed, refer to page 85 for details.
- * For details about auto switches with pre-wired connector, refer to the Best Pneumatics No. 3.
- * Auto switches are shipped together, (but not assembled).

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

Made to Order

Model Selection



Specifications

Bore size (mm)	8	12
Piping port size	M5 x 0.8	
Fluid	Air	
Action	Double acting	
Operating pressure	0.15 to 0.7 MPa ^{Note)} (End lock: 0.35 to 0.7 MPa)	
Proof pressure	1.05 MPa	
Ambient and fluid temperature	-10 to 60°C	
Operating speed range (Average operating speed)	50 to 500 mm/s (Metal stopper with bumper: 50 to 300 mm/s)	
Cushion (Without stroke adjuster)	Internal rubber bumper	
Cushion (With stroke adjuster)	Metal stopper with bumper, Rubber stopper, Shock absorber	
Lubrication	Non-lube	
Auto switch	Solid state auto switch (2-wire, 3-wire)	
	2-color indication solid state auto switch (2-wire, 3-wire)	
Stroke length tolerance	+2 to 0 mm	

Note) Refer to page 46 for the minimum operating pressure for metal stopper with bumper.
If the operating pressure is lower than the minimum operating pressure, repeated accuracy becomes worse.
Minimum operating pressure of metal stopper with bumper: Pressure required to fully compress the protrusion of the bumper to get in contact with the metal part.

Standard Stroke

Model	Standard stroke (mm)
MXQ8C	10, 20, 30, 40, 50, 75
MXQ12C	10, 20, 30, 40, 50, 75, 100



Made to Order
(For details, refer to pages 87 to 91.)

Symbol	Specifications
-X7	PTFE grease
-X9	Grease for food processing equipment
-X11	Long adjustment bolt (Longer adjustment range by 10 mm)
-X12	Long adjustment bolt (Longer adjustment range by 20 mm)
-X27	Centralized adjuster
-X28	Long adjustment nut and bolt
-X33	Without built-in auto switch magnet
-X39	Fluororubber seal
-X42	Anti-corrosive guide unit
-X45	EPDM seal

Theoretical Output

The dual rod ensures an output twice that of existing cylinders. (N)

Bore size (mm)	Rod size (mm)	Operating direction	Piston area (mm ²)	Operating pressure (MPa)					
				0.2	0.3	0.4	0.5	0.6	0.7
8	4	OUT	101	20	30	40	51	61	71
		IN	75	15	23	30	38	45	53
12	6	OUT	226	45	68	90	113	136	158
		IN	170	34	51	68	85	102	119

Weight

Model	Standard stroke (mm)									Reduction of the extension stroke end adjuster non-mounting type	Additional weight of adjuster option		Extra for option		
	10	20	30	40	50	75	100	125	150		Extension stroke end	Retraction stroke end	End lock	Buffer	Axial piping
MXQ8C	140	150	170	200	260	280	—	—	—	-6	10	8	60	30	No addition
MXQ12C	280	290	320	370	400	550	620	—	—	-12	20	16	80	70	

Maximum Load Weight

Model	Standard stroke (mm)					Reduction of the extension stroke end adjuster non-mounting type	Additional weight of adjuster option		Extra for option		
	10	20	30	40	50		Extension stroke end	Retraction stroke end	End lock	Buffer	Axial piping
	140	150	170	200	260		10	8	60	30	No addition
MXQ8C	1	1	1	1	1	-6	10	8	60	30	No addition
MXQ12C	2	2	2	2	2	-12	20	16	80	70	No addition

Allowable Kinetic Energy

Model	Standard stroke (mm)					Reduction of the extension stroke end adjuster non-mounting type	Additional weight of adjuster option		Extra for option		
	10	20	30	40	50		Extension stroke end	Retraction stroke end	End lock	Buffer	Axial piping
	140	150	170	200	260		10	8	60	30	No addition
MXQ8C	0.033	0.053	0.016	0.17							
MXQ12C	0.09	0.11	0.034	0.24							

Optional Specifications

With End Lock

Model	MXQ8C	MXQ12C
Operating pressure range (MPa)	0.35 to 0.7	
Holding force (N)	12	23

With Buffer Mechanism

Model	MXQ8C	MXQ12C
Operating speed range (mm/s)	50 to 500 (Horizontal mounting 50 to 300)	
Buffer stroke (mm)	5	10
Buffer stroke load (N)	Stroke at 0 (mm)	9
	Maximum stroke	15

Applicable Auto Switch to Buffer

Type	Model	Specifications	Electrical entry direction
Solid state auto switch	D-M9BV	With light, 2-wire	Vertical
	D-M9NV	With light, 3-wire, Output: NPN	
	D-M9PV	With light, 3-wire, Output: PNP	

Adjusters

Metal Stopper with Bumper

Applicable slide table	MXQ8C	MXQ12C
Model (Metal stopper with bumper only)	MXQA-A887	MXQA-A1287
Max. absorbed energy (J)	0.018	0.04
Stroke absorption (mm)	2	2.8
Full compression force of bumper (N)	20	42
Min. operating pressure of metal stopper with bumper* (MPa)	0.3	0.3
Weight (g)	7	14
Mounting screw size (mm)	M6 x 0.75	M8 x 1

* Pressure required to fully compress the protrusion of the bumper when mounted horizontally to get in contact with the metal part.
Consider the additional weight of the load when mounted in the vertical direction.

Rubber Stopper

Applicable slide table	MXQ8C	MXQ12C
Model (Rubber stopper only)	MXQA-A827	MXQA-A1227
Max. absorbed energy (J)	0.06	0.12
Weight (g)	7	14
Mounting screw size (mm)	M6 x 0.75	M8 x 1

Shock Absorber (RJ)

Applicable slide table	MXQ8C	MXQ12C
Model (Shock absorber only)	RJ0603N	RJ0805N
Max. absorbed energy (J)	0.35	0.5
Stroke absorption (mm)	3	5
Collision speed (mm/s)	50 to 500	50 to 500
Max. operating frequency (cycle/min)	80	80
Max. allowable thrust (N)	150	245
Spring force (Extended) (N)	1.3	2.8
Spring force (Compressed) (N)	3.9	4.9
Weight (g)	5.5	15
Mounting screw size (mm)	M6 x 0.75	M8 x 1

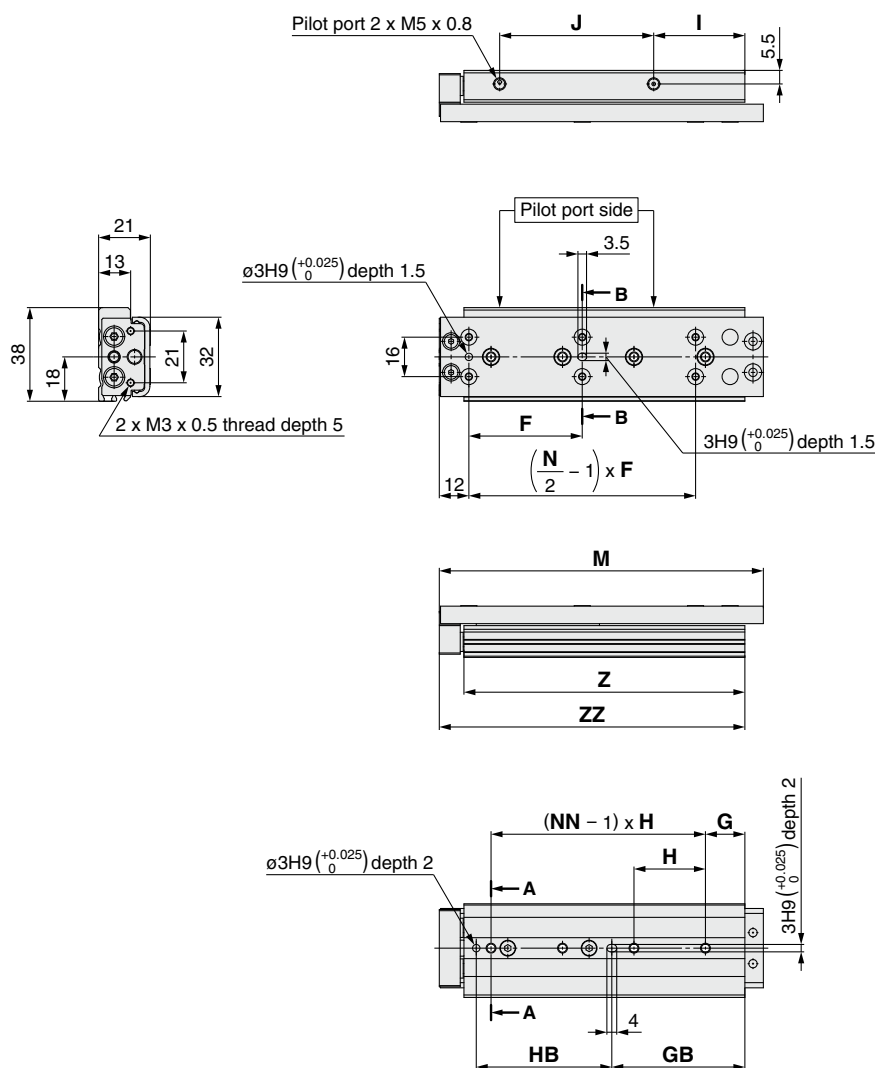
Double ported type
MXQ□ALow thrust with high rigidity type
MXQ□BSingle side ported type
MXQ□CHeight interchangeable type
MXQ□Common Adjuster
OptionsAuto Switch
Mounting

Made to Order

Model Selection

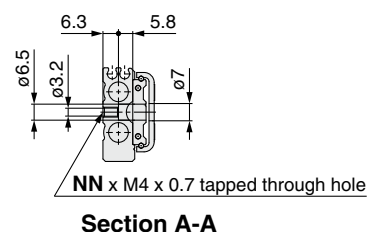
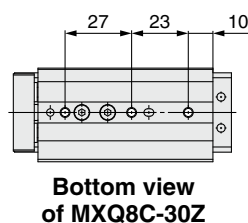
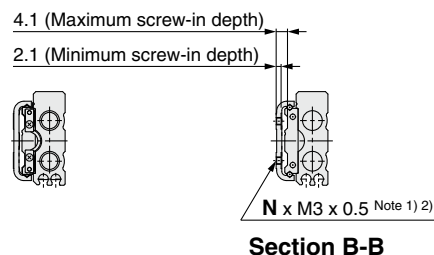
Dimensions: MXQ **8C** [Standard]

MXQ **8C**-□Z Standard type

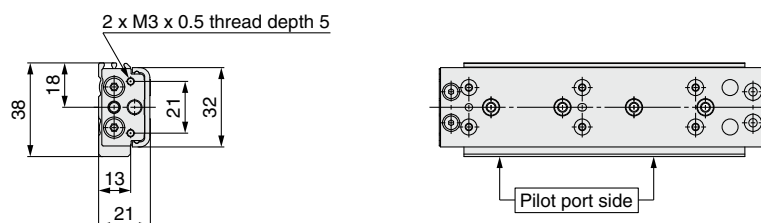


Note 1) If long bolts are used, they can touch the guide block and cause a malfunction etc. Use a screw which has the intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to pages 125 and 126 for details.

Note 2) Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet etc. This could cause an auto switch malfunction.



MXQ **8CL**-□Z Symmetric type



* Dimensions other than listed above are the same as those for the standard type.

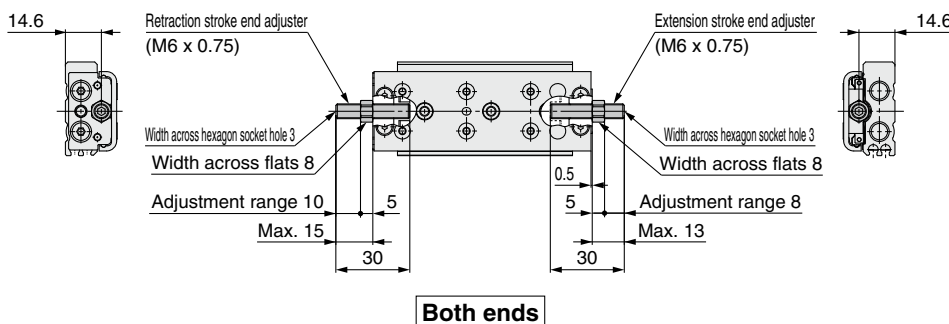
Dimensions

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ8C-10Z	25	15	9	25	37	10	26.5	68.5	4	2	51	61
MXQ8C-20Z	25	22	16	28	40	14	32.5	78.5	4	2	61	71
MXQ8C-30Z	26	—	26	—	40	14.5	42	88.5	6	3	71	81
MXQ8C-40Z	32	14	27	31	55	20	52.5	104.5	6	3	87	97
MXQ8C-50Z	46	16	54	29	55	37	62.5	131.5	6	4	114	124
MXQ8C-75Z	50	15	56	30	55	10	91.5	156.5	6	4	116	126

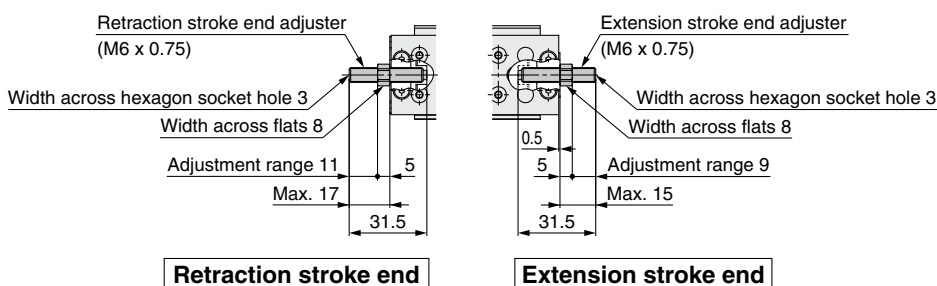
Dimensions: MXQ **8C** [Adjuster Option]

MXQ **8C**-□ With adjuster option (ø8)

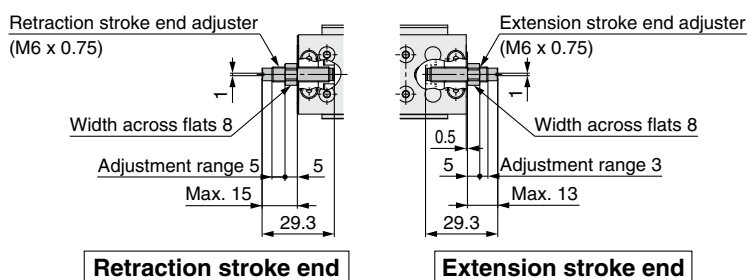
Metal stopper with bumper **ZA** : Both ends, **ZB** : Extension stroke end, **ZC** : Retraction stroke end, **ZS** : Retraction stroke end (Shorter total length type)



Rubber stopper **ZD** : Both ends, **ZE** : Extension stroke end, **ZF** : Retraction stroke end, **ZP** : Retraction stroke end (Shorter total length type)

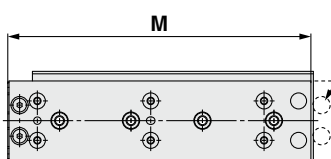


Shock absorber (RJ) **ZG** : Both ends, **ZH** : Extension stroke end, **ZJ** : Retraction stroke end, **ZQ** : Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ **8C**-□**ZN** Shorter total length type



Note 3)

Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)

Model	M
MXQ8C-10ZN	60
MXQ8C-20ZN	70
MXQ8C-30ZN	80
MXQ8C-40ZN	96
MXQ8C-50ZN	123
MXQ8C-75ZN	148

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

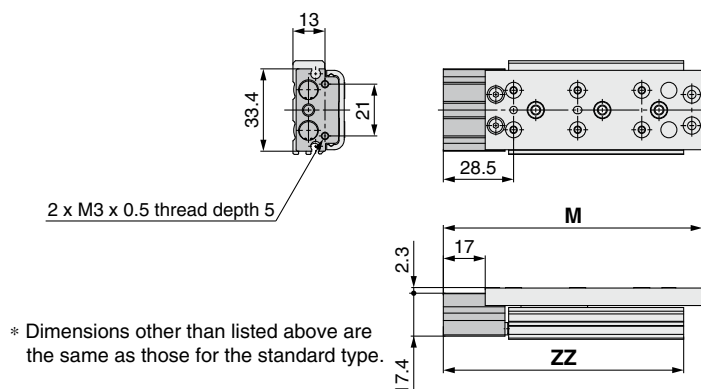
Made to Order

Model Selection

Series MXQ□C

Dimensions: MXQ **8C** [Functional Option]

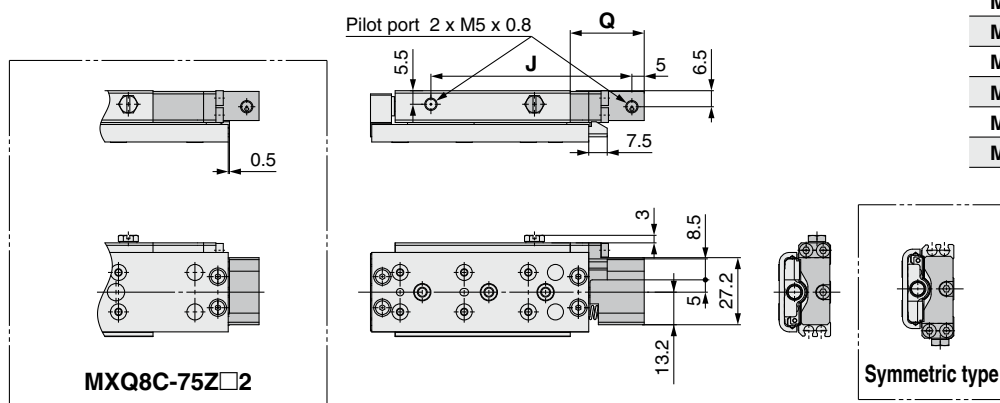
MXQ **8C**-□□1 With buffer (ø8)



Dimensions (mm)

Model	Standard type	Shorter total length type	ZZ
	M	M	
MXQ8C-10□1	85	76.5	77.5
MXQ8C-20□1	95	86.5	87.5
MXQ8C-30□1	105	96.5	97.5
MXQ8C-40□1	121	112.5	113.5
MXQ8C-50□1	148	139.5	140.5
MXQ8C-75□1	173	164.5	142.5

MXQ **8C**-□□2 With end lock (ø8)



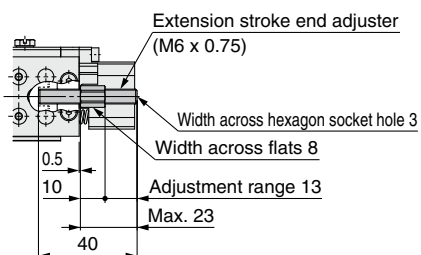
Dimensions (mm)

Model	J	Q
MXQ8C-10Z□2	61.5	30
MXQ8C-20Z□2	71.5	
MXQ8C-30Z□2	81.5	
MXQ8C-40Z□2	97.5	
MXQ8C-50Z□2	124.5	
MXQ8C-75Z□2	139.5	43

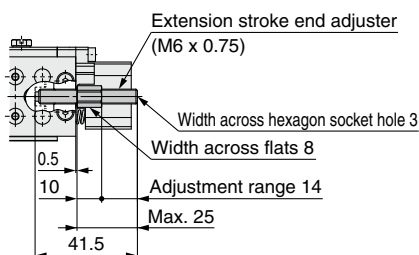
MXQ **8C**-□□2 With end lock, extension stroke end adjuster (ø8)

Select the long adjustment nut and bolt specification (-X28) when an end lock and extension stroke end adjuster are used together. The stroke adjustment range is different from the adjuster of the standard product. Retraction stroke end adjuster cannot be mounted to the end lock.

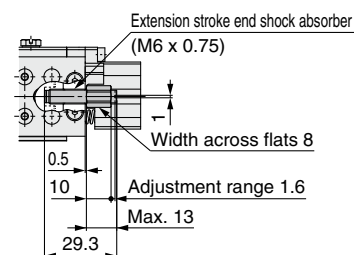
Metal stopper with bumper: **ZB**



Rubber stopper: **ZE**



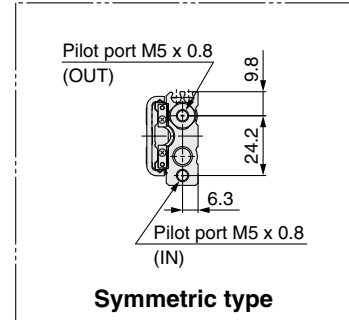
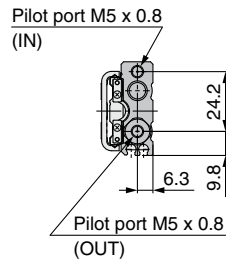
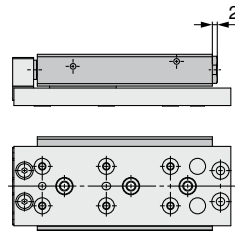
Shock absorber (RJ): **ZH**



* Dimensions other than listed above are the same as those for the standard type.

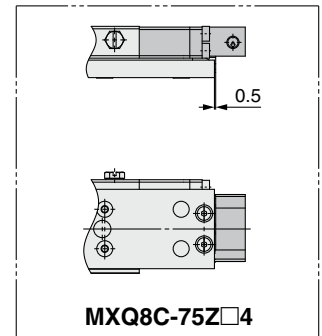
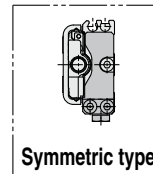
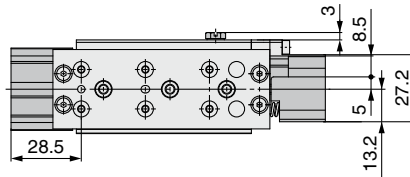
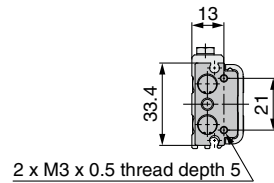
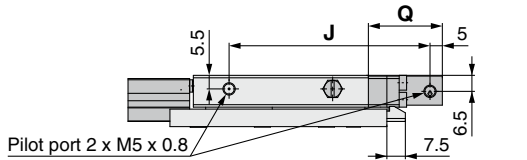
Dimensions: MXQ **8C** [Functional Option]

MXQ **8C**-□□**3** Axial piping (ø8)



* Dimensions other than listed above are the same as those for the standard type.

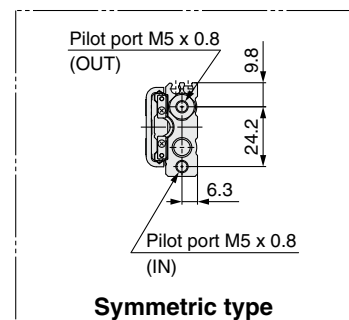
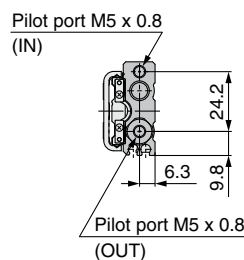
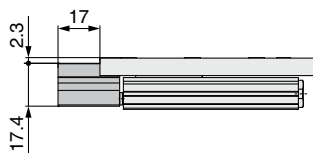
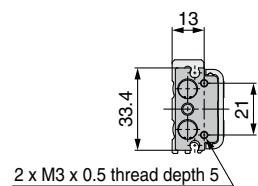
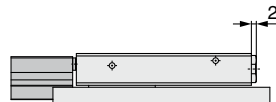
MXQ **8C**-□□**4** With buffer, end lock (ø8)



Dimensions (mm)		
Model	J	Q
MXQ8C-10Z□4	61.5	30
MXQ8C-20Z□4	71.5	
MXQ8C-30Z□4	81.5	
MXQ8C-40Z□4	97.5	
MXQ8C-50Z□4	124.5	
MXQ8C-75Z□4	139.5	43

* Dimensions other than listed above are the same as those for the standard type.

MXQ **8C**-□□**5** With buffer, axial piping (ø8)

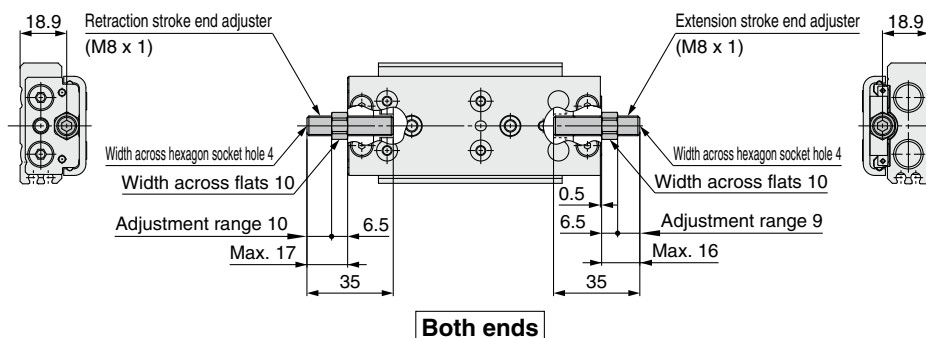


* Dimensions other than listed above are the same as those for the standard type.

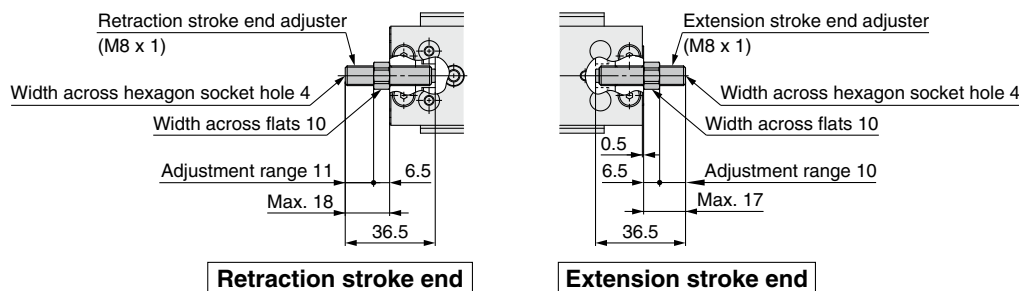
Dimensions: MXQ **12C** [Adjuster Option]

MXQ **12C**-□ With adjuster option (ø12)

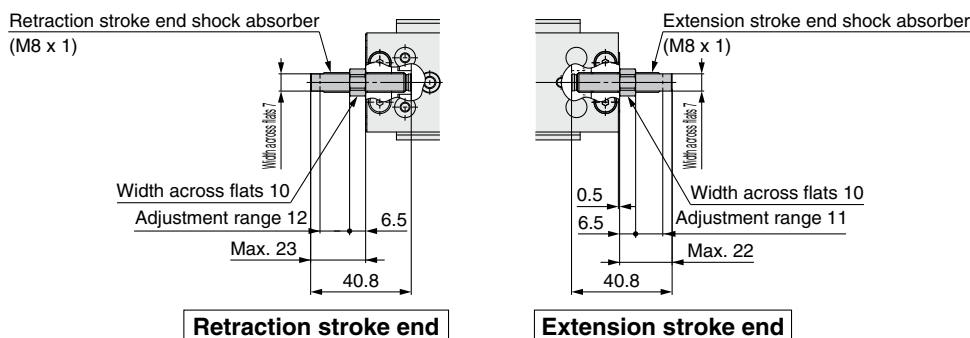
Metal stopper with bumper **ZA** : Both ends, **ZB** : Extension stroke end, **ZC** : Retraction stroke end, **ZS** : Retraction stroke end (Shorter total length type)



Rubber stopper **ZD** : Both ends, **ZE** : Extension stroke end, **ZF** : Retraction stroke end, **ZP** : Retraction stroke end (Shorter total length type)

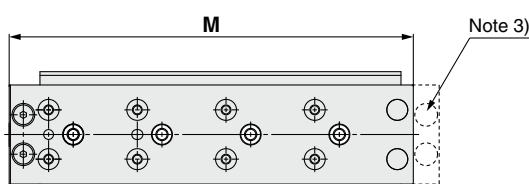


Shock absorber (RJ) **ZG** : Both ends, **ZH** : Extension stroke end, **ZJ** : Retraction stroke end, **ZQ** : Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ **12C**-□**ZN** Shorter total length type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)	
Model	M
MXQ12C-10ZN	72
MXQ12C-20ZN	82
MXQ12C-30ZN	92
MXQ12C-40ZN	110
MXQ12C-50ZN	120
MXQ12C-75ZN	164
MXQ12C-100ZN	189

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

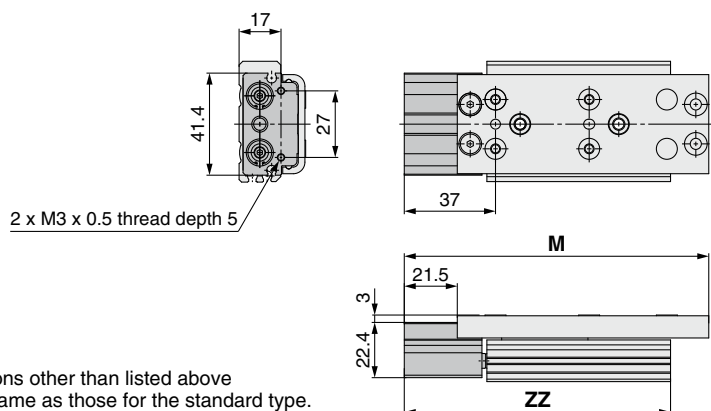
Made to Order

Model Selection

Series MXQ□C

Dimensions: MXQ **12C** [Functional Option]

MXQ 12C-□□1 With buffer (ø12)

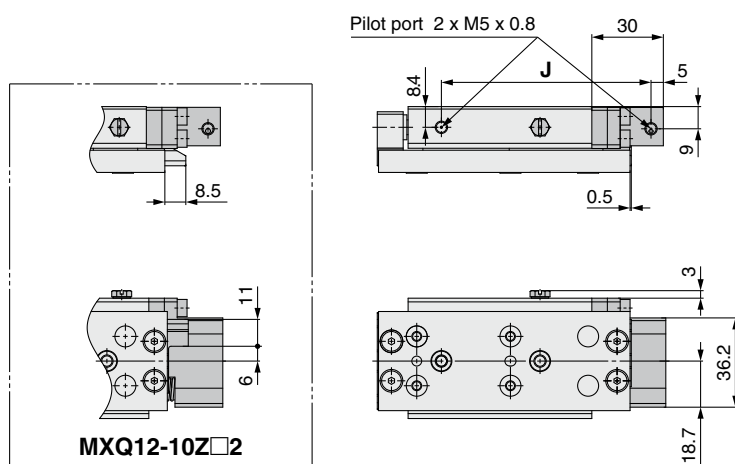


* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)

Model	Standard type	Shorter total length type	ZZ
	M	M	
MXQ12C-10□1	103.5	93	96
MXQ12C-20□1	113.5	103	98
MXQ12C-30□1	123.5	113	108
MXQ12C-40□1	141.5	131	126
MXQ12C-50□1	151.5	141	136
MXQ12C-75□1	195.5	185	180
MXQ12C-100□1	220.5	210	205

MXQ 12C-□□2 With end lock (ø12)



Dimensions (mm)

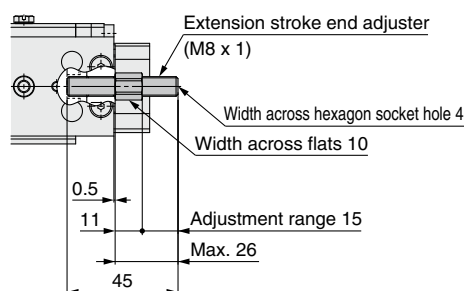
Model	J
MXQ12C-10Z□2	68
MXQ12C-20Z□2	70
MXQ12C-30Z□2	80
MXQ12C-40Z□2	98
MXQ12C-50Z□2	108
MXQ12C-75Z□2	152
MXQ12C-100Z□2	177

* Dimensions other than listed above are the same as those for the standard type.

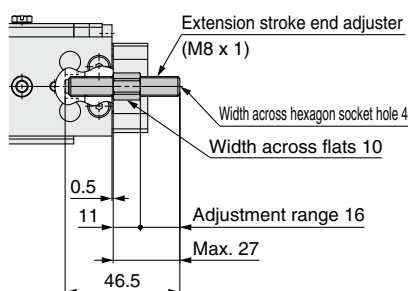
MXQ 12C-□□2 With end lock, extension stroke end adjuster (ø12)

Select the long adjustment nut and bolt specification (-X28) when an end lock and extension stroke end adjuster are used together. The stroke adjustment range is different from the adjuster of the standard product. Retraction stroke end adjuster cannot be mounted to the end lock.

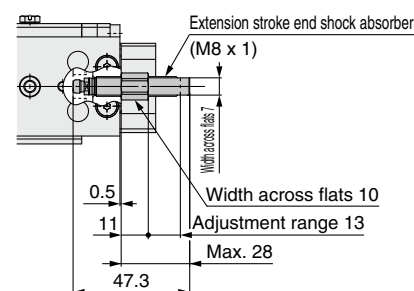
Metal stopper with bumper: **ZB**



Rubber stopper: **ZE**



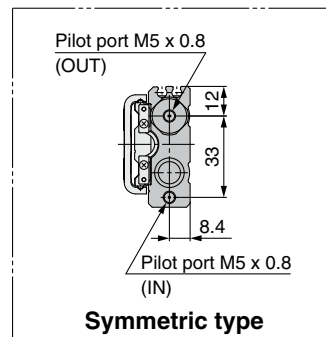
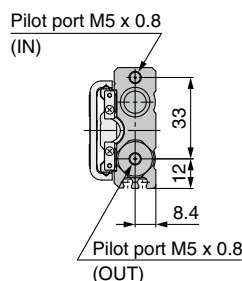
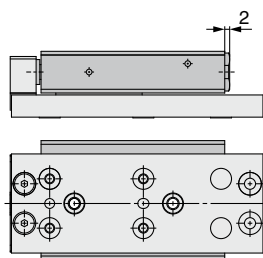
Shock absorber (RJ): **ZH**



* Dimensions other than listed above are the same as those for the standard type.

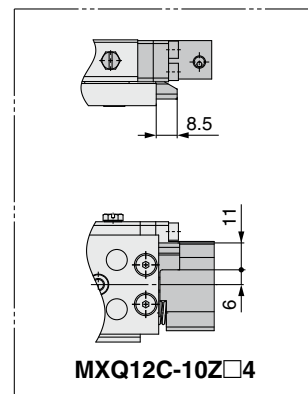
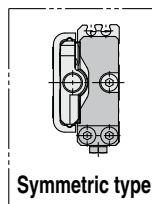
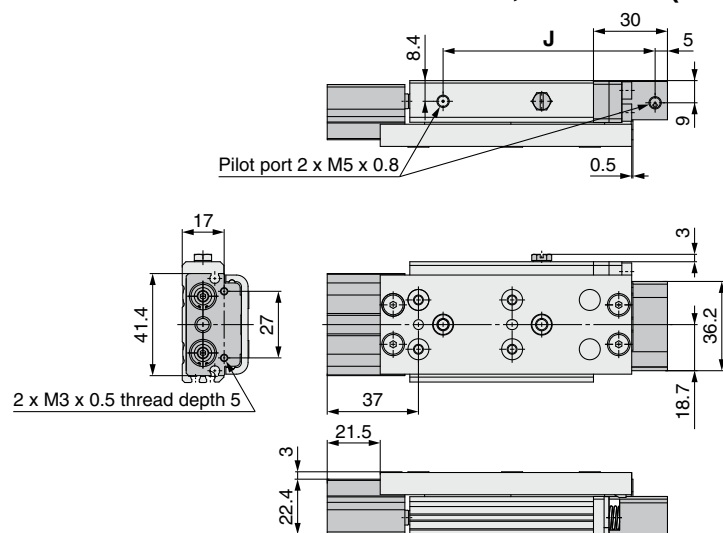
Dimensions: MXQ **12C** [Adjuster Option]

MXQ **12C-□□3** Axial piping (ø12)



* Dimensions other than listed above are the same as those for the standard type.

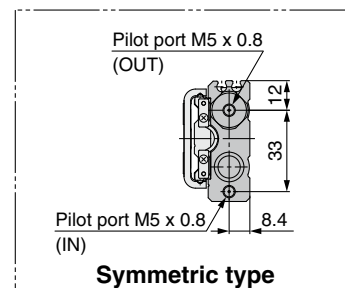
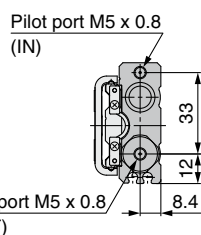
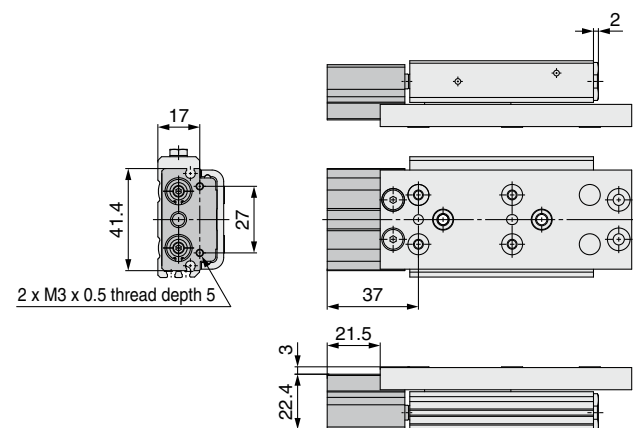
MXQ **12C-□□4** With buffer, end lock (ø12)



Dimensions (mm)	
Model	J
MXQ12C-10Z□4	68
MXQ12C-20Z□4	70
MXQ12C-30Z□4	80
MXQ12C-40Z□4	98
MXQ12C-50Z□4	108
MXQ12C-75Z□4	152
MXQ12C-100Z□4	177

* Dimensions other than listed above are the same as those for the standard type.

MXQ **12C-□□5** With buffer, axial piping (ø12)



* Dimensions other than listed above are the same as those for the standard type.

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

Made to Order

Model Selection

Air Slide Table

Height interchangeable type

Series MXQ

ø6, ø8, ø12, ø16, ø20, ø25

RoHS

How to Order

MXQ 12 - 30 ZA - M9BW -

Bore size	Body option		Standard stroke (mm)
	Standard type	Symmetric type	
	Nil	L	
6			10, 20, 30, 40, 50
8			10, 20, 30, 40, 50, 75
12			10, 20, 30, 40, 50, 75, 100
16		— Note)	10, 20, 30, 40, 50, 75, 100, 125
20			10, 20, 30, 40, 50, 75, 100, 125, 150
25			10, 20, 30, 40, 50, 75, 100, 125, 150

Note) No setting, as the standard model has the piping ports and auto switch mounting grooves on both sides.

• Made to Order
Refer to page 57 for details.

Auto switch

Nil Without auto switch

* For applicable auto switches, refer to the table below.

• Number of auto switches

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

Functional option

Symbol	Functional option
Nil	Without functional option
1	With buffer
2	With end lock
3	Axial piping
4	With buffer, end lock
5	With buffer, axial piping

Adjuster option/Functional option combinations

Symbol	Adjuster type	Adjuster mounting position Note 1)		Functional option combination					
		Extension stroke end	Retraction stroke end	Nil	1	2	3	4	5
Z	Without adjuster			○	○	○	○	○	○
ZA	Metal stopper with bumper (Not available for ø6)	●	●	○	×	×	○	×	×
ZB		●	●	○	×	○	○	×	×
ZC		●	●	○	×	×	○	×	×
ZD	Rubber stopper	●	●	○	×	×	○	×	×
ZE		●	●	○	○	○	○	○	○
ZF		●	●	○	×	×	○	×	×
ZG	Shock absorber (RJ)	●	●	○	×	×	○	×	×
ZH		●	●	○	×	○	○	×	×
ZJ		●	●	○	×	×	○	×	×
ZN	Note 5) Without adjuster		●	○	○ Note 6)	×	○	×	○ Note 6)
ZP	Shorter total length type		●	○	×	×	○	×	×
ZQ			●	○	×	×	○	×	×
ZS			●	○	×	×	○	×	×

Note 1) ●: Shipped together with the product, but not assembled. Without any symbols for the adjuster mounting position, the adjuster can be mounted afterward.

Note 2) For buffer mechanism, buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.

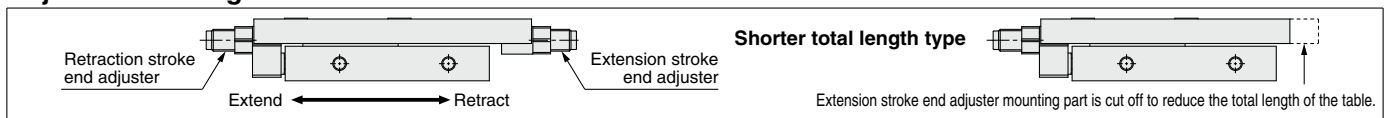
Note 3) When retraction stroke end adjuster with buffer mechanism is needed, use the centralized adjuster specification (-X27). End lock or axial piping option cannot be mounted to the centralized adjuster specification model.

Note 4) Extension stroke end adjuster with end lock mechanism is available as long adjustment nut and bolt specification (-X28). The adjustment nut cannot be tightened with the standard adjuster.

Note 5) Extension stroke end adjuster mounting holes are removed to reduce the total length.

Note 6) Shorter total length type can be used, but the retraction stroke end adjuster cannot be mounted afterward.

Adjuster Mounting Position



Applicable Auto Switches/Refer to the Best Pneumatics No. 3 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)					
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9NV	M9N	●	●	●	○	○	IC	Relay, PLC	
				3-wire (PNP)				M9PV	M9P	●	●	●	○	○			
				2-wire				M9BV	M9B	●	●	●	○	○			
	Diagnostic indication (2-color indication)			3-wire (NPN)				5 V, 12 V	M9NWV	M9NW	●	●	●	○	○		IC
				3-wire (PNP)					M9PWV	M9PW	●	●	●	○	○		
				2-wire					M9BWV	M9BW	●	●	●	○	○		
	Water resistant (2-color indication)			3-wire (NPN)	5 V, 12 V	M9NAV***			M9NA***	○	○	○	○	IC			
				3-wire (PNP)		M9PAV***			M9PA***	○	○	●	○		○		
				2-wire		M9BAV***			M9BA***	○	○	●	○		○		

*** Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance. Please contact SMC regarding water resistant types with the above model numbers.

* Lead wire length symbols: 0.5 m Nil (Example) M9NV * Solid state auto switches marked with "○" are produced upon receipt of order.

1 m M (Example) M9NWM * Since there are other applicable auto switches than listed, refer to page 85 for details.

3 m L (Example) M9NWL * For details about auto switches with pre-wired connector, refer to the Best Pneumatics No. 3.

5 m Z (Example) M9NWX * Auto switches are shipped together, (but not assembled).

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

Made to Order

Model Selection



Specifications

Bore size (mm)	6	8	12	16	20	25
Piping port size	M5 x 0.8					
Fluid	Air					
Action	Double acting					
Operating pressure	0.15 to 0.7 MPa ^{Note)} (End lock: 0.35 to 0.7 MPa)					
Proof pressure	1.05 MPa					
Ambient and fluid temperature	-10 to 60°C					
Operating speed range (Average operating speed)	50 to 500 mm/s (Metal stopper with bumper: 50 to 300 mm/s) * in the standard stroke table: 50 to 300 mm/s					
Cushion (Without stroke adjuster)	Internal rubber bumper					
Cushion (With stroke adjuster)	Metal stopper with bumper, Rubber stopper, Shock absorber					
Lubrication	Non-lube					
Auto switch	Solid state auto switch (2-wire, 3-wire) 2-color indication solid state auto switch (2-wire, 3-wire)					
Stroke length tolerance	+2 to 0 mm					

Note) Refer to page 58 for the minimum operating pressure for metal stopper with bumper. If the operating pressure is lower than the minimum operating pressure, repeated accuracy becomes worse.
Minimum operating pressure of metal stopper with bumper: Pressure required to fully compress the protrusion of the bumper to get in contact with the metal part.
Operating pressure for the bore size 20 cylinder with shock absorber is 0.15 to 0.6 MPa.

Standard Stroke

Model	Standard stroke (mm)
MXQ6	10, 20, 30, 40, 50
MXQ8	10, 20, 30, 40, 50, 75
MXQ12	10, 20, 30, 40, 50, 75, 100
MXQ16	10, 20, 30, 40, 50, 75, 100, 125
MXQ20	10, 20, 30, 40, 50, 75, 100, 125, 150
MXQ25	10, 20, 30, 40, 50, 75, 100, 125, 150*

Note) * Operating speed range is 50 to 300 mm/s. (Without stroke adjuster)



Made to Order
(For details, refer to pages 87 to 91.)

Symbol	Specifications
-X7	PTFE grease
-X9	Grease for food processing equipment
-X11	Long adjustment bolt (Longer adjustment range by 10 mm)
-X12	Long adjustment bolt (Longer adjustment range by 20 mm)
-X27	Centralized adjuster
-X28	Long adjustment nut and bolt
-X33	Without built-in auto switch magnet
-X39	Fluororubber seal
-X42	Anti-corrosive guide unit
-X45	EPDM seal

Theoretical Output

The dual rod ensures an output twice that of existing cylinders.

(N)

Bore size (mm)	Rod size (mm)	Operating direction	Piston area (mm ²)	Operating pressure (MPa)					
				0.2	0.3	0.4	0.5	0.6	0.7
6	3	OUT	57	11	17	23	29	34	40
		IN	42	8	13	17	21	25	29
8	4	OUT	101	20	30	40	51	61	71
		IN	75	15	23	30	38	45	53
12	6	OUT	226	45	68	90	113	136	158
		IN	170	34	51	68	85	102	119
16	6	OUT	402	80	121	161	201	241	281
		IN	346	69	104	138	173	207	242
20	8	OUT	628	126	188	251	314	377	440
		IN	528	106	158	211	264	317	369
25	10	OUT	982	196	295	393	491	589	687
		IN	825	165	247	330	412	495	577

Weight

Model	Standard stroke (mm)									Reduction of the shorter total length type	Additional weight of adjuster option		Extra for option		
	10	20	30	40	50	75	100	125	150		Extension stroke end	Retraction stroke end	End lock	Buffer	Axial piping
MXQ6	120	120	160	180	190	—	—	—	—	−6	10	8	40	30	No addition
MXQ8	150	180	190	230	310	350	—	—	—	−6	10	8	60	30	
MXQ12	290	310	340	400	430	590	670	—	—	−12	20	16	80	70	
MXQ16	500	520	570	650	690	840	1,100	1,200	—	−21	40	30	150	120	
MXQ20	870	870	900	990	1,100	1,300	1,700	2,000	2,100	−33	70	50(80)	400	190	
MXQ25	1,400	1,400	1,500	1,600	1,900	2,100	2,300	3,000	3,300	−60	110	80	700	310	

Note) Value in the () is the additional weight for the shock absorber.

Maximum Load Weight

Model	Adjuster option				
	Without adjuster		Adjuster option		
	Internal rubber bumper	Rubber stopper	Metal stopper with bumper	Shock absorber (RJ)	
MXQ6	0.6	0.6	—	0.6	
MXQ8	1	1	1	1	
MXQ12	2	2	2	1.5	1
MXQ16	4	4	4	4	2.5
MXQ20	6	6	6	6	
MXQ25	9	9	9	9	6

Allowable Kinetic Energy

Model	Without adjuster		Adjuster option	
	Internal rubber bumper		Rubber stopper	Metal stopper with bumper
			Shock absorber (RJ)	
MXQ6	0.026		0.051	—
MXQ8	0.033		0.053	0.016
MXQ12	0.09		0.11	0.034
MXQ16	0.1		0.18	0.07
MXQ20	0.2		0.34	0.10
MXQ25	0.32		0.51	0.15

Optional Specifications

With End Lock

Model	MXQ6	MXQ8	MXQ12	MXQ16	MXQ20	MXQ25
Operating pressure range (MPa)	0.35 to 0.7					
Holding force (N)	12	12	23	45	70	110

With Buffer Mechanism

Model		MXQ6	MXQ8	MXQ12	MXQ16	MXQ20	MXQ25
Operating speed range (mm/s)		50 to 500 (Horizontal mounting 50 to 300)					
Buffer stroke (mm)		5		10			
Buffer stroke load (N)	Stroke at 0 (mm)	3	5	9	16	25	40
	Maximum stroke	6	8	15	24	38	59

Applicable Auto Switch to Buffer

Type	Model	Specifications	Electrical entry direction
Solid state auto switch	D-M9BV	With light, 2-wire	Vertical
	D-M9NV	With light, 3-wire, Output: NPN	
	D-M9PV	With light, 3-wire, Output: PNP	

Adjusters

Metal Stopper with Bumper

Applicable slide table	MXQ8	MXQ12	MXQ16	MXQ20	MXQ25
Mode (Metal stopper with bumper only)	MXQA-A887	MXQA-A1287	MXQA-A1687	MXQA-A2087	MXQA-A2587
Max. absorbed energy (J)	0.018	0.04	0.08	0.12	0.18
Stroke absorption (mm)	2	2.8	3.6	4.4	5.5
Full compression force of bumper (N)	20	42	65	97	154
Min. operating pressure of metal stopper with bumper* (MPa)	0.3	0.3	0.2	0.2	0.2
Weight (g)	7	14	25	42	65
Mounting screw size (mm)	M6 x 0.75	M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

* Pressure required to fully compress the protrusion of the bumper to get in contact with the metal part.

Rubber Stopper

Applicable slide table	MXQ6	MXQ8	MXQ12	MXQ16	MXQ20	MXQ25
Mode (Rubber stopper only)	MXQA-A827		MXQA-A1227	MXQA-A1627	MXQA-A2027	MXQA-A2527
Max. absorbed energy (J)	0.06		0.12	0.2	0.4	0.6
Weight (g)	7		14	25	42	65
Mounting screw size (mm)	M6 x 0.75		M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

Shock Absorber (RJ)

Applicable slide table	MXQ6	MXQ8	MXQ12	MXQ16	MXQ20	MXQ25
Model (Shock absorber only)	RJ0603N		RJ0805N	RJ1006N	RJ1007HN	RJ1410N
Max. absorbed energy (J)	0.35		0.5	1.5	3	3.7
Stroke absorption (mm)	3		5	6	7	10
Collision speed (mm/s)	50 to 500					
Max. operating frequency (cycle/min)	80		80	70		45
Max. allowable thrust (N)	150		245	422		814
Spring force (Extended) (N)	1.3		2.8	5.4		6.4
Spring force (Compressed) (N)	3.9		4.9	8		15
Weight (g)	5.5		15	23		65
Mounting screw size (mm)	M6 x 0.75		M8 x 1	M10 x 1		M14 x 1.5

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

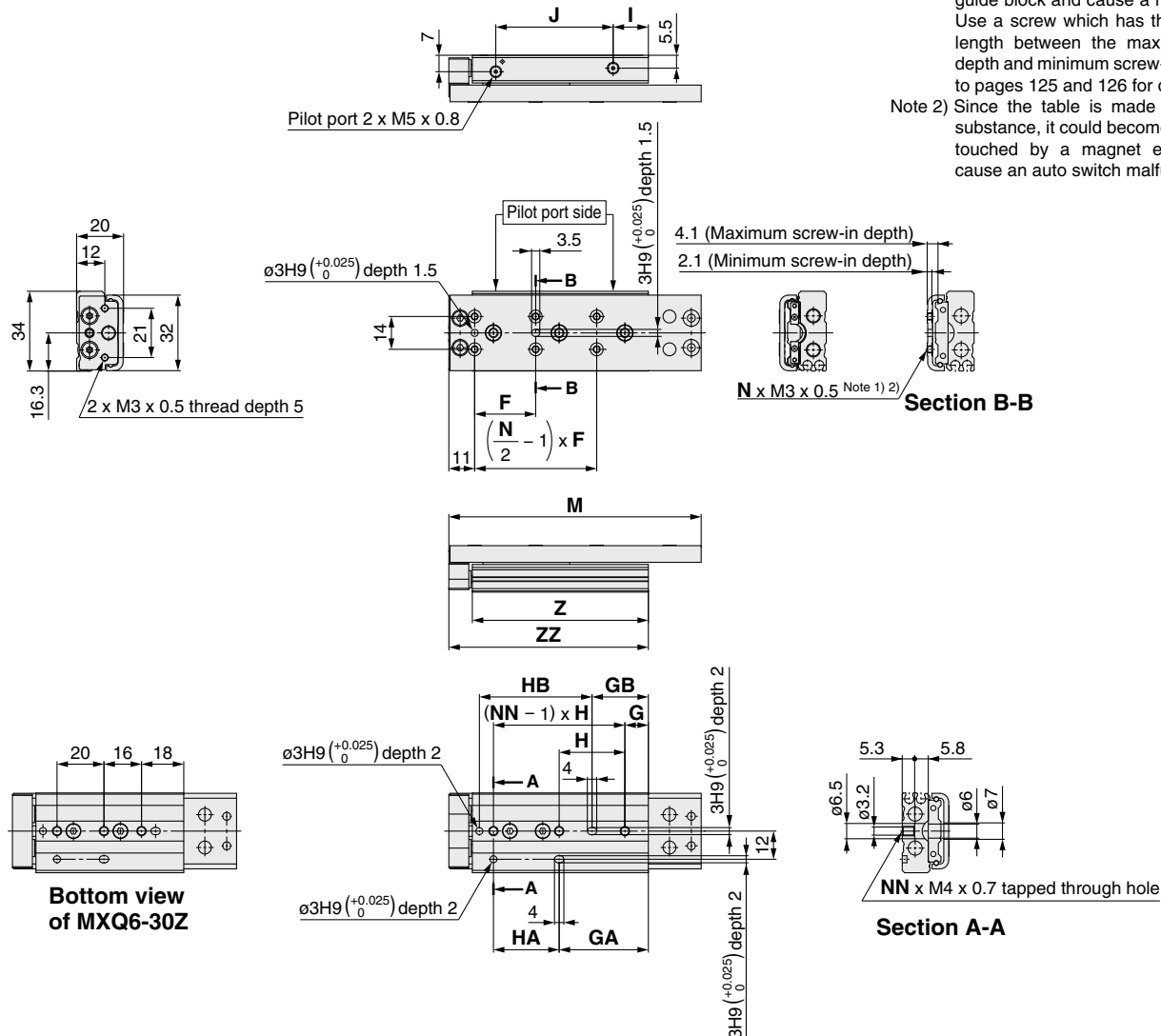
Auto Switch
Mounting

Made to Order

Model Selection

Dimensions: MXQ **6** [Standard]

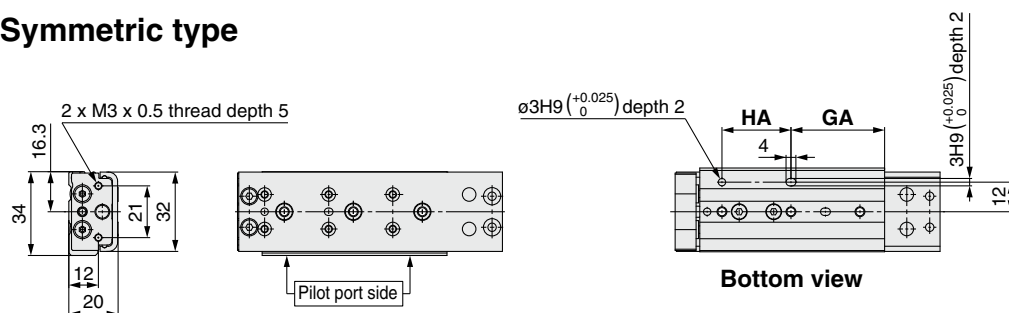
MXQ **6**-□**Z** Standard type



Note 1) If long bolts are used, they can touch the guide block and cause a malfunction etc. Use a screw which has the intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to pages 125 and 126 for details.

Note 2) Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet etc. This could cause an auto switch malfunction.

MXQ **6L**-□**Z** Symmetric type



* Dimensions other than listed above are the same as those for the standard type.

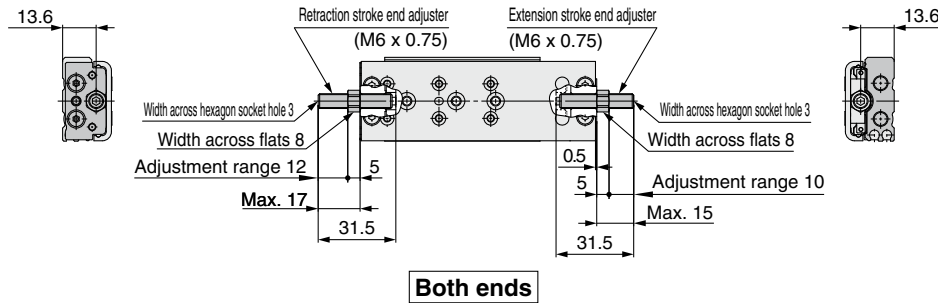
Dimensions

Model	F	G	GA	GB	H	HA	HB	I	J	M	N	NN	Z	ZZ
MXQ6-10Z	22	18	25	9	23	16	38	10	30	64.5	4	2	50	60
MXQ6-20Z	25	15	15	9	26	26	38	10	30	74.5	4	2	50	60
MXQ6-30Z	21	—	34	12	—	20	48	13	40	95.5	6	3	63	73
MXQ6-40Z	26	10	38	24	28	28	48	15	50	107.5	6	3	75	85
MXQ6-50Z	27	20	48	34	28	28	48	15	60	117.5	6	3	85	95

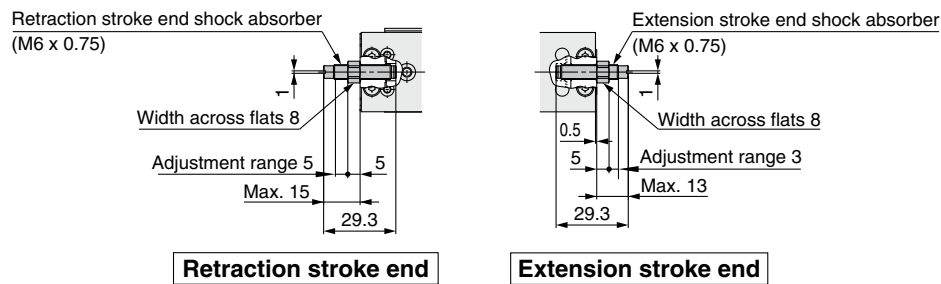
Dimensions: MXQ **6** [Adjuster Option]

MXQ **6**-□□ With adjuster option (ø6)

Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

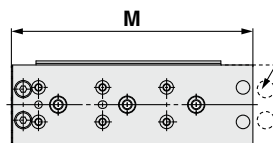


Shock absorber (RJ) **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ **6**-□**ZN** Height interchangeable type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)

Model	M
MXQ6-10ZN	55
MXQ6-20ZN	65
MXQ6-30ZN	86
MXQ6-40ZN	98
MXQ6-50ZN	108

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

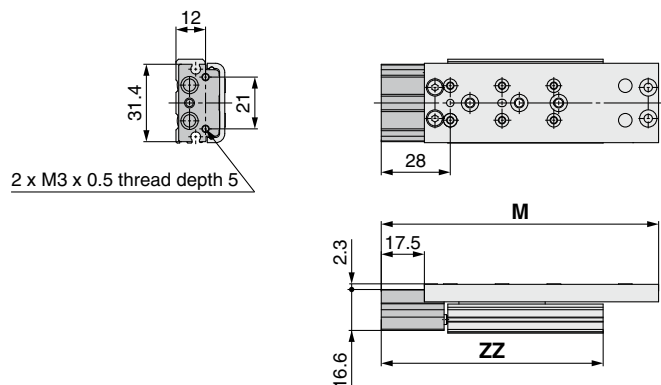
Made to Order

Model Selection

Series MXQ

Dimensions: MXQ **6** [Functional Option]

MXQ 6-□□1 With buffer (ø6)

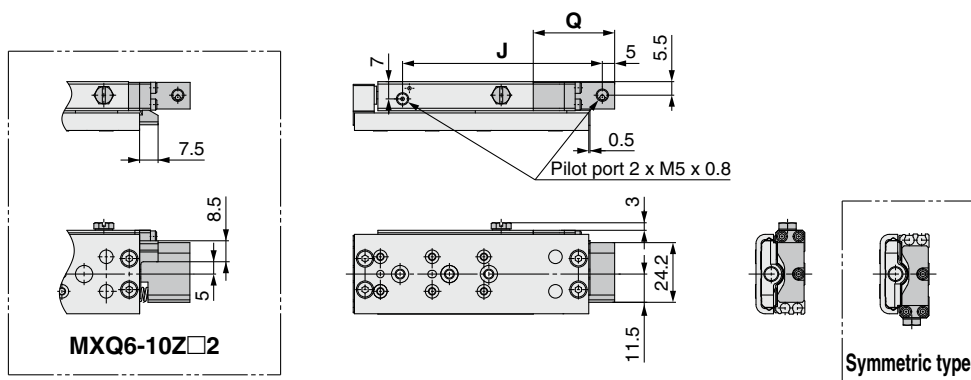


Dimensions (mm)

Model	Standard type	Shorter total length type	ZZ
MXQ6-10□1	M	M	77
MXQ6-20□1	M	M	
MXQ6-30□1	M	M	90
MXQ6-40□1	M	M	102
MXQ6-50□1	M	M	112

* Dimensions other than listed above are the same as those for the standard type.

MXQ 6-□□2 With end lock (ø6)



Dimensions (mm)

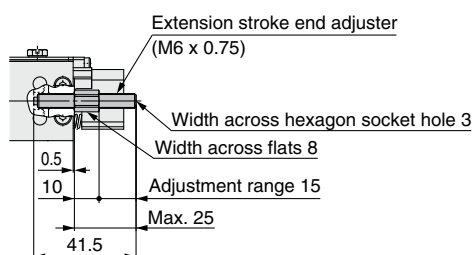
Model	J	Q
MXQ6-10Z□2	57.5	25
MXQ6-20Z□2		
MXQ6-30Z□2	78.5	33
MXQ6-40Z□2	90.5	
MXQ6-50Z□2	100.5	

* Dimensions other than listed above are the same as those for the standard type.

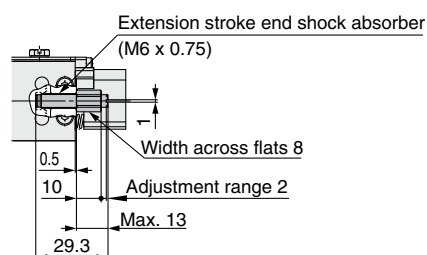
MXQ 6-□□2 With end lock, extension stroke end adjuster (ø6)

Select the long adjustment nut and bolt specification (-X28) when an end lock and extension stroke end adjuster are used together. The stroke adjustment range is different from the adjuster of the standard product. Retraction stroke end adjuster cannot be mounted to the end lock.

Rubber stopper: ZE



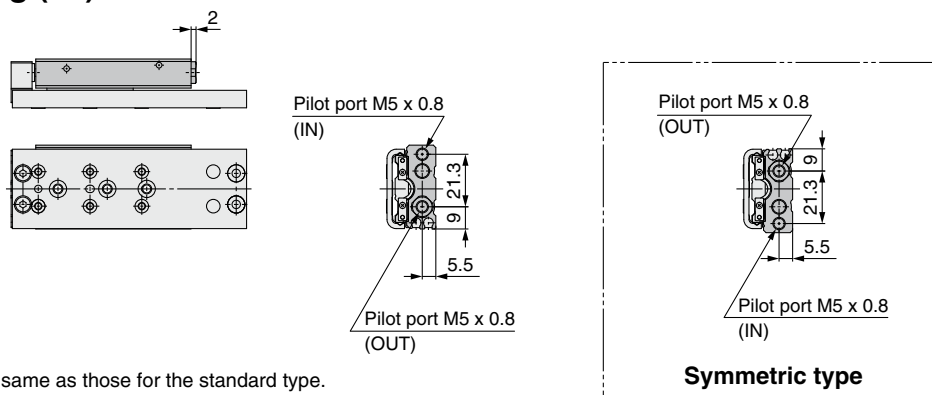
Shock absorber (RJ): ZH



* Dimensions other than listed above are the same as those for the standard type.

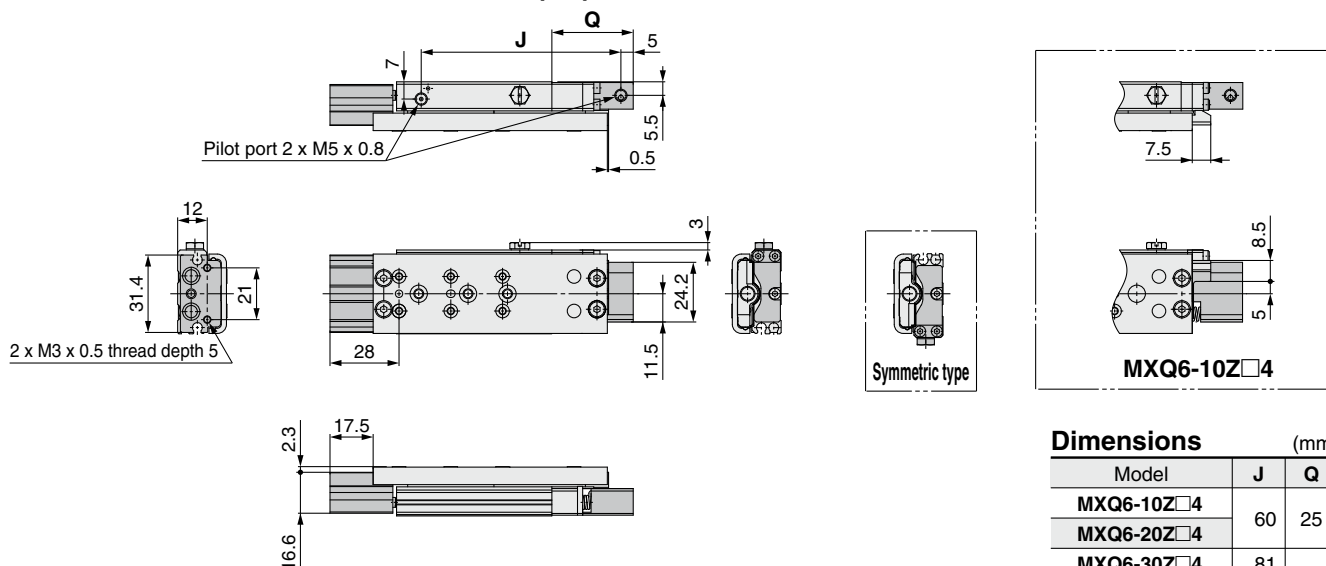
Dimensions: MXQ **6** [Functional Option]

MXQ 6-□□3 Axial piping (ø6)



* Dimensions other than listed above are the same as those for the standard type.

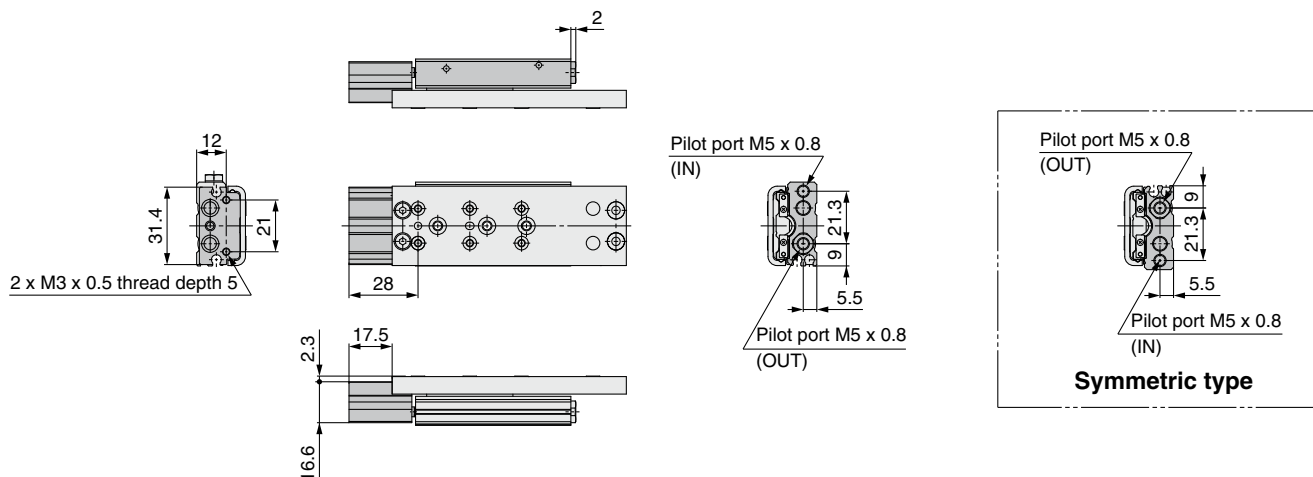
MXQ 6-□□4 With buffer, end lock (ø6)



* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)		
Model	J	Q
MXQ6-10Z□4	60	25
MXQ6-20Z□4		
MXQ6-30Z□4	81	33
MXQ6-40Z□4	93	
MXQ6-50Z□4	103	

MXQ 6-□□5 With buffer, axial piping (ø6)



* Dimensions other than listed above are the same as those for the standard type.

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

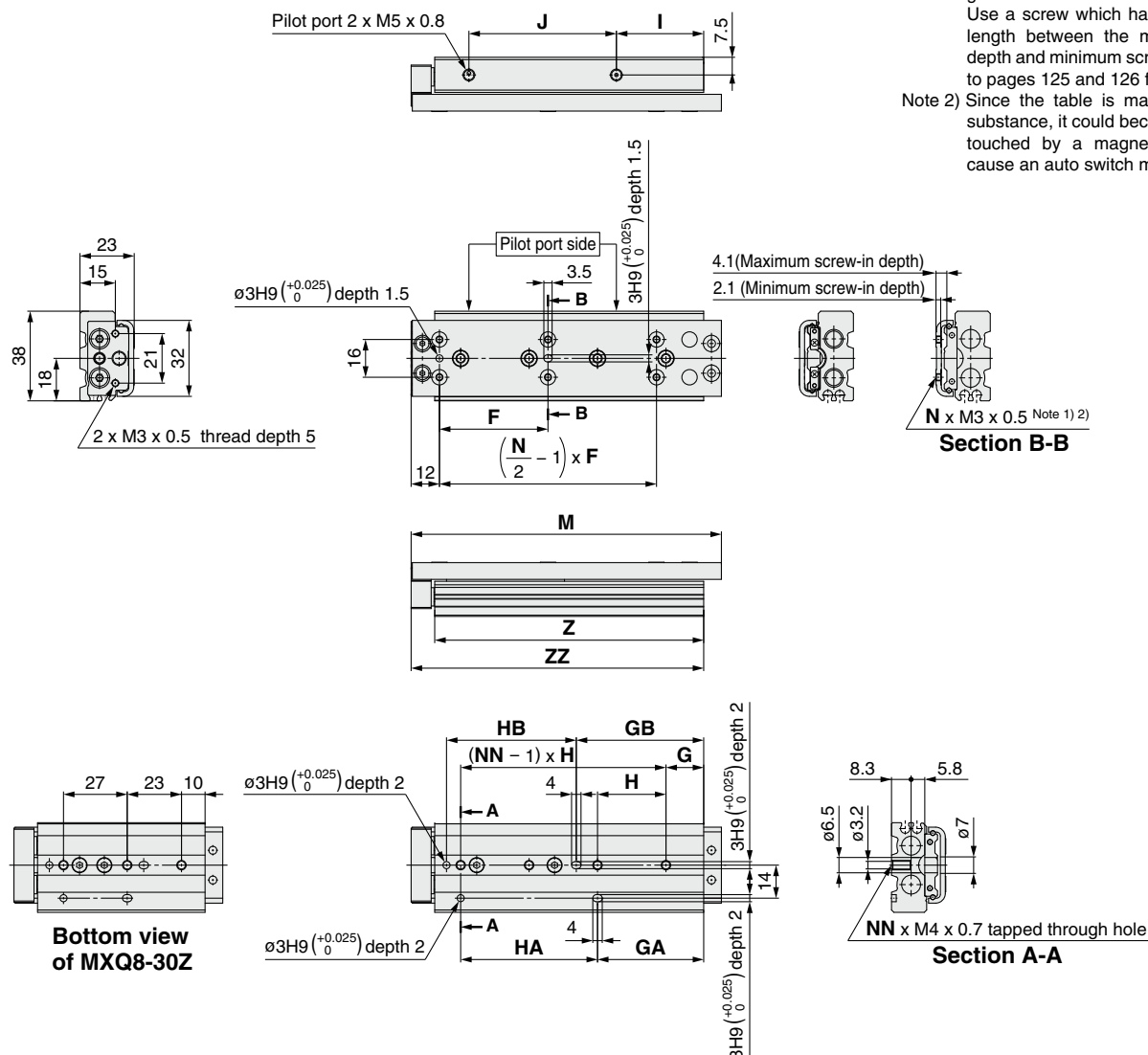
Auto Switch
Mounting

Made to Order

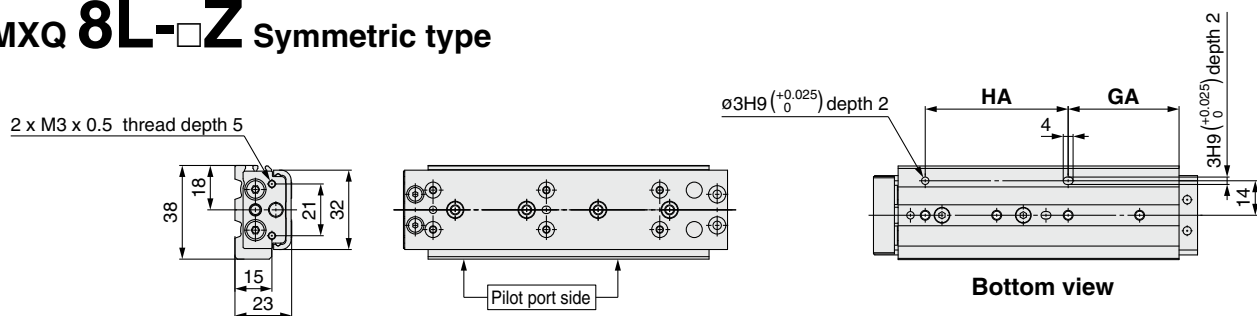
Model Selection

Dimensions: MXQ 8 [Standard]

MXQ 8-□Z Standard type



MXQ 8L-□Z Symmetric type



* Dimensions other than listed above are the same as those for the standard type.

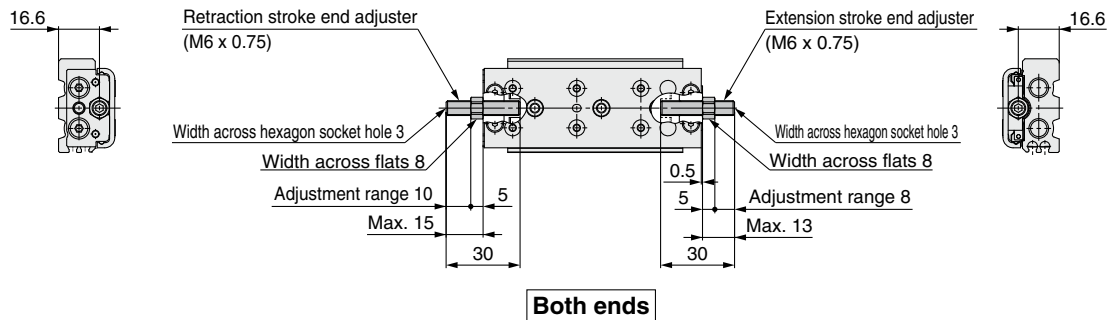
Dimensions

Dimensions														(mm)
Model	F	G	GA	GB	H	HA	HB	I	J	M	N	NN	Z	ZZ
MXQ8-10Z	25	15	21	9	25	19	37	10	26.5	68.5	4	2	51	61
MXQ8-20Z	25	22	22	16	28	28	40	14	32.5	78.5	4	2	61	71
MXQ8-30Z	26	—	33	26	—	27	40	14.5	42	88.5	6	3	71	81
MXQ8-40Z	32	14	45	27	31	31	55	20	52.5	104.5	6	3	87	97
MXQ8-50Z	46	16	45	54	29	58	55	37	62.5	131.5	6	4	114	124
MXQ8-75Z	50	15	45	56	30	60	55	10	91.5	156.5	6	4	116	126

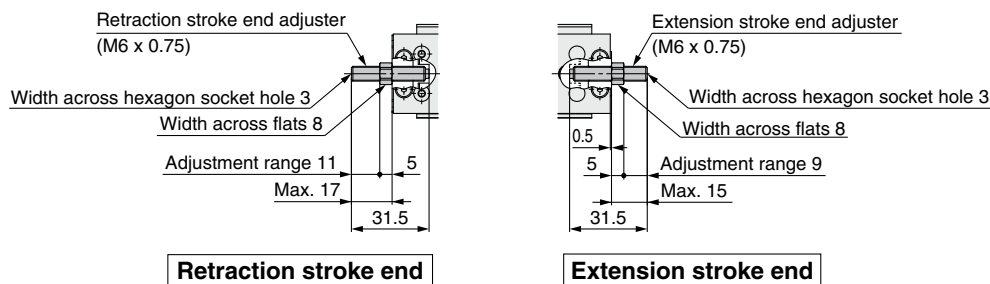
Dimensions: MXQ **8** [Adjuster Option]

MXQ 8-□□ With adjuster option (ø8)

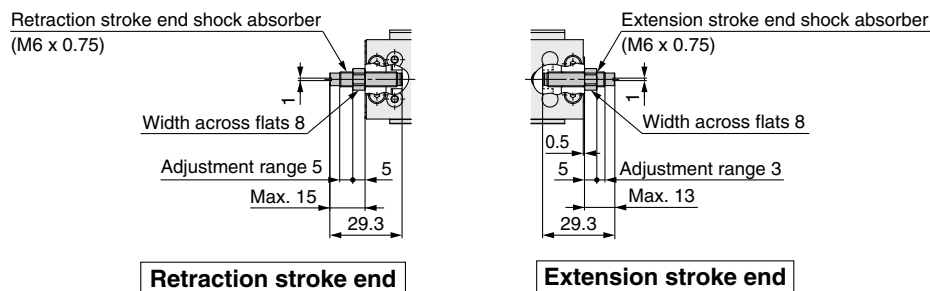
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)



Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

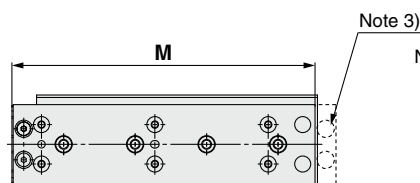


Shock absorber (RJ) **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ 8-□**ZN** Height interchangeable type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjuster can be mounted afterward.)

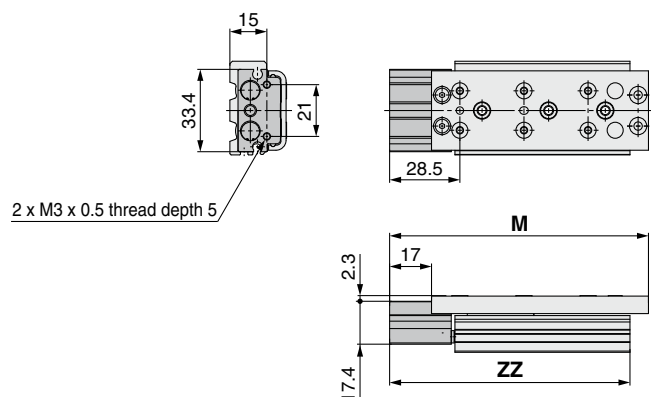
Dimensions (mm)	
Model	M
MXQ8-10ZN	60
MXQ8-20ZN	70
MXQ8-30ZN	80
MXQ8-40ZN	96
MXQ8-50ZN	123
MXQ8-75ZN	148

* Dimensions other than listed above are the same as those for the standard type.

Series MXQ

Dimensions: MXQ **8** [Functional Option]

MXQ 8-□□1 With buffer (ø8)

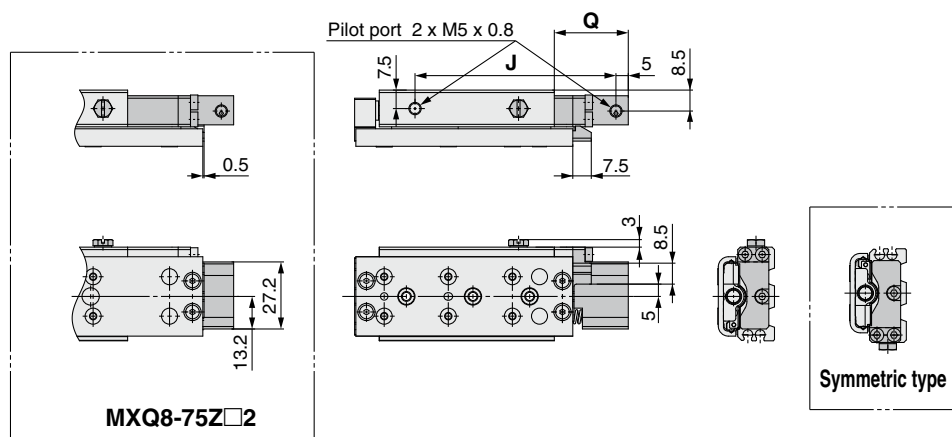


Dimensions (mm)

Model	Standard type	Shorter total length type	ZZ
MXQ8-10□1	85	76.5	77.5
MXQ8-20□1	95	86.5	87.5
MXQ8-30□1	105	96.5	97.5
MXQ8-40□1	121	112.5	113.5
MXQ8-50□1	148	139.5	140.5
MXQ8-75□1	173	164.5	142.5

* Dimensions other than listed above are the same as those for the standard type.

MXQ 8-□□2 With end lock (ø8)



Dimensions (mm)

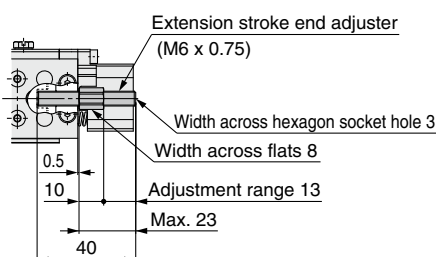
Model	J	Q
MXQ8-10Z□2	61.5	30
MXQ8-20Z□2	71.5	
MXQ8-30Z□2	81.5	
MXQ8-40Z□2	97.5	
MXQ8-50Z□2	124.5	43
MXQ8-75Z□2	139.5	

* Dimensions other than listed above are the same as those for the standard type.

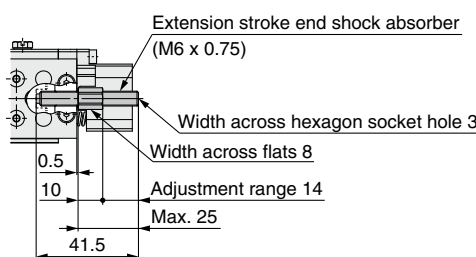
MXQ 8-□□2 With end lock, extension stroke end adjuster (ø8)

Select the long adjustment nut and bolt specification (-X28) when an end lock and extension stroke end adjuster are used together.
The stroke adjustment range is different from the adjuster of the standard product.
Retraction stroke end adjuster cannot be mounted to the end lock.

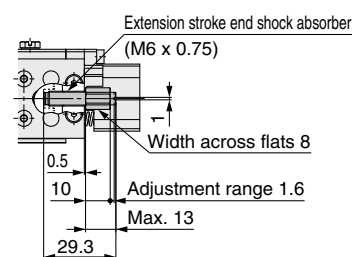
Metal stopper with bumper: **ZB**



Rubber stopper: **ZE**



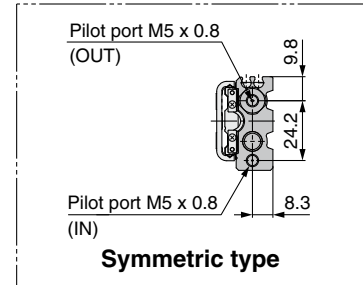
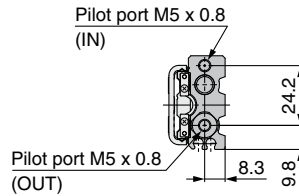
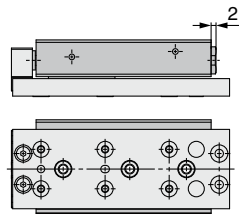
Shock absorber (RJ): **ZH**



* Dimensions other than listed above are the same as those for the standard type.

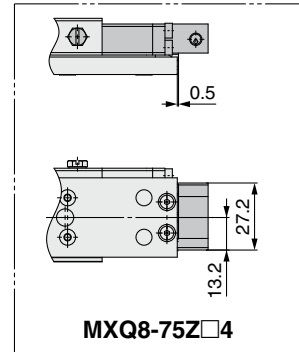
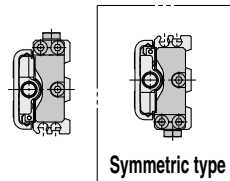
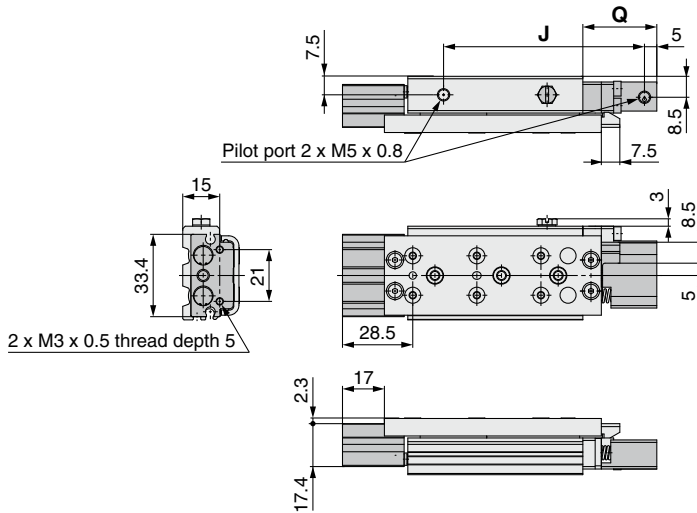
Dimensions: MXQ **8** [Functional Option]

MXQ 8-□□**3** Axial piping (ø8)



* Dimensions other than listed above are the same as those for the standard type.

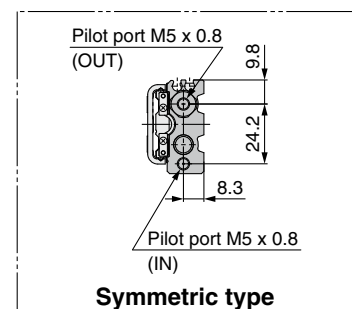
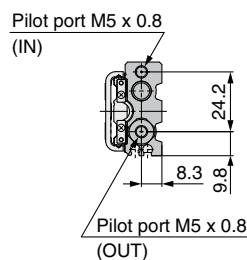
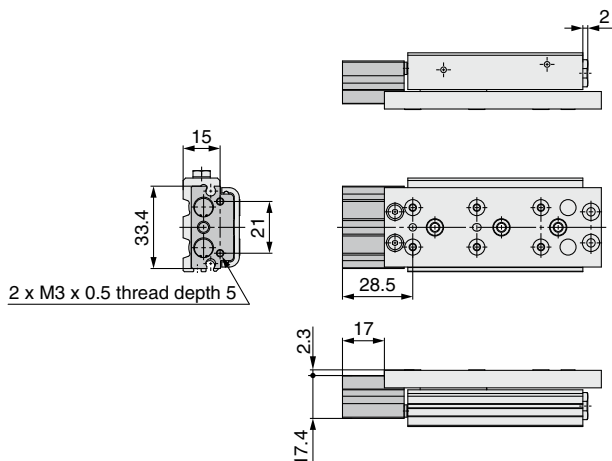
MXQ 8-□□**4** With buffer, end lock (ø8)



Dimensions (mm)		
Model	J	Q
MXQ8-10Z□4	61.5	30
MXQ8-20Z□4	71.5	
MXQ8-30Z□4	81.5	
MXQ8-40Z□4	97.5	
MXQ8-50Z□4	124.5	
MXQ8-75Z□4	139.5	43

* Dimensions other than listed above are the same as those for the standard type.

MXQ 8-□□**5** With buffer, axial piping (ø8)



* Dimensions other than listed above are the same as those for the standard type.

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

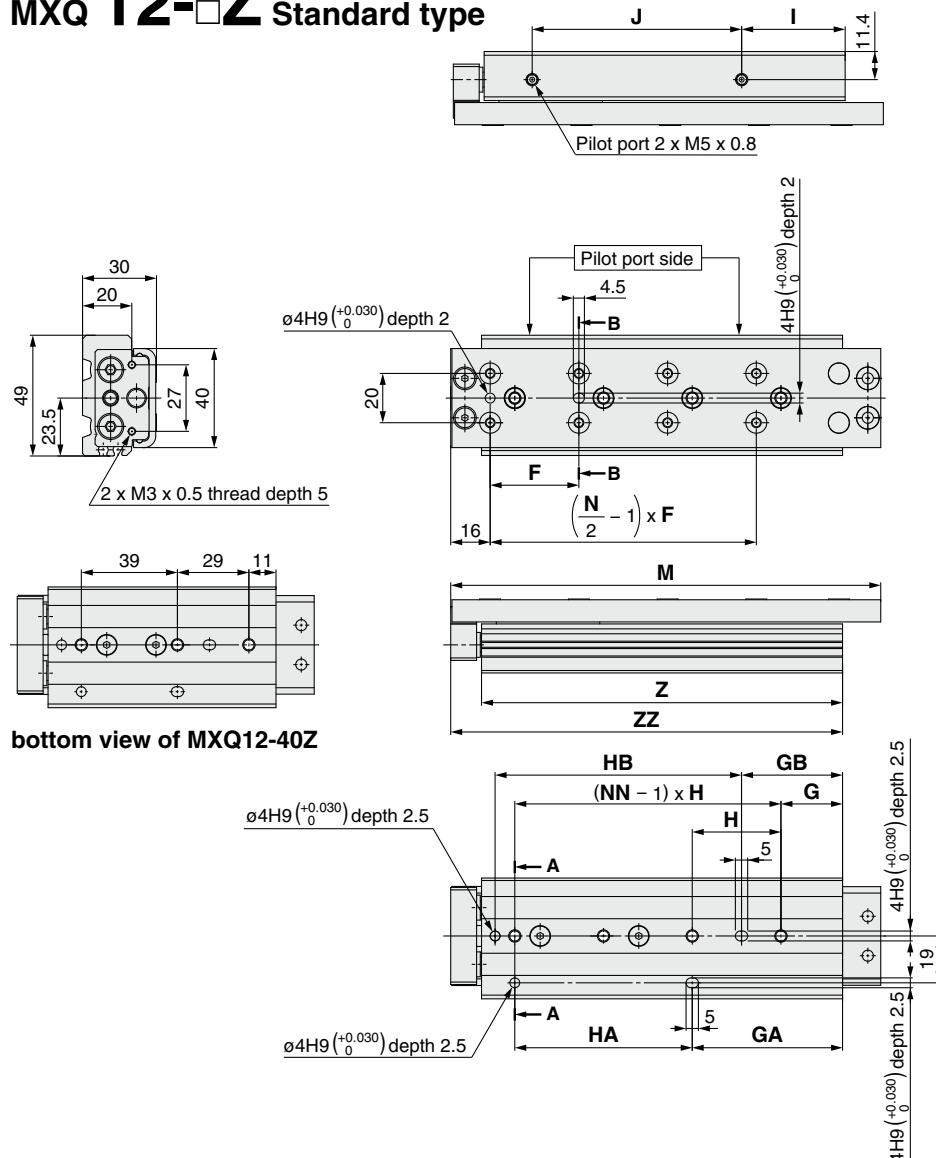
Auto Switch Mounting

Made to Order

Model Selection

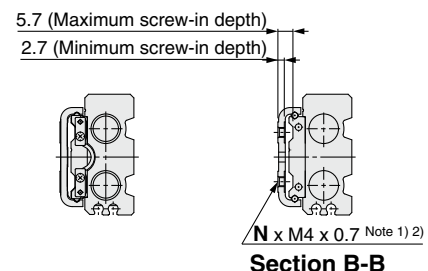
Dimensions: MXQ **12** [Standard]

MXQ **12**-□**Z** Standard type



Note 1) If long bolts are used, they can touch the guide block and cause a malfunction etc. Use a screw which has the intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to pages 125 and 126 for details.

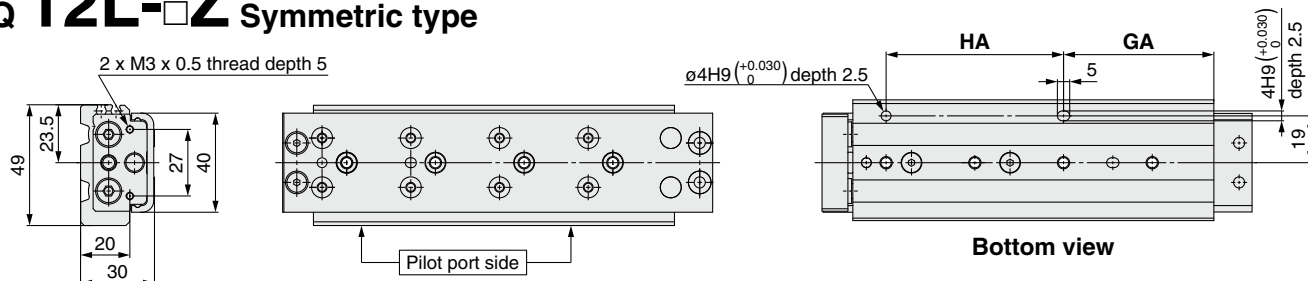
Note 2) Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet etc. This could cause an auto switch malfunction.



bottom view of MXQ12-40Z

Section A-A

MXQ **12L**-□**Z** Symmetric type



* Dimensions other than listed above are the same as those for the standard type.

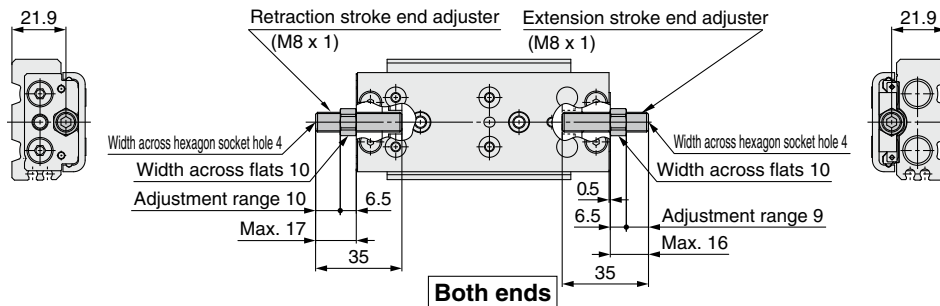
Dimensions

Model	F	G	GA	GB	H	HA	HB	I	J	M	N	NN	Z	ZZ
MXQ12-10Z	28	17	17	11	32	32	46	11	32	82.5	4	2	62.5	75
MXQ12-20Z	28	19	19	11	32	32	48	13	32	92.5	4	2	64.5	77
MXQ12-30Z	38	21	21	11	40	40	58	15	40	102.5	4	2	74.5	87
MXQ12-40Z	34	—	40	27	—	39	60	23	50	120.5	6	3	92.5	105
MXQ12-50Z	34	11	50	37	39	39	60	23	60	130.5	6	3	102.5	115
MXQ12-75Z	36	25	61	41	36	72	100	42	85	174.5	8	4	146.5	159
MXQ12-100Z	36	14	86	66	36	72	100	42	110	199.5	10	5	171.5	184

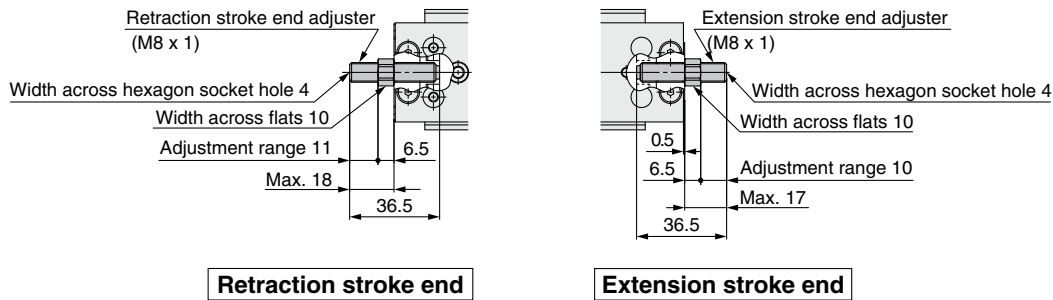
Dimensions: MXQ **12** [Adjuster Option]

MXQ 12-□□ With adjuster option (ø12)

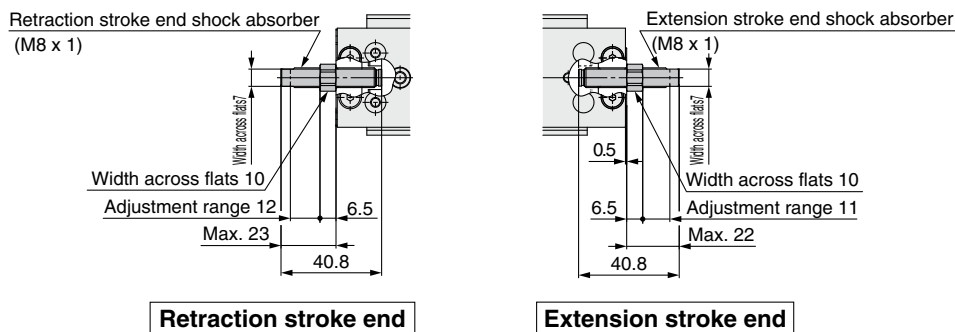
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)



Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

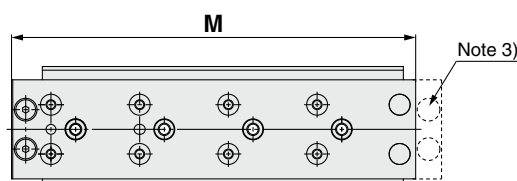


Shock absorber (RJ) **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ 12-□ZN Height interchangeable type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)	
Model	M
MXQ12-10ZN	72
MXQ12-20ZN	82
MXQ12-30ZN	92
MXQ12-40ZN	110
MXQ12-50ZN	120
MXQ12-75ZN	164
MXQ12-100ZN	189

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

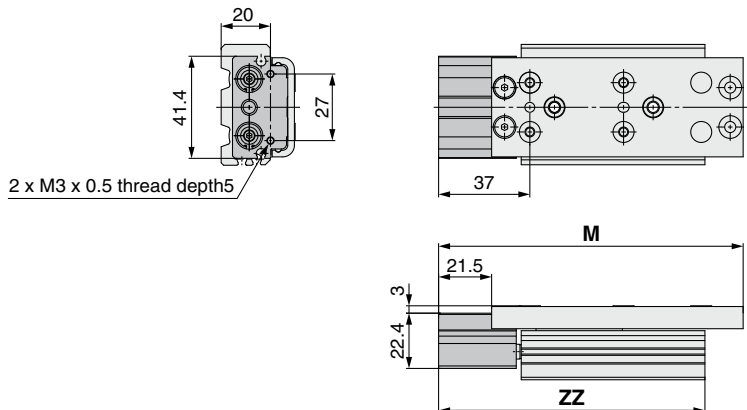
Made to Order

Model Selection

Series MXQ

Dimensions: MXQ **12** [Functional Option]

MXQ 12-□□1 With buffer (ø12)

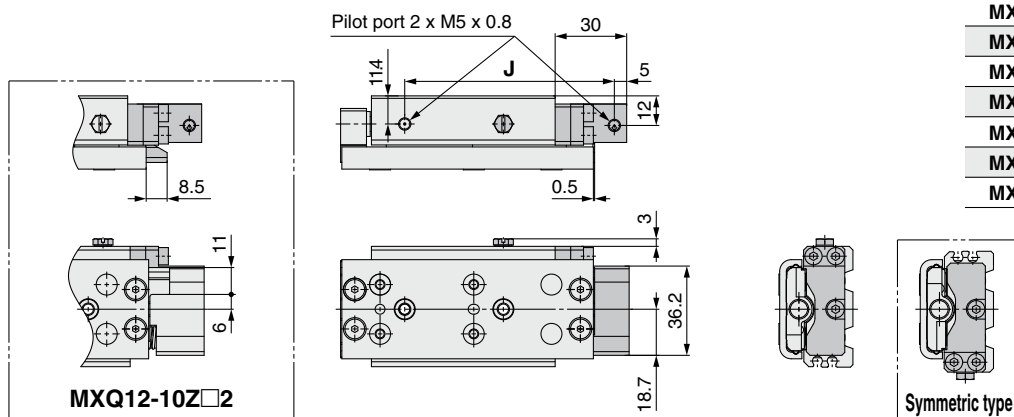


Dimensions (mm)

Model	Standard type	Shorter total length type	ZZ
	M	M	
MXQ12-10□1	103.5	93	96
MXQ12-20□1	113.5	103	98
MXQ12-30□1	123.5	113	108
MXQ12-40□1	141.5	131	126
MXQ12-50□1	151.5	141	136
MXQ12-75□1	195.5	185	180
MXQ12-100□1	220.5	210	205

* Dimensions other than listed above are the same as those for the standard type.

MXQ 12-□□2 With end lock (ø12)



Dimensions (mm)

Model	J
MXQ12-10Z□2	68
MXQ12-20Z□2	70
MXQ12-30Z□2	80
MXQ12-40Z□2	98
MXQ12-50Z□2	108
MXQ12-75Z□2	152
MXQ12-100Z□2	177

* Dimensions other than listed above are the same as those for the standard type.

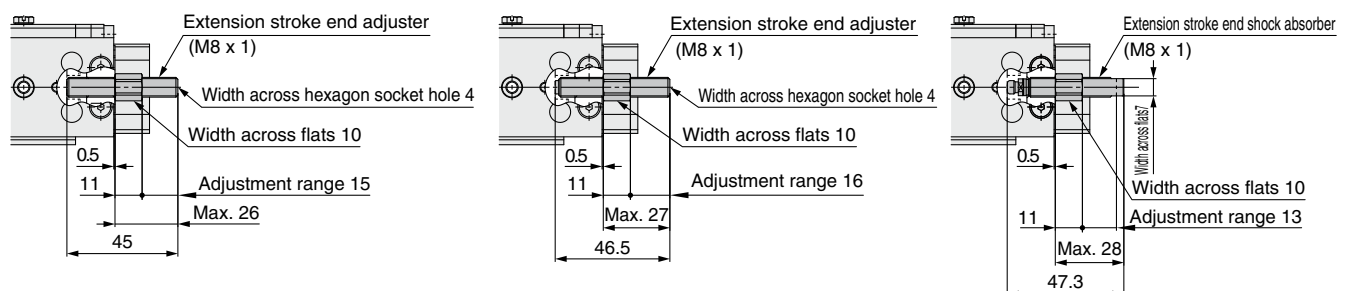
MXQ 12-□□2 With end lock, extension stroke end adjuster (ø12)

Select the long adjustment nut and bolt specification (-X28) when an end lock and extension stroke end adjuster are used together.
The stroke adjustment range is different from the adjuster of the standard product.
Retraction stroke end adjuster cannot be mounted to the end lock.

Metal stopper with bumper: **ZB**

Rubber stopper: **ZE**

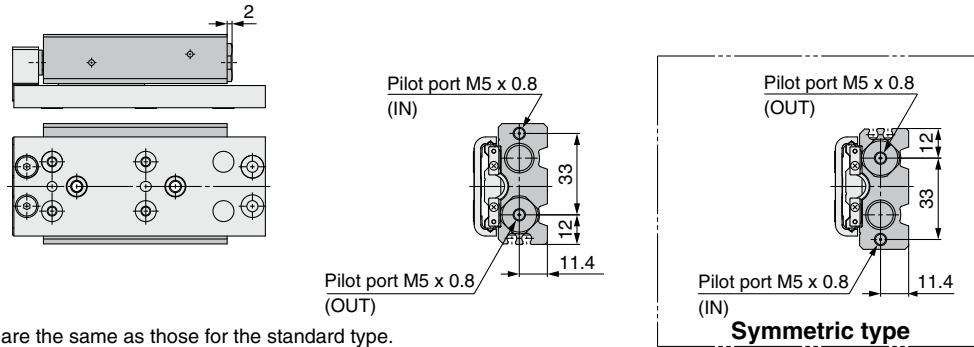
Shock absorber (RJ): **ZH**



* Dimensions other than listed above are the same as those for the standard type.

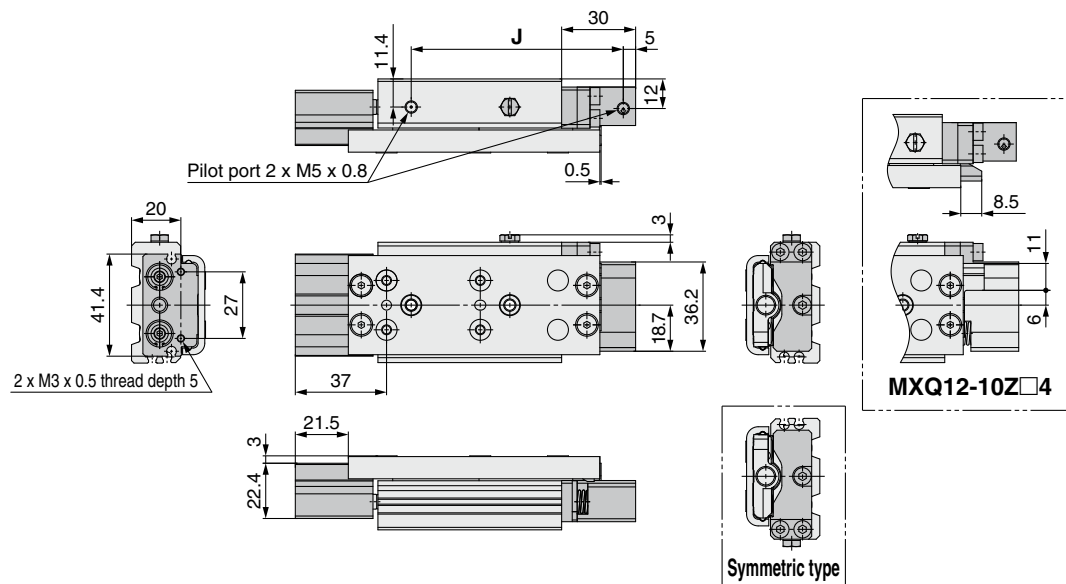
Dimensions: MXQ **12** [Functional Option]

MXQ 12-□□3 Axial piping (ø12)



* Dimensions other than listed above are the same as those for the standard type.

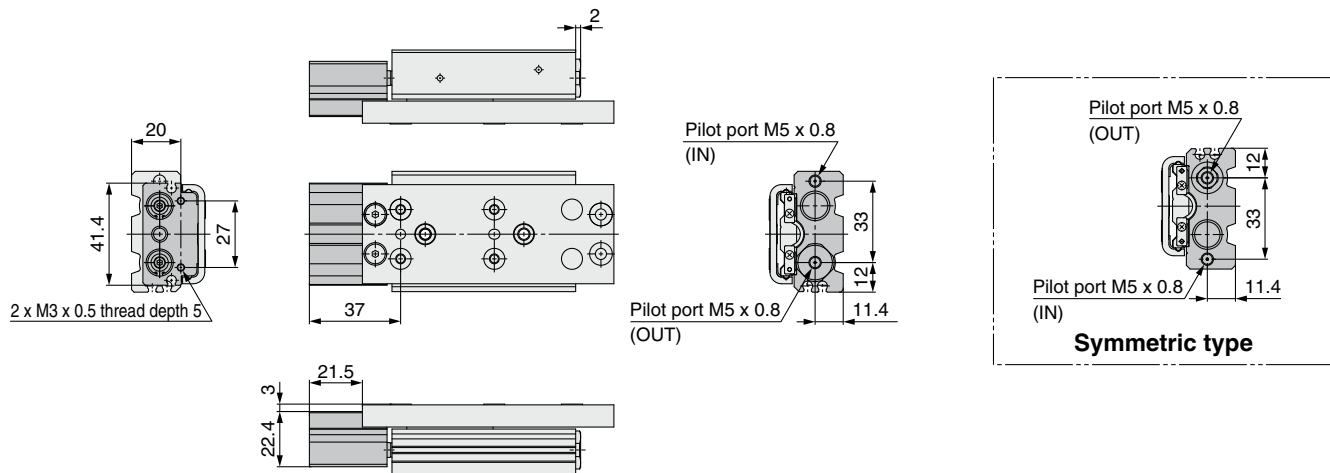
MXQ 12-□□4 With buffer, end lock (ø12)



Dimensions (mm)	
Model	J
MXQ12-10Z□4	68
MXQ12-20Z□4	70
MXQ12-30Z□4	80
MXQ12-40Z□4	98
MXQ12-50Z□4	108
MXQ12-75Z□4	152
MXQ12-100Z□4	177

* Dimensions other than listed above are the same as those for the standard type.

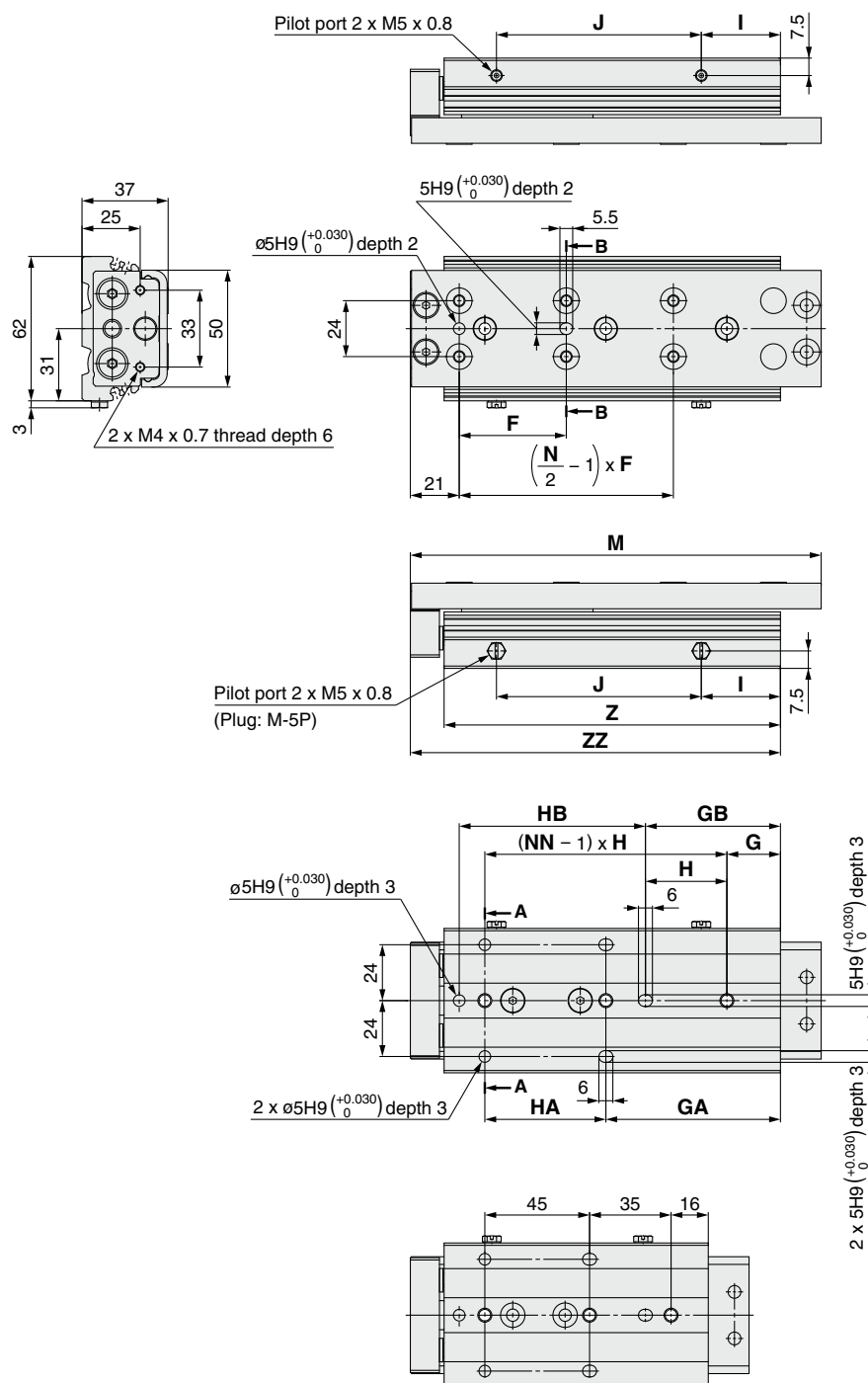
MXQ 12-□□5 With buffer, axial piping (ø12)



* Dimensions other than listed above are the same as those for the standard type.

Dimensions: MXQ **16** [Standard]

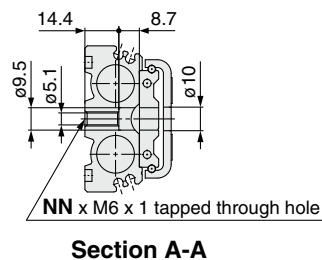
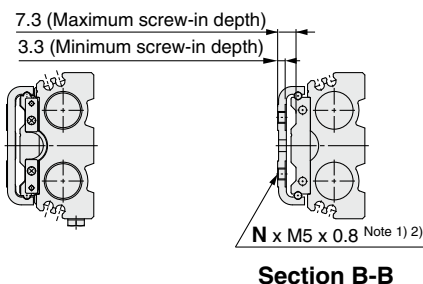
MXQ 16-□Z Standard type



Bottom view of MXQ16A-50Z

Note 1) If long bolts are used, they can touch the guide block and cause a malfunction etc. Use a screw which has the intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to pages 125 and 126 for details.

Note 2) Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet etc. This could cause an auto switch malfunction.



Section A-A

Dimensions

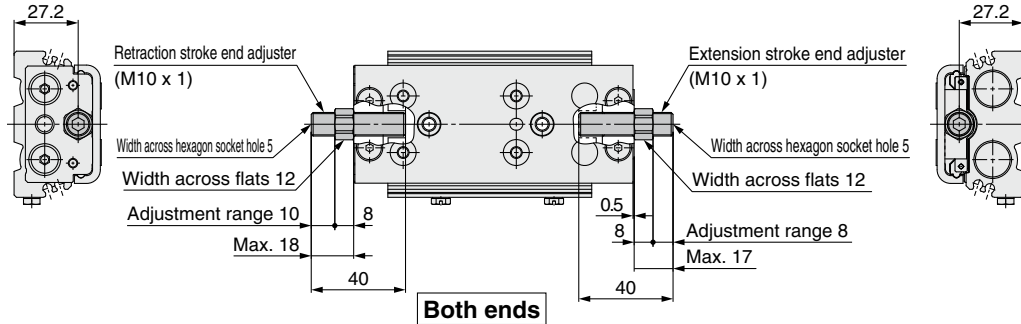
(mm)

Model	F	G	GA	GB	H	HA	HB	I	J	M	N	NN	Z	ZZ
MXQ16-10Z	38	16	16	8	39	39	58	22	28	98.5	4	2	72.5	87
MXQ16-20Z	38	20	20	12	39	39	58	15	39	108.5	4	2	76.5	91
MXQ16-30Z	48	21	21	30	48	48	50	16	48	118.5	4	2	86.5	101
MXQ16-40Z	58	28	28	17	58	58	80	23	58	135.5	4	2	103.5	118
MXQ16-50Z	40	—	51	27	—	45	80	28	63	145.5	6	3	113.5	128
MXQ16-75Z	46	23	75	58	52	52	80	34	88	176.5	6	3	144.5	159
MXQ16-100Z	44	39	83	102	44	88	80	53	113	220.5	8	4	188.5	203
MXQ16-125Z	44	20	108	127	44	88	80	53	138	245.5	10	5	213.5	228

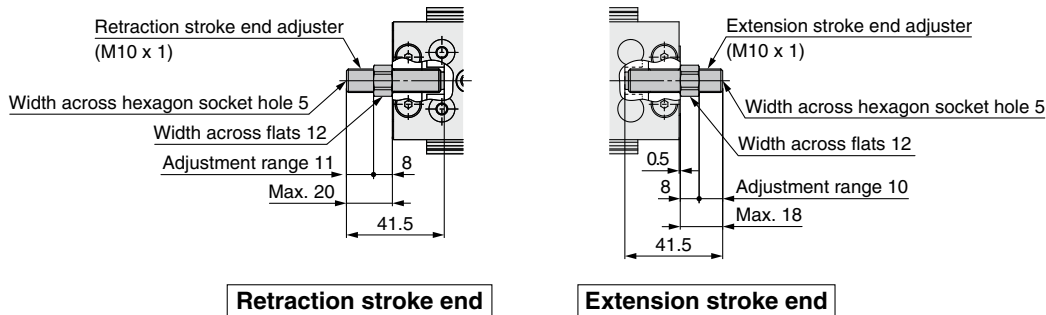
Dimensions: MXQ **16** [Adjuster Option]

MXQ 16-□ □ With adjuster option (ø16)

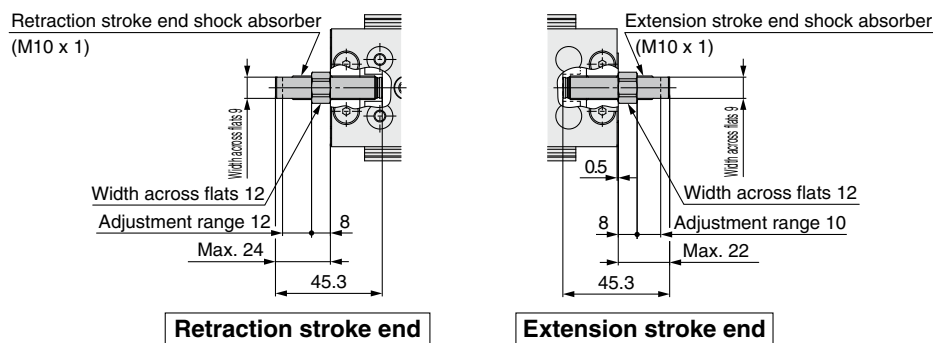
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)



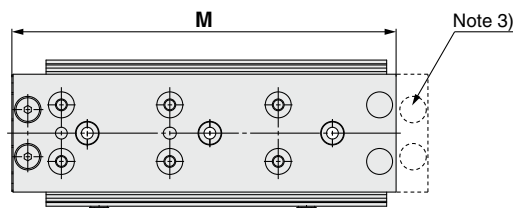
Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)



Shock absorber (RJ) **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



MXQ 16-□ ZN Shorter total length type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)	
Model	M
MXQ16-10ZN	85
MXQ16-20ZN	95
MXQ16-30ZN	105
MXQ16-40ZN	122
MXQ16-50ZN	132
MXQ16-75ZN	163
MXQ16-100ZN	207
MXQ16-125ZN	232

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

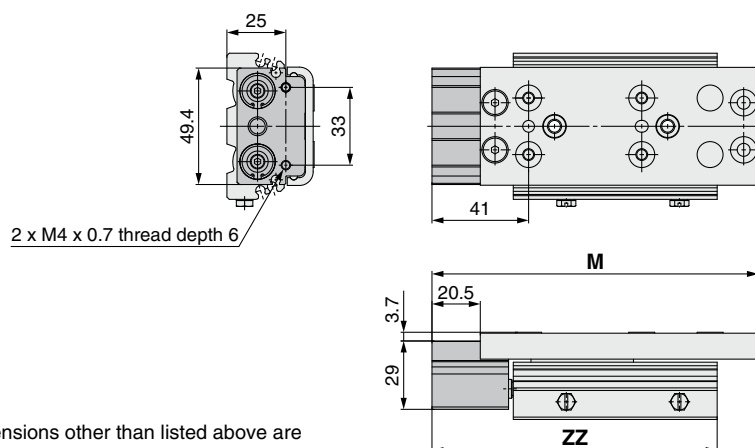
Made to Order

Model Selection

Series MXQ

Dimensions: MXQ **16** [Functional Option]

MXQ 16-□□1 With buffer (ø16)

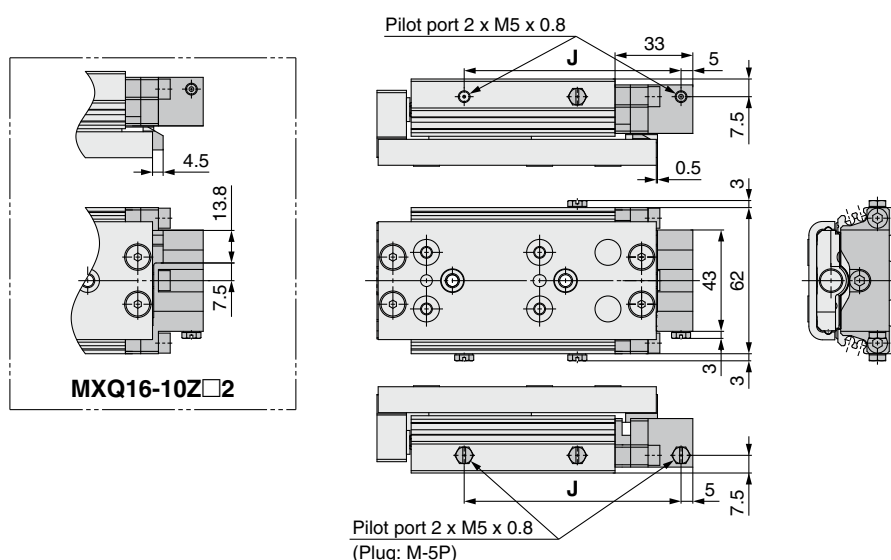


Dimensions (mm)

Model	Standard type	Shorter total length type	ZZ
MXQ16-10□1	M	M	107
MXQ16-20□1	M	M	111
MXQ16-30□1	M	M	121
MXQ16-40□1	M	M	138
MXQ16-50□1	M	M	148
MXQ16-75□1	M	M	179
MXQ16-100□1	M	M	223
MXQ16-125□1	M	M	248

* Dimensions other than listed above are the same as those for the standard type.

MXQ 16-□□2 With end lock (ø16)



Dimensions (mm)

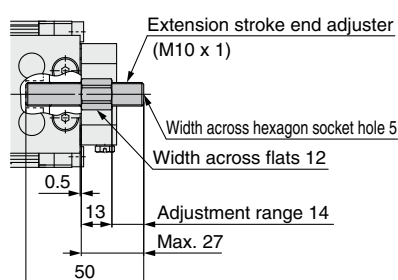
Model	J
MXQ16-10Z□2	78
MXQ16-20Z□2	82
MXQ16-30Z□2	92
MXQ16-40Z□2	109
MXQ16-50Z□2	119
MXQ16-75Z□2	150
MXQ16-100Z□2	194
MXQ16-125Z□2	219

* Dimensions other than listed above are the same as those for the standard type.

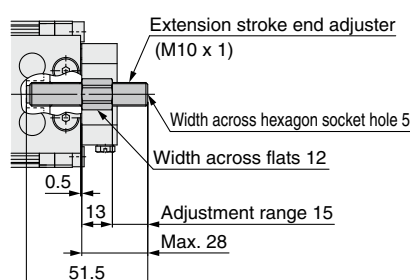
MXQ 16-□□2 With end lock, extension stroke end adjuster (ø16)

Select the long adjustment nut and bolt specification (-X28) when an end lock and extension stroke end adjuster are used together. The stroke adjustment range is different from the adjuster of the standard product. Retraction stroke end adjuster cannot be mounted to the end lock.

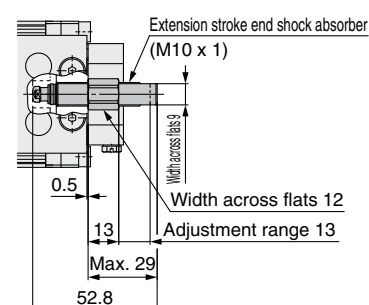
Metal stopper with bumper: **ZB**



Rubber stopper: **ZE**



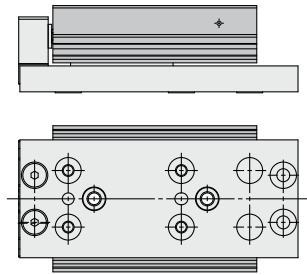
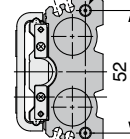
Shock absorber (RJ): **ZH**



* Dimensions other than listed above are the same as those for the standard type.

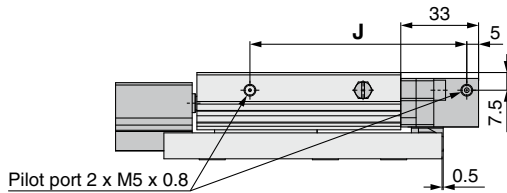
Dimensions: MXQ **16** [Functional Option]

MXQ 16-□□3 Axial piping (ø16)

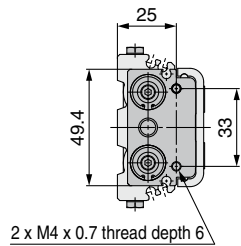

Pilot port M5 x 0.8
(OUT)

Pilot port M5 x 0.8
(IN)

* Dimensions other than listed above are the same as those for the standard type.

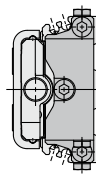
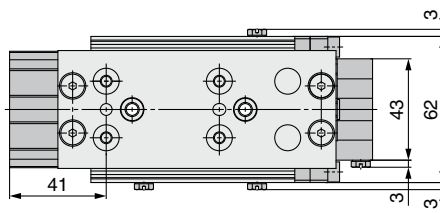
MXQ 16-□□4 With buffer, end lock (ø16)



Pilot port 2 x M5 x 0.8



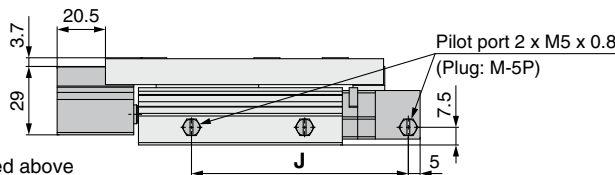
2 x M4 x 0.7 thread depth 6



MXQ16-10Z□4

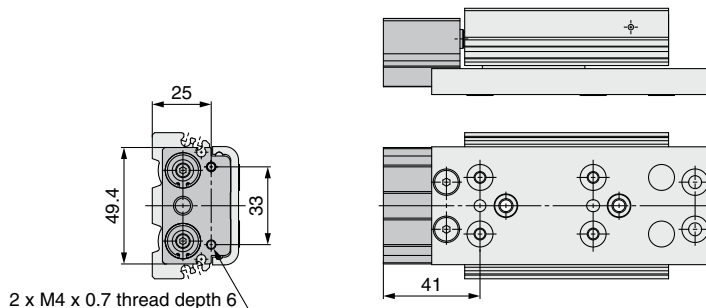
Dimensions (mm)

Model	J
MXQ16-10Z□4	78
MXQ16-20Z□4	82
MXQ16-30Z□4	92
MXQ16-40Z□4	109
MXQ16-50Z□4	119
MXQ16-75Z□4	150
MXQ16-100Z□4	194
MXQ16-125Z□4	219

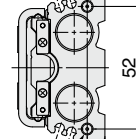

Pilot port 2 x M5 x 0.8
(Plug: M-5P)

* Dimensions other than listed above are the same as those for the standard type.

MXQ 16-□□5 With buffer, axial piping (ø16)



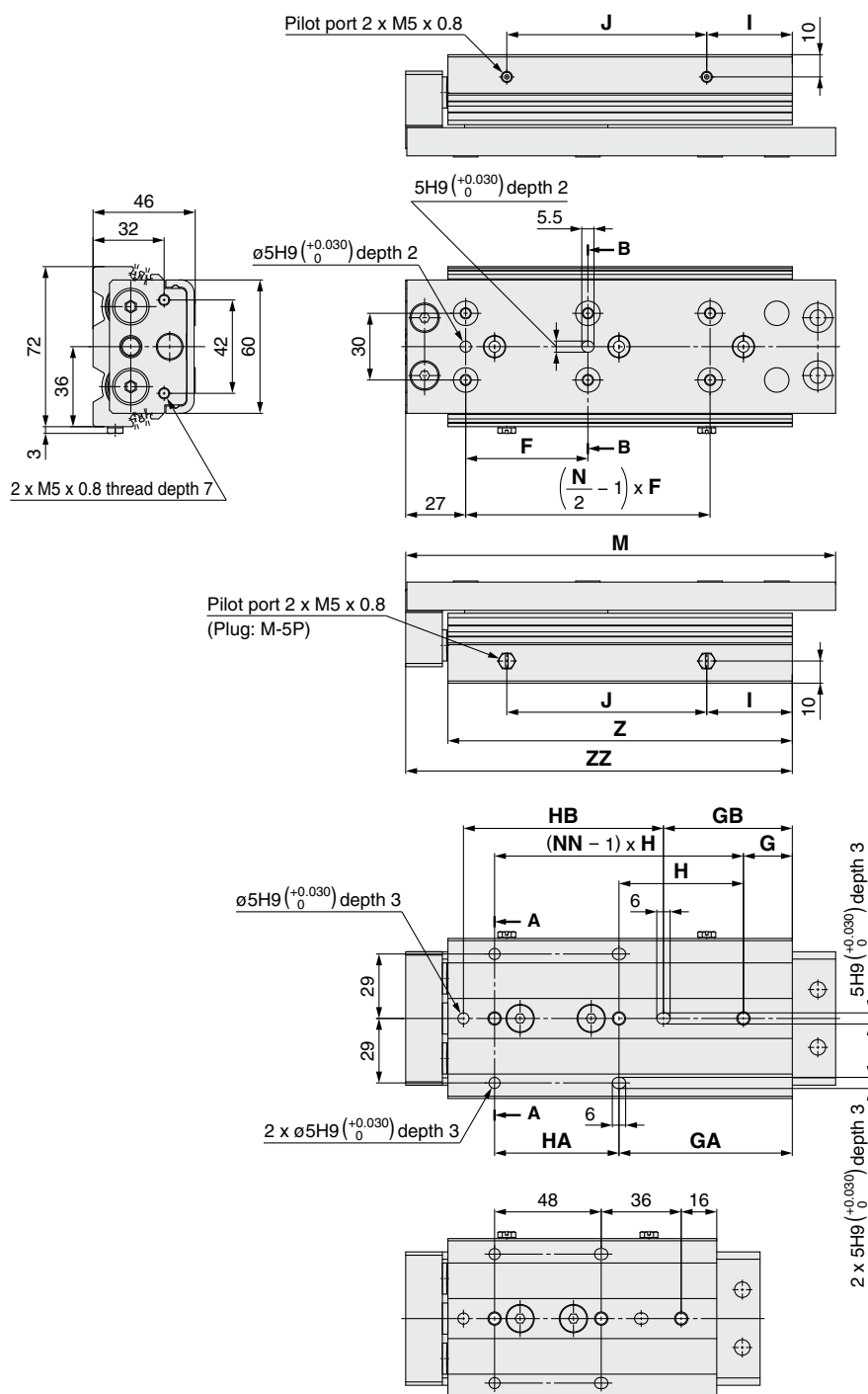
2 x M4 x 0.7 thread depth 6

Pilot port M5 x 0.8
(OUT)

Pilot port M5 x 0.8
(IN)

* Dimensions other than listed above are the same as those for the standard type.

Dimensions: MXQ **20** [Standard]

MXQ 20-□Z Standard type



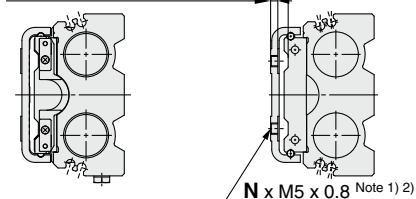
Bottom view of MXQ20-50Z

Note 1) If long bolts are used, they can touch the guide block and cause a malfunction etc. Use a screw which has the intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to pages 125 and 126 for details.

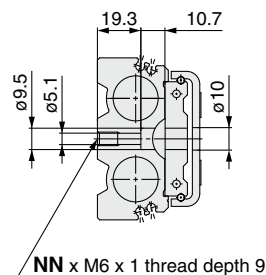
Note 2) Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet etc. This could cause an auto switch malfunction.

7.3 (Maximum screw-in depth)

3.3 (Minimum screw-in depth)



Section B-B



Section A-A

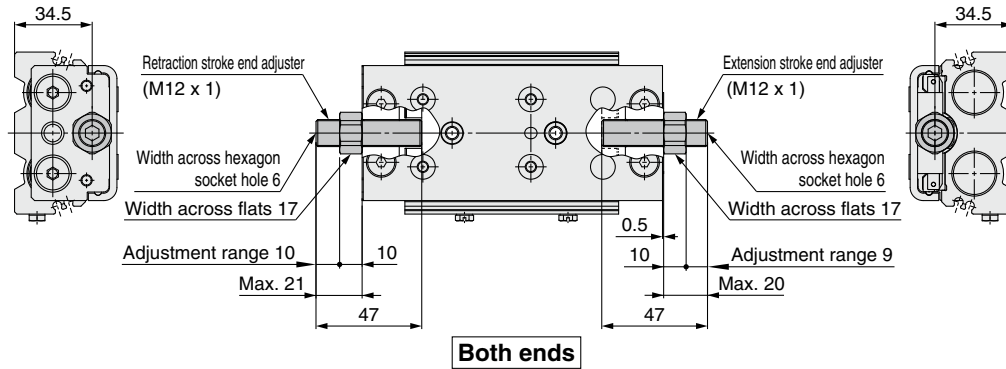
Dimensions

Model	F	G	GA	GB	H	HA	HB	I	J	M	N	NN	Z	ZZ
MXQ20-10Z	45	18	14	8	46	50	70	24.5	34	113.5	4	2	85	104
MXQ20-20Z	40	18	14	8	46	50	70	24.5	34	123.5	4	2	85	104
MXQ20-30Z	48	28	24	18	46	50	70	22.5	46	133.5	4	2	95	114
MXQ20-40Z	58	28	28	18	56	56	80	22.5	56	143.5	4	2	105	124
MXQ20-50Z	42	—	52	34	—	48	80	30.5	64	159.5	6	3	121	140
MXQ20-75Z	55	22	78	58	56	56	90	38.5	90	193.5	6	3	155	174
MXQ20-100Z	50	16	72	108	56	112	90	63.5	115	266.5	8	4	205	224
MXQ20-125Z	55	32	91	133	59	118	90	63.5	140	291.5	8	4	230	249
MXQ20-150Z	62	48	110	158	62	124	90	63.5	165	316.5	8	4	255	274

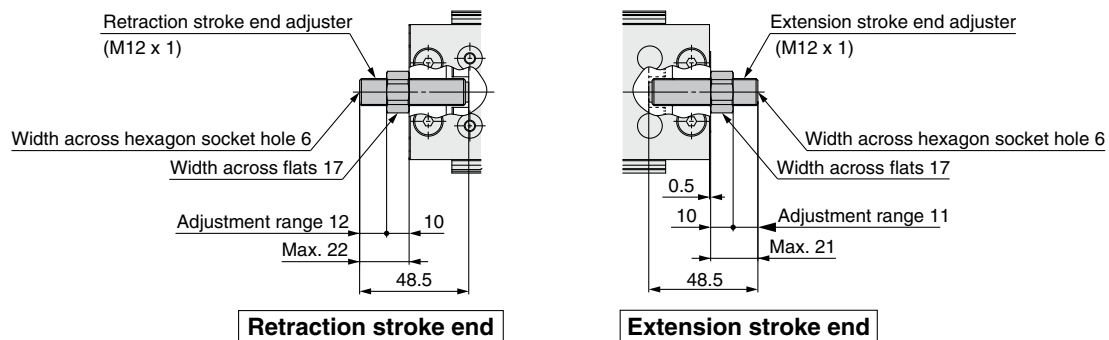
Dimensions: MXQ **20** [Adjuster Option]

MXQ 20-□□ With adjuster option (ø20)

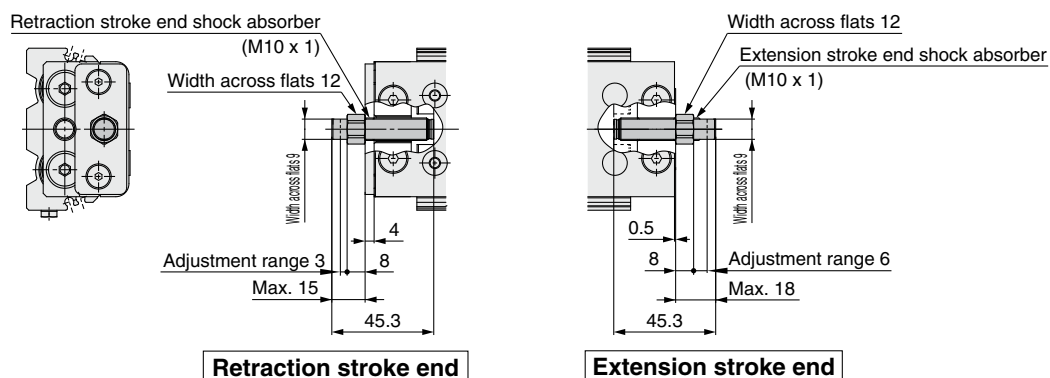
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)



Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

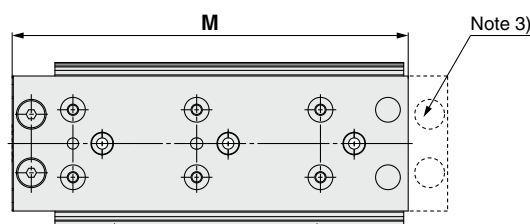


Shock absorber (RJ) **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ 20-□**ZN** Height interchangeable type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)	
Model	M
MXQ20-10ZN	96
MXQ20-20ZN	106
MXQ20-30ZN	116
MXQ20-40ZN	126
MXQ20-50ZN	142
MXQ20-75ZN	176
MXQ20-100ZN	249
MXQ20-125ZN	274
MXQ20-150ZN	299

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

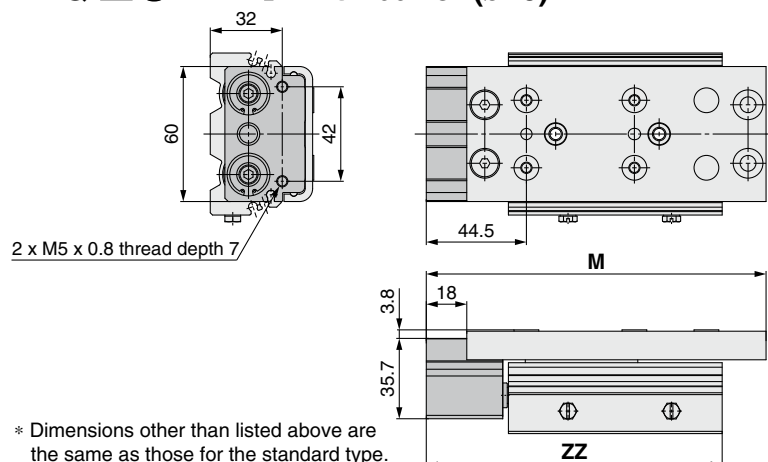
Made to Order

Model Selection

Series MXQ

Dimensions: MXQ **20** [Functional Option]

MXQ 20-□□1 With buffer (ø20)

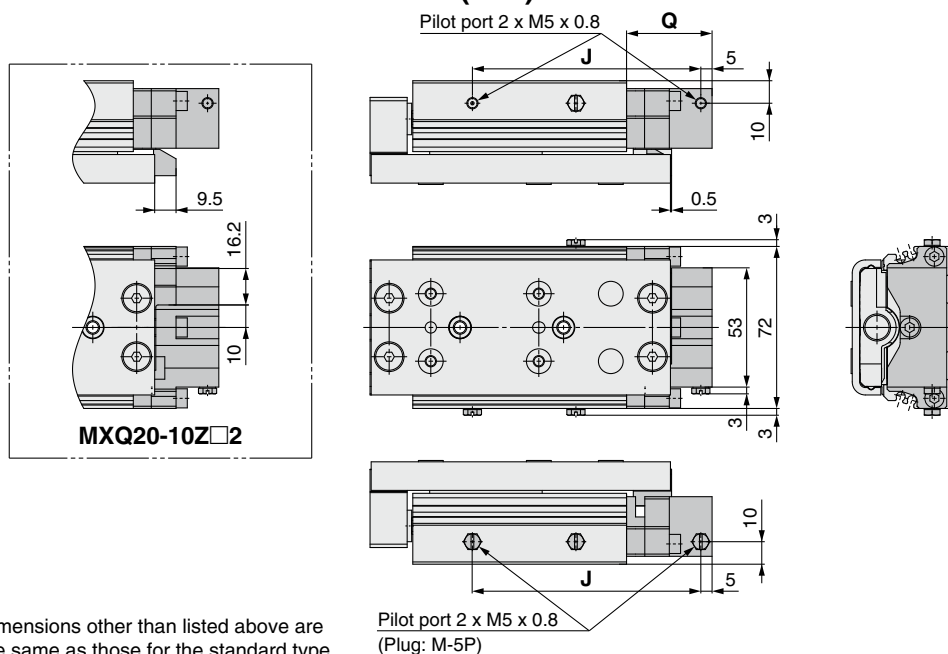


Dimensions (mm)

Model	Standard type	Shorter total length type	ZZ
MXQ20-10□1	131	113.5	121.5
MXQ20-20□1	141	123.5	
MXQ20-30□1	151	133.5	131.5
MXQ20-40□1	161	143.5	141.5
MXQ20-50□1	177	159.5	157.5
MXQ20-75□1	211	193.5	191.5
MXQ20-100□1	284	266.5	241.5
MXQ20-125□1	309	291.5	266.5
MXQ20-150□1	334	316.5	291.5

* Dimensions other than listed above are the same as those for the standard type.

MXQ 20-□□2 With end lock (ø20)



Dimensions (mm)

Model	J	Q
MXQ20-10Z□2	91.5	
MXQ20-20Z□2		38
MXQ20-30Z□2	101.5	
MXQ20-40Z□2	111.5	
MXQ20-50Z□2	127.5	
MXQ20-75Z□2	161.5	
MXQ20-100Z□2	234.5	
MXQ20-125Z□2	259.5	61
MXQ20-150Z□2	284.5	

* Dimensions other than listed above are the same as those for the standard type.

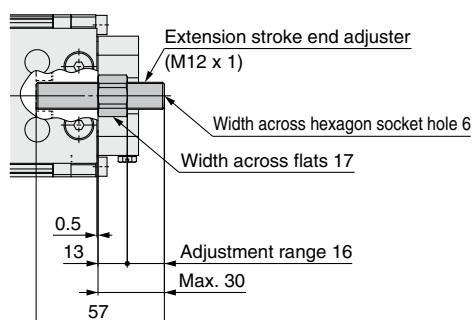
MXQ 20-□□2 With end lock, extension stroke end adjuster (ø20)

Select the long adjustment nut and bolt specification (-X28) when an end lock and extension stroke end adjuster are used together.

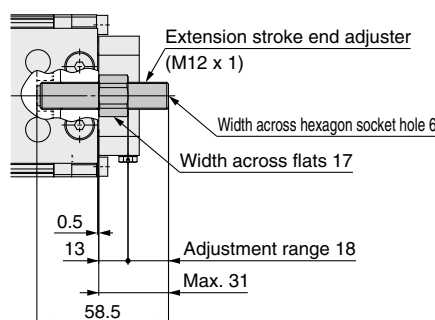
The stroke adjustment range is different from the adjuster of the standard product.

Retraction stroke end adjuster cannot be mounted to the end lock.

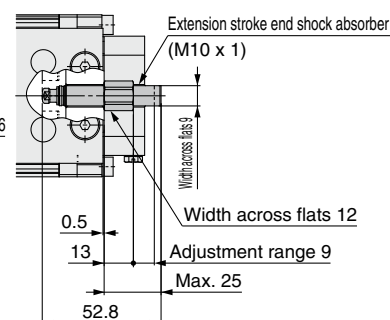
Metal stopper with bumper: **ZB**



Rubber stopper: **ZE**



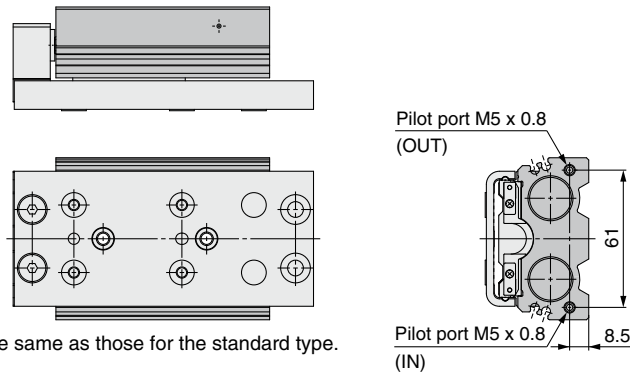
Shock absorber (RJ): **ZH**



* Dimensions other than listed above are the same as those for the standard type.

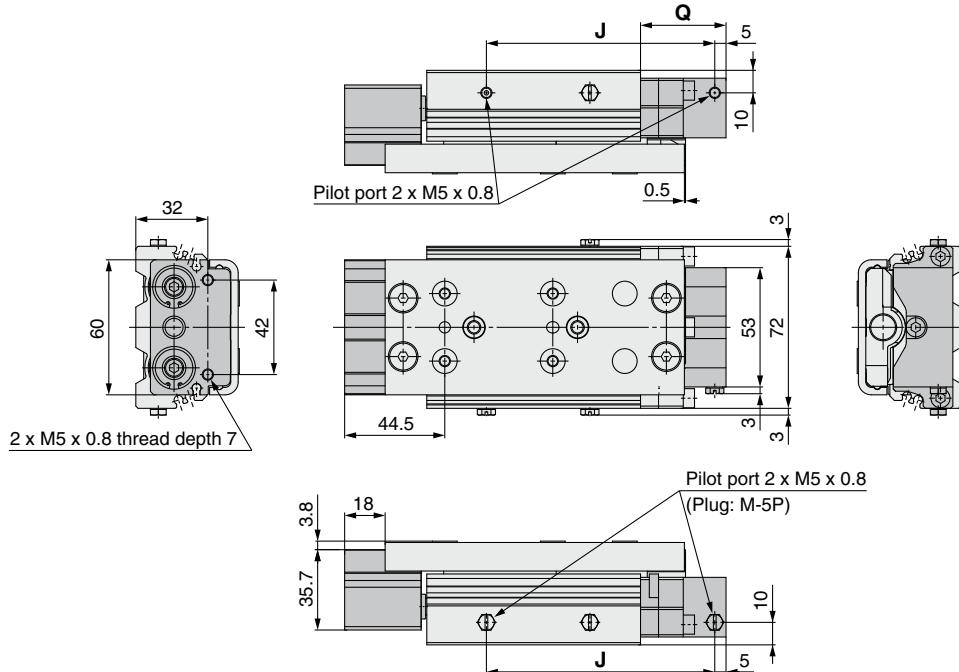
Dimensions: MXQ **20A** [Functional Option]

MXQ 20-□□3 Axial piping (ø20)

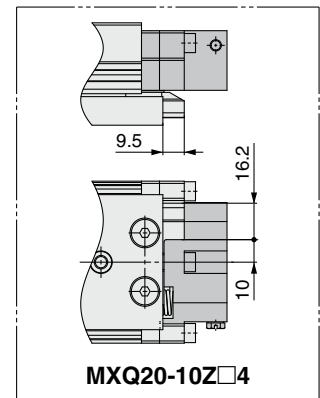


* Dimensions other than listed above are the same as those for the standard type.

MXQ 20-□□4 With buffer, end lock (ø20)

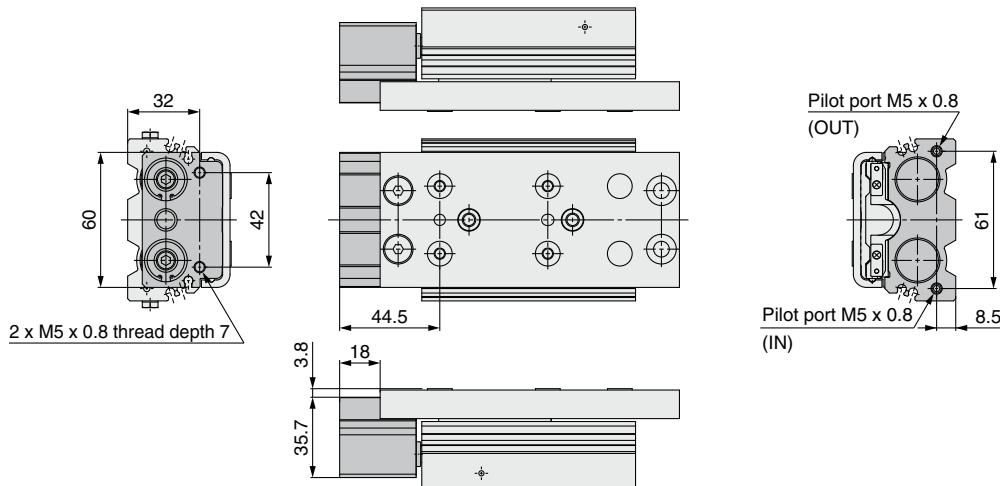


* Dimensions other than listed above are the same as those for the standard type.



Dimensions (mm)		
Model	J	Q
MXQ20-10Z□4	91.5	38
MXQ20-20Z□4		
MXQ20-30Z□4		
MXQ20-40Z□4		
MXQ20-50Z□4		
MXQ20-75Z□4	161.5	61
MXQ20-100Z□4		
MXQ20-125Z□4		
MXQ20-150Z□4		

MXQ 20-□□5 With buffer, axial piping (ø20)



* Dimensions other than listed above are the same as those for the standard type.

Pilot port 2 x M5 x 0.8



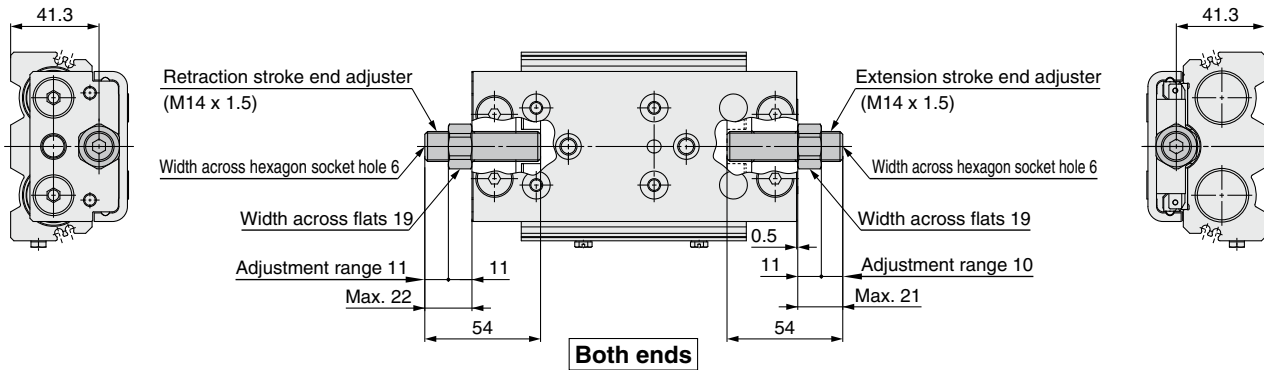
(mm)

Model	F	G	GA	GB	H	HA	HB	I	J	M	N	NN	Z	ZZ
MXQ25-10Z	55	18	18	7	55	55	80	30	36	131.5	4	2	95	118
MXQ25-20Z	46	18	18	7	55	55	80	30	36	141.5	4	2	95	118
MXQ25-30Z	55	28	28	17	55	55	80	22	54	151.5	4	2	105	128
MXQ25-40Z	65	28	28	17	65	65	90	22	64	161.5	4	2	115	138
MXQ25-50Z	75	36	36	20	80	80	110	43	66	184.5	4	2	138	161
MXQ25-75Z	60	—	76	45	—	65	110	42	92	209.5	6	3	163	186
MXQ25-100Z	48	20	64	46	44	88	120	28	117	250.5	8	4	174	197
MXQ25-125Z	60	18	84	60	66	132	170	67	142	314.5	8	4	238	261
MXQ25-150Z	65	43	109	85	66	132	170	66	168	339.5	8	4	263	286

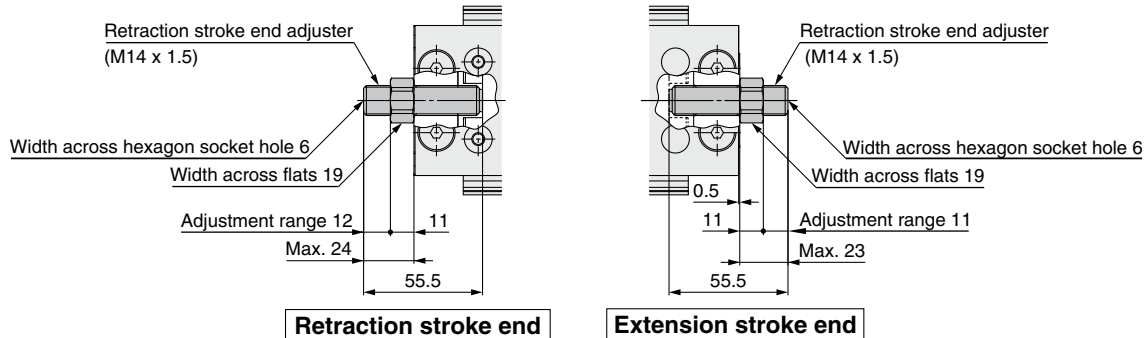
Dimensions: MXQ **25** [Adjuster Option]

MXQ 25-□□ With adjuster option (ø25)

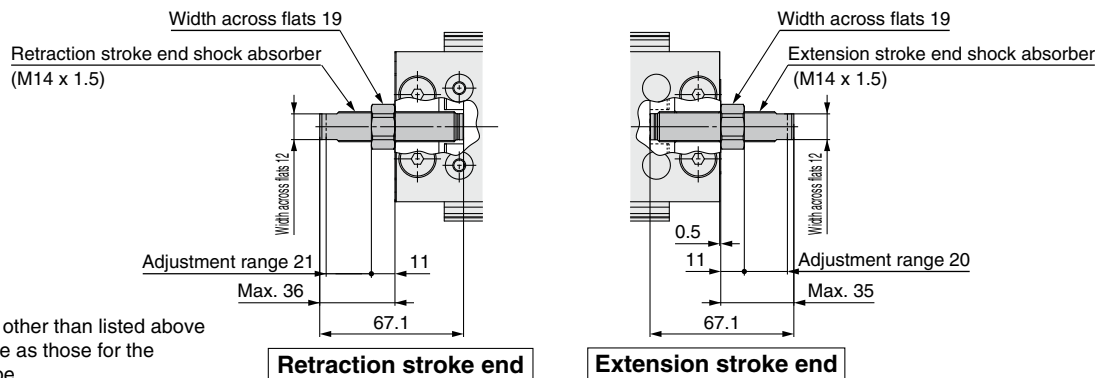
Metal stopper with bumper **ZA** : Both ends, **ZB** : Extension stroke end, **ZC** : Retraction stroke end, **ZS** : Retraction stroke end (Shorter total length type)



Rubber stopper **ZD** : Both ends, **ZE** : Extension stroke end, **ZF** : Retraction stroke end, **ZP** : Retraction stroke end (Shorter total length type)

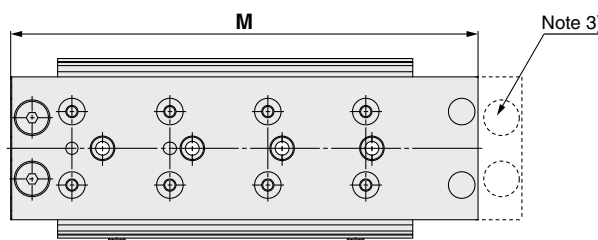


Shock absorber (RJ) **ZG** : Both ends, **ZH** : Extension stroke end, **ZJ** : Retraction stroke end, **ZQ** : Retraction stroke end (Shorter total length type)



* Dimensions other than listed above are the same as those for the standard type.

MXQ 25-□**ZN** Height interchangeable type



Note 3) As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjuster can be mounted afterward.)

* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)	
Model	M
MXQ25-10ZN	110
MXQ25-20ZN	120
MXQ25-30ZN	130
MXQ25-40ZN	140
MXQ25-50ZN	163
MXQ25-75ZN	188
MXQ25-100ZN	229
MXQ25-125ZN	293
MXQ25-150ZN	318

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

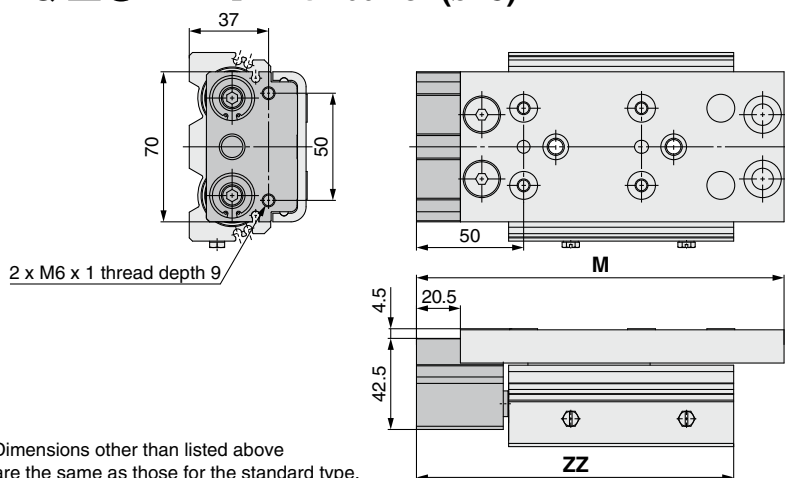
Made to Order

Model Selection

Series MXQ

Dimensions: MXQ **25** [Functional Option]

MXQ 25-□□1 With buffer (ø25)

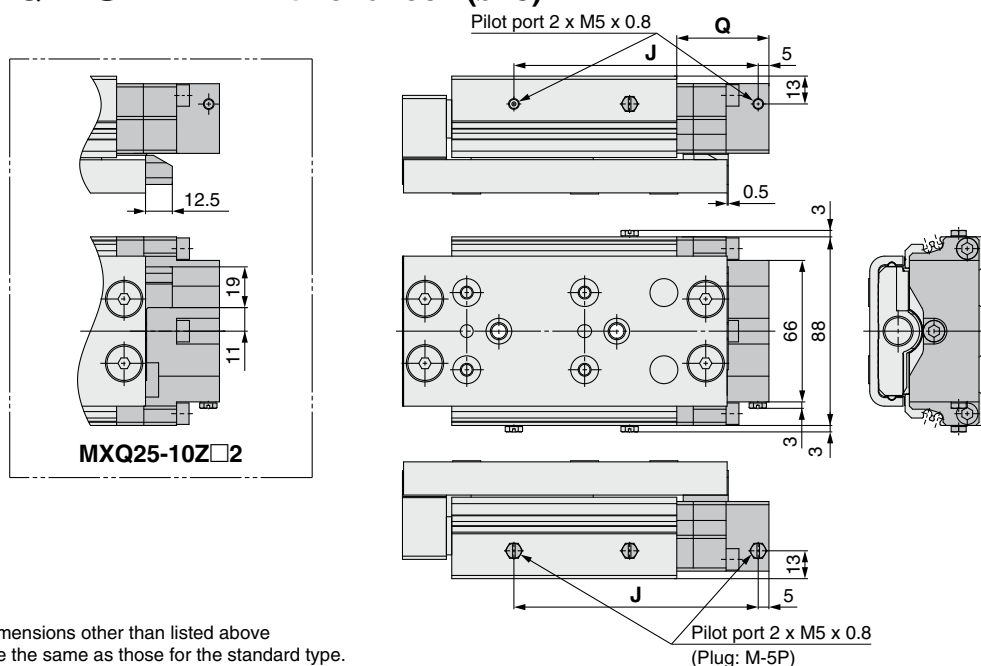


* Dimensions other than listed above
are the same as those for the standard type.

Dimensions (mm)

Model	Standard type	Shorter total length type	ZZ
	M	M	
MXQ25-10□1	151.5	130	138
MXQ25-20□1	161.5	140	
MXQ25-30□1	171.5	150	148
MXQ25-40□1	181.5	160	158
MXQ25-50□1	204.5	183	181
MXQ25-75□1	229.5	208	206
MXQ25-100□1	270.5	249	217
MXQ25-125□1	334.5	313	281
MXQ25-150□1	359.5	338	306

MXQ 25-□□2 With end lock (ø25)



* Dimensions other than listed above are the same as those for the standard type.

Dimensions (mm)

Model	J	Q
MXQ25-10Z□□2	109	43
MXQ25-20Z□□2	104	
MXQ25-30Z□□2	114	
MXQ25-40Z□□2	124	
MXQ25-50Z□□2	147	
MXQ25-75Z□□2	172	
MXQ25-100Z□□2	213	73
MXQ25-125Z□□2	277	
MXQ25-150Z□□2	302	

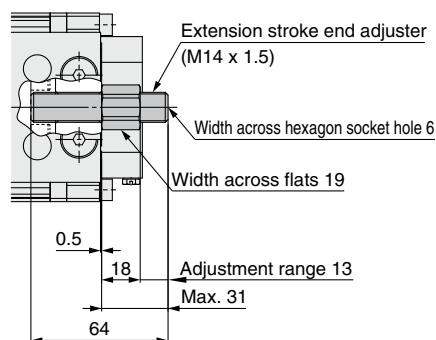
MXQ 25-□□2 With end lock, extension stroke end adjuster (ø25)

Select the long adjustment nut and bolt specification (-X28) when an end lock and extension stroke end adjuster are used together.

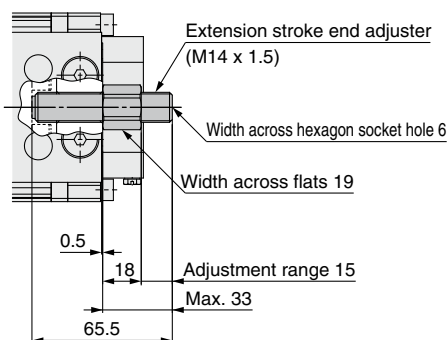
The stroke adjustment range is different from the adjuster of the standard product.

Retraction stroke end adjuster cannot be mounted to the end lock.

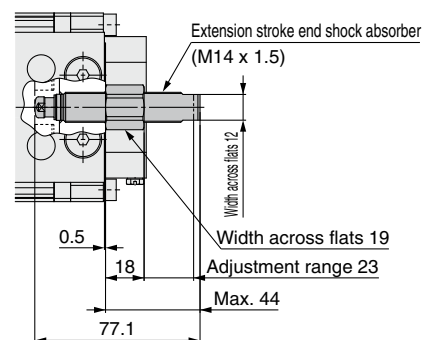
Metal stopper with bumper: ZB



Rubber stopper: ZE



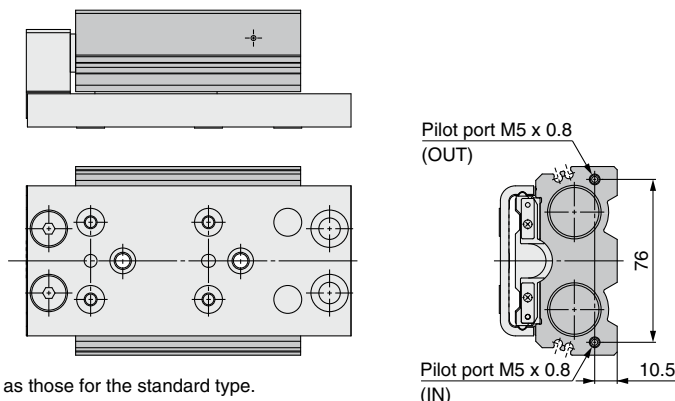
Shock absorber (RJ): ZH



* Dimensions other than listed above are the same as those for the standard type.

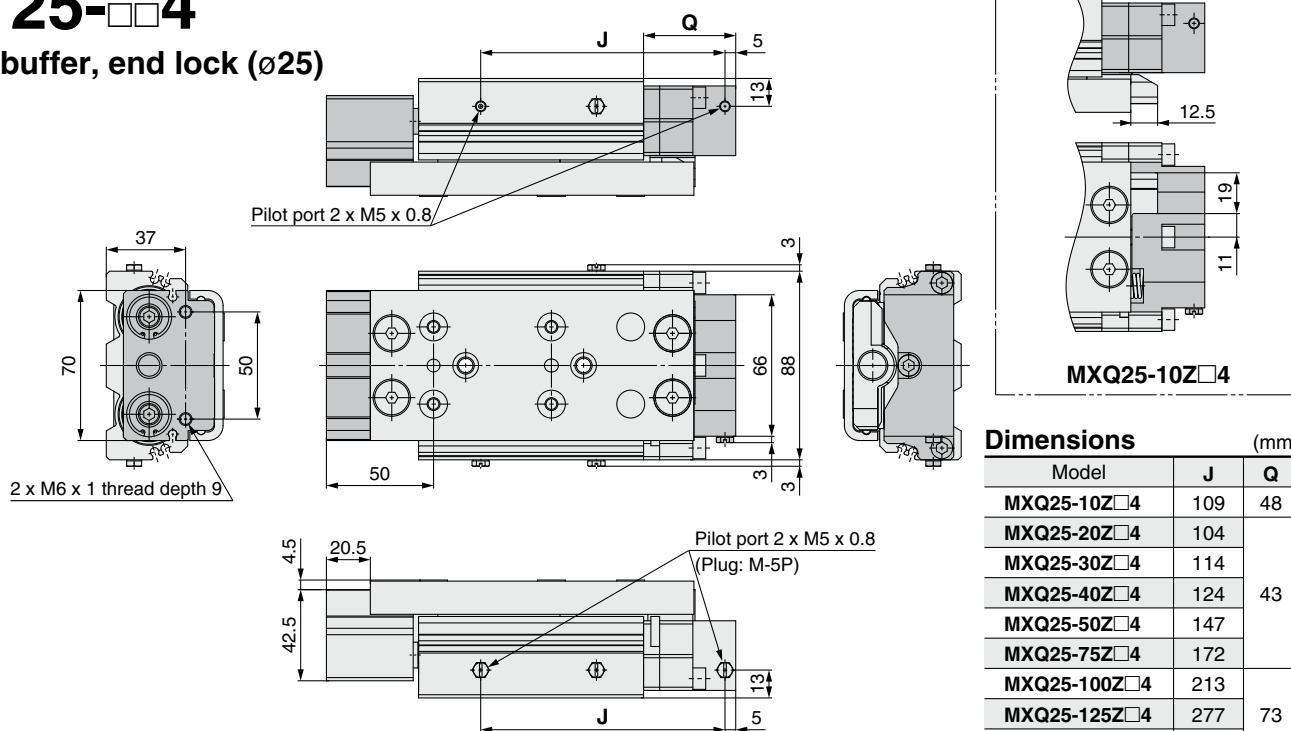
Dimensions: MXQ **25** [Functional Option]

MXQ **25-□□3** Axial piping (ø25)



* Dimensions other than listed above are the same as those for the standard type.

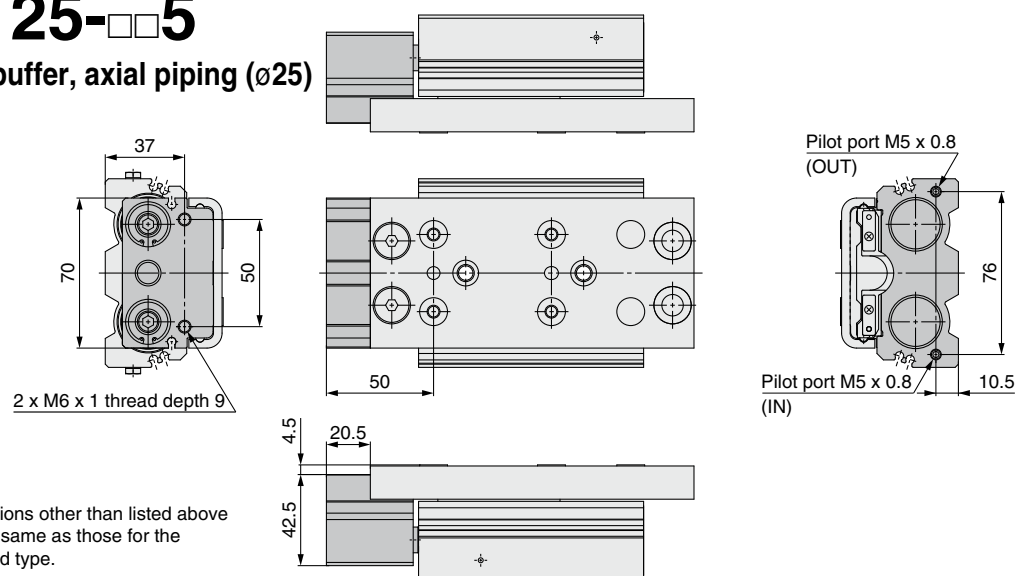
MXQ **25-□□4** With buffer, end lock (ø25)



Dimensions (mm)		
Model	J	Q
MXQ25-10Z□4	109	48
MXQ25-20Z□4	104	
MXQ25-30Z□4	114	
MXQ25-40Z□4	124	43
MXQ25-50Z□4	147	
MXQ25-75Z□4	172	
MXQ25-100Z□4	213	
MXQ25-125Z□4	277	73
MXQ25-150Z□4	302	

* Dimensions other than listed above are the same as those for the standard type.

MXQ **25-□□5** With buffer, axial piping (ø25)



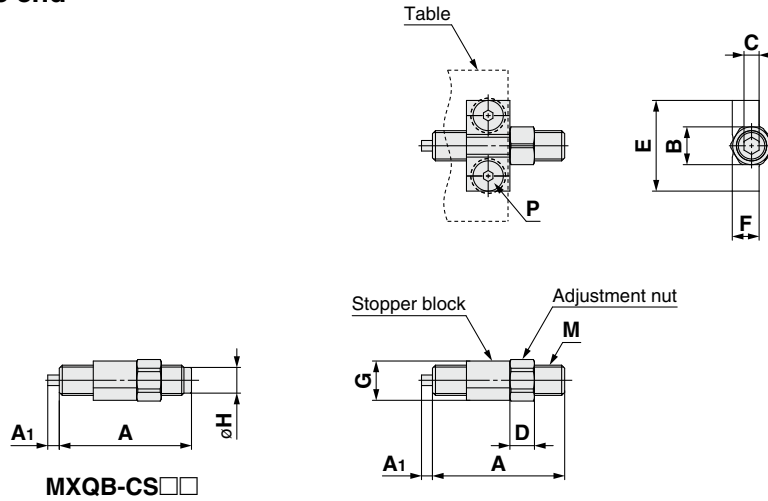
* Dimensions other than listed above are the same as those for the standard type.

Series MXQ

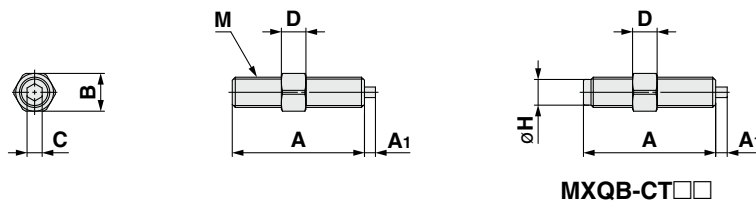
Common Adjuster Options

Metal Stopper with Bumper

Extension stroke end



Retraction stroke end



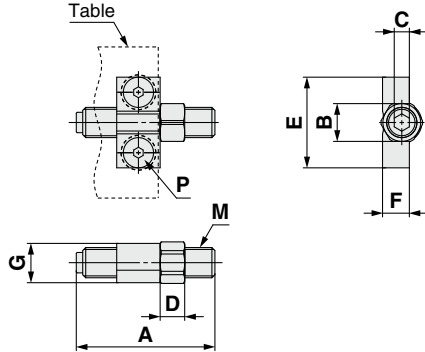
Applicable size		Model			A	A ₁	B	C	D	E	F	G	M (Fine pitch)	P Note 2)	øH
		Extension stroke end	Retraction stroke end	Metal stopper with bumper only Note 1)											
MXQ 6 (A)	—	MXQA-CS8	MXQA-CT8	MXQA-A887	30	2	8	3	5	18	5.8	8.3	M6 x 0.75	M3 x 6	—
MXQ 8 (A,C)	—	MXQA-CS12	MXQA-CT12	MXQA-A1287	35	2.8	10	4	6.5	24	7.1	10.4	M8 x 1	M4 x 8	—
MXQ12 (A,C)	—	MXQA-CS16	MXQA-CT16	MXQA-A1687	40	3.6	12	5	8	29.4	9.2	12.6	M10 x 1	M5 x 10	—
MXQ20 (A)	—	MXQA-CS20	MXQA-CT20	MXQA-A2087	47	4.4	17	6	10	36	11.2	16.2	M12 x 1	M6 x 12	—
MXQ25 (A)	—	MXQA-CS25	MXQA-CT25	MXQA-A2587	54	5.5	19	6	11	44	13.5	19.3	M14 x 1.5	M8 x 16	—
—	MXQ 8B	MXQB-CS8	MXQB-CT8	MXQB-A887	35	2	10	4	6.5	24	7.1	10.4	M8 x 1	M4 x 8	6.8
—	MXQ12B	MXQB-CS12	MXQB-CT12	MXQB-A1287	40	2.8	12	5	8	29.4	9.2	12.6	M10 x 1	M5 x 10	8.8
—	MXQ16B	MXQB-CS16	MXQB-CT16	MXQB-A1687	47	3.6	17	6	10	36	11.2	16.2	M12 x 1	M6 x 12	10.8
—	MXQ20B	MXQB-CS20	MXQB-CT20	MXQB-A2087	54	4.4	19	6	11	44	13.5	19.3	M14 x 1.5	M8 x 16	12.3

Note 1) Metal stopper with bumper only: A single unit of stopper without stopper block, adjustment nut and hexagon socket head cap screw

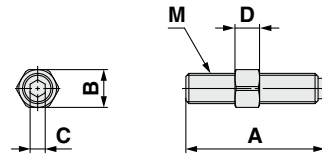
Note 2) Size of hexagon socket head cap screw

Rubber Stopper

Extension stroke end



Retraction stroke end

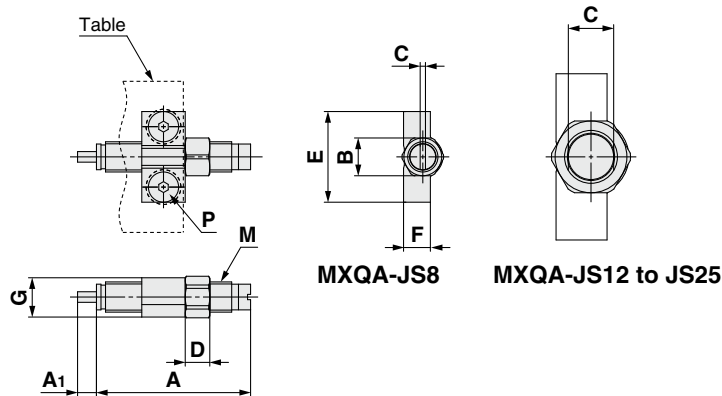


Applicable size	Model			A	B	C	D	E	F	G	M (Fine pitch)	P (Note)
	Extension stroke end	Retraction stroke end	Rubber stopper only									
MXQ6(A)	MXQA-AS8	MXQA-AT8	MXQA-A827	31.5	8	3	5	18	5.8	8.3	M6 x 0.75	M3 x 6
MXQ6B												
MXQ8(A,C)												
MXQ12(A,C)	MXQA-AS12	MXQA-AT12	MXQA-A1227	36.5	10	4	6.5	24	7.1	10.4	M8 x 1	M4 x 8
MXQ8B												
MXQ16(A)												
MXQ12B	MXQA-AS16	MXQA-AT16	MXQA-A1627	41.5	12	5	8	29.4	9.2	12.6	M10 x 1	M5 x 10
MXQ20(A)												
MXQ16B												
MXQ25(A)	MXQA-AS25	MXQA-AT25	MXQA-A2527	55.5	19	6	11	44	13.5	19.3	M14 x 1.5	M8 x 16
MXQ20B												

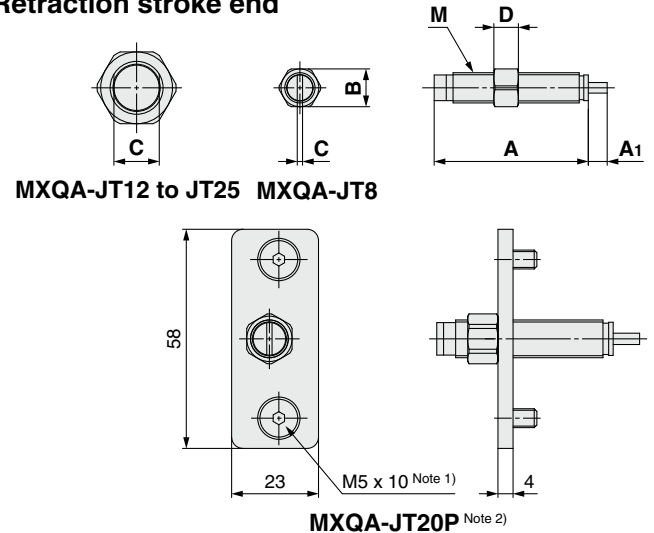
Note) Size of hexagon socket head cap screw

Shock Absorber (RJ)

Extension stroke end



Retraction stroke end



Applicable size	Model			A	A1	B	C	D	E	F	G	M (Fine pitch)	P (Note 1)
	Extension stroke end	Retraction stroke end	Shock absorber only										
MXQ6(A)	MXQA-JS8	MXQA-JT8	RJ0603N	29.9	3.4	8	1	5	18	5.8	8.3	M6 x 0.75	M3 x 6
MXQ6B													
MXQ8(A,C)													
MXQ12(A,C)	MXQA-JS12	MXQA-JT12	RJ0805N	40.8	5	10	7	6.5	24	7.1	10.4	M8 x 1	M4 x 8
MXQ8B													
MXQ16(A)													
MXQ12B	MXQA-JS16	MXQA-JT16	RJ1006N	45.3	6	12	9	8	29.4	9.2	12.6	M10 x 1	M5 x 10
MXQ20(A)													
MXQ16B													
MXQ25(A)	MXQA-JS25	MXQA-JT25	RJ1410N	67.1	10	19	12	11	44	13.5	19.3	M14 x 1.5	M8 x 16
MXQ20B													

Note 1) Size of hexagon socket head cap screw

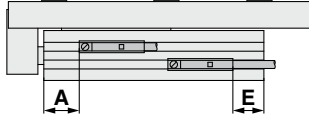
Note 2) Since the retraction stroke end shock absorber of the MXQ20(A) and MXQ16B has the different thread size from the thread of the product, use the mounting plate to mount the shock absorber. This makes the part number to be different from other sizes. (The part number has a suffix "P".)

Series MXQ

Auto Switch Mounting

Auto Switch Proper Mounting Position (Detection at Stroke End)

Note) Adjust the auto switch after confirming the operating conditions in the actual setting.



Solid State Switch: D-M9□/M9□W

(mm)

Model	A stroke										E stroke									
	10	20	30	40	50	75	100	125	150	10	20	30	40	50	75	100	125	150		
MXQ6(A)	18	7.4	7.4	7.4	7.4	—	—	—	—	0	0.6	3.6	5.6	5.6	—	—	—	—		
MXQ8(A,C)	13.9	13.9	13.9	13.9	13.9	13.9	—	—	—	5.1	5.1	5.1	11.1	28.1	5.1	—	—	—		
MXQ12(A,C)	16.9	16.5	16.5	16.5	16.5	16.5	16.5	—	—	14.1	6.1	6.1	14.1	14.1	33.1	33.1	—	—		
MXQ16(A)	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	—	20	14	14	21	21	27	46	46	—		
MXQ20(A)	32.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	20.9	21.9	21.9	21.9	27.9	36.9	69.1	61.9	61.9		
MXQ25(A)	34.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	28.7	27.7	27.7	27.7	40.7	40.7	42.7	65.4	65.7		
MXQ6B	18	7.4	7.4	7.4	7.4	7.4	—	—	—	1	11.6	11.6	17.6	34.6	11.6	—	—	—		
MXQ8B	29	13.9	13.9	13.9	13.9	13.9	13.9	—	—	2	9.1	9.1	17.1	17.1	36.1	36.1	—	—		
MXQ12B	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	—	24.1	18.1	18.1	25.1	25.1	31.1	50.1	50.1	—		
MXQ16B	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	33	23	23	23	29	38	63	63	63		
MXQ20B	32.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	30.9	31.9	31.9	31.9	44.9	44.9	46.9	69.9	69.9		

Solid State Switch: D-M9□V/M9□WV

(mm)

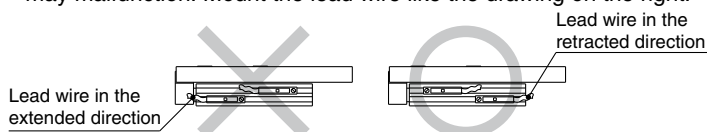
Model	A stroke										E stroke									
	10	20	30	40	50	75	100	125	150	10	20	30	40	50	75	100	125	150		
MXQ6(A)	18	7.4	7.4	7.4	7.4	—	—	—	—	2	2.6	5.6	7.6	7.6	—	—	—	—		
MXQ8(A,C)	13.9	13.9	13.9	13.9	13.9	13.9	—	—	—	7.1	7.1	7.1	13.1	30.1	7.1	—	—	—		
MXQ12(A,C)	16.5	16.5	16.5	16.5	16.5	16.5	16.5	—	—	16.1	8.1	8.1	16.1	16.1	35.1	35.1	—	—		
MXQ16(A)	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	—	22	16	16	23	23	29	48	48	—		
MXQ20(A)	32.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	22.9	23.9	23.9	23.9	29.9	38.9	63.9	63.9	63.9		
MXQ25(A)	34.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	30.7	29.7	29.7	29.7	42.7	42.7	28.7	67.7	67.7		
MXQ6B	18	7.4	7.4	7.4	7.4	7.4	—	—	—	3	13.6	13.6	19.6	36.6	13.6	—	—	—		
MXQ8B	29	13.9	13.9	13.9	13.9	13.9	13.9	—	—	4	11.1	11.1	19.1	19.1	38.1	38.1	—	—		
MXQ12B	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	—	26.1	20.1	20.1	27.1	27.1	33.1	52.1	52.1	—		
MXQ16B	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	35	25	25	25	31	39	65	65	65		
MXQ20B	32.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	32.9	33.9	33.9	33.9	46.9	46.9	32.9	71.9	71.9		

Auto Switch Mounting

⚠ Caution

■ Auto switch mounting direction

If the lead wire is positioned like the drawing on the left, the auto switch may malfunction. Mount the lead wire like the drawing on the right.



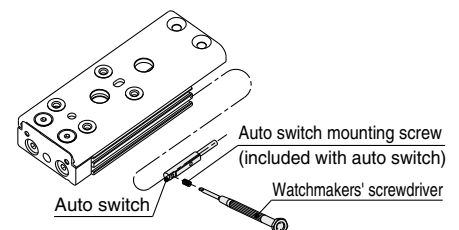
■ Auto switch mounting tool

When tightening the auto switch set screw (included with auto switch),
Use a watchmakers' screwdriver with a handle about 5 to 6 mm in diameter.

■ Tightening torque

Tightening Torque of Auto Switch Mounting Screw (N·m)

Auto switch model	Tightening torque
D-M9□(V)/M9□W(V)	0.05 to 0.15



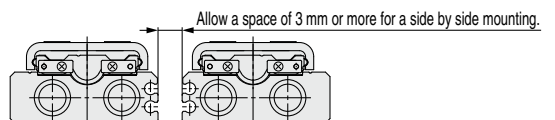
Operating Range

Auto switch model	Applicable bore size					
	6	8	12	16	20	25
D-M9□/M9□V/M9□W/M9□WV	2.5	2.5	3	4	4.5	5

* Values which include hysteresis are for guideline purposes only, they are not a guarantee (assuming approximately $\pm 30\%$ dispersion) and may change substantially depending on the ambient environment.

⚠ Caution

Allow a space of 3 mm or more if standard type and symmetric type are used side by side.
Otherwise, the auto switch may malfunction.



Other than the applicable auto switches listed in "How to Order", the following auto switches can be mounted.

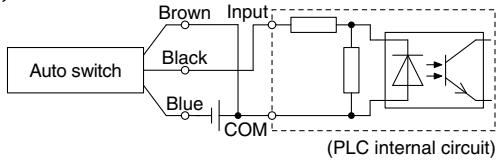
* Normally closed (NC = b contact) solid state auto switches (D-F9G/F9H) and solid state auto switch (D-F8) are also available.
Refer to the Best Pneumatics No.3 for details.

Prior to Use

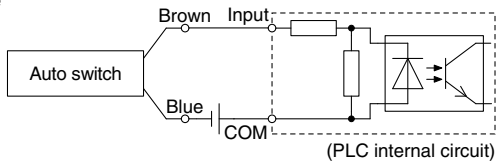
Auto Switch Connection and Example

Sink Input Specifications

3-wire, NPN

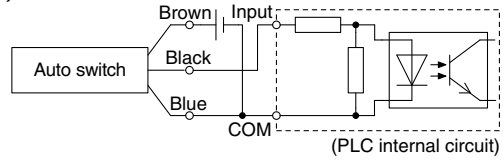


2-wire

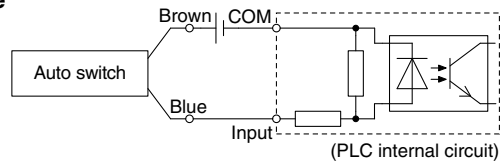


Source Input Specifications

3-wire, PNP



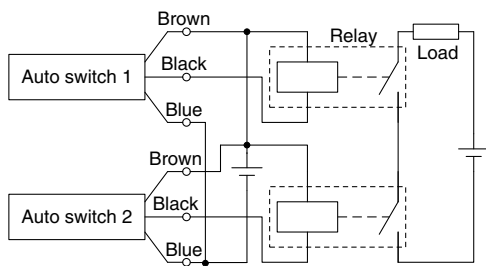
2-wire



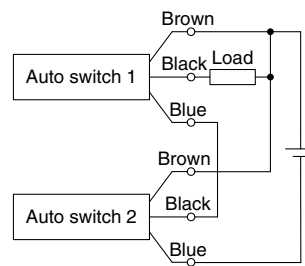
Connect according to the applicable PLC input specifications, as the connection method will vary depending on the PLC input specifications.

Example of AND (Series) and OR (Parallel) Connection

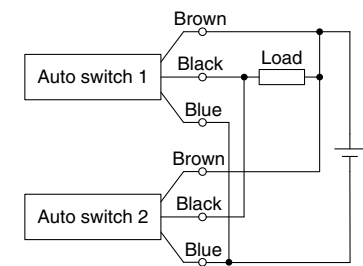
3-wire AND connection for NPN output (Using relays)



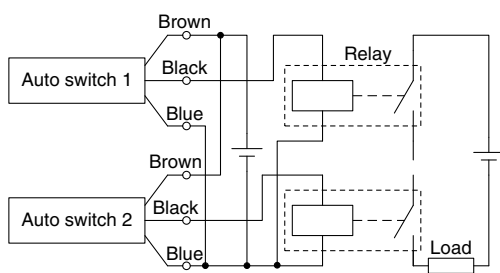
(Performed with auto switches only)



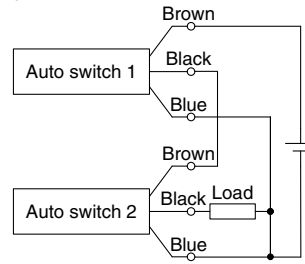
3-wire OR connection for NPN output



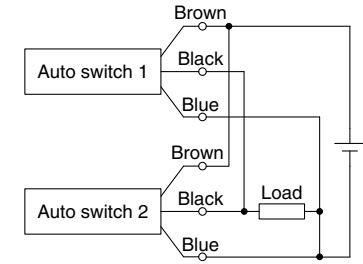
3-wire AND connection for PNP output (Using relays)



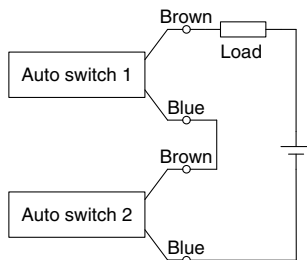
(Performed with auto switches only)



3-wire OR connection for PNP output

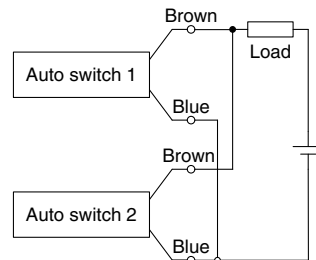


2-wire AND connection



When two auto 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 when both of the auto switches are in the ON state.

2-wire OR connection



(Solid state)

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

$$\begin{aligned} \text{Load voltage at ON} &= \text{Power supply voltage} - \text{Residual voltage} \times 2 \text{ pcs.} \\ &= 24 \text{ V} - 4 \text{ V} \times 2 \text{ pcs.} \\ &= 16 \text{ V} \end{aligned}$$

Example: Supply voltage 24 VDC
Internal voltage drop in auto switch is 4 V.

$$\begin{aligned} \text{Load voltage at OFF} &= \text{Leakage current} \times 2 \text{ pcs.} \times \text{Load impedance} \\ &= 1 \text{ mA} \times 2 \text{ pcs.} \times 3 \text{ k}\Omega \\ &= 6 \text{ V} \end{aligned}$$

Example: Load impedance 3 k Ω
Leakage current from auto switch is 1 mA.

Series MXQ Made to Order

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



1 PTFE Grease

Symbol

-X7

PTFE grease is used for all parts that grease is applied.

MXQ Standard model no. - X7

● PTFE grease

Warning

Precautions

Be aware that smoking cigarettes etc. after your hands have come into contact with the grease used in this cylinder can create a gas that is hazardous to humans.

Specifications

Bore size (mm)	6, 8, 12, 16, 20, 25
----------------	----------------------

* Dimensions other than the above is the same as those for the standard type.

2 Grease for Food Processing Equipment

Symbol

-X9

Grease for food is used for all parts that grease is applied.

MXQ Standard model no. - X9

● Grease for food

Caution

1. Do not use in a food contact environment.
2. Do not use in a liquid splash environment, e.g. water, detergent, liquid chemicals.

Specifications

Bore size (mm)	6, 8, 12, 16, 20, 25
----------------	----------------------

* Dimensions other than the above is the same as those for the standard type.

3 Long Adjustment Bolt (Longer adjustment range by 10 mm)

Symbol

-X11

Metal stopper with bumper, Rubber stopper: Stroke adjustment range is increased by 10 mm compared with the standard product by making the adjustment bolt longer. Shock absorber (RJ): Adjustment range becomes larger with the cap bracket mounted at the rod end of the shock absorber.

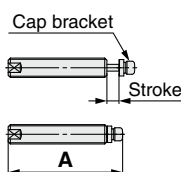
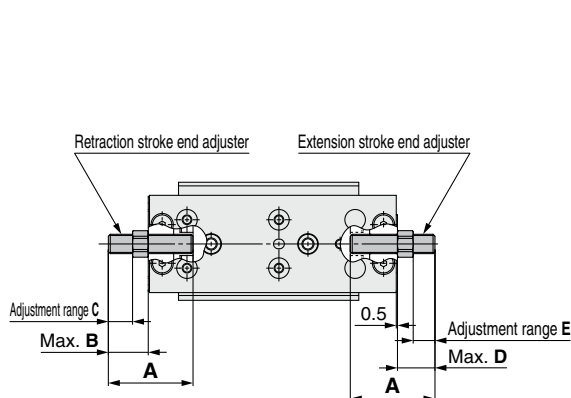
Note 1) Refer to the table below for the shock absorber unit applicable to "-X11".

Note 2) "-X11" is not available for the product with end lock. Please consult SMC when a product with the 10 mm longer adjustment range is required.

MXQ	Standard model no.
MXQ	Standard adjuster model no.
MXQ	Standard adjustment bolt model no. Note 1)

- X11

● Long adjustment bolt (Longer adjustment range by 10 mm)



RJ□□□□-X2300

Cap bracket is mounted to lengthen the A dimension.

Metal Stopper with Bumper

(mm)

Applicable model	A	B	C	D	E
MXQ8(A,C)	—	40	25	20	23
MXQ12(A,C)	MXQ8B	45	27	20	26
MXQ16(A)	MXQ12B	50	28	20	27
MXQ20(A)	MXQ16B	57	31	20	30
MXQ25(A)	MXQ20B	64	32	21	31

"-X11" is not available for the MXQ6 (A, B).

Rubber Stopper

(mm)

Applicable model	A	B	C	D	E
MXQ6(A)	—	41.5	27	22	25
MXQ8(A,C)	MXQ6B	41.5	27	21	25
MXQ12(A,C)	MXQ8B	46.5	28	21	27
MXQ16(A)	MXQ12B	51.5	30	21	28
MXQ20(A)	MXQ16B	58.5	32	22	31
MXQ25(A)	MXQ20B	65.5	34	22	33

Shock Absorber (RJ)

(mm)

Applicable model	A	B	C	D	E	Applicable shock absorber model
MXQ12(A,C)	MXQ8B	47.3	29	19	29	RJ0805U-X2300
MXQ16(A)	MXQ12B	52.8	31	19	30	RJ1006U-X2300
MXQ20(A)	MXQ16B	52.8	23	11	26	RJ1007HU-X2300
MXQ25(A)	MXQ20B	77.1	46	31	42	RJ1410U-X2300

"-X11" is not available for the MXQ6 (A, B) and MXQ8 (A, C).

Shape of the adjustment part varies (hexagonal hole, width across flats, slot) depending on the model of the adjuster or shock absorber. Refer to the full view of the standard product for details.

4 Long Adjustment Bolt (Longer adjustment range by 20 mm)

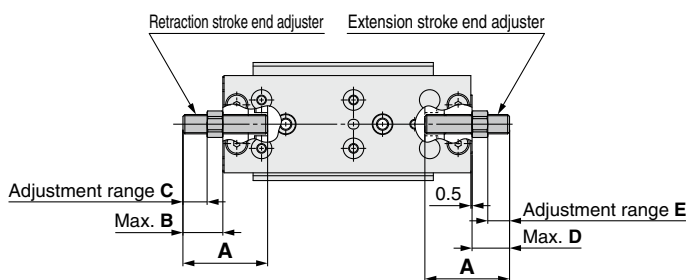
Symbol
-X12

With bumper metal stopper, rubber stopper: Stroke adjustment range is increased by 20 mm compared with the standard product by making the adjustment bolt longer. For adjustment range, refer to the table below.

Note 1) "-X12" is not available for the shock absorber (RJ).

Note 2) "-X12" is not available for the product with end lock. Please consult SMC when a product with the 20 mm longer adjustment range is required.

MXQ	Standard model no.	- X12	● Long adjustment bolt (Longer adjustment range by 20 mm)
	Standard adjuster model no.		
	Standard adjustment bolt model no.		



Metal Stopper with Bumper (mm)

Applicable model	A	B	C	D	E
MXQ8(A,C)	—	50	35	30	28
MXQ12(A,C)	MXQ8B	55	37	30	29
MXQ16(A)	MXQ12B	60	38	30	28
MXQ20(A)	MXQ16B	67	41	30	29
MXQ25(A)	MXQ20B	74	42	31	30

"-X12" is not available for the MXQ6 (A, B).

Rubber Stopper (mm)

Applicable model	A	B	C	D	E
MXQ6(A)	—	51.5	37	32	30
MXQ8(A,C)	MXQ6B	51.5	37	31	29
MXQ12(A,C)	MXQ8B	56.5	38	31	30
MXQ16(A)	MXQ12B	61.5	40	31	30
MXQ20(A)	MXQ16B	68.5	42	32	31
MXQ25(A)	MXQ20B	75.5	44	32	31

Shape of the adjustment part varies (hexagonal hole, width across flats, slot) depending on the model of the adjuster or shock absorber. Refer to the full view of the standard product for details.

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

Made to Order

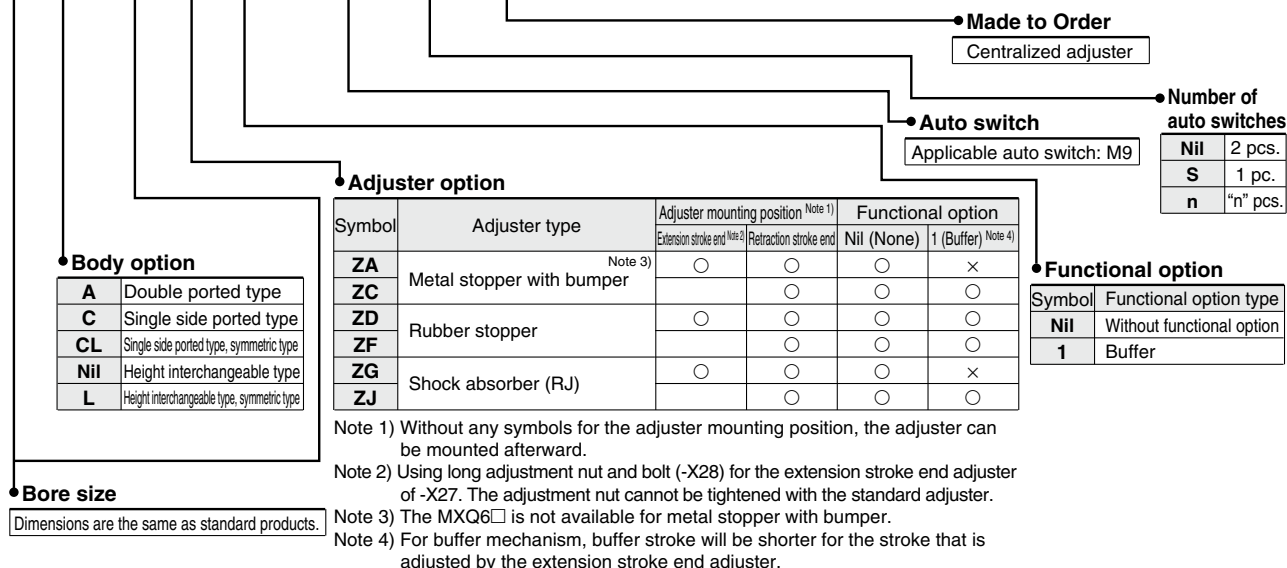
Model Selection

5 Centralized Adjuster

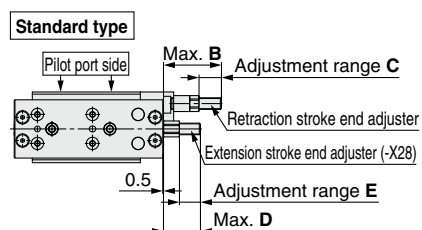
Symbol
-X27

When a retraction stroke end adjuster with buffer mechanism is needed or when the standard model's retraction stroke end adjuster cannot be used, use the centralized adjuster specification (-X27).

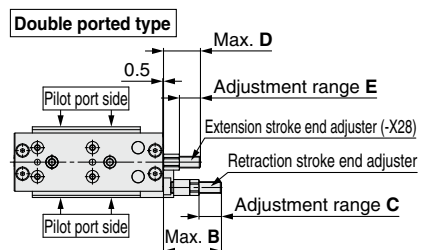
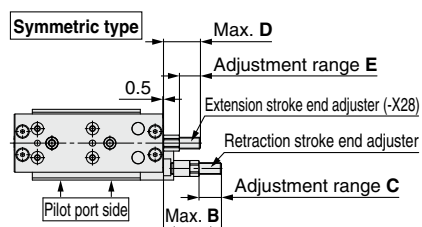
MXQ 12 A - 30 ZA 1 - M9BW S - X27



Single side ported type/Height interchangeable type



Single side ported type/Height interchangeable type



Metal Stopper with Bumper

Model	B	C	D	E	Adjuster model no. ^{Note 1)}		Adjustment bolt model no. ^{Note 2)}	
					Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end
MXQ8(A,C)-□-X27	34	15	23	13	MXQA-CT8-X28	MXQA-CT8	MXQA-A887-X11	MXQA-A887
MXQ12(A,C)-□-X27	41	16	26	14	MXQA-CT12-X28	MXQA-CT12	MXQA-A1287-X11	MXQA-A1287
MXQ16(A)-□-X27	47	17	27	13	MXQA-CT16-X28	MXQA-CT16	MXQA-A1687-X11	MXQA-A1687
MXQ20(A)-□-X27	54	17	30	16	MXQA-CT20-X28	MXQA-CT20	MXQA-A2087-X11	MXQA-A2087
MXQ25(A)-□-X27	64	19	31	13	MXQA-CT25-X28	MXQA-CT25	MXQA-A2587-X11	MXQA-A2587

Rubber Stopper

Model	B	C	D	E	Adjuster model no. ^{Note 1)}		Adjustment bolt model no. ^{Note 2)}	
					Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end
MXQ6(A)-□-X27	36	16	25	15	MXQA-AT8-X28	MXQA-AT8	MXQA-A827-X11	MXQA-A827
MXQ8(A,C)-□-X27	35	16	25	14				
MXQ12(A,C)-□-X27	43	18	27	16	MXQA-AT12-X28	MXQA-AT12	MXQA-A1227-X11	MXQA-A1227
MXQ16(A)-□-X27	48	19	28	15	MXQA-AT16-X28	MXQA-AT16	MXQA-A1627-X11	MXQA-A1627
MXQ20(A)-□-X27	56	19	31	18	MXQA-AT20-X28	MXQA-AT20	MXQA-A2027-X11	MXQA-A2027
MXQ25(A)-□-X27	66	20	33	14	MXQA-AT25-X28	MXQA-AT25	MXQA-A2527-X11	MXQA-A2527

Shock Absorber (RJ)

Model	B	C	D	E	Adjuster model no. ^{Note 1)}		Shock absorber model no. ^{Note 2)}	
					Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end
MXQ6(A)-□-X27	34	9	13	1	MXQA-JT8-X28	MXQA-JT8	RJ0603N	RJ0603N
MXQ8(A,C)-□-X27	34	9	13	1				
MXQ12(A,C)-□-X27	46	16	28	11	MXQA-JT12-X28	MXQA-JT12	RJ0805U-X2300	RJ0805N
MXQ16(A)-□-X27	52	15	30	8	MXQA-JT16-X28	MXQA-JT16	RJ1006U-X2300	RJ1006N
MXQ20(A)-□-X27	53	10	26	4	MXQA-JT20-X28	MXQA-JT20	RJ1007HU-X2300	RJ1007HN
MXQ25(A)-□-X27	78	23	45	17	MXQA-JT25-X28	MXQA-JT25	RJ1410U-X2300	RJ1410N

Note 1) Adjuster part number is for a set of an adjustment bolt (shock absorber) and a nut. This is used to add an adjuster later.

Note 2) This part number is only for a single unit of the adjustment bolt (shock absorber) without a nut. This is used as a spare part when the adjustment bolt is worn.

Shape of the adjustment part varies (hexagonal hole, width across flats, slot) depending on the model of the adjuster or shock absorber. Refer to the full view of the standard product for details.

6 Long Adjustment Nut and Bolt

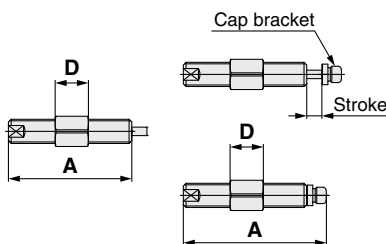
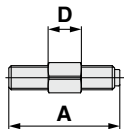
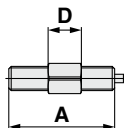
Symbol
-X28

Easier stroke adjustment with the longer overall lengths of the adjustment nut, adjustment bolt and shock absorber. This is used for the extension stroke end adjuster of the end lock mechanism and the extension stroke end adjuster of the centralized adjuster specification (-X27).

MXQ Standard adjuster model no. – **X28**

● Long adjustment nut and bolt

Metal Stopper with Bumper



RJ□□□□-X2300

Cap bracket is mounted to lengthen the A dimension.

Metal Stopper with Bumper						(mm)
Applicable model		Adjuster model no. Note 1)	Nut total length	Bolt total length	Adjustment bolt model no. Note 2)	
			D	A		
MXQ8(A,C)	—	MXQA-CT8-X28	10	40	MXQA-A887-X11	
MXQ12(A,C)	—	MXQA-CT12-X28	11	45	MXQA-A1287-X11	
MXQ16(A)	—	MXQA-CT16-X28	13	50	MXQA-A1687-X11	
MXQ20(A)	—	MXQA-CT20-X28	13	57	MXQA-A2087-X11	
MXQ25(A)	—	MXQA-CT25-X28	18	64	MXQA-A2587-X11	
—	MXQ8B	MXQB-CT8-X28	11	45	MXQB-A887-X11	
—	MXQ12B	MXQB-CT12-X28	13	50	MXQB-A1287-X11	
—	MXQ16B	MXQB-CT16-X28	13	57	MXQB-A1687-X11	
—	MXQ20B	MXQB-CT20-X28	18	64	MXQB-A2087-X11	

Not available for the MXQ6 (A, B).

Rubber Stopper

Applicable model		Adjuster model no. Note 1)	Nut total length	Bolt total length	Adjustment bolt model no. Note 2)
			D	A	
MXQ6(A), MXQ8(A,C)	MXQ6B	MXQA-AT8-X28	10	41.5	MXQA-A827-X11
MXQ12(A,C)	MXQ8B	MXQA-AT12-X28	11	46.5	MXQA-A1227-X11
MXQ16(A)	MXQ12B	MXQA-AT16-X28	13	51.5	MXQA-A1627-X11
MXQ20(A)	MXQ16B	MXQA-AT20-X28	13	58.5	MXQA-A2027-X11
MXQ25(A)	MXQ20B	MXQA-AT25-X28	18	65.5	MXQA-A2527-X11

Shock Absorber (RJ)

Applicable model		Adjuster model no.	Note 1)		Adjustment bolt model no.
			Nut total length	Shock absorber total length	
			D	A	
MXQ6(A), MXQ8(A,C)	MXQ6B	MXQA-JT8-X28	10	29.3	RJ0603N
MXQ12(A,C)	MXQ8B	MXQA-JT12-X28	11	47.3	RJ0805U-X2300
MXQ16(A)	MXQ12B	MXQA-JT16-X28	13	52.8	RJ1006U-X2300
MXQ20(A)	MXQ16B	MXQA-JT20-X28	13	52.8	RJ1007HU-X2300
MXQ25(A)	MXQ20B	MXQA-JT25-X28	18	77.1	RJ1410U-X2300

Note 1) Adjuster part number is for a set of an adjustment bolt (shock absorber) and a nut.

Note 2) This part number is only for a single unit of the adjustment bolt (shock absorber) without a nut. This is used as a spare part when the adjustment bolt is worn.

Shape of the adjustment part varies (hexagonal hole, width across flats, slot) depending on the model of the adjuster or shock absorber. Refer to the full view of the standard product for details.

7 Without Built-in Auto Switch Magnet

Symbol
-X33

This product does not have a magnet for an auto switch. It is suitable for applications where magnetic force is not acceptable.

MXQ Standard model no. – **X33**

● Without built-in auto switch magnet

Specifications

Bore size (mm)	6, 8, 12, 16, 20, 25
Auto switch	Not mountable

* Dimensions other than the above is the same as those for the standard type.

8 Fluororubber Seal

Symbol
-X39

Change the materials for the piston seal, rod seal, O-rings and scrapers (rubber lined parts) to fluororubber.

MXQ Standard model no. – **X39**

● Fluororubber seal

Specifications

Bore size (mm)	6, 8, 12, 16, 20, 25
Seal material	Fluororubber

* Dimensions other than the above is the same as those for the standard type.

9 Anti-corrosive Guide Unit

Symbol
-X42

Martensitic stainless steel is used for table and guide block. Use this treatment if more effective anti-corrosiveness is necessary. Table and guide block are given anti-corrosive treatment.

MXQ Standard model no. - **X42**
● Anti-corrosive guide unit

Specifications

Bore size (mm)	6, 8, 12, 16, 20, 25
Surface treatment	Special anti-corrosive treatment* ²

*1 Specifications other than above are the same as those for standard models.

*2 Special anti-corrosive treatment makes the table and the guide block black.

10 EPDM Seal

Symbol
-X45

Change the materials for the piston seal, rod seal, O-rings and scrapers (rubber lined parts) to fluororubber.

MXQ Standard model no. - **X45**
● EPDM seal

Specifications

Bore size (mm)	6, 8, 12, 16, 20, 25
Seal material	EPDM
Grease	PTFE grease

* Dimensions other than the above is the same as those for the standard type.

Warning

Precautions

Be aware that smoking cigarettes etc. after your hands have come into contact with the grease used in this cylinder can create a gas that is hazardous to humans.

Series MXQ

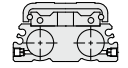
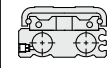
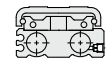
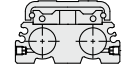
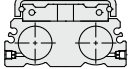
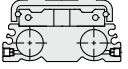
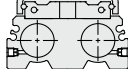
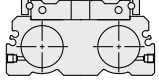
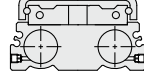
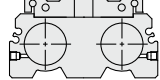
Model Selection

Guideline for Model Selection 1

Model selection criteria	Body type	Bore size	Dimensions (mm)			Weight (g) (Compared at 50 stroke)	Thrust (N) (0.5 MPa, OUT direction)	Allowable moment (N·m) (Compared at 50 stroke)		
			Height	Width	Table width			Pitch	Yaw	Roll
Air Slide Table without preset piping directions. The piping direction can be set when mounting to application. * ø16, ø20, ø25: Standard type, Low thrust with high rigidity type (excluding ø25): Double piping direction type	Double ported (MXQ□A)	ø6	23	34	32	210	29	6	6	13
		ø8	23	38	32	270	51	10	10	18
		ø12	27	49	40	400	113	10	10	19
		ø16	35	62	50	670	201	16	16	33
		ø20	43	72	60	1,100	314	21	21	49
		ø25	52	88	70	1,900	491	41	41	82
Application which requires more guide rigidity than thrust	Low thrust with high rigidity type (MXQ□B)	ø6	20	34	32	230	29	10	10	18
		ø8	23	42	40	330	51	10	10	19
		ø12	30	52	50	580	113	16	16	33
		ø16	37	70	60	920	201	21	21	49
●When lower height is required ●When two indicator LEDs need to be observed on one side (including short stroke)	Single side ported type (MXQ□C)	ø8	21	38	32	260	51	10	10	18
		ø12	27	49	40	400	113	10	10	19
To replace with the current type. Mounting dimensions and height are interchangeable.	Height interchangeable type (MXQ□)	ø6	20	34	32	190	29	6	6	13
		ø8	23	38	32	310	51	10	10	18
		ø12	30	49	40	430	113	10	10	19
		ø16	37	62	50	690	201	16	16	33
		ø20	46	72	60	1,100	314	21	21	49
		ø25	55	88	70	1,900	491	41	41	82

Guideline for Model Selection 2

Model Variations

Guide size (Width)	Double ported type MXQ□A		Low thrust with high rigidity type MXQ□B			Single side ported type MXQ□C			Height interchangeable type MXQ□		
	Bore size		Bore size	Standard type	Symmetric type (L)	Bore size	Standard type	Symmetric type (L)	Bore size	Standard type	Symmetric type (L)
Note) 32(1)	ø6		—	—	—	—	—	—	ø6		
32(2)	ø8		ø6			ø8			ø8		
40	ø12		ø8			ø12			ø12		
50	ø16		ø12			—	—	—	ø16		
60	ø20		ø16			—	—	—	ø20		
70	ø25		ø20			—	—	—	ø25		

Note) There are two rigidity types of actuator tables for width 32.

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

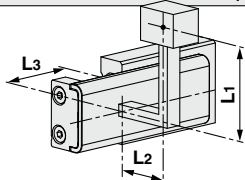
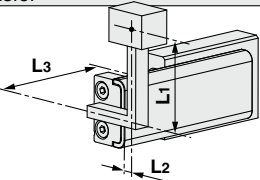
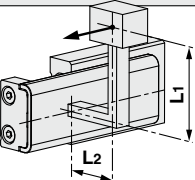
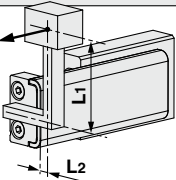
Made to Order

Model Selection

Selection Conditions

There are two model selection methods according to the usage. Model selection procedure is shown below.

Model selection procedure shown below is for when an MXQ is mounted onto a static table. When using the product mounted to a rodless cylinder, etc., it is necessary to perform model selection in another method as the product can be influenced by the impact at the rodless cylinder operation stoppage. Please consult SMC sales representative for details.

Application		Transfer				Pressing			
Workpiece mounting position Overhang									
		Table mounting		End plate mounting			Table mounting		End plate mounting
		L1: Distance from the center of the table to the center of gravity of the workpiece L2: Distance from the top surface of the table to the center of gravity of the workpiece L3: Distance from the end of the body to the center of gravity of the workpiece in Z direction.				L1: Distance from the center of the table to the pressing part L2: Distance from the center of the table to the pressing part			
Stroke adjuster		Without adjuster	Metal stopper with bumper	Rubber stopper	Shock absorber (RJ)				
Selection graph	Double ported type	Page 97	Page 103	Page 109	Page 115	Page 121			
	Single side ported type								
	Height interchangeable type								
	Low thrust with high rigidity type	Page 100	Page 106	Page 112	Page 118	Page 122			

For Transfer

Model Selection Step

1 Necessary conditions

- Equipment to be used
- Overhang
- Adjuster type
- Load weight
- Average speed

2 Select a graph.

Select the applicable graph (page on and after 97) with the body configuration and stroke adjuster type.

3 Determine the overhang.

Determine the overhang at the workpiece mounting positions L1, L2 and L3
 * Positional relationships among L1, L2 and L3 do not change regardless of the body mounting direction.

4 Check the overhang.

- Check the overhang, L1max, L2max, L3max during transfer
- ① L1max: Check the overhang from the cross point of the work load and driving speed.
 - ② L2max: a: When mounted to the table
Check the allowable overhang from the cross point of the work load and driving speed.
b: When mounted to the end plate
Allowable overhang is found by multiplying the allowable overhang by 1/2 (coefficient^{Note}).
 - ③ L3max: Can be used within the range of the "Allowable overhang range" in the selection graph if it is within the allowable range of the load weight and driving speed.

Note) Coefficient varies depending on the model and stroke. Refer to page 94 for details.

5 Overhang as the operating condition

The product can be used with the overhang required as the operating condition (L1, L2, L3 of No.3) if it is within the allowable range of overhang (L1max, L2max, L3max of No.4) that is selected.

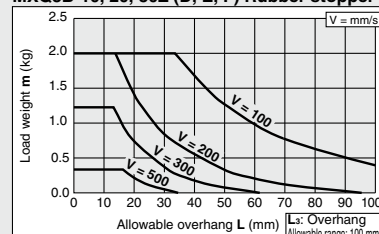
* When the required overhang exceeds the allowable overhang, review the overhang, load weight, driving speed, etc. and reconfirm that the product operates normally.

Precautions for Metal Stopper with Bumper

When a metal stopper with bumper is used in a vertical position, thrust larger than "the operating load weight + full compression force of metal stopper with bumper" is required. This needs to be considered when adjusting the operating pressure and selecting the cylinder size.

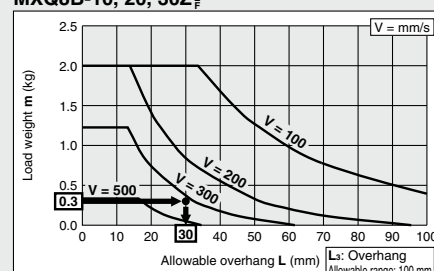
* The metal stopper with bumper may not be fully compressed due to lack of thrust.

MXQ8B-10, 20, 30Z (D, E, F) Rubber stopper



Application		Transfer	
Workpiece mounting position Overhang		Table mounting	End plate mounting
		L1: Distance from the center of the table to the center of gravity of the workpiece L2: Distance from the top surface of the table to the center of gravity of the workpiece L3: Distance from the end of the body to the center of gravity of the workpiece in Z direction.	

MXQ8B-10, 20, 30Z^D



For Pressing

Model Selection Step

Precautions for Metal Stopper with Bumper

When a metal stopper with bumper is used in a vertical position, thrust larger than "the operating load weight + full compression force of metal stopper with bumper" is required. This needs to be considered when adjusting the operating pressure and selecting the cylinder size.

* The metal stopper with bumper may not be fully compressed due to lack of thrust.

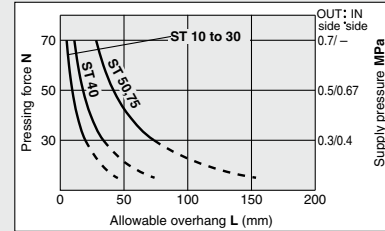
1 Necessary conditions

- Equipment to be used
- Required pressing force or operating pressure
- Overhang

2 Select a graph.

Select the applicable graph for body configuration (page on and after 121).

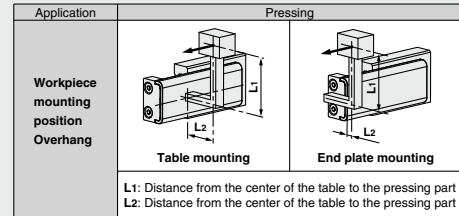
MXQ 8^A-□Z



3 Determine the overhang.

Determine the overhang L1, L2.

* Positional relationships among L1, L2 do not change regardless of the body mounting direction.



4 Check the overhang.

Confirm the allowable pressing force Nmax with the overhang.

Nmax: ① When mounted to the table

Determine the allowable pressing force with the cross point of the overhang L1 and L2.

② When mounted to the end plate

Allowable overhang is found by multiplying the allowable pressing force by 1/2 (coefficient ^{Note)}).

Note) Coefficient varies depending on the model and stroke. Refer to below for details.

5 Allowable pressing force in the operating condition

It is acceptable if the required pressing force is smaller than the allowable pressing force.

* When the required pressing force is larger than the allowable pressing force, reexamine the operating pressing force or operating pressure, and overhang, etc. and confirm if they are acceptable again.

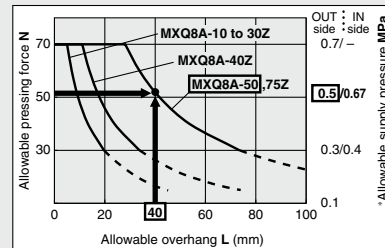
6 Check the allowable supply pressure.

Allowable supply pressure can be confirmed with the selection graph.

Note) Allowable pressing force coefficient used to calculate the allowable overhang of the models shown below is 1/4.

Model	Stroke
MXQ8(A,C)	50, 75
MXQ12(A,C)	75, 100
MXQ16(A)	100, 125
MXQ20(A)	100, 125, 150
MXQ25(A)	125, 150
MXQ6B	50, 75
MXQ8B	75, 100
MXQ12B	100, 125
MXQ16B	100, 125, 150
MXQ20B	125, 150

MXQ 8^A-□Z



* Allowable supply pressure on OUT side and IN side is the theoretical output of cylinder when pressing force is required.

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

Auto Switch
Mounting

Made to Order

Model Selection

Selection Example 1 (Transfer, Table Mounting)

Selection conditions

Selected model: **MXQ8B-30Z(D, E, F)**

Maximum load weight: 0.3 kg

Average operating speed: 300 mm/s

Note) Average operating speed: Speed calculated by dividing the stroke by the time from starting operation until reaching the end.

Overhang: **L1 = 20, L2 = 20, L3 = 50**

Stroke adjuster: Rubber stopper

Selection method

- Find the **L1, L2, L3** Upper limit of the overhang from the selection graph.
L1, L2: Use the graph to find the **L** when the speed is 300 mm/s and load weight $m = 0.3$ kg. **L = 30 mm** → **L1, L2** Upper limit of the overhang = 30 mm
L3: Check the allowable overhang range shown at the right bottom of the graph. **L3** Upper limit of the overhang = 100 mm
- Confirm that **L1, L2, L3** are lower than the upper limit of the overhang.
L1 = 20 mm and **L2 = 20 mm** OK (**L1, L2** Upper limit of the overhang = 30 mm), **L3 = 50 mm** OK (**L3** Upper limit of the overhang = 100 mm)
 Therefore, the **MXQ8B-30Z(D, E, F)** can be used.

Selection Example 2 (Transfer, End Plate Mounting)

Selection conditions

Selected model: **MXQ8B-30Z(D, E, F)**

Maximum load weight: 0.3 kg

Average operating speed: 300 mm/s

Note) Average operating speed: Speed calculated by dividing the stroke by the time from starting operation until reaching the end.

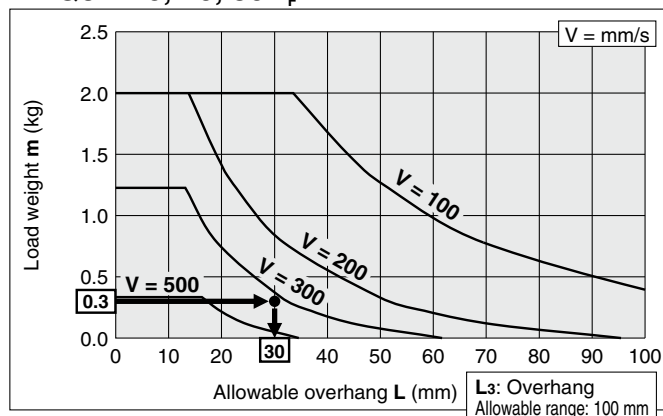
Overhang: **L1 = 20, L2 = 10, L3 = 50**

Stroke adjuster: Rubber stopper

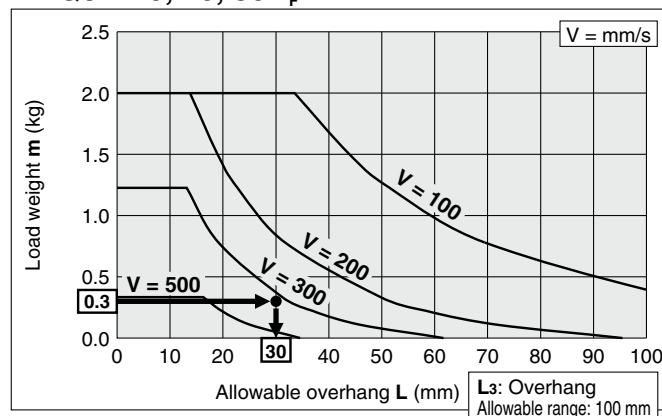
Selection method

- Find the **L1, L2, L3** Upper limit of the overhang from the selection graph.
L1: Use the graph to find the **L** when the speed is 300 mm/s and load weight $m = 0.3$ kg. **L = 30 mm** → **L1** Upper limit of the overhang = 30 mm
L2: Use the graph to find the **L** when the speed is 300 mm/s and load weight $m = 0.3$ kg and multiply it by 1/2.
L = 30 mm → **L2** Upper limit of the overhang = $30 \text{ mm} / 2 = 15 \text{ mm}$
 Note) For end plate mounting, **L2** is 1/2 of the **L** which is found from the graph.
L3: Confirm that this value is lower than the upper limit of the overhang shown at the right bottom of the graph. **L3** Upper limit of the overhang = 100 mm
- Confirm that **L1, L2, L3** are lower than the upper limit of the overhang.
L1 = 20 mm OK (**L1** Upper limit of the overhang = 30 mm)
L2 = 10 mm OK (**L2** Upper limit of the overhang = 15 mm)
L3 = 50 mm OK (**L3** Upper limit of the overhang = 100 mm)
 Therefore, the **MXQ8B-30Z(D, E, F)** can be used.

MXQ8B-10, 20, 30Z^{D E F}



MXQ8B-10, 20, 30Z^{D E F}



Selection Example 3 (Pressing, Table Mounting)

Selection conditions

Selected model: **MXQ8A-50Z**

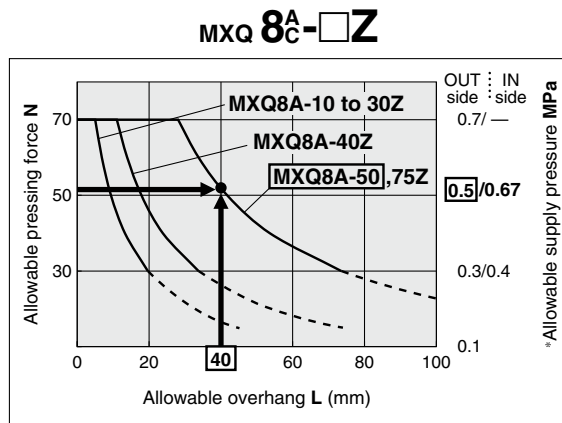
Operating direction: OUT

Operating pressure: 0.5 MPa (Pressing force: 50 N)

Overhang: **L1** = 20, **L2** = 30

Selection method

- Find the **L1**, **L2** Upper limit of the overhang from the selection graph.
Find the **L** at the operating pressure of 0.5 MPa from the graph.
L1, **L2** Upper limit of the overhang = 40 mm
- Confirm that **L1**, **L2** are lower than the upper limit of the overhang.
L1 = 20 mm and **L2** = 30 mm OK (**L1**, **L2** Upper limit of the overhang = 40 mm)
Therefore, the **MXQ8A-50** can be used with the supply pressure at 0.5 MPa.



* Allowable supply pressure on OUT side and IN side is the theoretical output of cylinder when pressing force is required.

Selection Example 4 (Pressing, End Plate Mounting)

Selection conditions

Selected model: **MXQ8A-50Z**

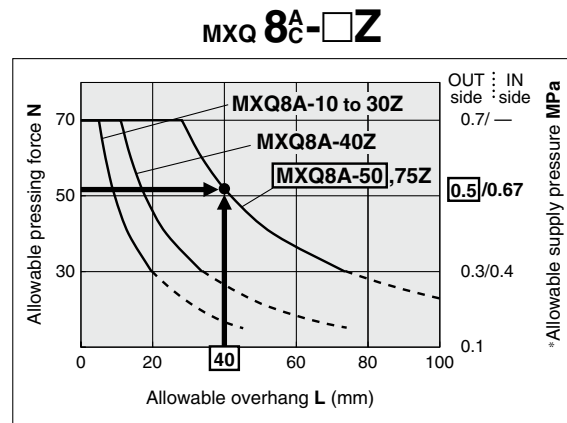
Operating direction: OUT

Operating pressure: 0.5 MPa (Pressing force: 50 N)

Overhang: **L1** = 20, **L2** = 10

Selection method

- Find the **L1**, **L2** Upper limit of the overhang from the selection graph.
L1: Find the **L** at the operating pressure of 0.5 MPa from the graph.
L1 Upper limit of the overhang = 40 mm
L2: Find the **L** at the operating pressure of 0.5 MPa from the graph, and multiply it by 1/2. **L2** Upper limit of the overhang = 20 mm
Note) For end plate mounting, **L2** is 1/2 of the **L** which is found from the graph.
- Confirm that **L1**, **L2** are lower than the upper limit of the overhang.
L1 = 20 mm OK (**L1** Upper limit of the overhang = 40 mm)
L2 = 10 mm OK (**L2** Upper limit of the overhang = 20 mm)
Therefore, the **MXQ8A-50** can be used.



* Allowable supply pressure on OUT side and IN side is the theoretical output of cylinder when pressing force is required.

⚠ Caution

1. Operate loads within the range of the operating limits.

Select the model according to the model selection step.

If the product is used outside of the operating limit, the product may have adverse effects such as creating play at the guide, degraded accuracy and shortened product life.

2. If intermediate stop by external stopper is done, avoid ejection when restarting.

If lurching occurs, damage can result. In the case slide table is stopped at intermediate positions by the external stopper then forwarded to the front, after slide table is returned to the back for just a moment to retract the stopper, supply pressure to the opposite port to operate slide table.

3. Do not use it in such a way that excessive external force or impact force could work on it.

Malfunction or the damage of the table can result.

Although the table has adequate strength, if it is damaged, protect your hands with gloves. Otherwise, it may cause injury.

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

Auto Switch
Mounting

Made to Order

Model Selection

Series MXQ

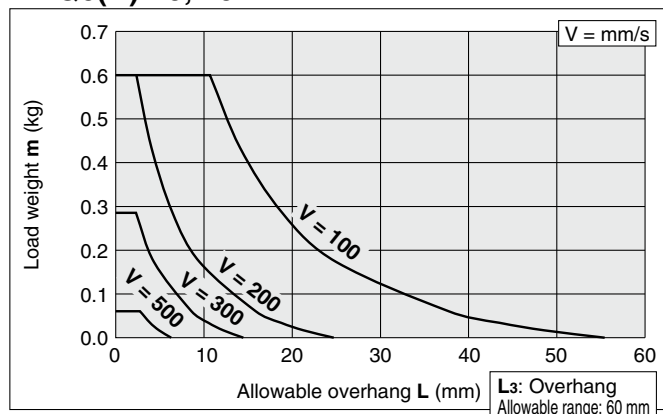
MXQ 6A-□Z, MXQ 6-□Z (Height interchangeable type)

MXQ 8^A-□Z, MXQ 8-□Z (Height interchangeable type)

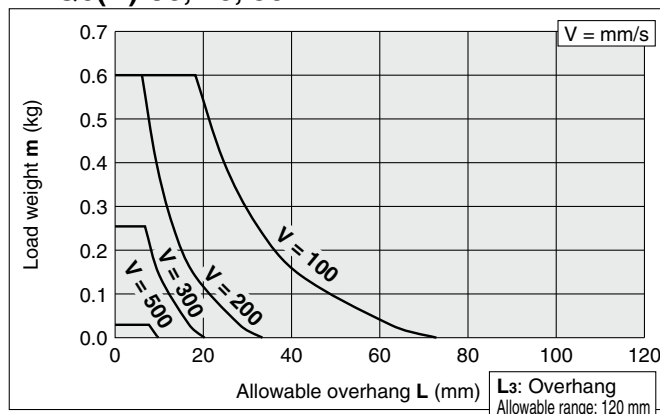
For Transfer/
Without Adjuster

Determine the overhang. (Refer to page 93 for details.)
L₁, L₂: Check from the cross point of the load weight and driving speed.
L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

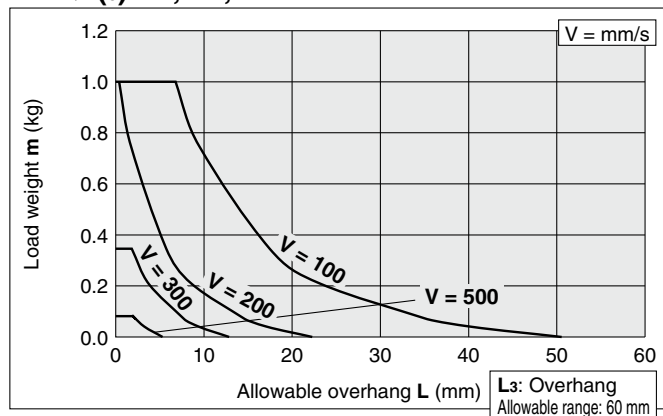
MXQ6(A)-10, 20Z



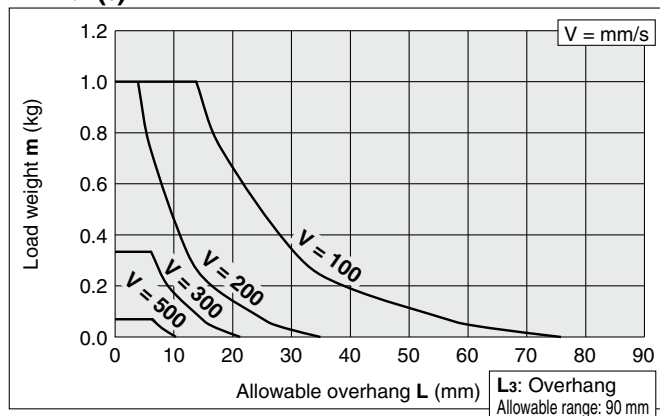
MXQ6(A)-30, 40, 50Z



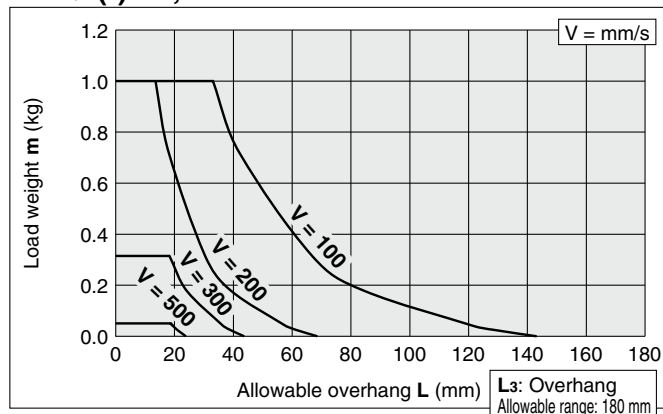
MXQ8(Δ)-10, 20, 30Z



MXQ8(Δ)-40Z



MXQ8(Δ)-50, 75Z



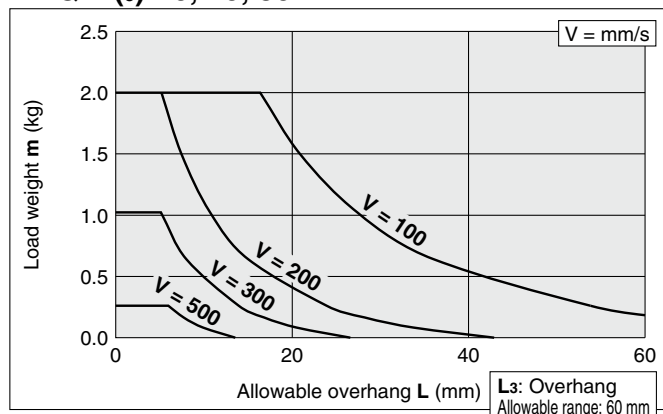
MXQ 12^A-□Z, MXQ 12-□Z (Height interchangeable type)

MXQ 16A-□Z, MXQ 16-□Z (Height interchangeable type)

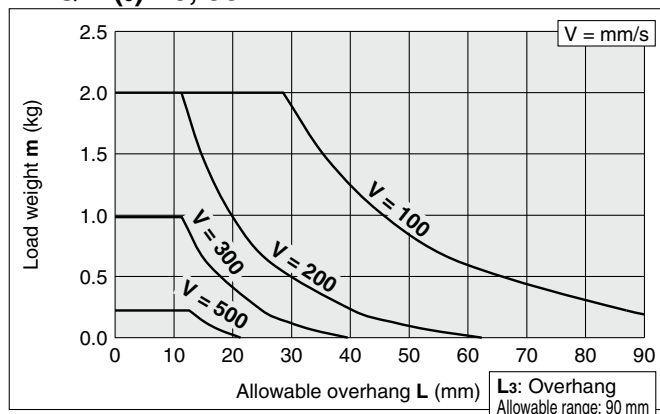
For Transfer/
Without Adjuster

Determine the overhang. (Refer to page 93 for details.)
L₁, L₂: Check from the cross point of the load weight and driving speed.
L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

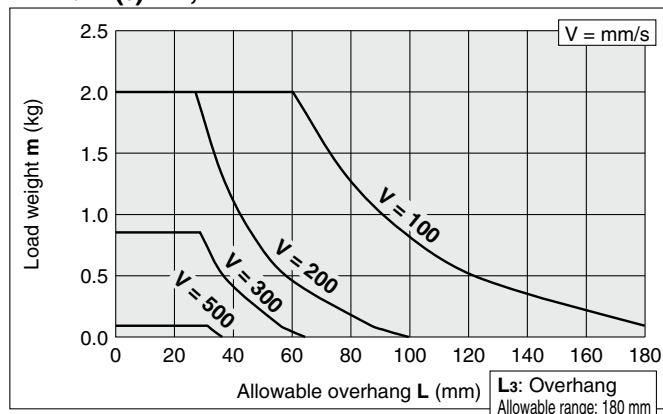
MXQ12(⌘)-10, 20, 30Z



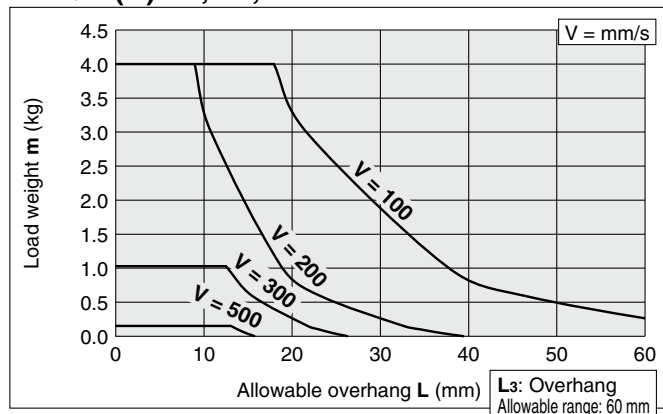
MXQ12(⌘)-40, 50Z



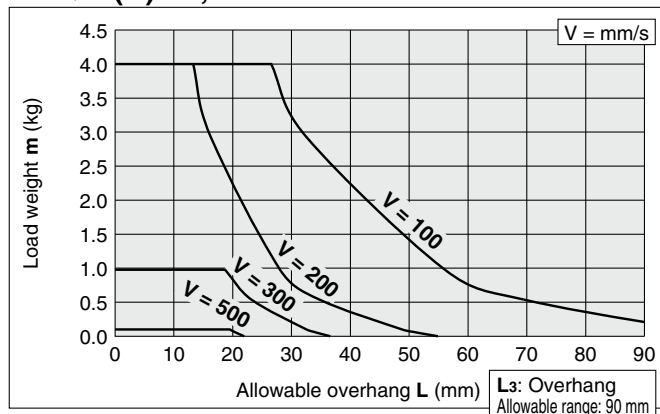
MXQ12(⌘)-75, 100Z



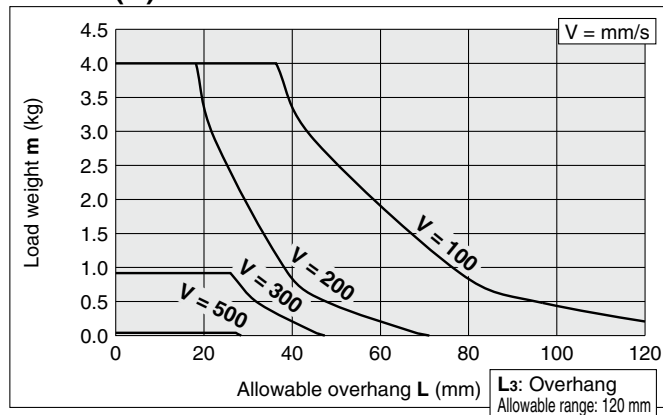
MXQ16(A)-10, 20, 30Z



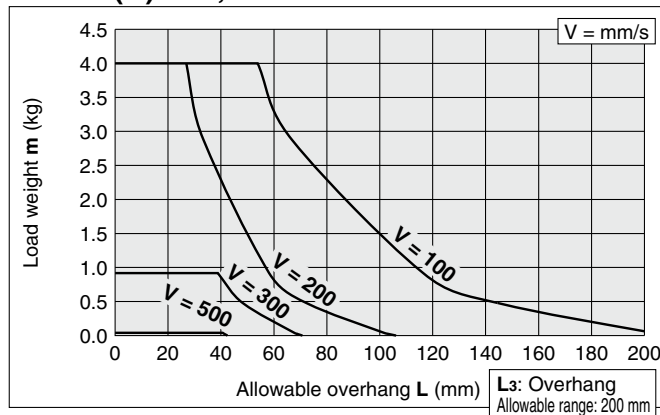
MXQ16(A)-40, 50Z



MXQ16(A)-75Z



MXQ16(A)-100, 125Z



Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

Auto Switch
Mounting

Made to Order

Model Selection

Series MXQ

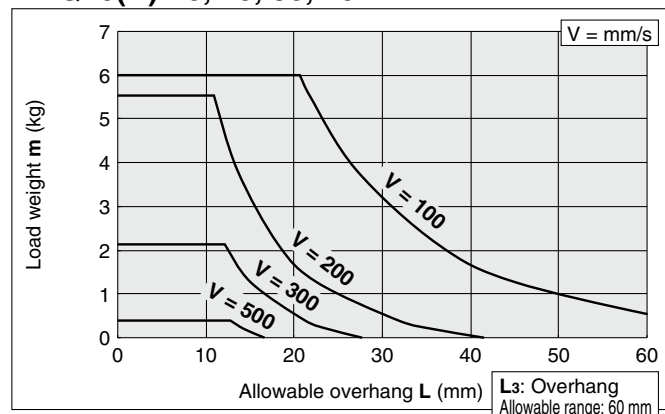
MXQ 20A-□Z, MXQ 20-□Z (Height interchangeable type)

MXQ 25A-□Z, MXQ 25-□Z (Height interchangeable type)

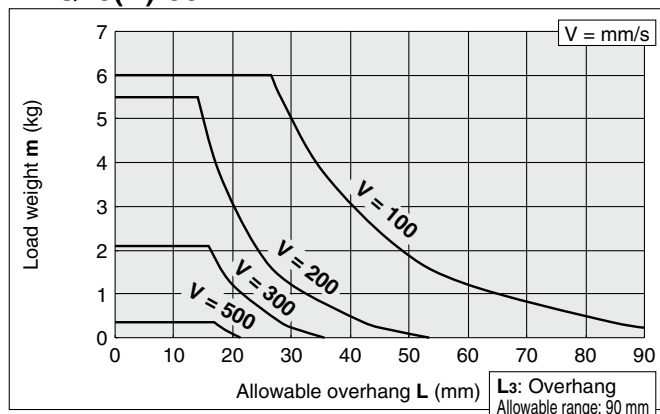
For Transfer/
Without Adjuster

Determine the overhang. (Refer to page 93 for details.)
L1, L2: Check from the cross point of the load weight and driving speed.
L3: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

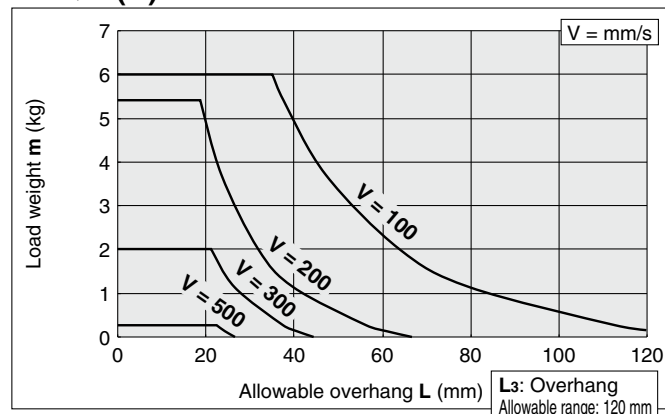
MXQ20(A)-10, 20, 30, 40Z



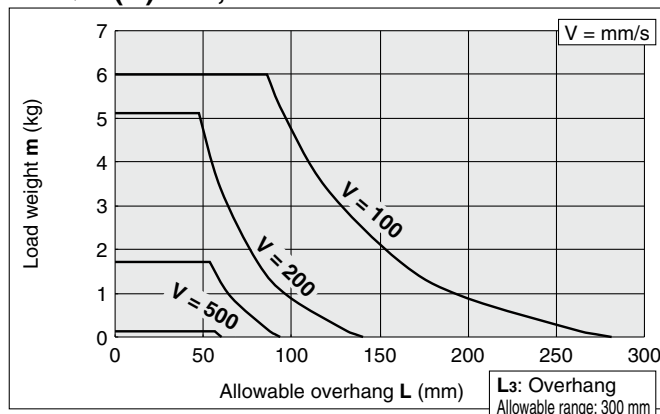
MXQ20(A)-50Z



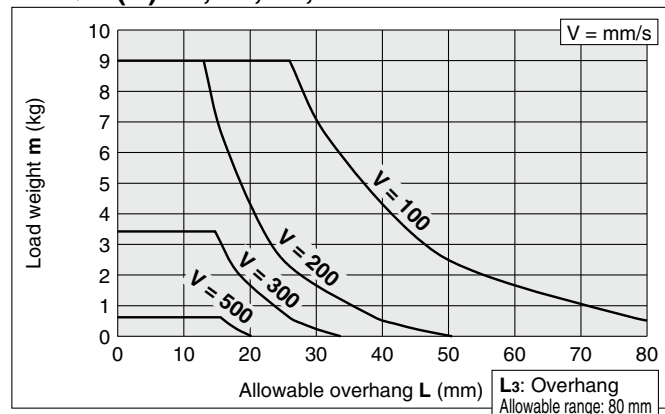
MXQ20(A)-75Z



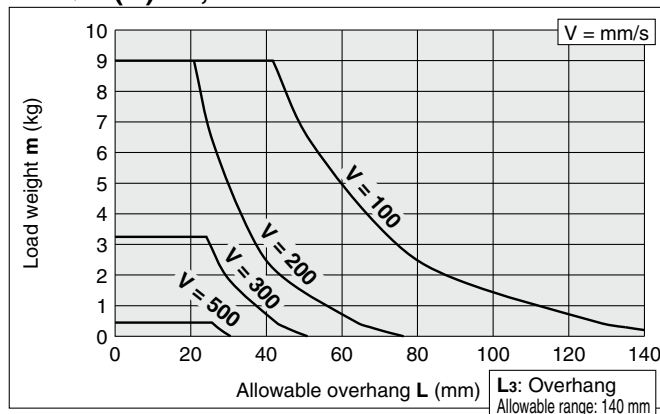
MXQ20(A)-100, 150Z



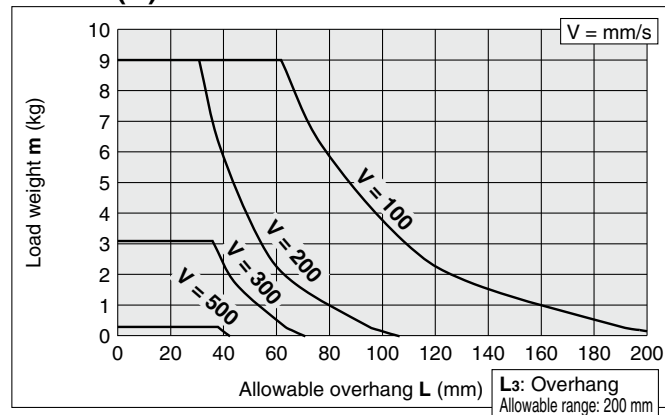
MXQ25(A)-10, 20, 30, 40Z



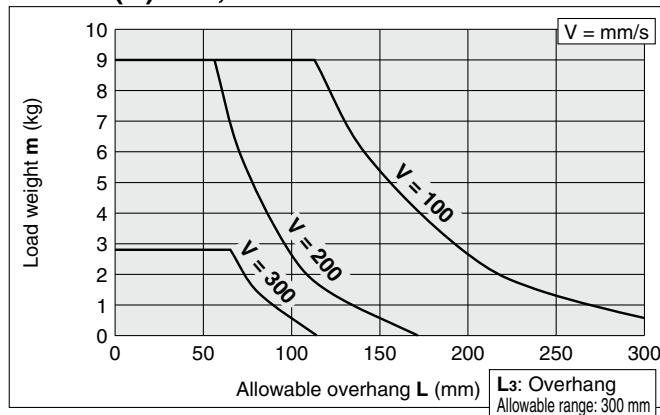
MXQ25(A)-50, 75Z



MXQ25(A)-100Z



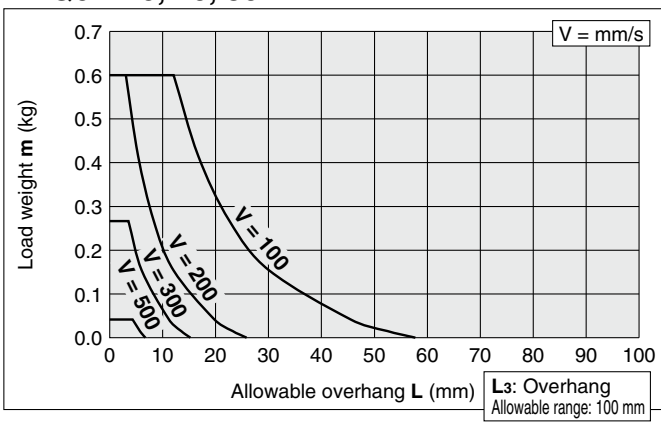
MXQ25(A)-125, 150Z



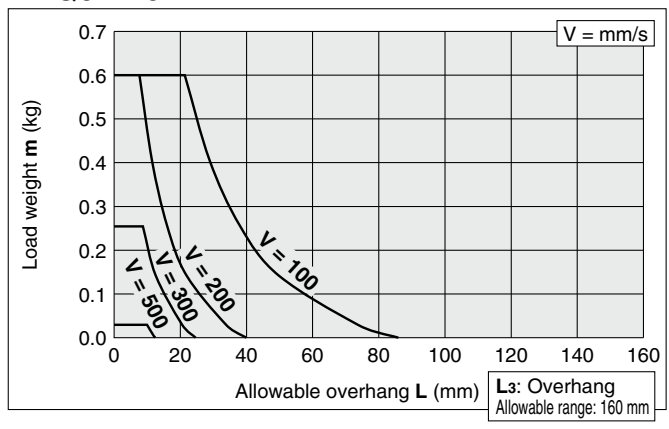
Determine the overhang. (Refer to page 93 for details.)
L₁, L₂: Check from the cross point of the load weight and driving speed.
L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

MXQ 6B-□Z/For Transfer/Without Adjuster

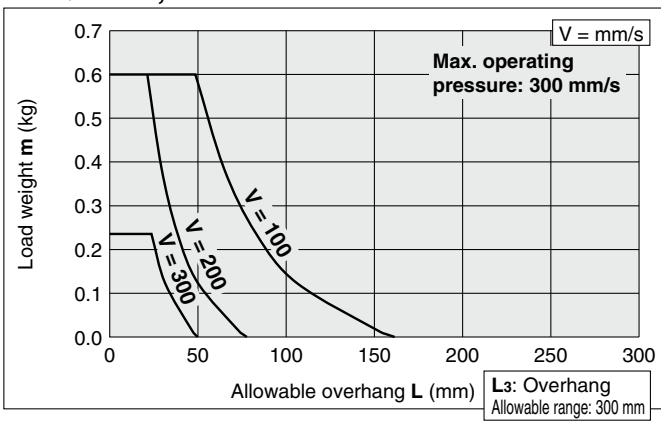
MXQ6B-10, 20, 30Z



MXQ6B-40Z



MXQ6B-50, 75Z



Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

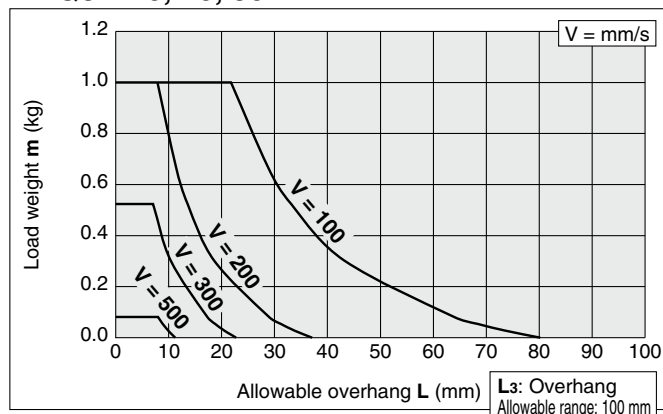
Made to Order

Model Selection

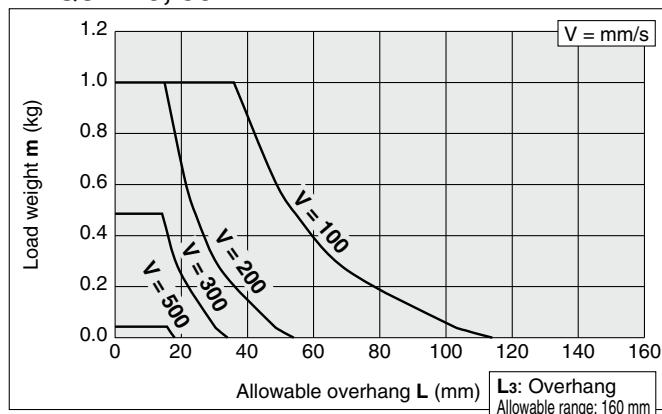
MXQ 8B-□Z, MXQ 12B-□Z / For Transfer/ Without Adjuster

Determine the overhang. (Refer to page 93 for details.)
 L₁, L₂: Check from the cross point of the load weight and driving speed.
 L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

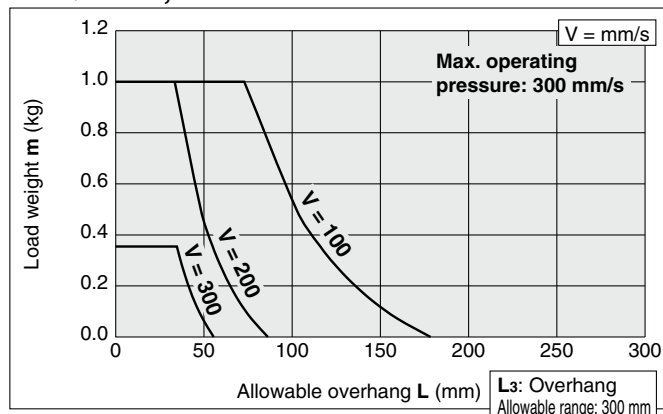
MXQ8B-10, 20, 30Z



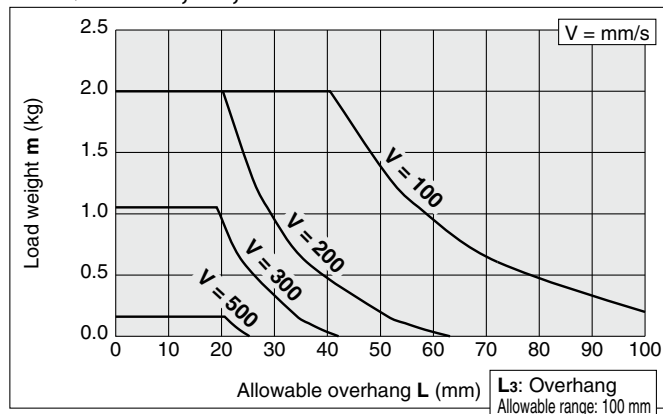
MXQ8B-40, 50Z



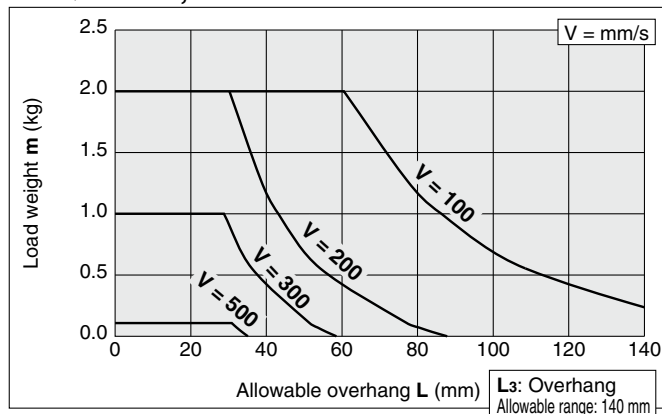
MXQ8B-75, 100Z



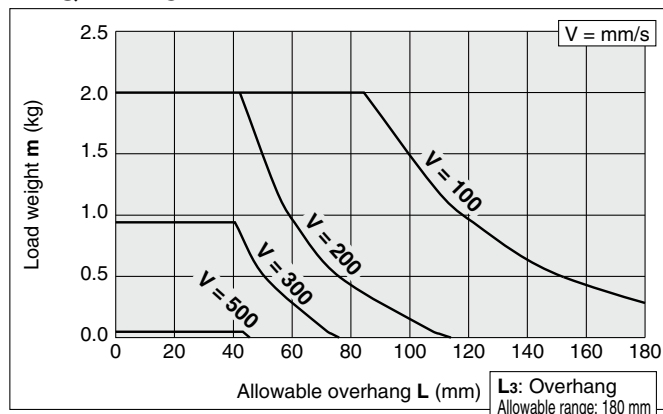
MXQ12B-10, 20, 30Z



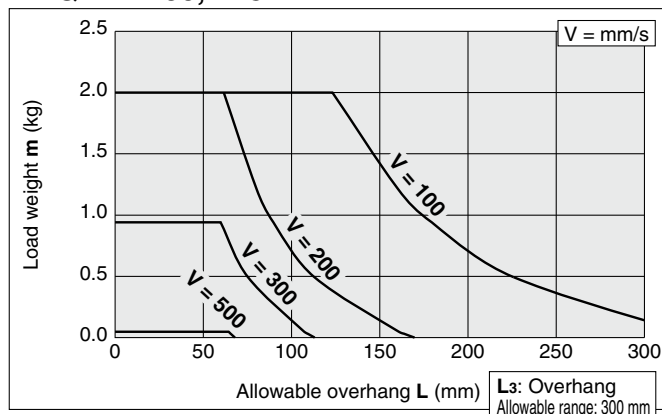
MXQ12B-40, 50Z



MXQ12B-75Z



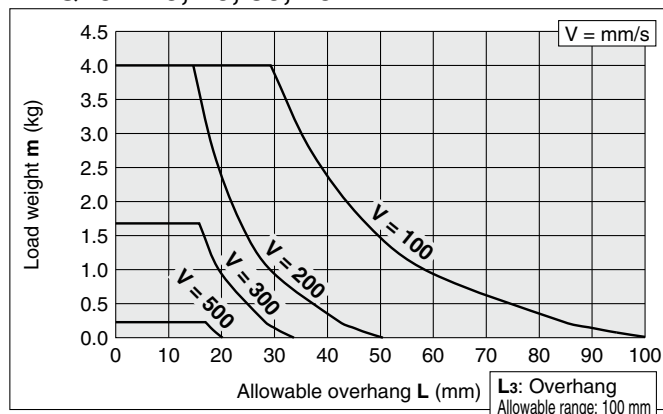
MXQ12B-100, 125Z



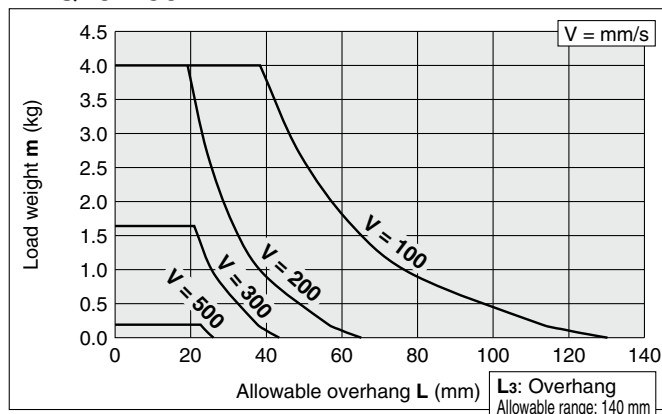
Determine the overhang. (Refer to page 93 for details.)
 L₁, L₂: Check from the cross point of the load weight and driving speed.
 L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

MXQ 16B-□Z, MXQ 20B-□Z / For Transfer/ Without Adjuster

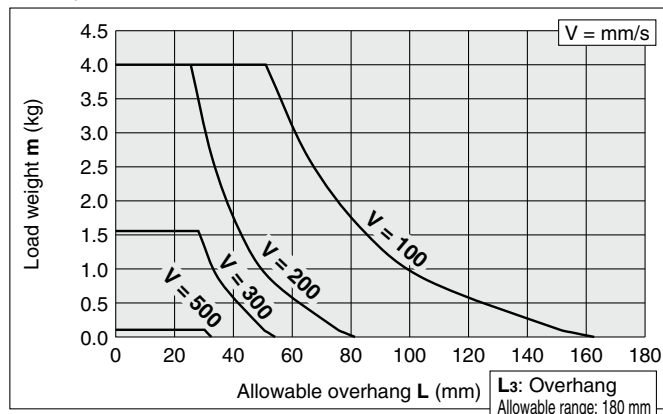
MXQ16B-10, 20, 30, 40Z



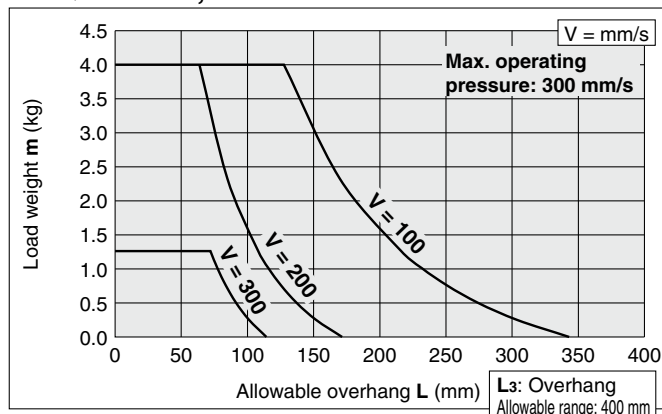
MXQ16B-50Z



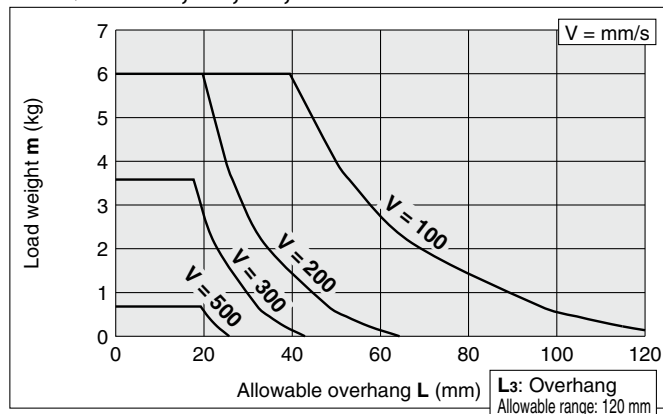
MXQ16B-75Z



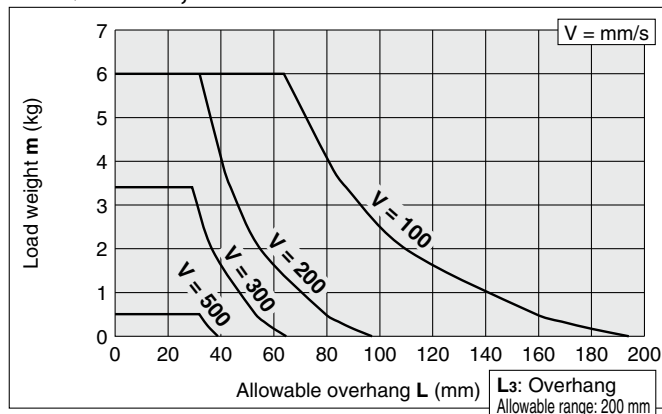
MXQ16B-100, 150Z



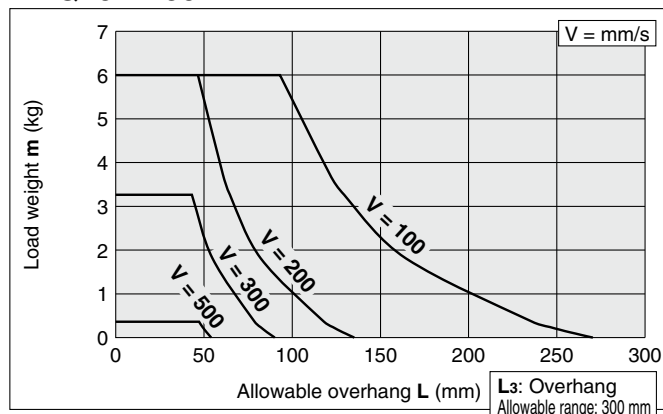
MXQ20B-10, 20, 30, 40Z



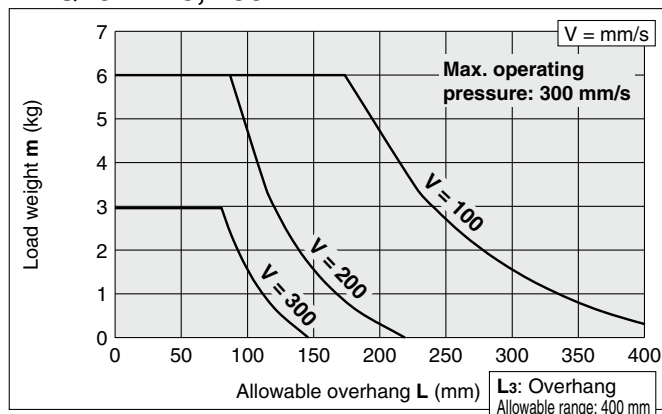
MXQ20B-50, 75Z



MXQ20B-100Z



MXQ20B-125, 150Z



Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

Auto Switch
Mounting

Made to Order

Model Selection

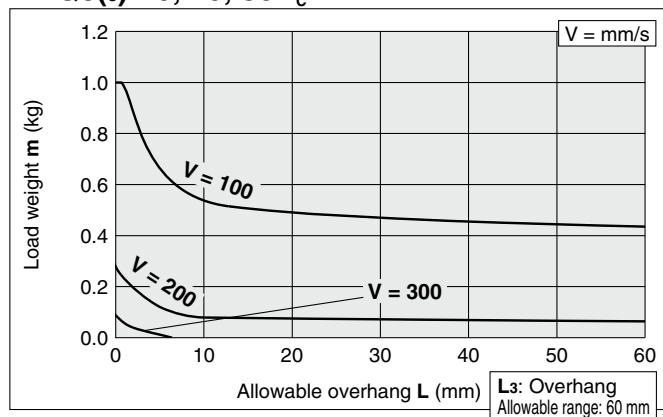
Series MXQ

MXQ 8^A_C-□Z^A_B_C, MXQ 8-□Z^A_B_C (Height interchangeable type)

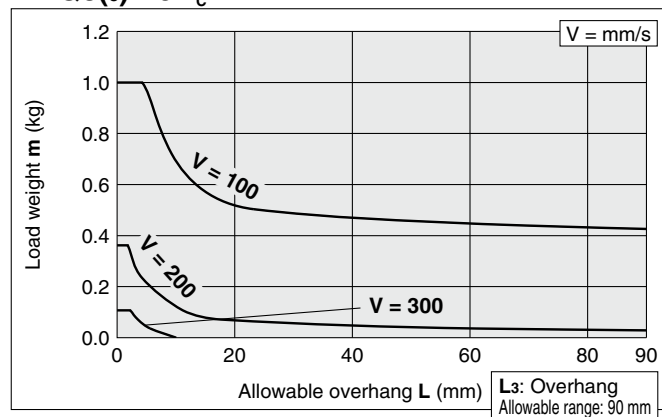
For Transfer/
Metal Stopper with Bumper

Determine the overhang. (Refer to page 93 for details.)
L₁, L₂: Check from the cross point of the load weight and driving speed.
L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

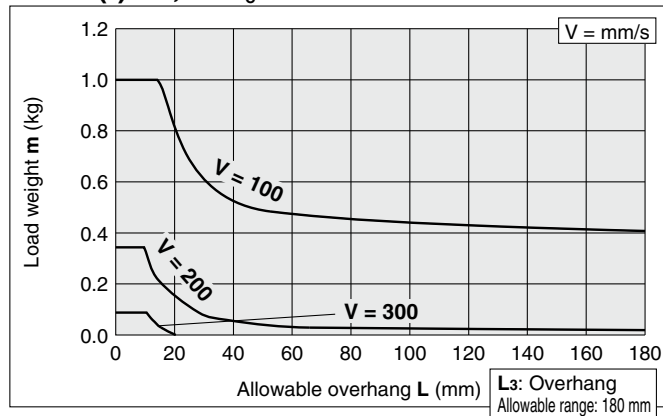
MXQ8(⌘)-10, 20, 30Z^A_B_C



MXQ8(⌘)-40Z^A_B_C



MXQ8(⌘)-50, 75Z^A_B_C

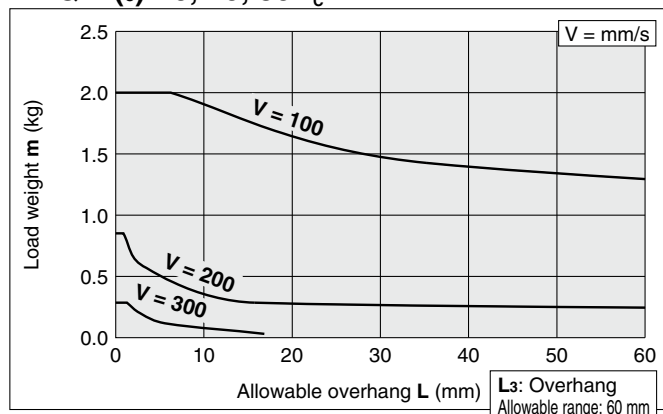


MXQ 12^A_C-□Z^A_{BC}, MXQ 12-□Z^A_{BC} (interchangeable type)
 MXQ 16A-□Z^A_{BC}, MXQ 16-□Z^A_{BC} (interchangeable type)

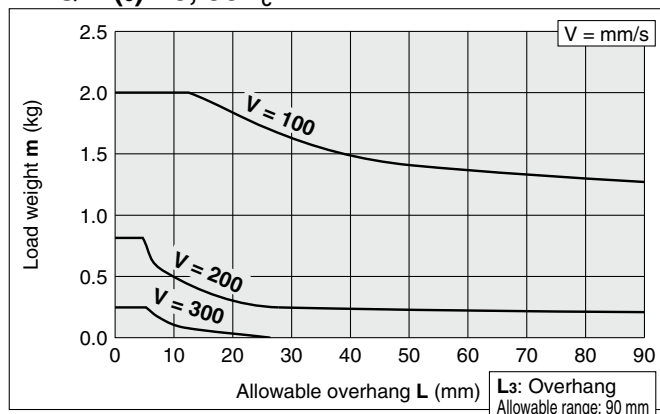
For Transfer/
Metal Stopper with Bumper

Determine the overhang. (Refer to page 93 for details.)
 L₁, L₂: Check from the cross point of the load weight and driving speed.
 L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

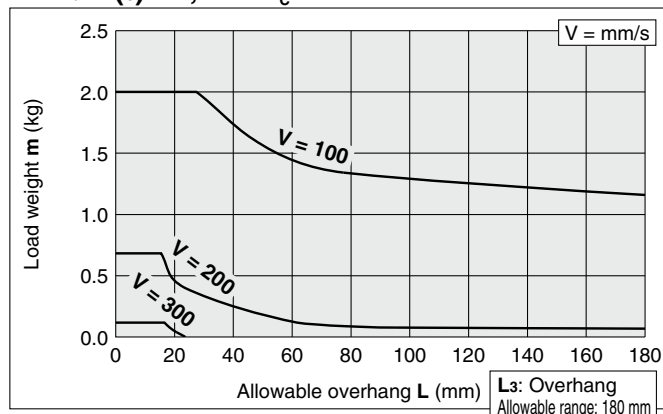
MXQ12(Δ)-10, 20, 30Z^A_{BC}



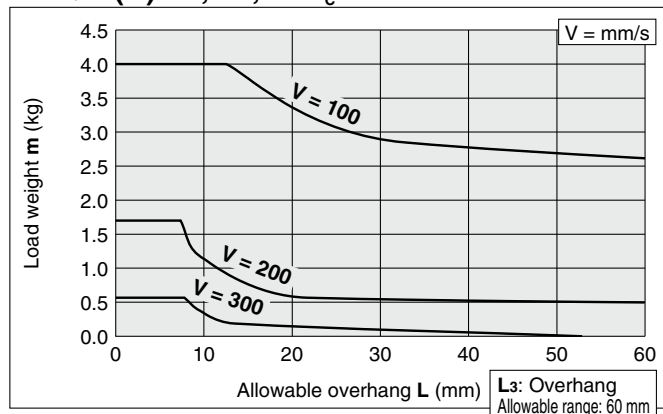
MXQ12(Δ)-40, 50Z^A_{BC}



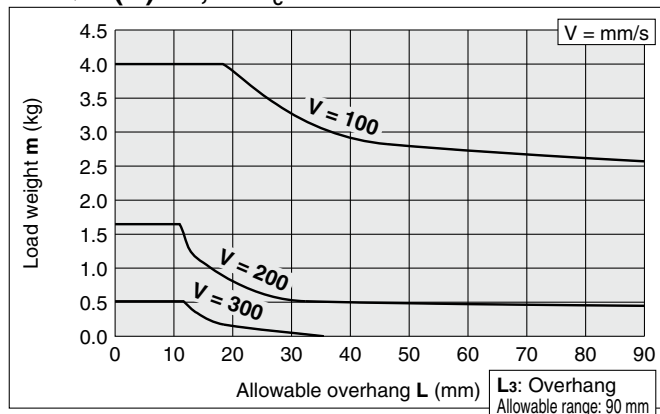
MXQ12(Δ)-75, 100Z^A_{BC}



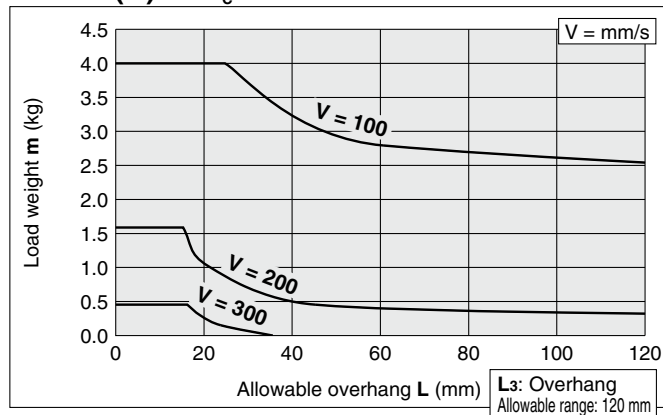
MXQ16(A)-10, 20, 30Z^A_{BC}



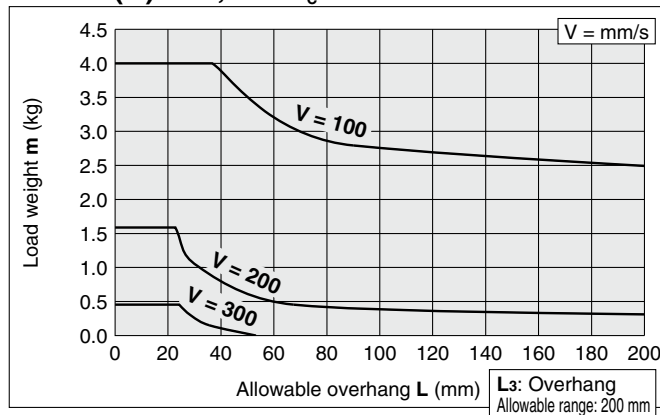
MXQ16(A)-40, 50Z^A_{BC}



MXQ16(A)-75Z^A_{BC}



MXQ16(A)-100, 125Z^A_{BC}



Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

Auto Switch
Mounting

Made to Order

Model Selection

Series MXQ

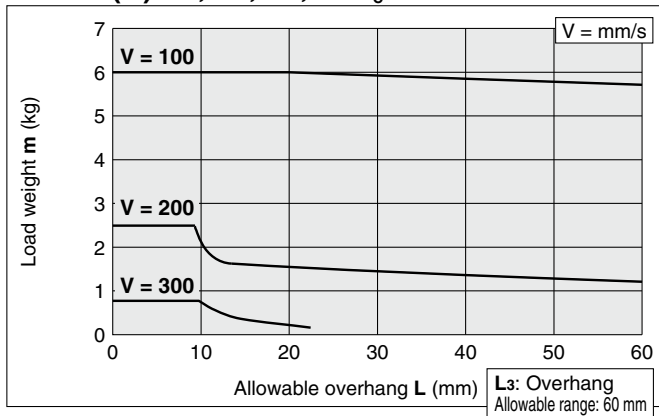
MXQ 20A-□Z^A_{BC}, MXQ 20-□Z^A_{BC} (interchangeable type)

MXQ 25A-□Z^A_{BC}, MXQ 25-□Z^A_{BC} (interchangeable type)

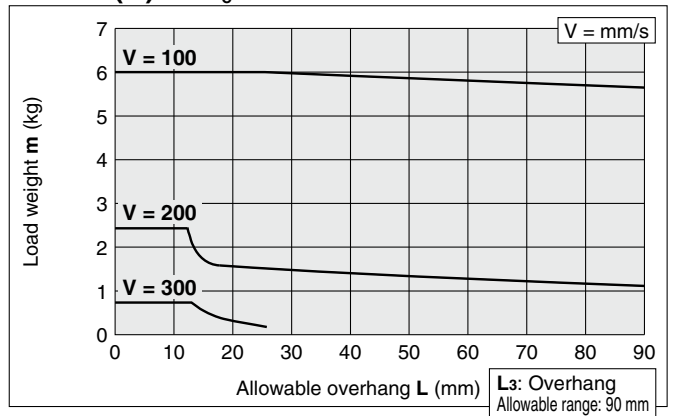
For Transfer/
Metal Stopper with Bumper

Determine the overhang. (Refer to page 93 for details.)
L₁, L₂: Check from the cross point of the load weight and driving speed.
L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

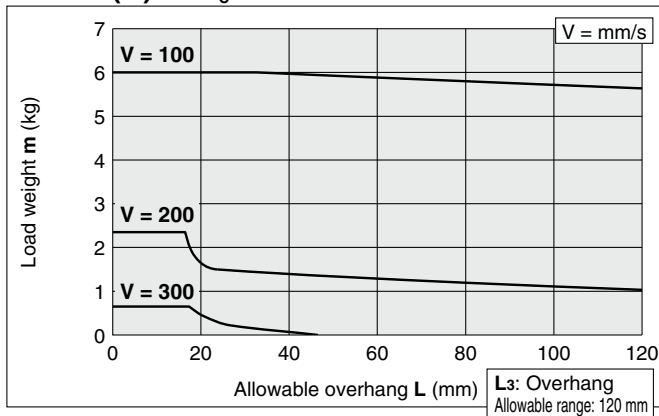
MXQ20(A)-10, 20, 30, 40Z^A_{BC}



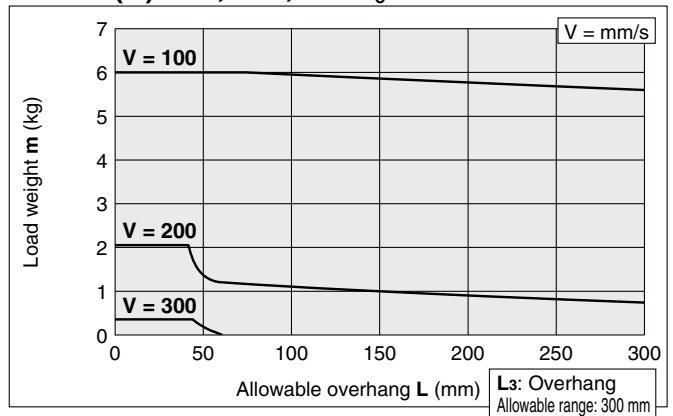
MXQ20(A)-50Z^A_{BC}



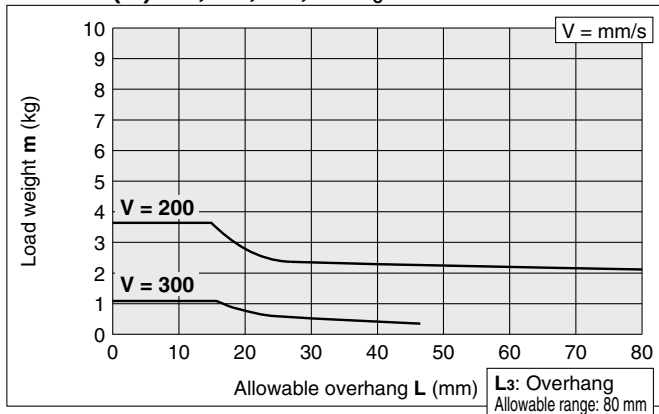
MXQ20(A)-75Z^A_{BC}



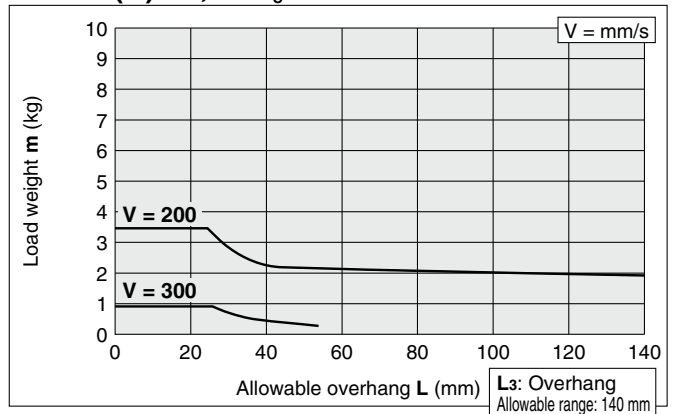
MXQ20(A)-100, 125, 150Z^A_{BC}



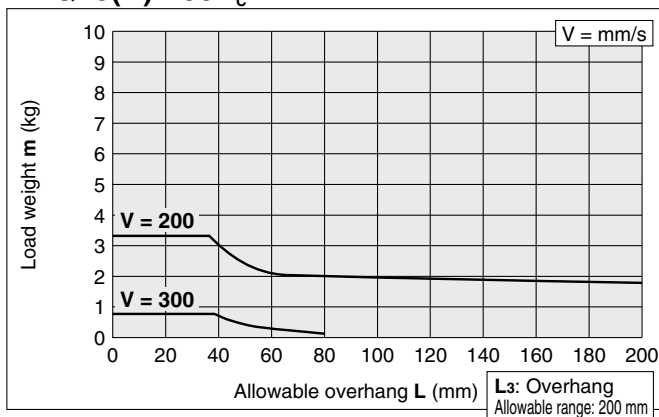
MXQ25(A)-10, 20, 30, 40Z^A_{BC}



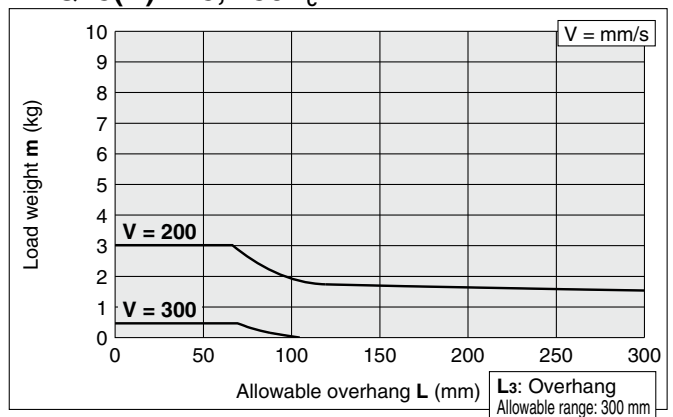
MXQ25(A)-50, 75Z^A_{BC}



MXQ25(A)-100Z^A_{BC}



MXQ25(A)-125, 150Z^A_{BC}



Model Selection	Made to Order	Auto Switch Mounting	Common Adjuster Options	Height interchangeable type MXQ□	Single side ported type MXQ□C	Low thrust with high rigidity type MXQ□B	Double ported type MXQ□A
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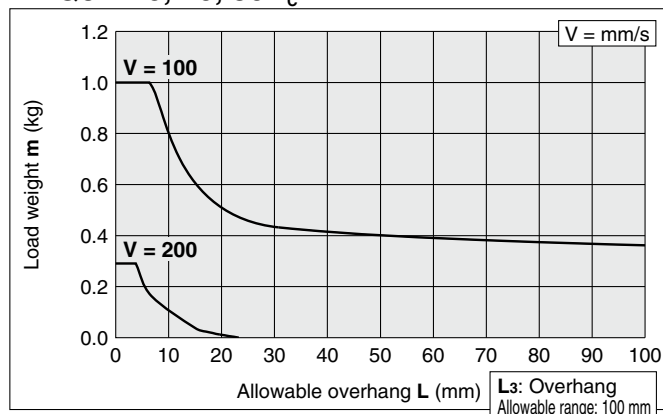
Series MXQ

MXQ 8B-□Z^A_{BC}, MXQ 12B-□Z^A_{BC}

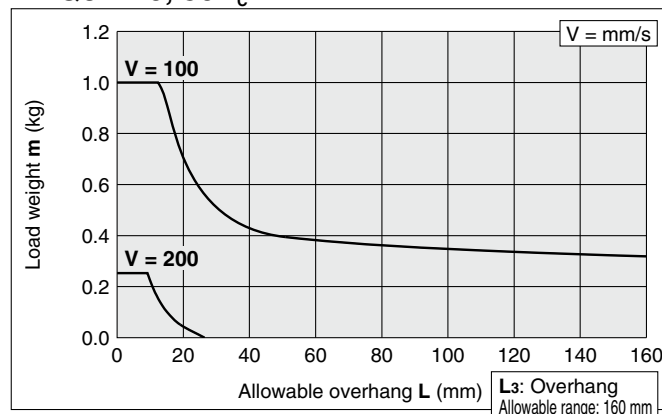
For Transfer/
Metal Stopper with Bumper

Determine the overhang. (Refer to page 93 for details.)
L₁, L₂: Check from the cross point of the load weight and driving speed.
L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

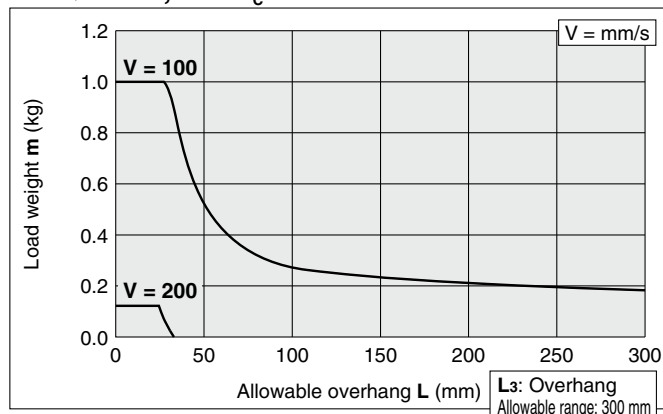
MXQ8B-10, 20, 30Z^A_{BC}



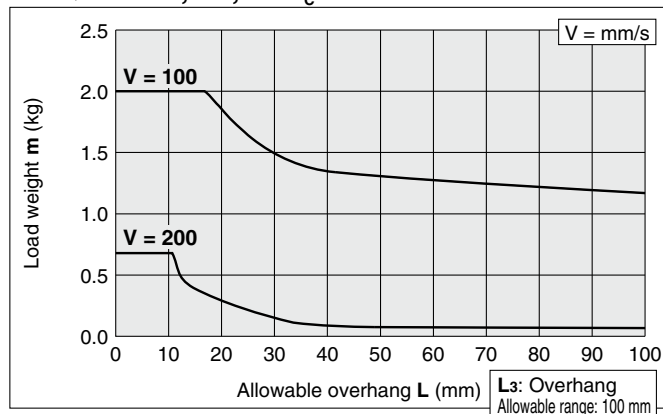
MXQ8B-40, 50Z^A_{BC}



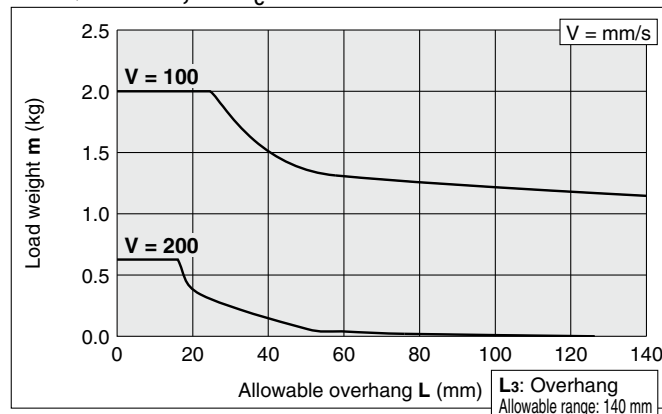
MXQ8B-75, 100Z^A_{BC}



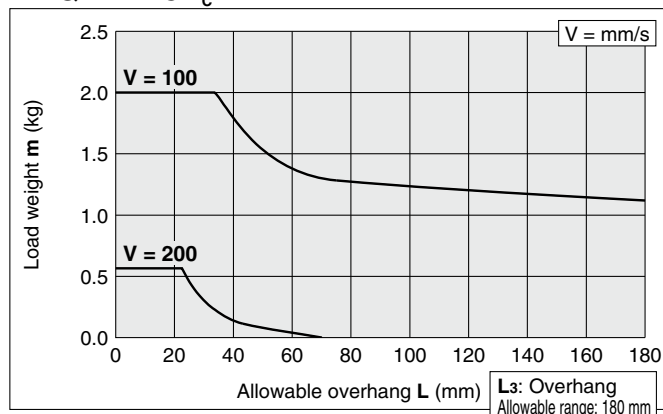
MXQ12B-10, 20, 30Z^A_{BC}



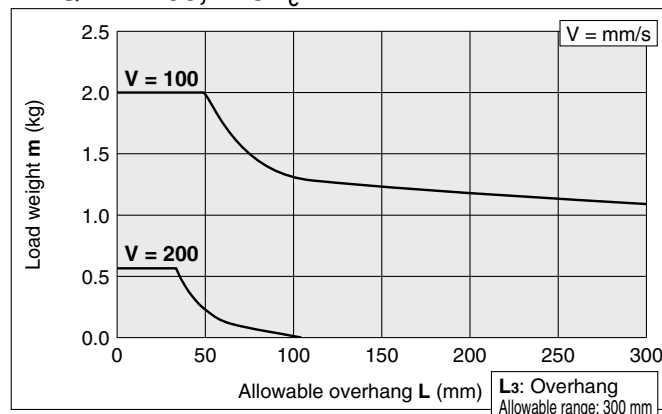
MXQ12B-40, 50Z^A_{BC}



MXQ12B-75Z^A_{BC}



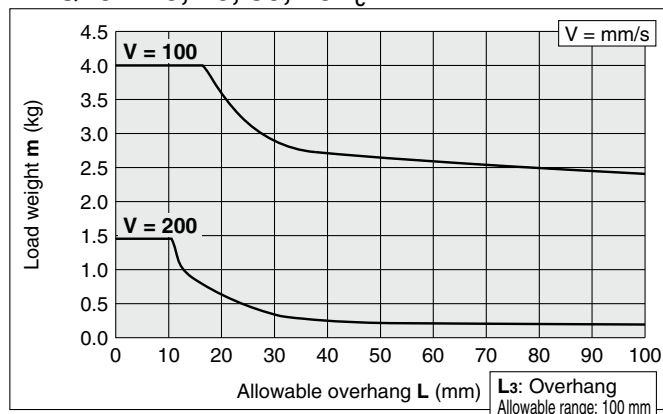
MXQ12B-100, 125Z^A_{BC}



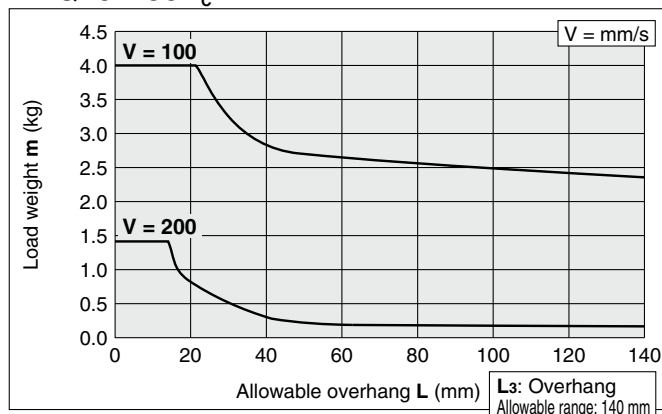
Determine the overhang. (Refer to page 93 for details.)
 L₁, L₂: Check from the cross point of the load weight and driving speed.
 L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

MXQ 16B-□Z^A_BC, MXQ 20B-□Z^A_BC / For Transfer/ Metal Stopper with Bumper

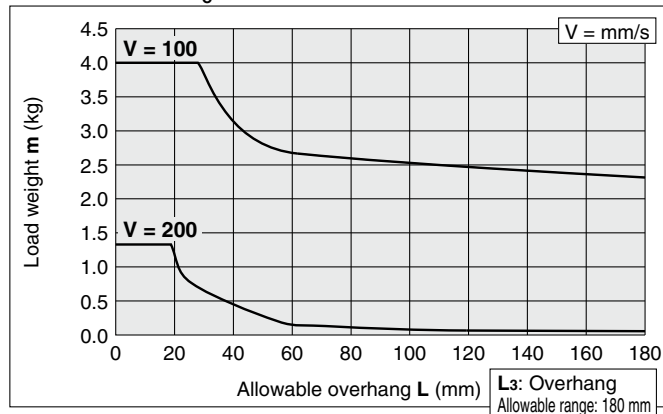
MXQ16B-10, 20, 30, 40Z^A_BC



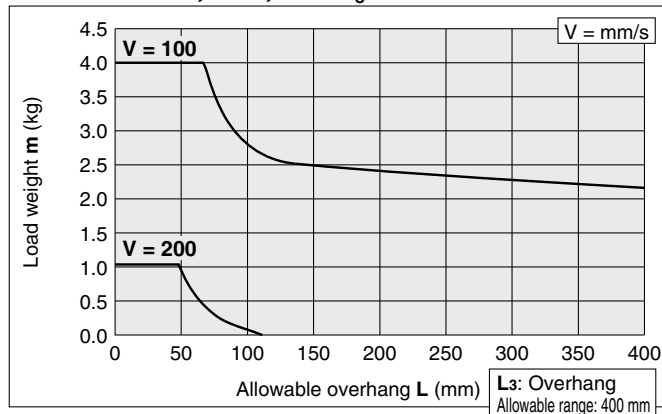
MXQ16B-50Z^A_BC



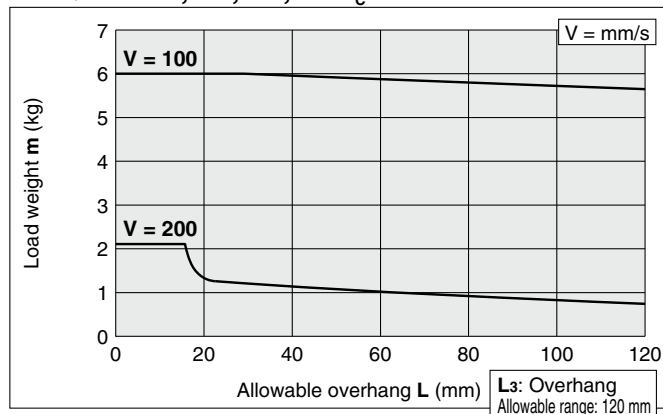
MXQ16B-75Z^A_BC



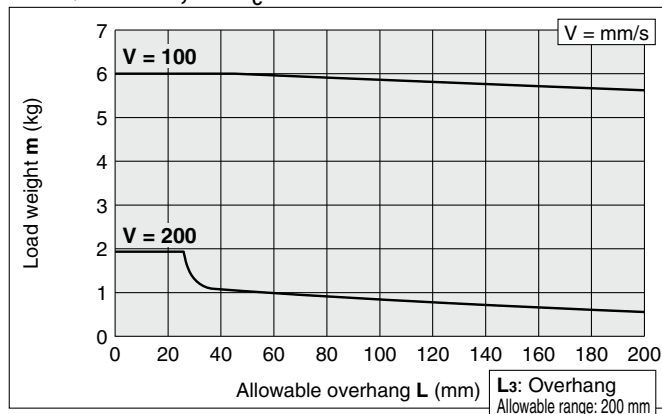
MXQ16B-100, 125, 150Z^A_BC



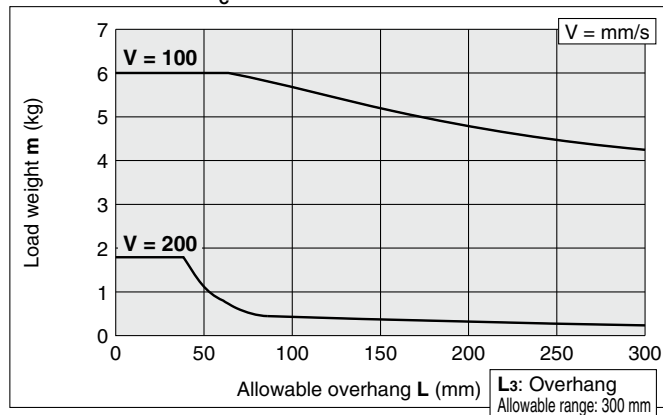
MXQ20B-10, 20, 30, 40Z^A_BC



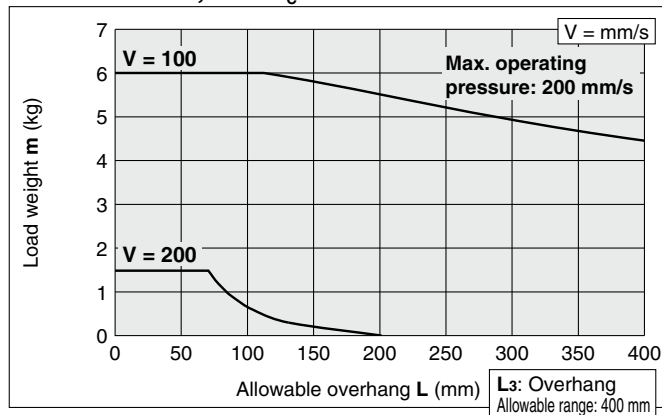
MXQ20B-50, 75Z^A_BC



MXQ20B-100Z^A_BC



MXQ20B-125, 150Z^A_BC



Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

Auto Switch
Mounting

Made to Order

Model Selection

Series MXQ

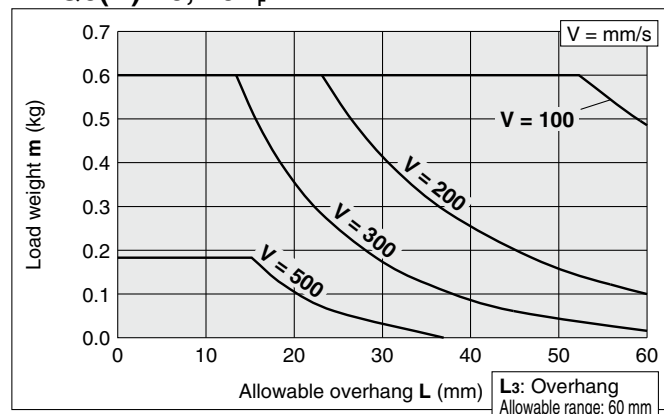
MXQ 6A-□Z_{FF}^D, MXQ 6-□Z_{FF}^D (Height interchangeable type)

MXQ 8^A_C-□Z_{FF}^D, MXQ 8-□Z_{FF}^D (Height interchangeable type)

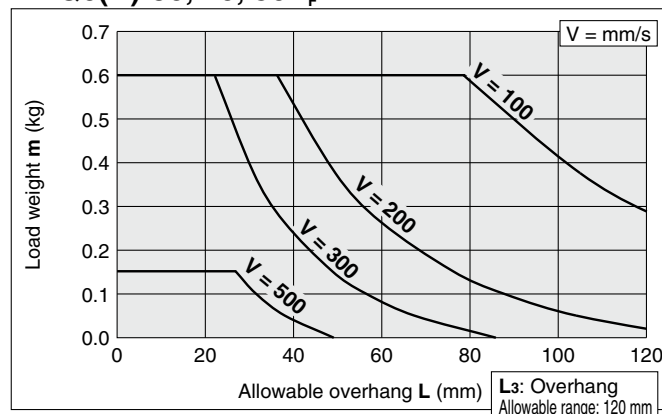
For Transfer/
Rubber Stopper

Determine the overhang. (Refer to page 93 for details.)
L₁, L₂: Check from the cross point of the load weight and driving speed.
L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

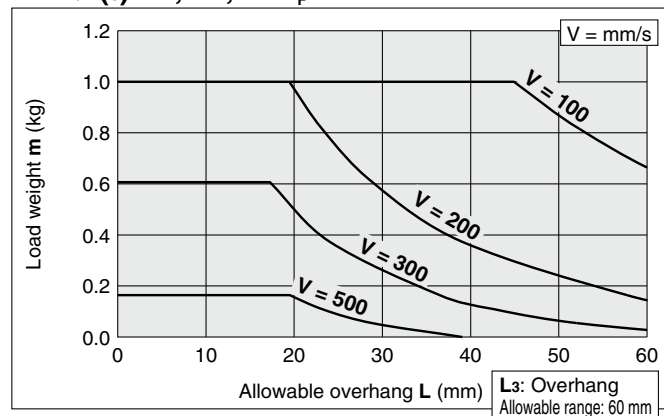
MXQ6(A)-10, 20Z_{FF}^D



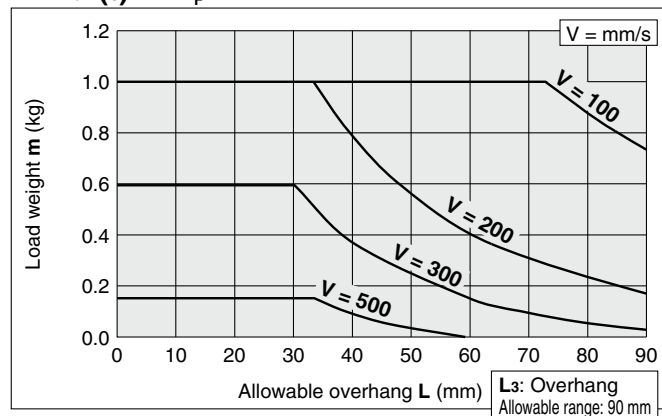
MXQ6(A)-30, 40, 50Z_{FF}^D



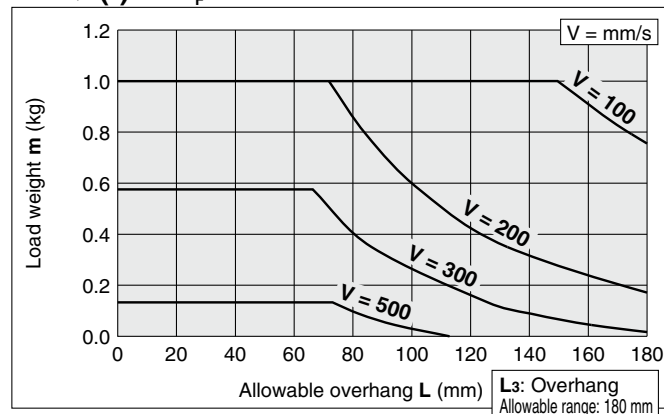
MXQ8(Δ)-10, 20, 30Z_{FF}^D



MXQ8(Δ)-40Z_{FF}^D



MXQ8(Δ)-50Z_{FF}^D

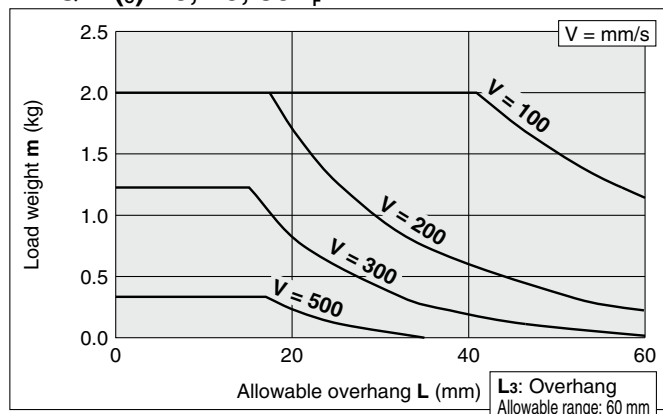


MXQ 12^A-□Z_{FF}^D, MXQ 12-□Z_{FF}^D (Height interchangeable type)
 MXQ 16A-□Z_{FF}^D, MXQ 16-□Z_{FF}^D (Height interchangeable type)

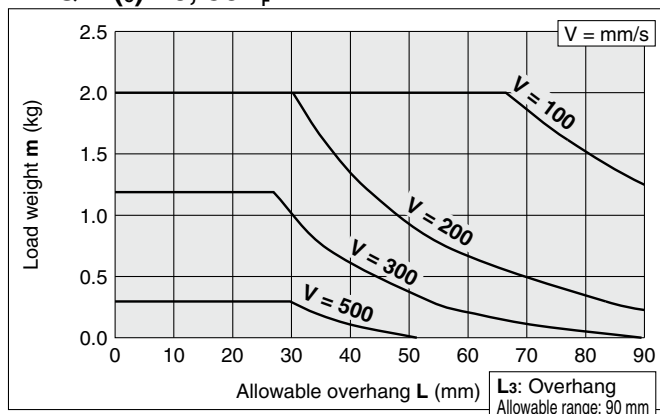
For Transfer/
Rubber Stopper

Determine the overhang. (Refer to page 93 for details.)
 L₁, L₂: Check from the cross point of the load weight and driving speed.
 L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

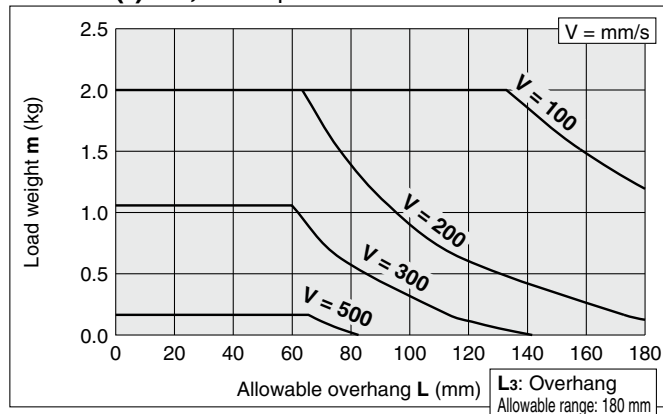
MXQ12(Δ)-10, 20, 30Z_{FF}^D



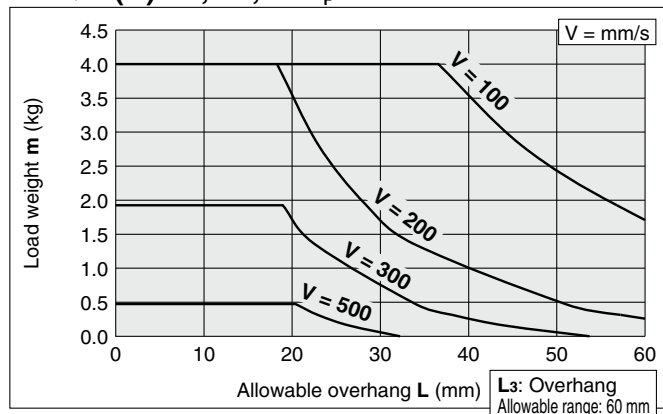
MXQ12(Δ)-40, 50Z_{FF}^D



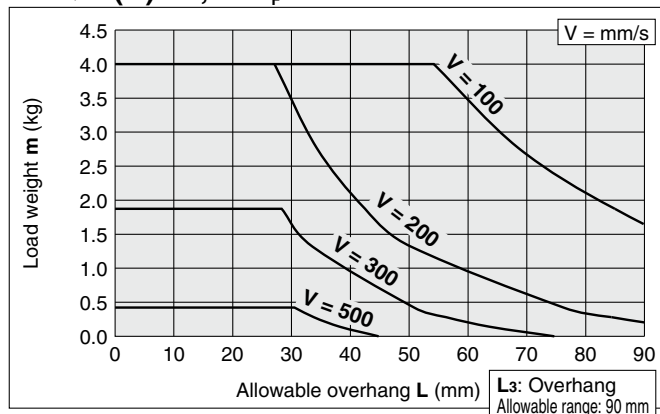
MXQ12(Δ)-75, 100Z_{FF}^D



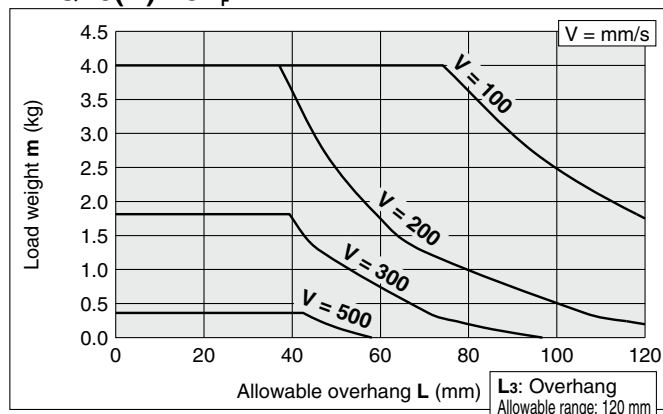
MXQ16(A)-10, 20, 30Z_{FF}^D



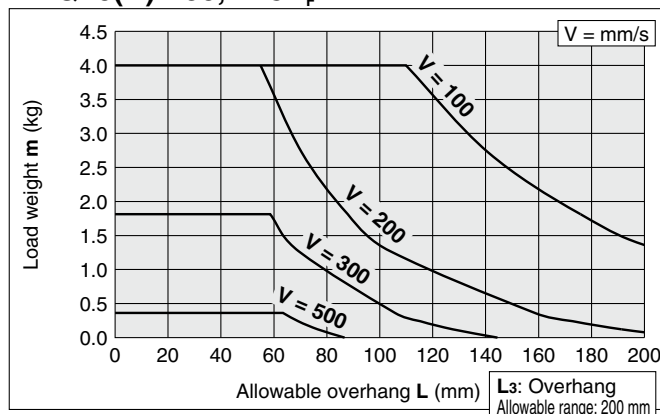
MXQ16(A)-40, 50Z_{FF}^D



MXQ16(A)-75Z_{FF}^D



MXQ16(A)-100, 125Z_{FF}^D



Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

Auto Switch
Mounting

Made to Order

Model Selection

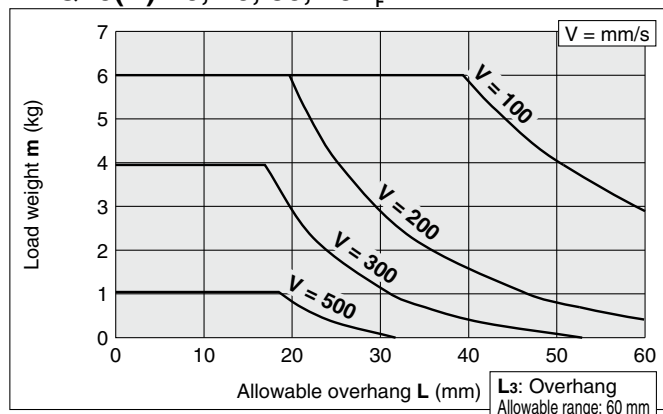
Series MXQ

MXQ 20A-□Z_{DEF}^D, MXQ 20-□Z_{DEF}^D (Height interchangeable type)
 MXQ 25A-□Z_{DEF}^D, MXQ 25-□Z_{DEF}^D (Height interchangeable type)

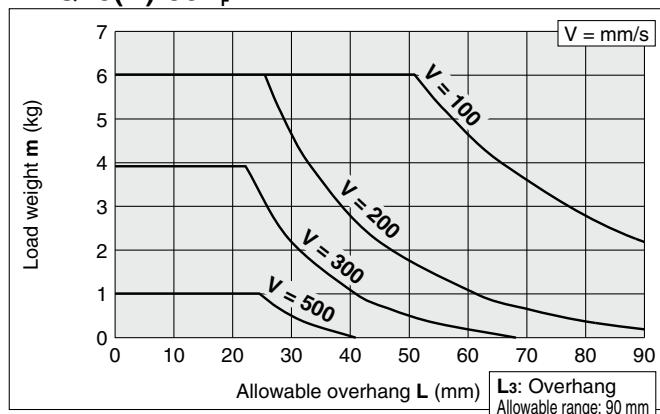
For Transfer/
Rubber Stopper

Determine the overhang. (Refer to page 93 for details.)
 L₁, L₂: Check from the cross point of the load weight and driving speed.
 L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

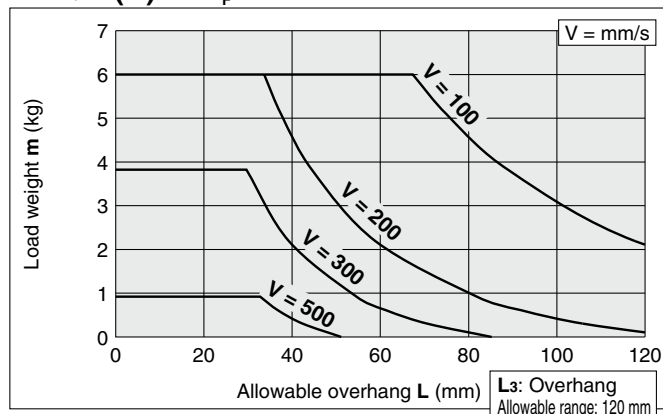
MXQ20(A)-10, 20, 30, 40Z_{DEF}^D



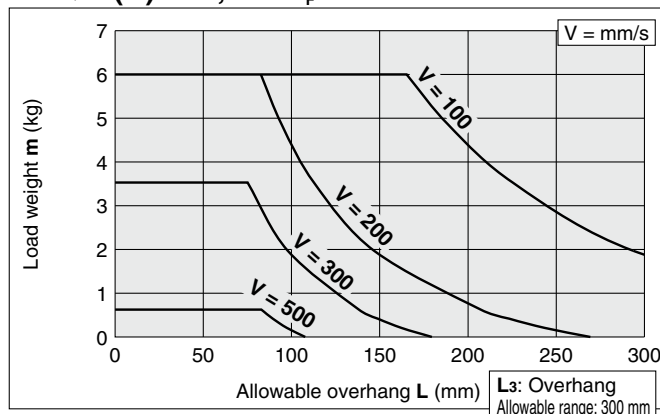
MXQ20(A)-50Z_{DEF}^D



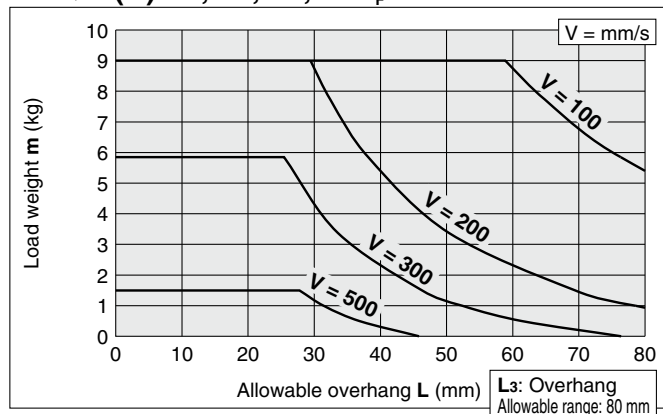
MXQ20(A)-75Z_{DEF}^D



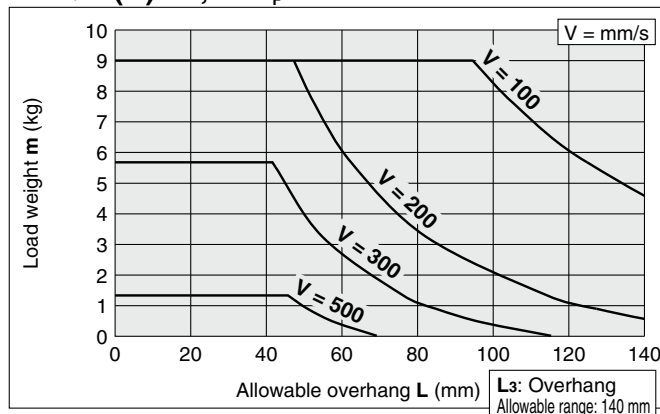
MXQ20(A)-100, 150Z_{DEF}^D



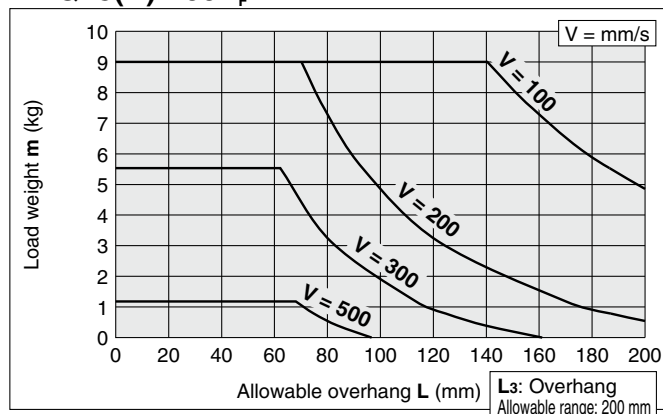
MXQ25(A)-10, 20, 30, 40Z_{DEF}^D



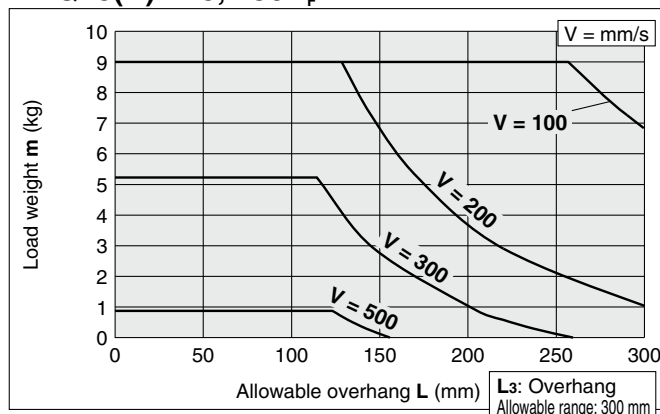
MXQ25(A)-50, 75Z_{DEF}^D



MXQ25(A)-100Z_{DEF}^D



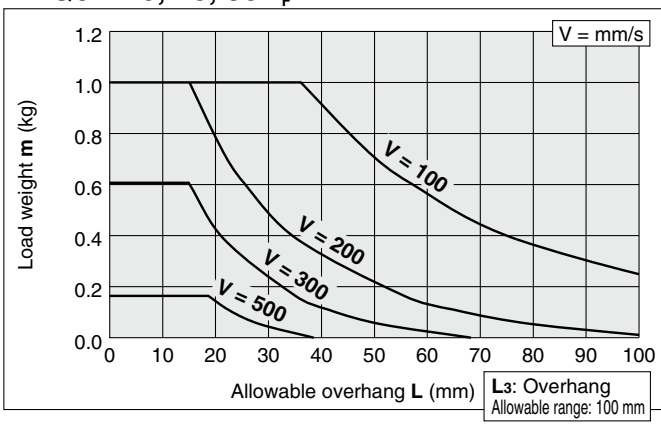
MXQ25(A)-125, 150Z_{DEF}^D



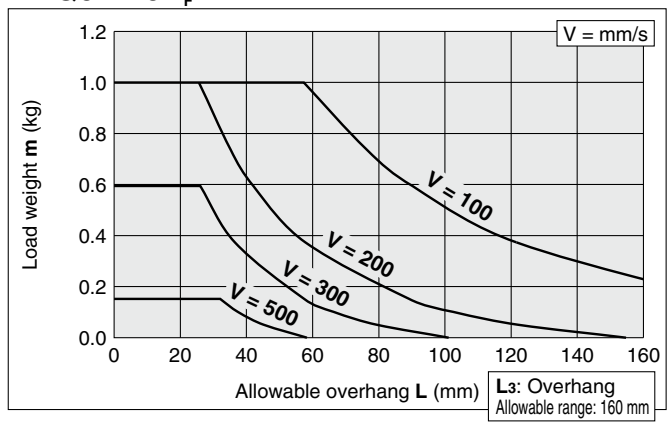
Determine the overhang. (Refer to page 93 for details.)
L₁, L₂: Check from the cross point of the load weight and driving speed.
L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

MXQ 6B-□Z_{DEF}/For Transfer/Rubber Stopper

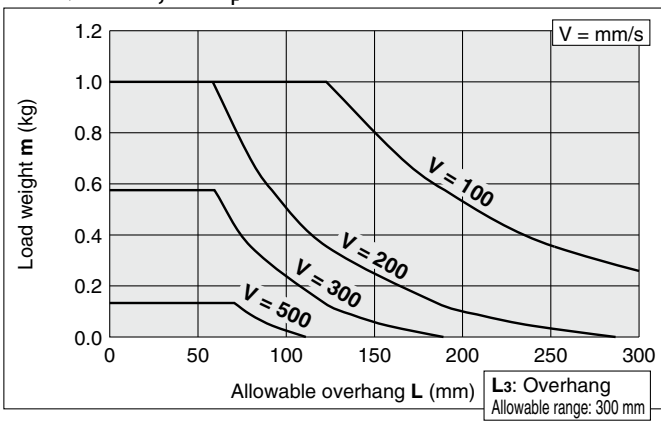
MXQ6B-10, 20, 30Z_{DEF}



MXQ6B-40Z_{DEF}



MXQ6B-50, 75Z_{DEF}



Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

Made to Order

Model Selection

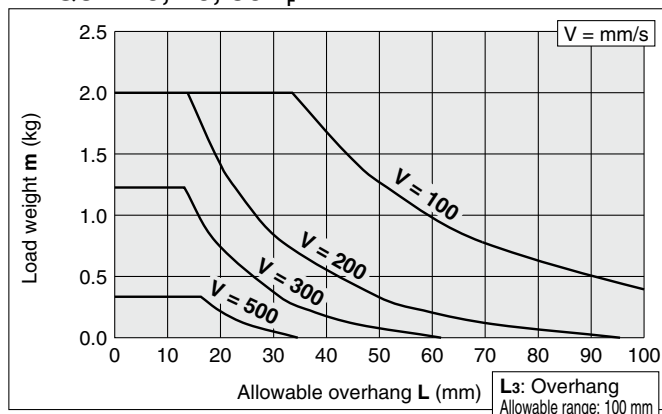
Series MXQ

MXQ 8B-□Z^D_{FF}, MXQ 12B-□Z^D_{FF}

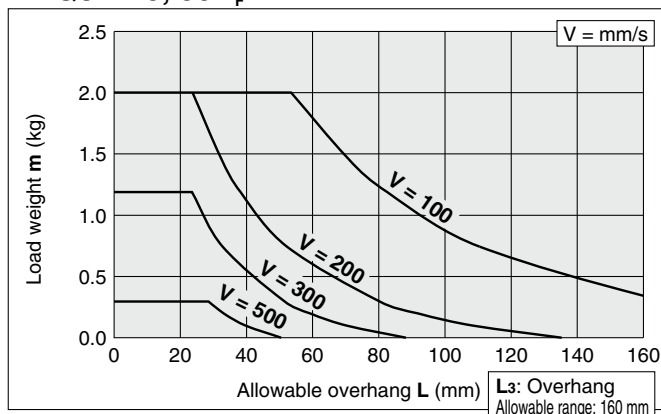
For Transfer/
Rubber Stopper

Determine the overhang. (Refer to page 93 for details.)
L₁, L₂: Check from the cross point of the load weight and driving speed.
L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

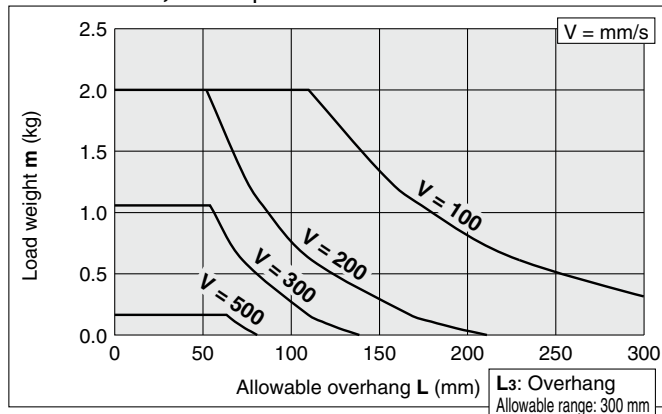
MXQ8B-10, 20, 30Z^D_{FF}



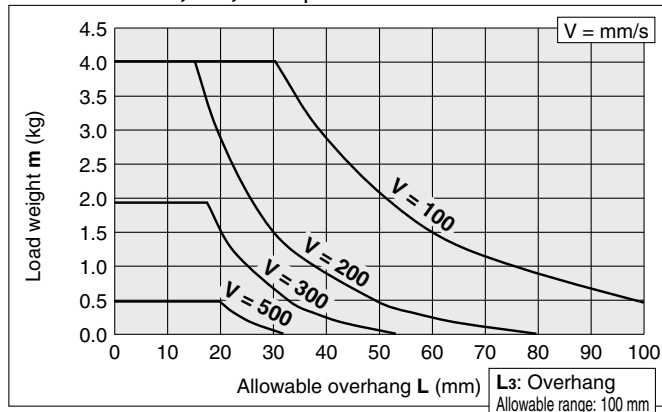
MXQ8B-40, 50Z^D_{FF}



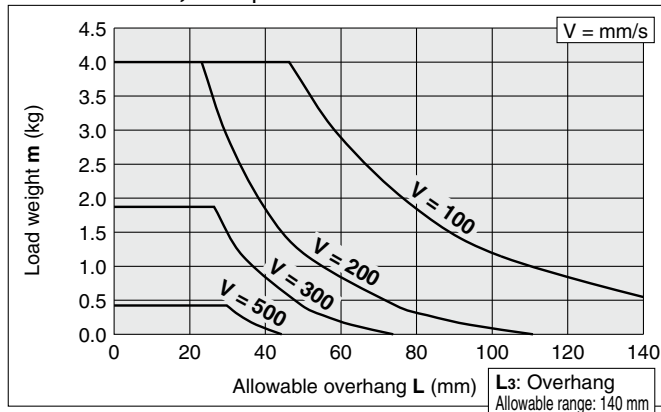
MXQ8B-75, 100Z^D_{FF}



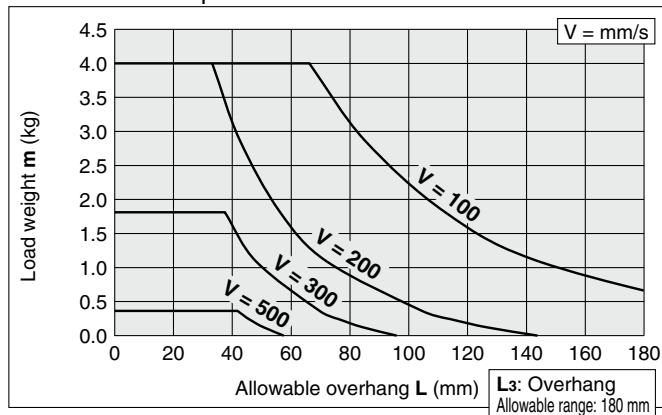
MXQ12B-10, 20, 30Z^D_{FF}



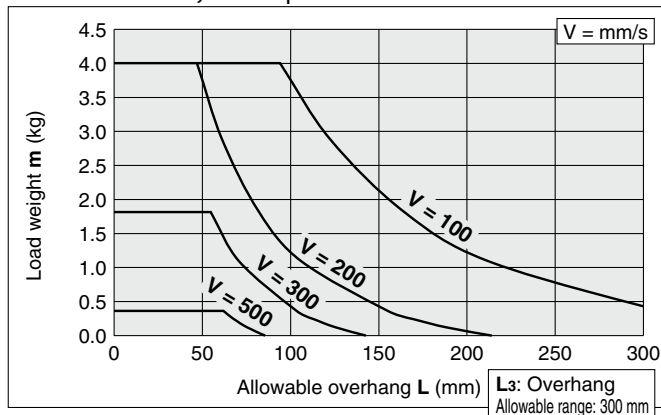
MXQ12B-40, 50Z^D_{FF}



MXQ12B-75Z^D_{FF}



MXQ12B-100, 125Z^D_{FF}

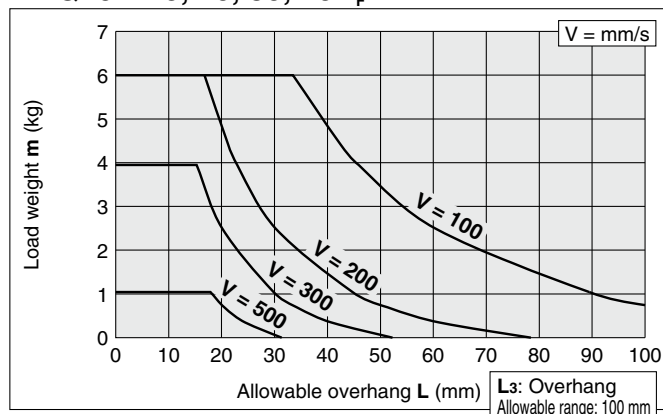


MXQ 16B-□Z^D_{rm}, MXQ 20B-□Z^D_{rm}

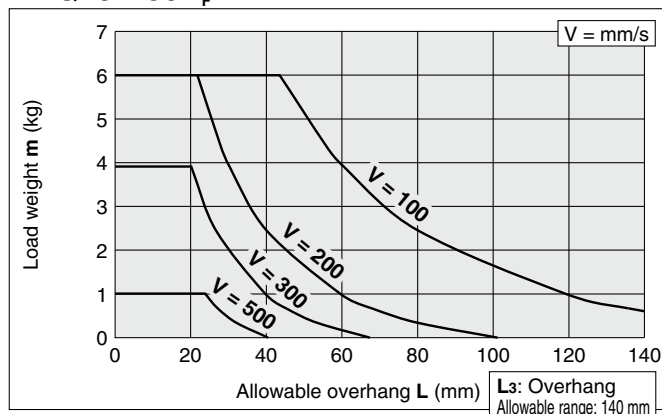
For Transfer/
Rubber Stopper

Determine the overhang. (Refer to page 93 for details.)
L₁, L₂: Check from the cross point of the load weight and driving speed.
L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

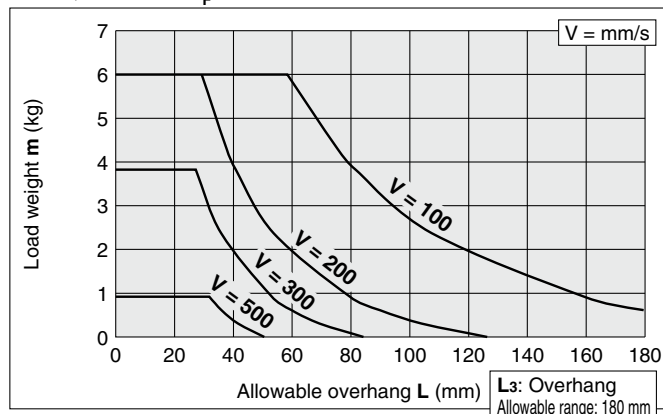
MXQ16B-10, 20, 30, 40Z^D_{rm}



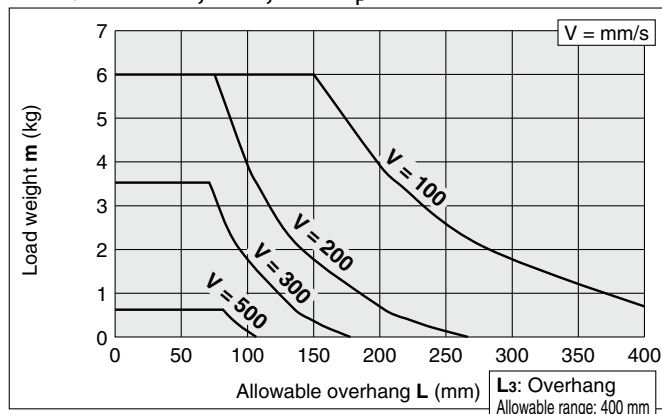
MXQ16B-50Z^D_{rm}



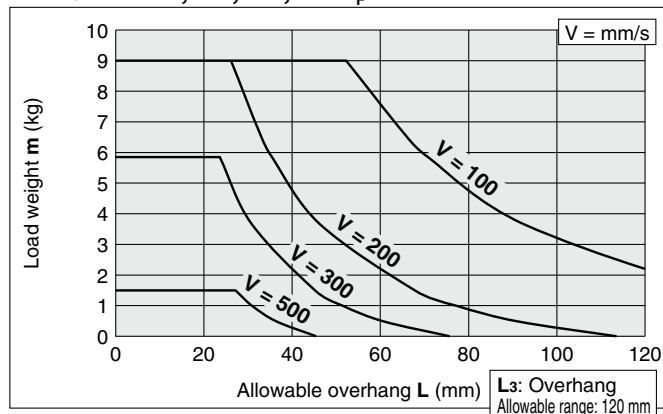
MXQ16B-75Z^D_{rm}



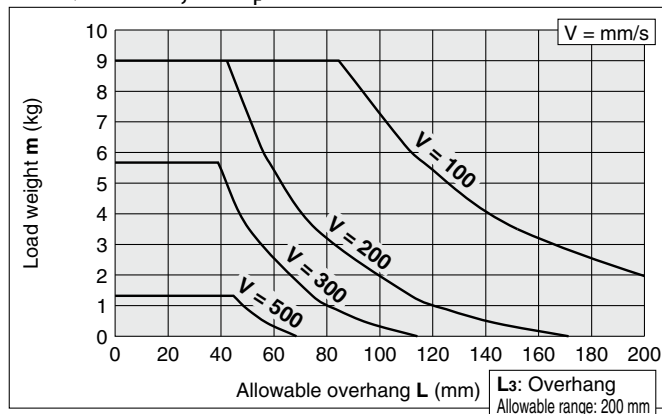
MXQ16B-100, 125, 150Z^D_{rm}



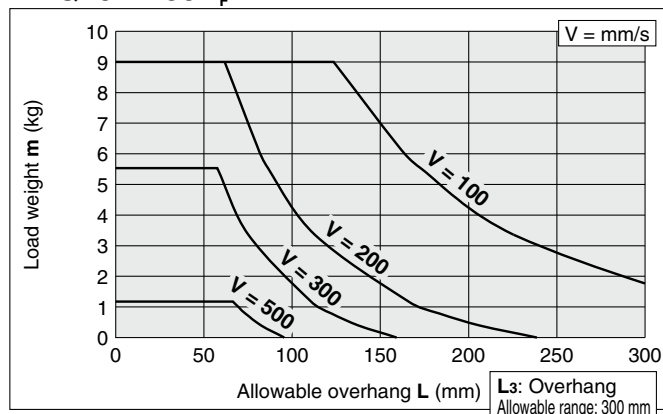
MXQ20B-10, 20, 30, 40Z^D_{rm}



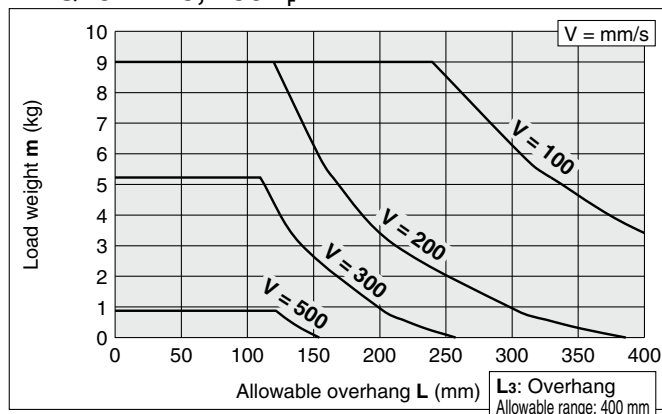
MXQ20B-50, 75Z^D_{rm}



MXQ20B-100Z^D_{rm}



MXQ20B-125, 150Z^D_{rm}



Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

Auto Switch
Mounting

Made to Order

Model Selection

Series MXQ

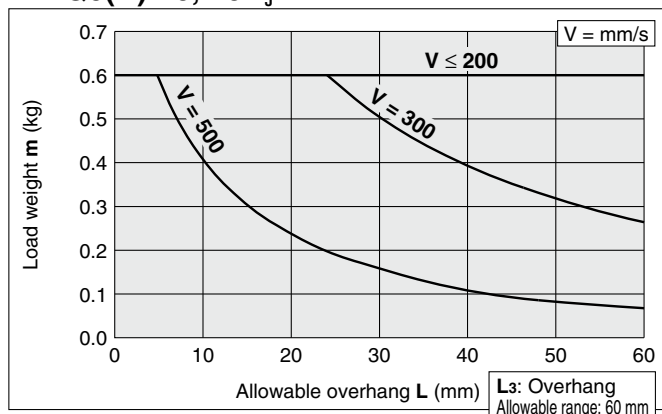
MXQ 6A-□Z_{HJ}^G, MXQ 6-□Z_{HJ}^G (Height interchangeable type)

MXQ 8^A_C-□Z_{HJ}^G, MXQ 8-□Z_{HJ}^G (Height interchangeable type)

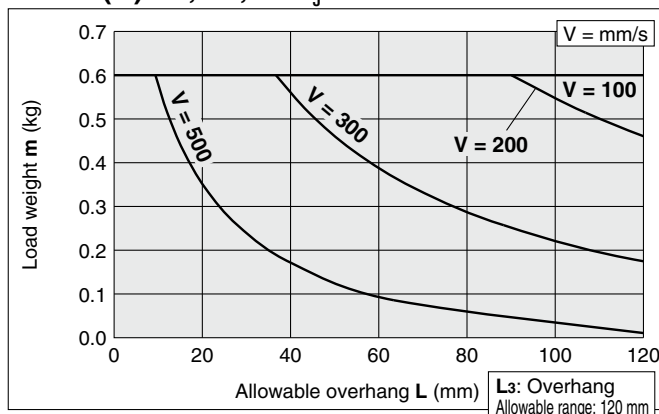
For Transfer/
Shock Absorber (RJ)

Determine the overhang. (Refer to page 93 for details.)
L₁, L₂: Check from the cross point of the load weight and driving speed.
L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

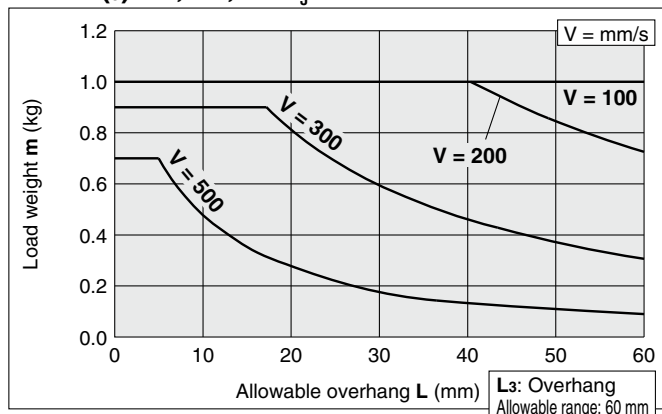
MXQ6(A)-10, 20Z_{HJ}^G



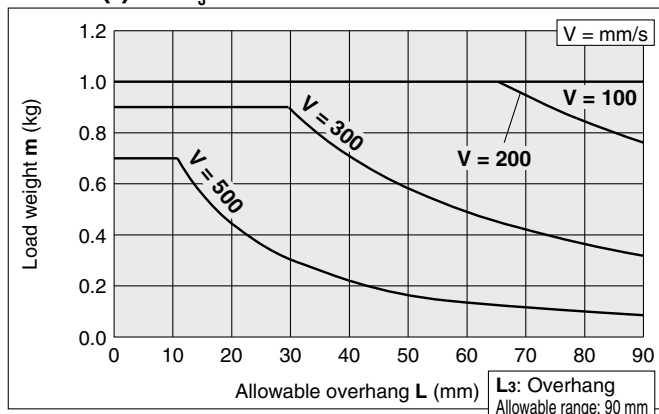
MXQ6(A)-30, 40, 50Z_{HJ}^G



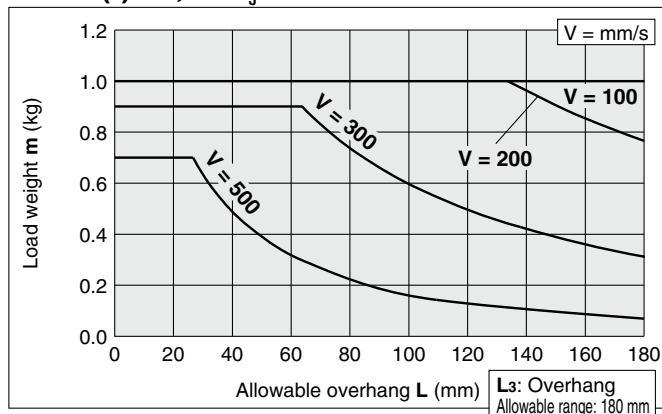
MXQ8(A)-10, 20, 30Z_{HJ}^G



MXQ8(A)-40Z_{HJ}^G



MXQ8(A)-50, 75Z_{HJ}^G

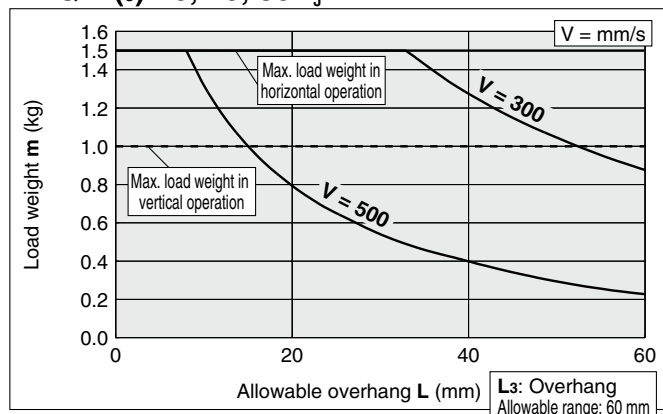


MXQ 12^A_C-□Z^G_{HJ}, MXQ 12-□Z^G_{HJ} (Height interchangeable type)
 MXQ 16A-□Z^G_{HJ}, MXQ 16-□Z^G_{HJ} (Height interchangeable type)

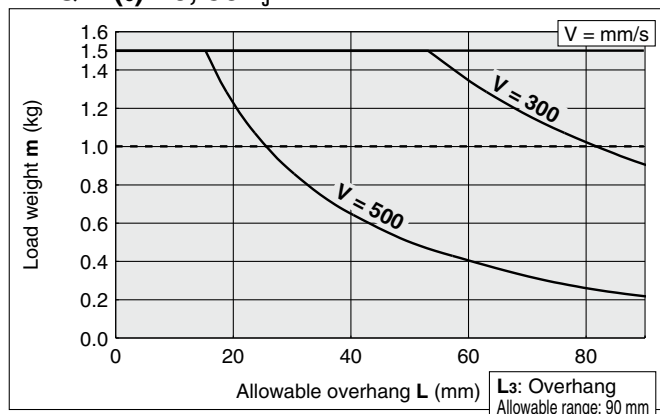
For Transfer/
Shock Absorber (RJ)

Determine the overhang. (Refer to page 93 for details.)
 L₁, L₂: Check from the cross point of the load weight and driving speed.
 L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

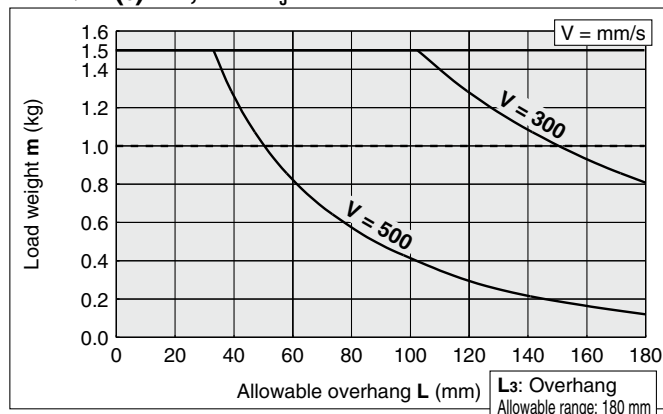
MXQ12(Ⓐ)-10, 20, 30Z^G_{HJ}



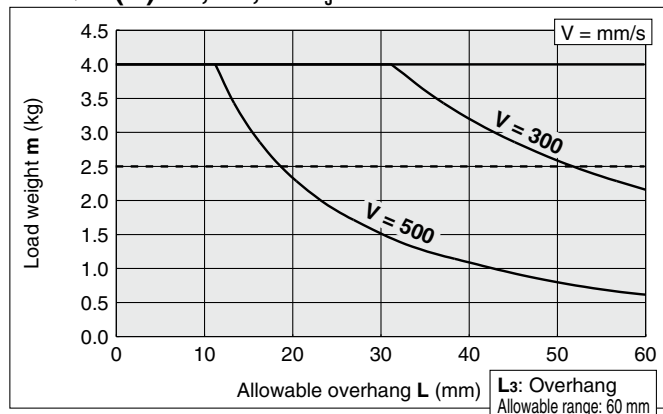
MXQ12(Ⓐ)-40, 50Z^G_{HJ}



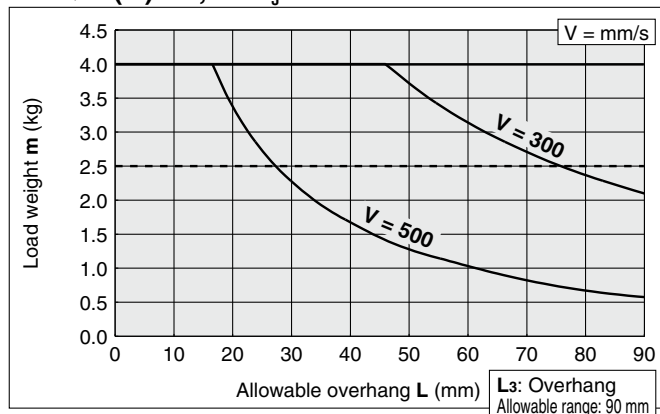
MXQ12(Ⓐ)-75, 100Z^G_{HJ}



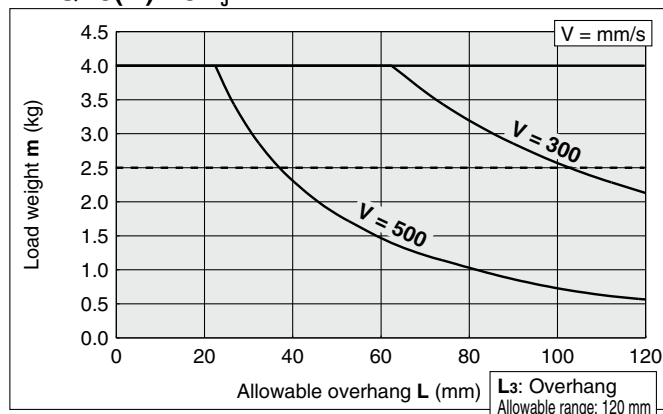
MXQ16(A)-10, 20, 30Z^G_{HJ}



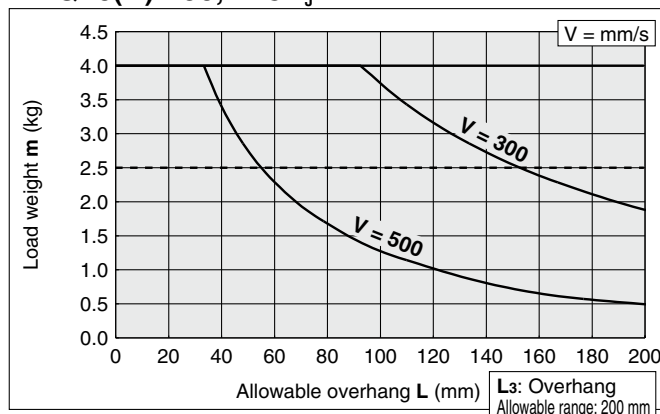
MXQ16(A)-40, 50Z^G_{HJ}



MXQ16(A)-75Z^G_{HJ}



MXQ16(A)-100, 125Z^G_{HJ}



Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

Auto Switch
Mounting

Made to Order

Model Selection

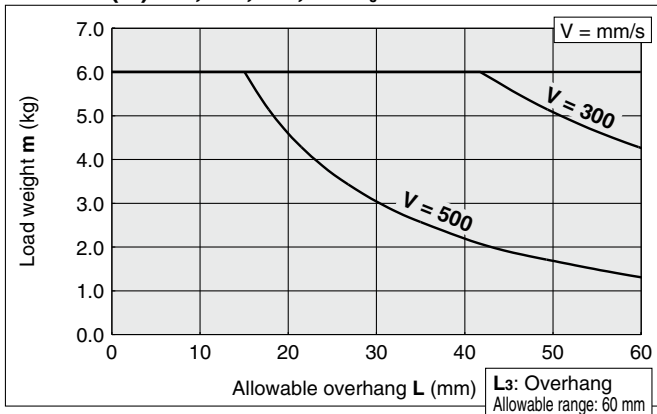
Series MXQ

MXQ 20A-□Z^G_{HJ}, MXQ 20-□Z^G_{HJ} (interchangeable type)
 MXQ 25A-□Z^G_{HJ}, MXQ 25-□Z^G_{HJ} (interchangeable type)

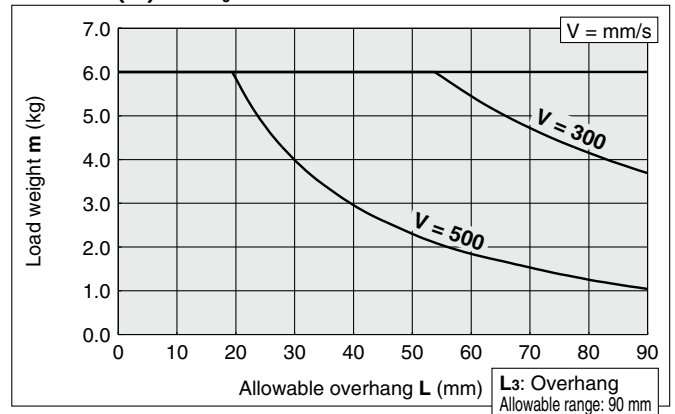
For Transfer/
Shock Absorber (RJ)

Determine the overhang. (Refer to page 93 for details.)
 L1, L2: Check from the cross point of the load weight and driving speed.
 L3: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

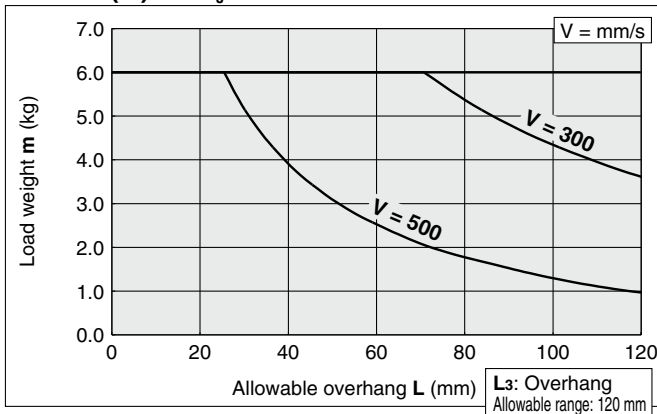
MXQ20(A)-10, 20, 30, 40Z^G_{HJ}



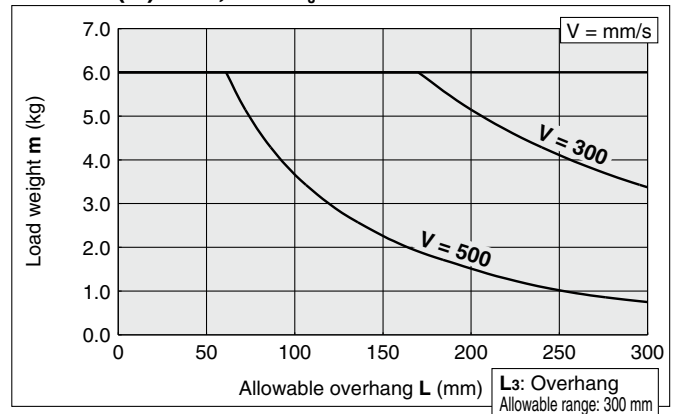
MXQ20(A)-50Z^G_{HJ}



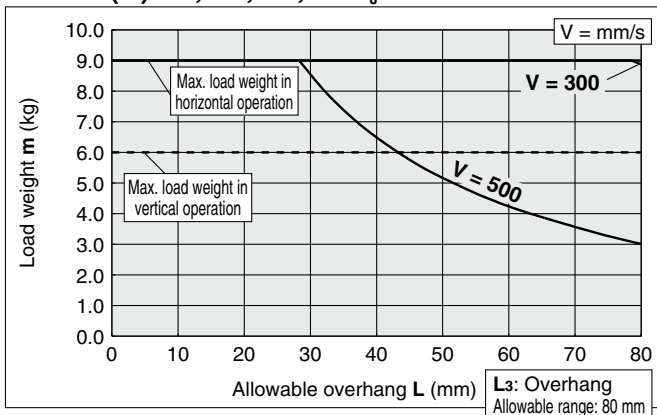
MXQ20(A)-75Z^G_{HJ}



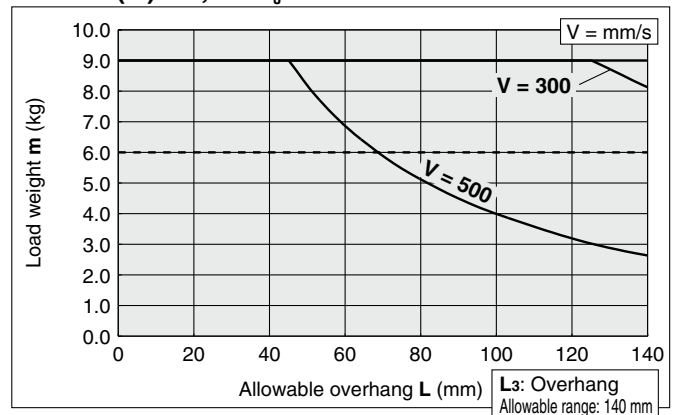
MXQ20(A)-100, 150Z^G_{HJ}



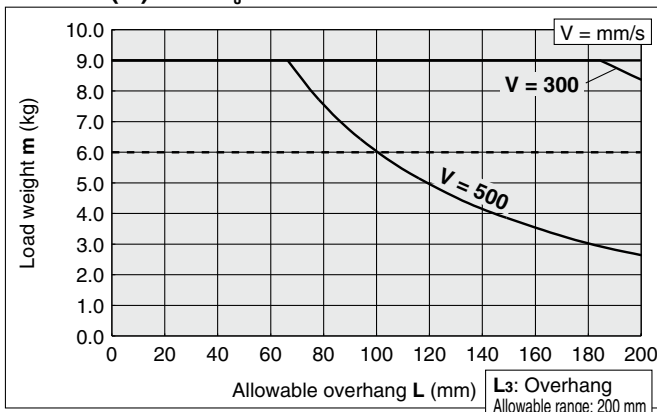
MXQ25(A)-10, 20, 30, 40Z^G_{HJ}



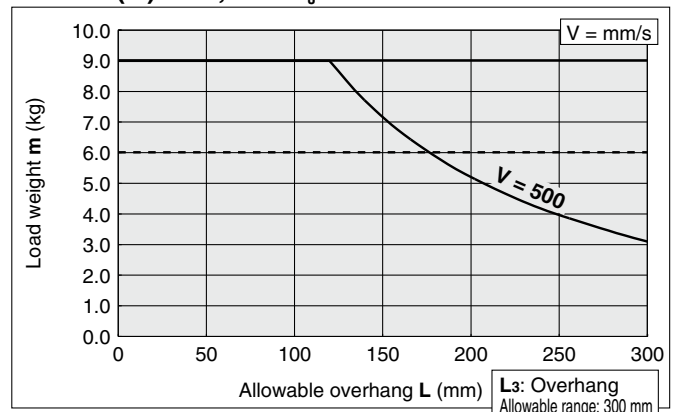
MXQ25(A)-50, 75Z^G_{HJ}



MXQ25(A)-100Z^G_{HJ}



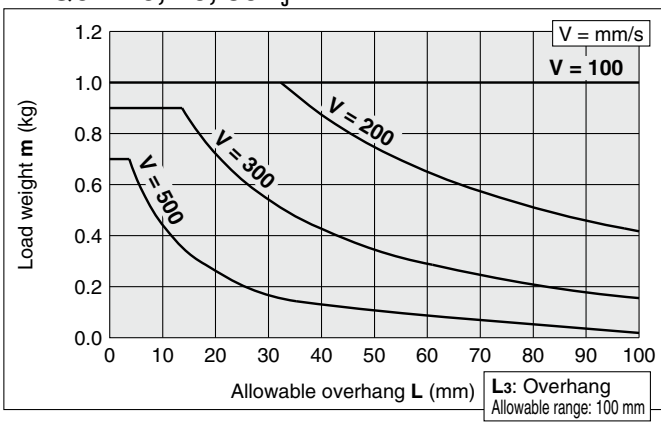
MXQ25(A)-125, 150Z^G_{HJ}



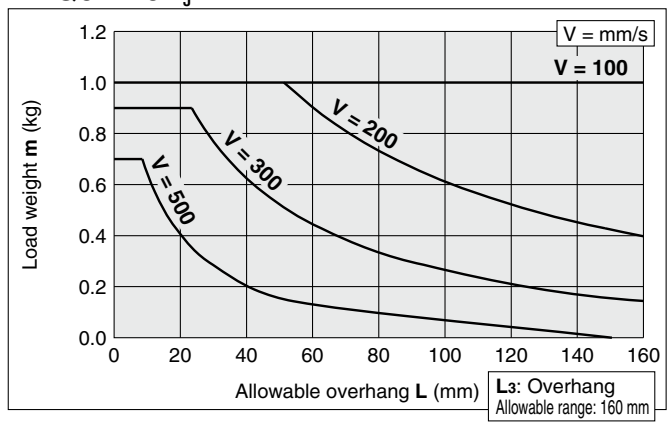
Determine the overhang. (Refer to page 93 for details.)
L₁, L₂: Check from the cross point of the load weight and driving speed.
L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

MXQ 6B-□Z^G_{HJ}/For Transfer/Shock Absorber (RJ)

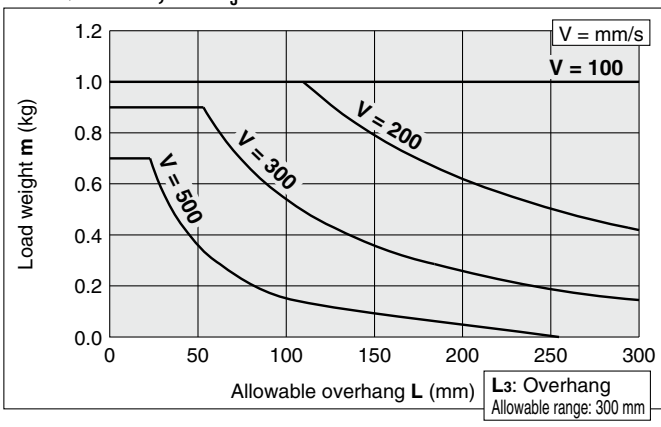
MXQ6B-10, 20, 30Z^G_{HJ}



MXQ6B-40Z^G_{HJ}



MXQ6B-50, 75Z^G_{HJ}



Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster Options

Auto Switch Mounting

Made to Order

Model Selection

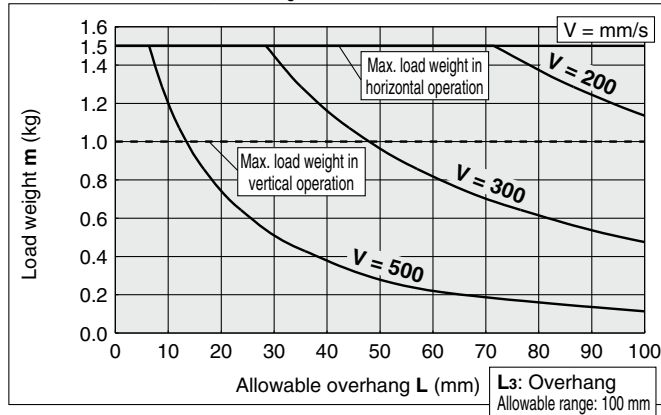
Series MXQ

MXQ 8B-□Z^G_{HJ}, MXQ 12B-□Z^G_{HJ}

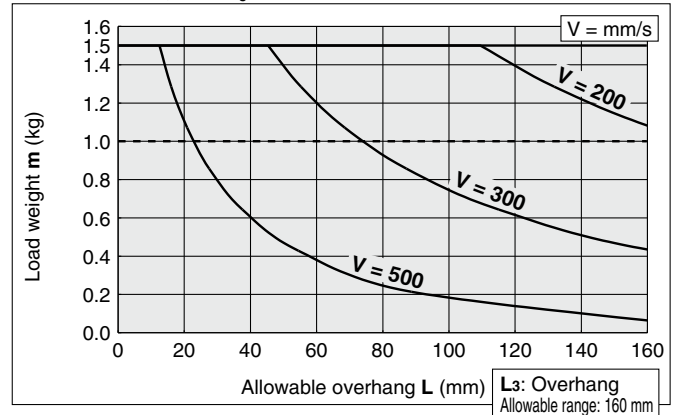
For Transfer/
Shock Absorber (RJ)

Determine the overhang. (Refer to page 93 for details.)
L₁, L₂: Check from the cross point of the load weight and driving speed.
L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

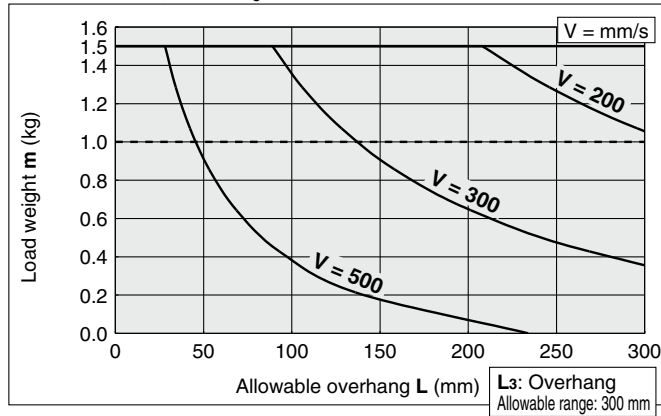
MXQ8B-10, 20, 30Z^G_{HJ}



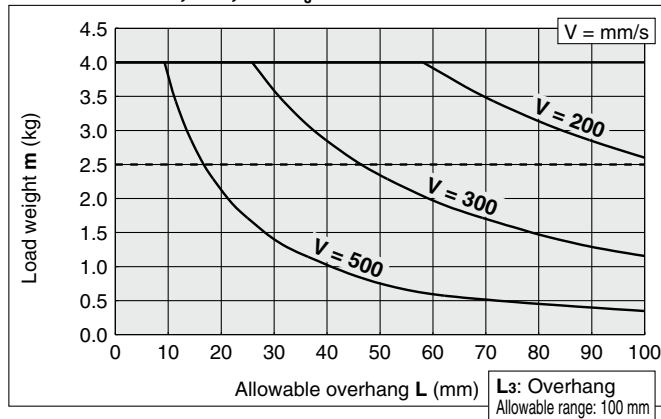
MXQ8B-40, 50Z^G_{HJ}



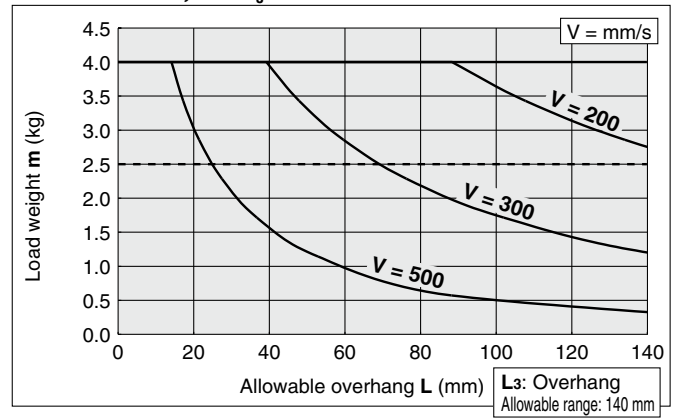
MXQ8B-75, 100Z^G_{HJ}



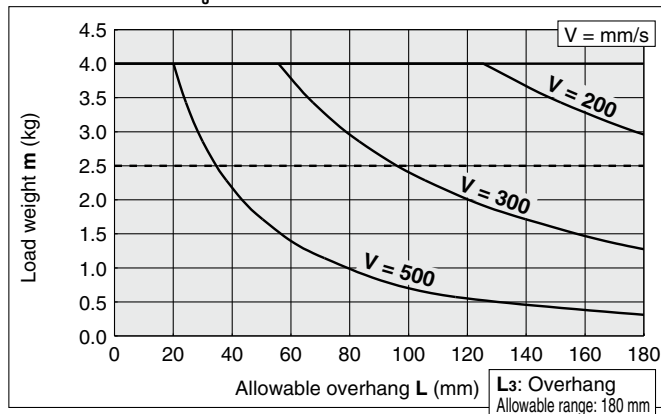
MXQ12B-10, 20, 30Z^G_{HJ}



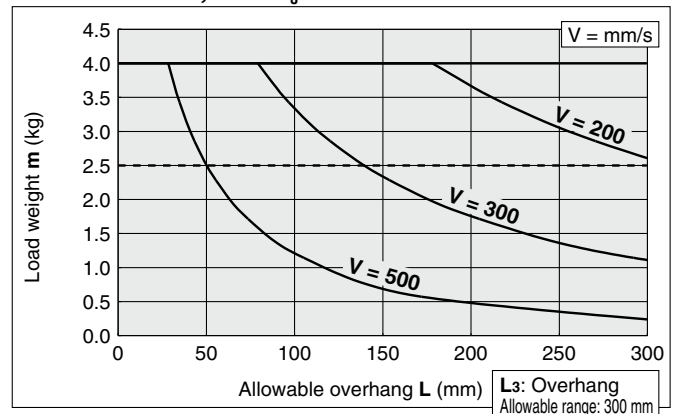
MXQ12B-40, 50Z^G_{HJ}



MXQ12B-75Z^G_{HJ}



MXQ12B-100, 125Z^G_{HJ}

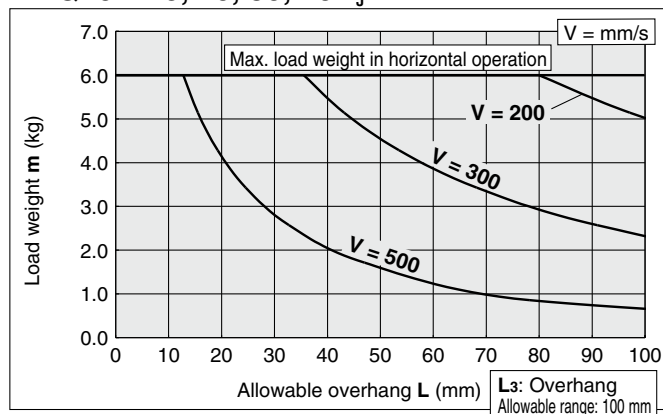


Determine the overhang. (Refer to page 93 for details.)
 L₁, L₂: Check from the cross point of the load weight and driving speed.
 L₃: Can be used within the "Allowable overhang range" in the selection graph if the load weight and driving speed values are within the allowable range.

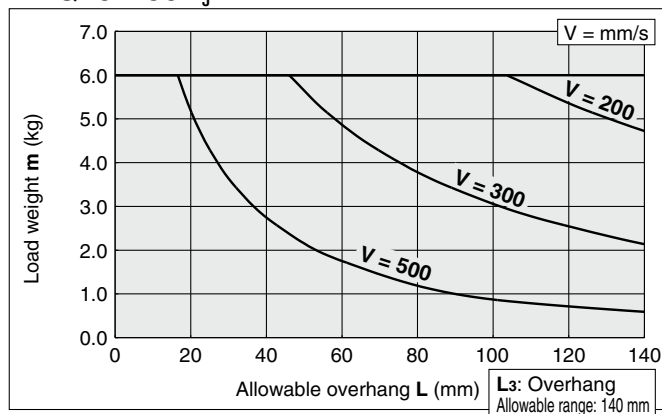
MXQ 16B-□Z^G_{HJ}, MXQ 20B-□Z^G_{HJ}

For Transfer/
Shock Absorber (RJ)

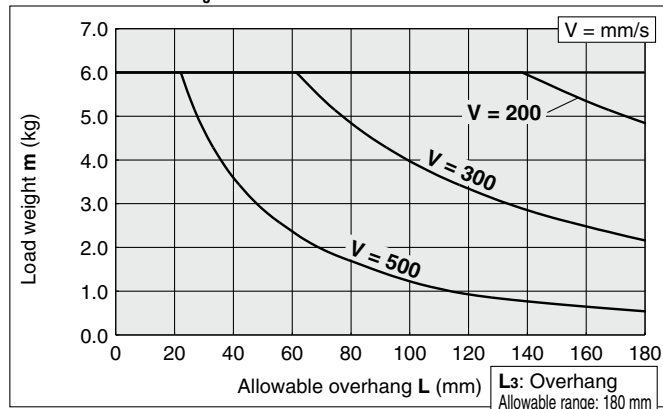
MXQ16B-10, 20, 30, 40Z^G_{HJ}



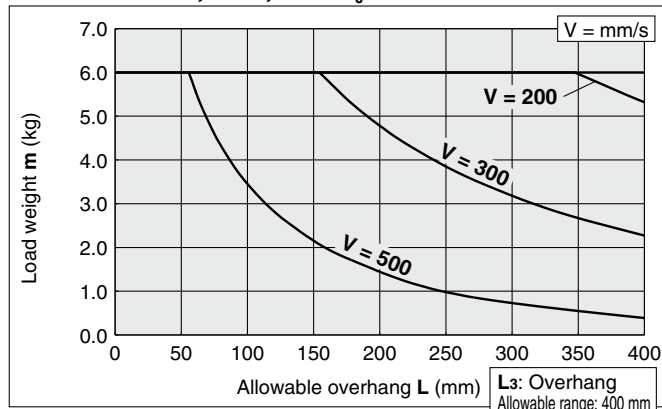
MXQ16B-50Z^G_{HJ}



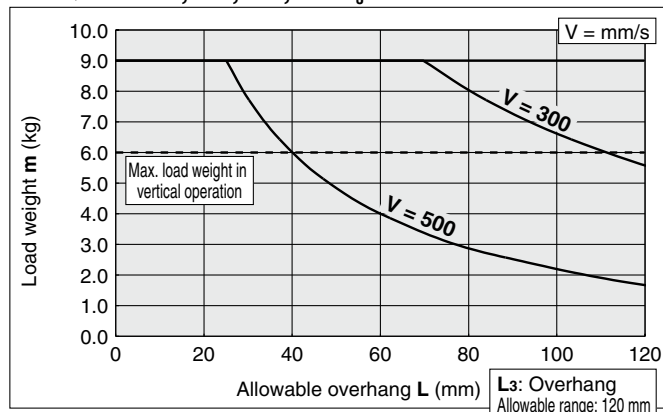
MXQ16B-75Z^G_{HJ}



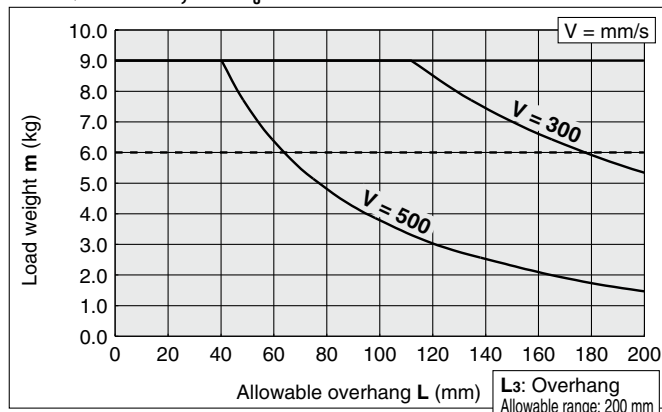
MXQ16B-100, 125, 150Z^G_{HJ}



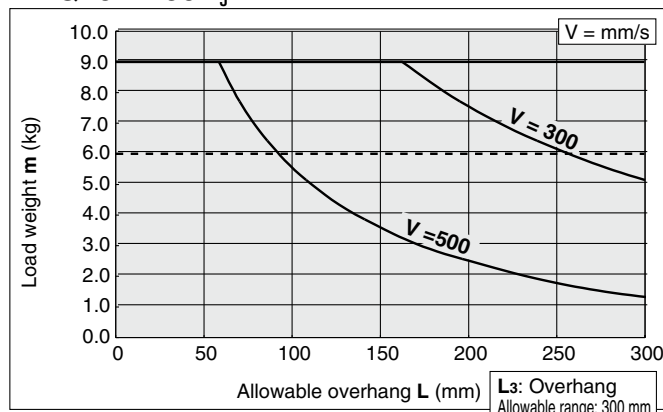
MXQ20B-10, 20, 30, 40Z^G_{HJ}



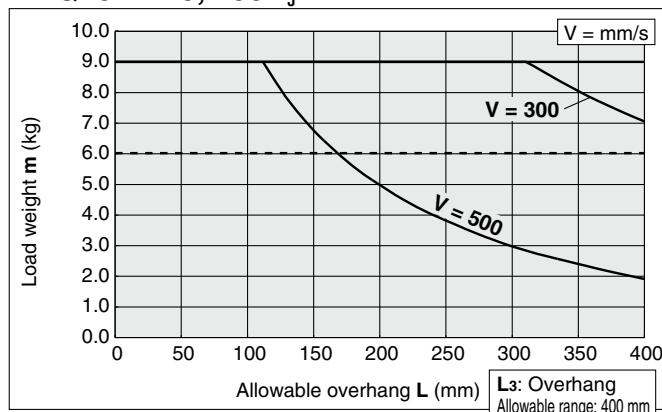
MXQ20B-50, 75Z^G_{HJ}



MXQ20B-100Z^G_{HJ}



MXQ20B-125, 150Z^G_{HJ}



Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

Auto Switch
Mounting

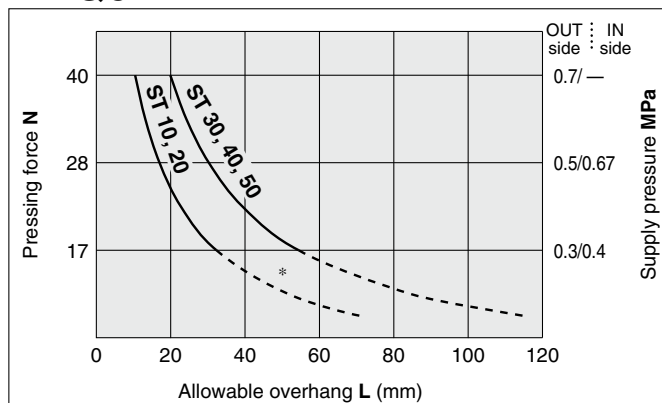
Made to Order

Model Selection

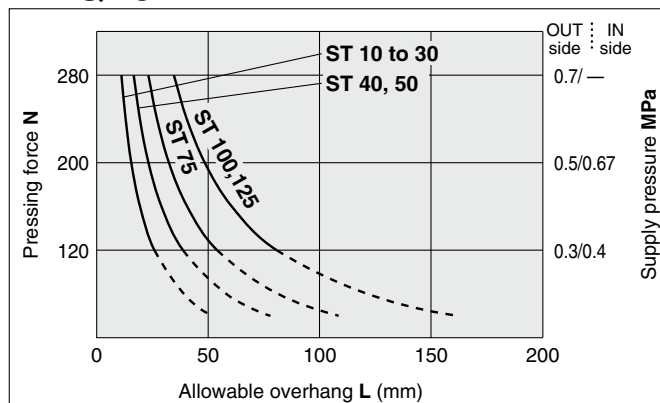
Double Ported Type, Single Side Ported Type, Height Interchangeable Type/For Pressing

Determine the overhang. (Refer to page 94 for details.)
L₁, L₂: Check from the cross point of the pressing force and driving speed.

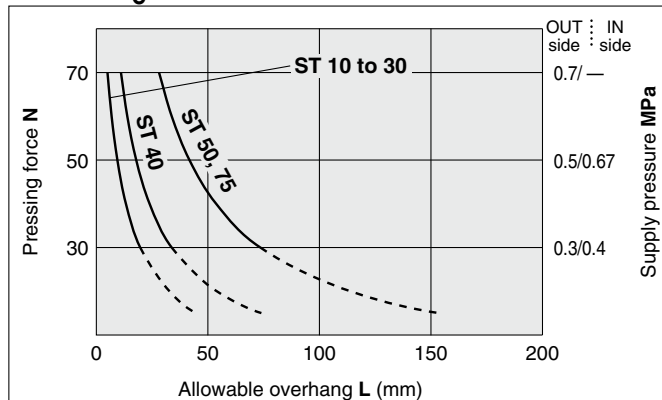
MXQ6A-□Z



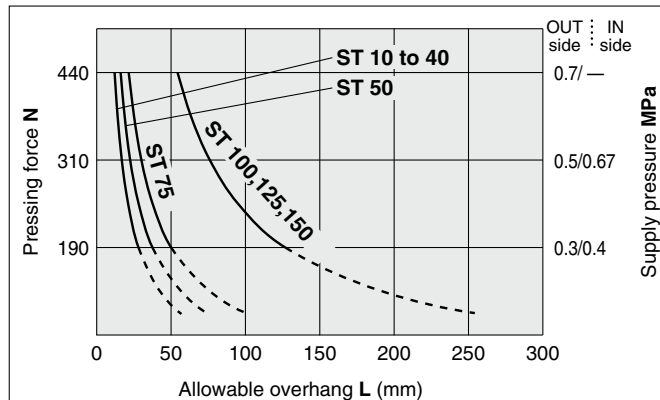
MXQ16A-□Z



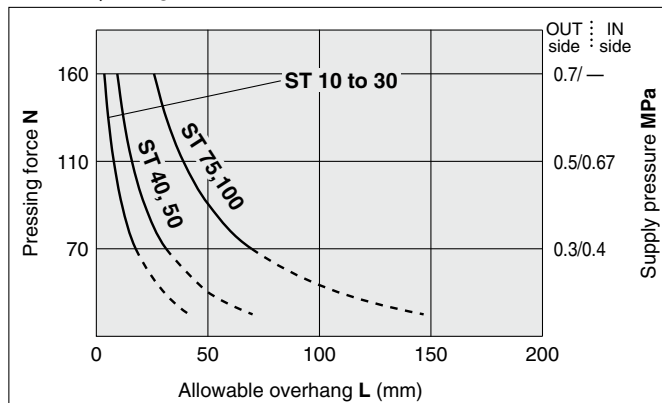
MXQ8A-□Z



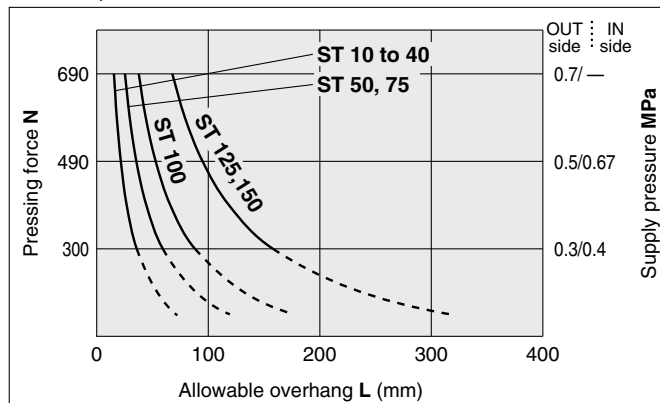
MXQ20A-□Z



MXQ12A-□Z



MXQ25A-□Z



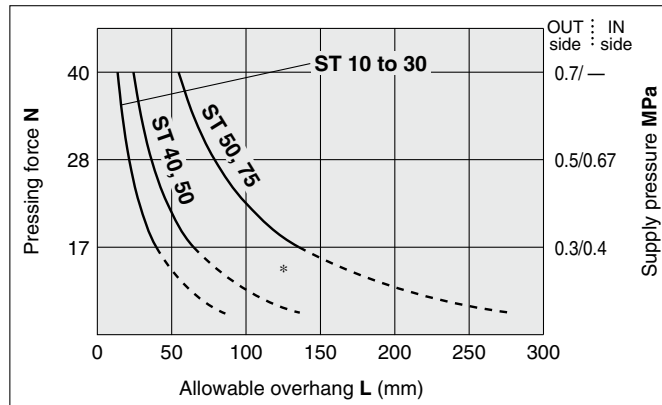
* Pressing force in the dotted line ranges are reference values as the pressing force may vary in these ranges.

* ST = Stroke

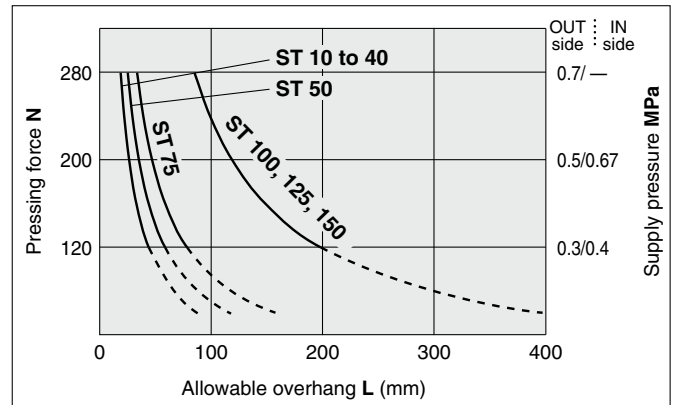
Determine the overhang. (Refer to page 94 for details.)
L₁, L₂: Check from the cross point of the pressing force and driving speed.

Low Thrust with High Rigidity Type/For Pressing

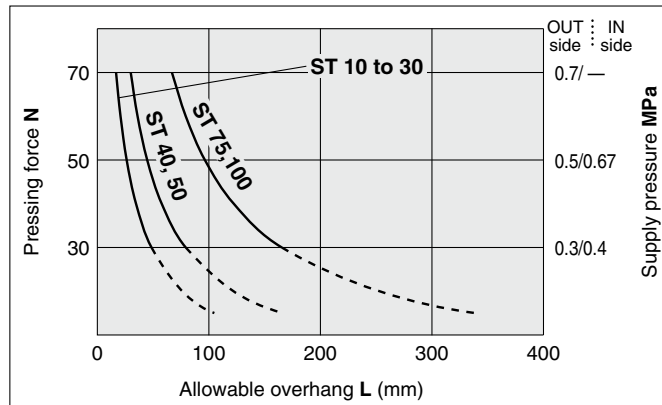
MXQ6B-□Z



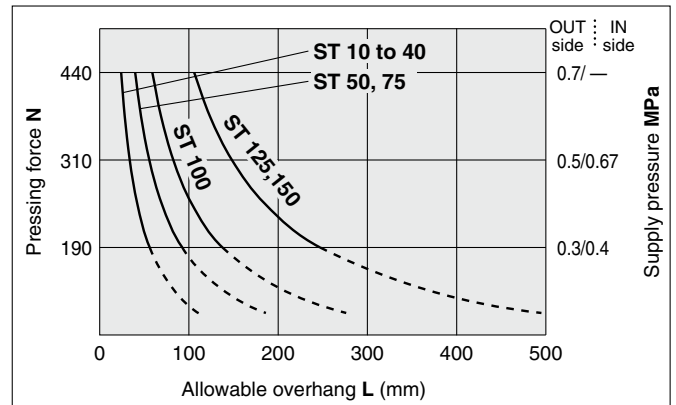
MXQ16B-□Z



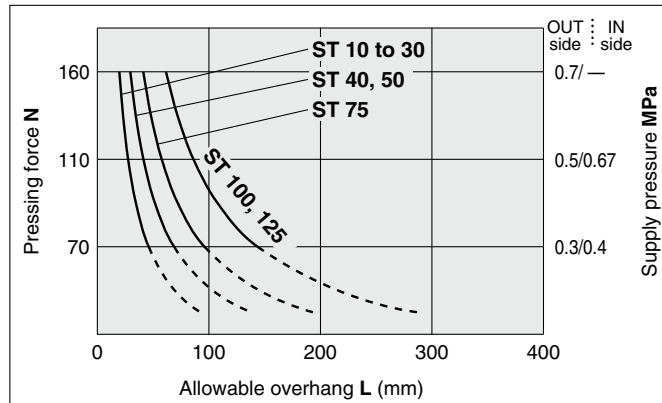
MXQ8B-□Z



MXQ20B-□Z



MXQ12B-□Z



* Pressing force in the dotted line ranges are reference values as the pressing force may vary in these ranges.

* ST = Stroke

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

Auto Switch
Mounting

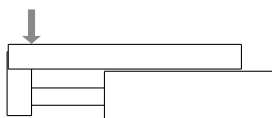
Made to Order

Model Selection

Table Deflection (Reference Values)

Table displacement due to pitch moment load

Displacement when a load is applied to the part indicated by the arrow for the entire stroke of the air slide table



MXQ6(A)-□Z

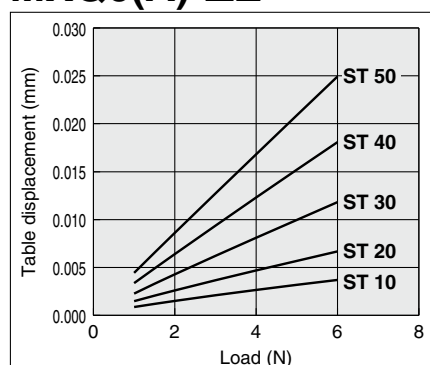
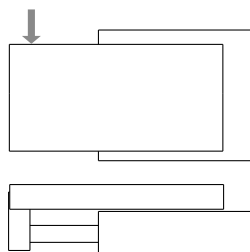


Table displacement due to yaw moment load

Displacement when a load is applied to the part indicated by the arrow for the entire stroke of the air slide table



MXQ6(A)-□Z

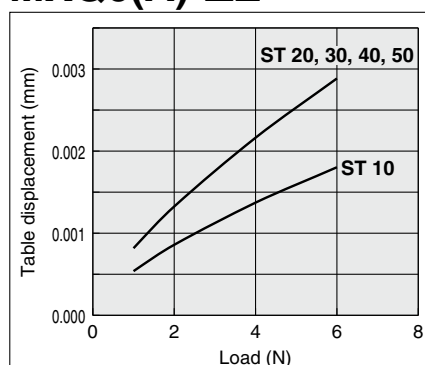
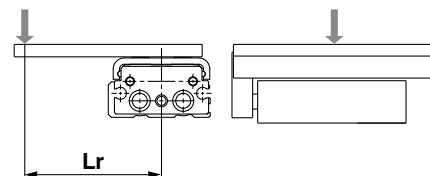
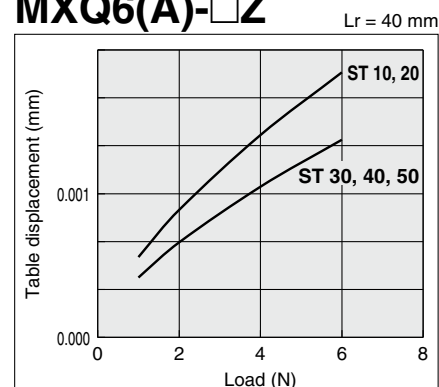


Table displacement due to roll moment load

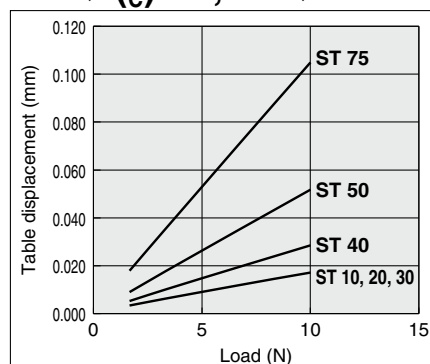
Displacement when a load is applied to the part indicated by the arrow when the air slide table is retracted



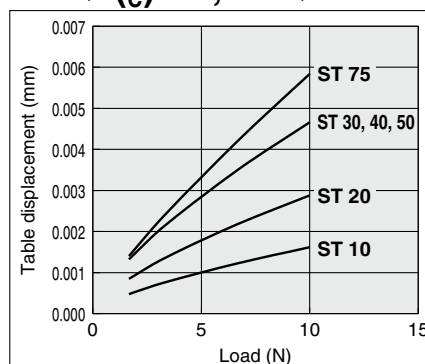
MXQ6(A)-□Z



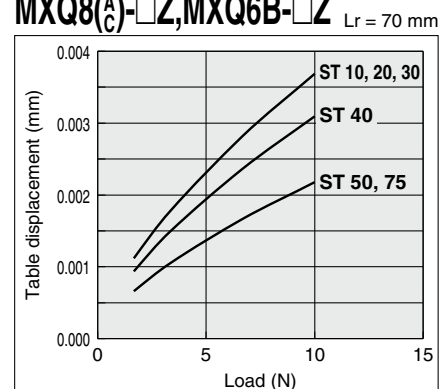
MXQ8(A)-□Z, MXQ6B-□Z



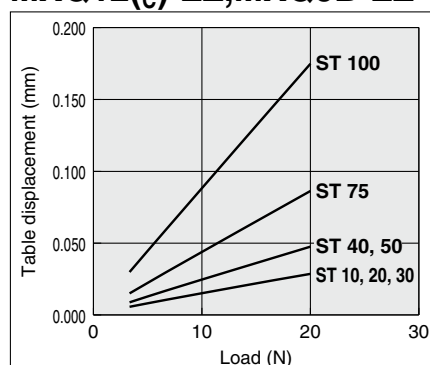
MXQ8(A)-□Z, MXQ6B-□Z



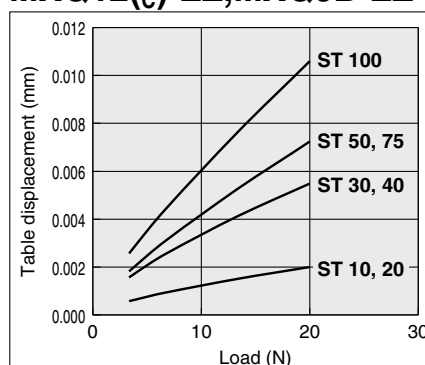
MXQ8(A)-□Z, MXQ6B-□Z



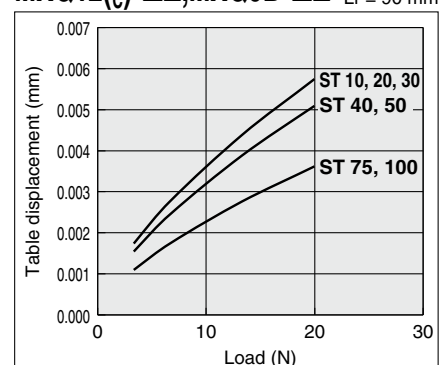
MXQ12(A)-□Z, MXQ8B-□Z



MXQ12(A)-□Z, MXQ8B-□Z



MXQ12(A)-□Z, MXQ8B-□Z

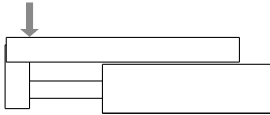


*ST = Stroke

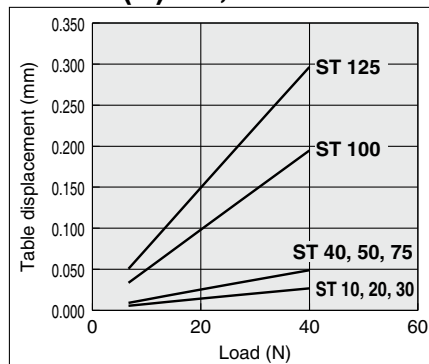
Table Deflection (Reference Values)

Table displacement due to pitch moment load

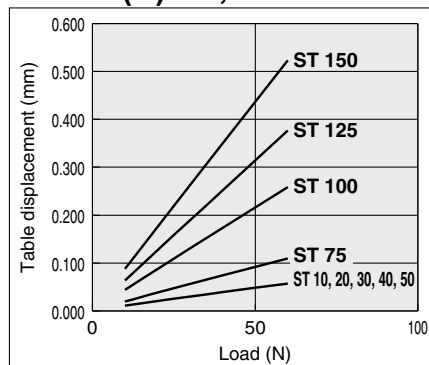
Displacement when a load is applied to the part indicated by the arrow for the entire stroke of the air slide table



MXQ16(A)-□Z, MXQ12B-□Z



MXQ20(A)-□Z, MXQ16B-□Z



MXQ25(A)-□Z, MXQ20B-□Z

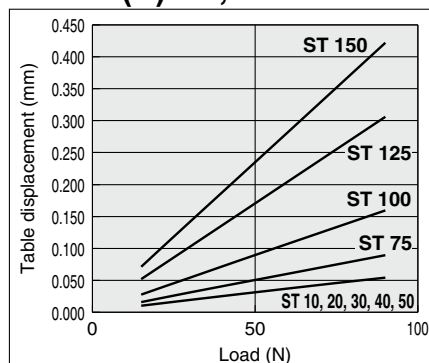
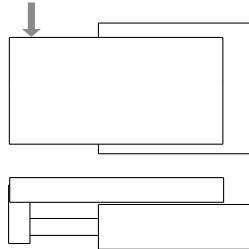
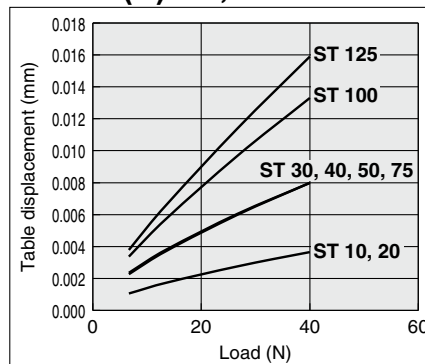


Table displacement due to yaw moment load

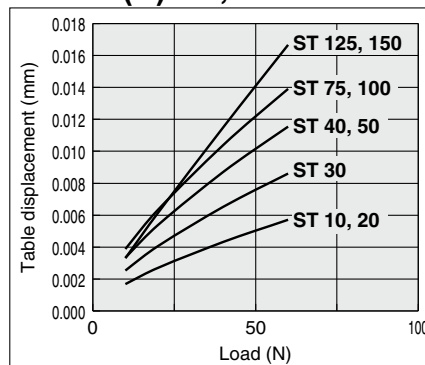
Displacement when a load is applied to the part indicated by the arrow for the entire stroke of the air slide table



MXQ16(A)-□Z, MXQ12B-□Z



MXQ20(A)-□Z, MXQ16B-□Z



MXQ25(A)-□Z, MXQ20B-□Z

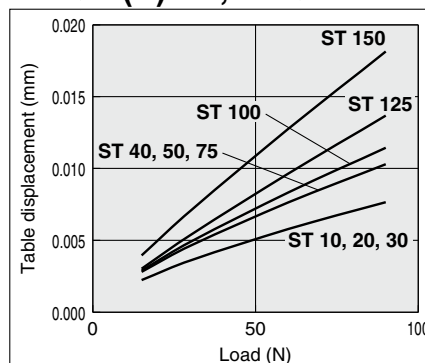
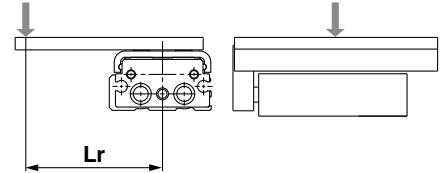
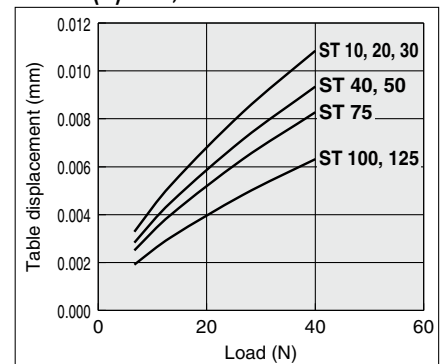


Table displacement due to roll moment load

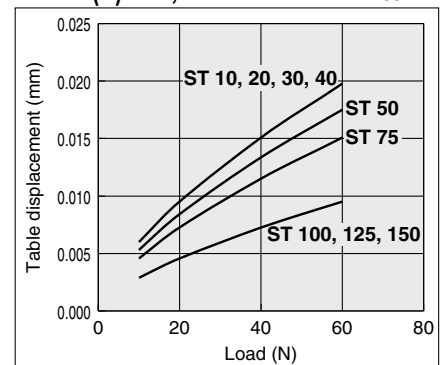
Displacement when a load is applied to the part indicated by the arrow when the air slide table is retracted



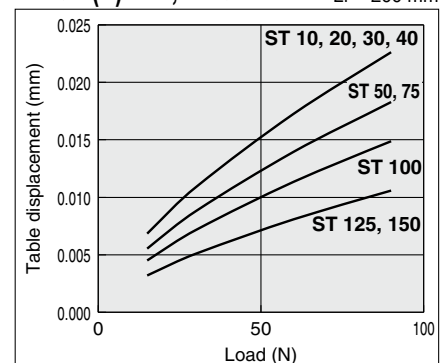
MXQ16(A)-□Z, MXQ12B-□Z Lr = 120 mm



MXQ20(A)-□Z, MXQ16B-□Z Lr = 160 mm



MXQ25(A)-□Z, MXQ20B-□Z Lr = 200 mm



*ST = Stroke

Double ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side ported type
MXQ□C

Height interchangeable type
MXQ□

Common Adjuster
Options

Auto Switch
Mounting

Made to Order

Model Selection



Series MXQ

Specific Product Precautions 1

Be sure to read before handling. Refer to back cover for Safety Instructions, “Handling Precautions for SMC Products” (M-E03-3) and the Operation Manual for Air Preparation Equipment Precautions. Please download it via our website, <http://www.smcworld.com>

Mounting

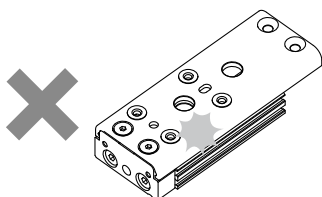
⚠ Caution

1. Do not scratch or dent the mounting side of the body, table or end plate.

This can cause loss of parallelism in the mounting surfaces, vibration in the guide unit and increased operating resistance, etc.

2. Do not scratch or dent on the forward side of the rail or guide.

This could result in looseness and increased operating resistance, etc.



3. Do not apply excessive power and load when work is mounted.

If the external force more than the allowable moment were applied, looseness of the guide unit or increased operating resistance could take place.

4. Flatness of mounting surface should be 0.02 mm or less.

Poor parallelism of the workpiece mounted on the body, the base, and other parts can cause vibration in the guide unit and increased operating resistance, etc.

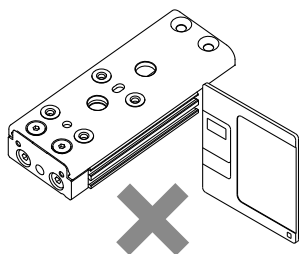
5. Select the proper connection with the load which has external support and/or guide mechanism on the outside, and align it properly.

6. Avoid contact with the body during operation.

Hands etc., may get caught in the stroke adjuster. Install a cover as a safety measure if there are instances to be near the slide table during operation.

7. Keep away from objects which are influenced by magnets.

As the body magnets are built-in, do not allow close contact with magnetic disks, magnetic cards or magnetic tapes. Data may be erased.



8. Do not touch a magnet to the table section.

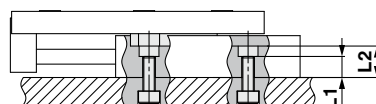
Since the table is made from the magnetic substance, it could turn to be magnetized if it stuck by a magnet etc.

That could cause auto switches etc. to malfunction.

9. When mounting the body, use screws with appropriate length and do not exceed the maximum tightening torque.

Tightening with a torque above the limit could malfunction. Whereas, tightening insufficiently could result in misalignment or come to a drop.

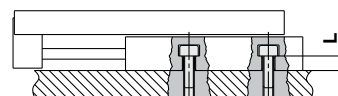
1. Body tapped



⚠ Caution Types other than the MXQ20(A) and MXQ25(A) have through tapped holes. Use bolts that are 0.5 mm or shorter than the maximum screw-in depth (L2). If long bolts are used, they can touch the end plate and cause a malfunction etc.

Model	Bolt	Max. tightening torque (N·m)	Screw-in depth L1 (mm)	Max. screw-in depth L2 (mm)
MXQ6	M4 x 0.7	2.1	5	8
MXQ8	M4 x 0.7	2.1	8	11
MXQ12	M5 x 0.8	4.4	11	15
MXQ16	M6 x 1	7.4	14	19
MXQ20	M6 x 1	7.4	9	
MXQ25	M8 x 1.25	18	12	
MXQ6A	M4 x 0.7	2.1	8	11
MXQ8A	M4 x 0.7	2.1	8	11
MXQ12A	M5 x 0.8	4.4	8	12
MXQ16A	M6 x 1	7.4	12	17
MXQ20A	M6 x 1	7.4	9	
MXQ25A	M8 x 1.25	18	12	
MXQ6B	M4 x 0.7	2.1	5	8
MXQ8B	M5 x 0.8	4.4	4	9
MXQ12B	M6 x 1	7.4	7	12
MXQ16B	M6 x 1	7.4	10	15
MXQ20B	M8 x 1.25	18	14	20
MXQ8C	M4 x 0.7	2.1	6	9
MXQ12C	M5 x 0.8	4.4	8	12

2. Through hole



Model	Bolt	Max. tightening torque (N·m)	L (mm)
MXQ6	M3 x 0.5	1.1	5.3
MXQ8	M3 x 0.5	1.1	8.3
MXQ12	M4 x 0.7	2.7	11.5
MXQ16	M5 x 0.8	5.4	14.4
MXQ20	M5 x 0.8	5.4	19.3
MXQ25	M6 x 1	9.2	23.5
MXQ6A	M3 x 0.5	1.1	8.3
MXQ8A	M3 x 0.5	1.1	8.3
MXQ12A	M4 x 0.7	2.7	8.5
MXQ16A	M5 x 0.8	5.4	12.4
MXQ20A	M5 x 0.8	5.4	16.3
MXQ25A	M6 x 1	9.2	20.5
MXQ6B	M3 x 0.5	1.1	5.3
MXQ8B	M4 x 0.7	2.7	4.5
MXQ12B	M5 x 0.8	5.4	7.4
MXQ16B	M5 x 0.8	5.4	10.3
MXQ20B	M6 x 1	9.2	14.5
MXQ8C	M3 x 0.5	1.1	6.3
MXQ12C	M4 x 0.7	2.7	8.5



Series MXQ

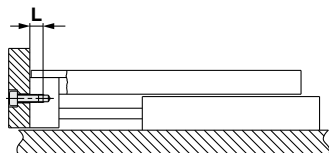
Specific Product Precautions 2

Be sure to read before handling. Refer to back cover for Safety Instructions, “Handling Precautions for SMC Products” (M-E03-3) and the Operation Manual for Air Preparation Equipment Precautions. Please download it via our website, <http://www.smcworld.com>

Mounting

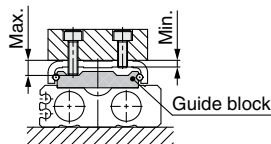
⚠ Caution

3. Front mounting



Model	Bolt	Max. tightening torque (N·m)	Max. screw-in depth L (mm)
MXQ6(A)	—	M3 x 0.5	0.9
MXQ8(A,C)	MXQ6B	M3 x 0.5	0.9
MXQ12(A,C)	MXQ8B	M3 x 0.5	0.9
MXQ16(A)	MXQ12B	M4 x 0.7	2.1
MXQ20(A)	MXQ16B	M5 x 0.8	4.4
MXQ25(A)	MXQ20B	M6 x 1	7.4

4. Top mounting



⚠ Caution In order to prevent the work piece fixing bolt from hitting the table, use a bolt of a length at least 0.5 mm shorter than the maximum screw-in depth. If long bolts are used, they can touch the guide block and cause malfunction, etc.

Model	Bolt	Max. tightening torque (N·m)	Screw-in depth (mm)	
			Max.	Min.
MXQ6(A)	—	M3 x 0.5	1.1	4.1
MXQ8(A,C)	MXQ6B	M3 x 0.5	1.1	4.1
MXQ12(A,C)	MXQ8B	M4 x 0.7	2.7	5.7
MXQ16(A)	MXQ12B	M5 x 0.8	5.4	7.3
MXQ20(A)	MXQ16B	M5 x 0.8	5.4	7.3
MXQ25(A)	MXQ20B	M6 x 1	9.2	9

- The positioning hole on the table and on the bottom of the body does not have the same center. Use these holes during reinstallation after the table has been removed for the maintenance of an identical product.

Operating Environment

⚠ Caution

- Do not use in the environment, where the product could be exposed to the liquid such as cutting oil etc.

Using in the environment where the product could be exposed to cutting oil, coolant or oil, etc. could result in looseness, increased operating resistance, or air leakage, etc.

- Do not use in the environment, where the product could be exposed directly to the foreign matters such as powder dust, blown dust, cutting chip, spatter, etc.

This could result in looseness and increased operating resistance, and air leakage, etc.

Please consult SMC regarding use in this kind of environment.

- Do not use in direct sunlight.

- When there are heat sources in the surrounding area, block them off.

When there are heat sources in the surrounding area, radiated heat may cause the product's temperature to rise and exceed the operating temperature range. Block off the heat with a cover, etc.

- Do not subject it to excessive vibration and/or impact.

Please consult SMC regarding use in this kind of environment, as this can cause damage and malfunction.

Sufficient strength is secure for the table, but when it is damaged, never touch it with bare hands as the broken section and the fragments will be like a sharp-edged tool.

- Use caution for the anticorrosiveness of linear guide section.

Martensitic stainless steel is used for the table and guide block. But, use caution that anti-corrosiveness is inferior to the austenitic stainless steel. Especially, rust may be generated in an environment where waterdrops are likely to adhere due to condensation etc.

Safety Instructions

These safety instructions are intended to prevent hazardous situations and/or equipment damage. These instructions indicate the level of potential hazard with the labels of “**Caution**,” “**Warning**” or “**Danger**.” They are all important notes for safety and must be followed in addition to International Standards (ISO/IEC)*1), and other safety regulations.

-  **Caution:** **Caution** indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.
-  **Warning:** **Warning** indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.
-  **Danger :** **Danger** indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.

- *1) ISO 4414: Pneumatic fluid power – General rules relating to systems.
ISO 4413: Hydraulic fluid power – General rules relating to systems.
IEC 60204-1: Safety of machinery – Electrical equipment of machines.
(Part 1: General requirements)
ISO 10218-1: Manipulating industrial robots – Safety.
etc.

Warning

- 1. The compatibility of the product is the responsibility of the person who designs the equipment or decides its specifications.**
Since the product specified here is used under various operating conditions, its compatibility with specific equipment must be decided by the person who designs the equipment or decides its specifications based on necessary analysis and test results. The expected performance and safety assurance of the equipment will be the responsibility of the person who has determined its compatibility with the product. This person should also continuously review all specifications of the product referring to its latest catalog information, with a view to giving due consideration to any possibility of equipment failure when configuring the equipment.
- 2. Only personnel with appropriate training should operate machinery and equipment.**
The product specified here may become unsafe if handled incorrectly. The assembly, operation and maintenance of machines or equipment including our products must be performed by an operator who is appropriately trained and experienced.
- 3. Do not service or attempt to remove product and machinery/equipment until safety is confirmed.**
 1. The inspection and maintenance of machinery/equipment should only be performed after measures to prevent falling or runaway of the driven objects have been confirmed.
 2. When the product is to be removed, confirm that the safety measures as mentioned above are implemented and the power from any appropriate source is cut, and read and understand the specific product precautions of all relevant products carefully.
 3. Before machinery/equipment is restarted, take measures to prevent unexpected operation and malfunction.
- 4. Contact SMC beforehand and take special consideration of safety measures if the product is to be used in any of the following conditions.**
 1. Conditions and environments outside of the given specifications, or use outdoors or in a place exposed to direct sunlight.
 2. Installation on equipment in conjunction with atomic energy, railways, air navigation, space, shipping, vehicles, military, medical treatment, combustion and recreation, or equipment in contact with food and beverages, emergency stop circuits, clutch and brake circuits in press applications, safety equipment or other applications unsuitable for the standard specifications described in the product catalog.
 3. An application which could have negative effects on people, property, or animals requiring special safety analysis.
 4. Use in an interlock circuit, which requires the provision of double interlock for possible failure by using a mechanical protective function, and periodical checks to confirm proper operation.

Caution

- 1. The product is provided for use in manufacturing industries.**
The product herein described is basically provided for peaceful use in manufacturing industries.
If considering using the product in other industries, consult SMC beforehand and exchange specifications or a contract if necessary.
If anything is unclear, contact your nearest sales branch.

Limited warranty and Disclaimer/ Compliance Requirements

The product used is subject to the following “Limited warranty and Disclaimer” and “Compliance Requirements”.

Read and accept them before using the product.

Limited warranty and Disclaimer

1. The warranty period of the product is 1 year in service or 1.5 years after the product is delivered, whichever is first.*2)
Also, the product may have specified durability, running distance or replacement parts. Please consult your nearest sales branch.
2. For any failure or damage reported within the warranty period which is clearly our responsibility, a replacement product or necessary parts will be provided.
This limited warranty applies only to our product independently, and not to any other damage incurred due to the failure of the product.
3. Prior to using SMC products, please read and understand the warranty terms and disclaimers noted in the specified catalog for the particular products.
***2) Vacuum pads are excluded from this 1 year warranty.**
A vacuum pad is a consumable part, so it is warranted for a year after it is delivered.
Also, even within the warranty period, the wear of a product due to the use of the vacuum pad or failure due to the deterioration of rubber material are not covered by the limited warranty.

Compliance Requirements

1. The use of SMC products with production equipment for the manufacture of weapons of mass destruction (WMD) or any other weapon is strictly prohibited.
2. The exports of SMC products or technology from one country to another are governed by the relevant security laws and regulations of the countries involved in the transaction. Prior to the shipment of a SMC product to another country, assure that all local rules governing that export are known and followed.

 **Safety Instructions** Be sure to read “Handling Precautions for SMC Products” (M-E03-3) before using.

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