

Air Slide Table Height Interchangeable Type MXQ Series

ø6, ø8, ø12, ø16, ø20, ø25



How to Order

MXQ 12 - 30 ZA - M9BW -

1
2
3
4
5
6
7
8

① Bore size	② Body option		③ 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		—*1	10, 20, 30, 40, 50, 75, 100, 125
20		—*1	10, 20, 30, 40, 50, 75, 100, 125, 150
25		—*1	10, 20, 30, 40, 50, 75, 100, 125, 150*

- *1 Not available, as the standard model has piping ports and auto switch mounting grooves on both sides. Please use the standard type. Only the adjuster part of the centralized adjuster is symmetric.
- * The operating speed range of the stroke marked with an asterisk (*) is 50 to 300 mm/s. (Refer to page 85.)

Symbol	Functional option	② Body option		
		Bore size		
		6, 8, 12	16, 20, 25	
		Standard type	Symmetric type	Standard type
Nil	Without functional option			
1	With buffer			
2	With end lock			
3	Axial piping			
4	With buffer, end lock			
5	With buffer, axial piping			
6	Centralized adjuster			
7	Centralized adjuster (Symmetric)			
8	Buffer, Centralized adjuster			
9	Buffer, Centralized adjuster (Symmetric)			

⑥ Auto switch	⑦ Number of auto switches	⑧ Made to order
Nil	Without auto switch	For details, refer to the next page.
	Nil	2
	S	1
	n	n

* For applicable auto switches, refer to the next page.

④ Adjuster options/Functional option combinations

Symbol	Adjuster type*9	Adjuster mounting position*1*8		Functional option combination														
		Extension stroke end	Retraction stroke end	Nil	1	2	3	4	5	6	7	8	9					
				Without functional option	With buffer	With end lock	Axial piping	With buffer, end lock	With buffer, axial piping	Centralized adjuster	Centralized adjuster (Symmetric)	Buffer, Centralized adjuster	Buffer, Centralized adjuster (Symmetric)					
Z	Without adjuster																	
ZA	Metal stopper with bumper	●	●	○	×	○	○	×	×	○	○	×	×	○	○	×	×	
ZB		●		○	×	○	○	×	×	×	×	×	×	○	○	×	×	
ZC		●	●	○	×	×	○	×	×	○	○	○	○	○	○	○	○	○
ZD		●	●	○	×	×	○	×	×	×	○	○	○	○	○	○	○	○
ZE	Rubber stopper	●		○	○	○	○	○	○	×	×	×	×	○	○	×	×	
ZF		●	●	○	×	×	○	×	×	○	○	○	○	○	○	○	○	
ZG		●	●	○	×	×	○	×	×	○	○	○	○	○	○	○	○	○
ZH		●	●	○	×	○	○	○	×	×	×	×	×	×	○	○	×	×
ZJ	Shock absorber/RJ	●	●	○	×	×	○	×	×	○	○	○	○	○	○	○	○	○
ZK		●	●	○	×	×	○	×	×	○	○	○	○	○	○	○	○	○
ZL		●	●	○	○	○	○	○	○	○	×	×	×	×	○	○	×	×
ZM		●	●	○	×	×	○	×	×	○	○	○	○	○	○	○	○	○
ZN	Shorter total length type*4	Without adjuster		○	○*5	×	○	×	○*5	×	×	×	×	○	○	×	×	
ZP		Rubber stopper	●	○	×	×	○	×	×	×	×	×	×	○	○	×	×	
ZQ		Shock absorber/RJ	●	○	×	×	○	×	×	×	×	×	×	○	○	×	×	
ZS		Metal stopper with bumper	●	○	×	×	○	×	×	×	×	×	×	×	○	○	×	×
ZT		Metal stopper	●	○	×	×	○	×	×	×	×	×	×	×	○	○	×	×
ZBF	Metal stopper with bumper	Rubber stopper	●	●	○	×	×	○	×	×	○	○	○	○	○	×	×	
ZBJ		Shock absorber/RJ	●	●	○	×	×	○	×	×	○	○	○	○	○	×	×	
ZBM	Rubber stopper	Metal stopper	●	●	○	×	×	○	×	×	○	○	○	○	○	×	×	
ZEC		Metal stopper with bumper	●	●	○	×	×	○	×	×	○	○	○	○	○	×	×	
ZEJ		Shock absorber/RJ	●	●	○	×	×	○	×	×	○	○	○	○	○	×	×	
ZEM		Metal stopper	●	●	○	×	×	○	×	×	○	○	○	○	○	×	×	
ZHC	Shock absorber/RJ	Metal stopper with bumper	●	●	○	×	×	○	×	×	○	○	○	○	○	×	×	
ZHF		Rubber stopper	●	●	○	×	×	○	×	×	○	○	○	○	×	×		
ZHM		Metal stopper	●	●	○	×	×	○	×	×	○	○	○	○	×	×		
ZLC	Metal stopper	Metal stopper with bumper	●	●	○	×	×	○	×	×	○	○	○	○	○	○	○	
ZLF		Rubber stopper	●	●	○	×	×	○	×	×	○	○	○	○	○	○	○	
ZLJ		Shock absorber/RJ	●	●	○	×	×	○	×	×	○	○	○	○	○	○	○	

- *1 ●: Shipped together with the product, but not assembled
- *2 Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
- *3 For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
- *4 If it is necessary to install a retraction stroke end adjuster with a buffer mechanism, use a buffer and centralized adjuster provided with a retraction stroke end adjuster on the rear end of the body. End lock or axial piping options cannot be mounted to centralized adjuster specification models.
- *5 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
- *6 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.
- *7 For axial piping, there is no piping port on the side.
- *8 For ø16 to ø25, only the centralized adjuster is symmetric.
- *9 For details on the adjuster mounting position, refer to the next page.
- *10 The metal stopper with bumper option is not available for ø6.
- *11 Not applicable to the symmetric type.



Applicable Auto Switches/Refer to the **Web Catalog** 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)		IC circuit	Relay, PLC				
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9NV	M9N	●	●	●	○	○	IC circuit	Relay, PLC			
				3-wire (PNP)				M9PV	M9P	●	●	●	○	○					
				2-wire				M9BV	M9B	●	●	●	○	○					
	Diagnostic indication (2-color indicator)			3-wire (NPN)	5 V, 12 V	—	M9NWV	M9NW	●	●	●	○	○	○	○	IC circuit	Relay, PLC		
				3-wire (PNP)			M9PWV	M9PW	●	●	●	○	○	○					
				2-wire			M9B WV	M9B W	●	●	●	○	○	○					
	Water resistant (2-color indicator)			3-wire (NPN)	5 V, 12 V	—	M9NAV*1	M9NA*1	○	○	●	○	○	○	○	IC circuit	Relay, PLC		
				3-wire (PNP)			M9PAV*1	M9PA*1	○	○	●	○	○	○					
				2-wire			M9BAV*1	M9BA*1	○	○	●	○	○	○					
Reed auto switch	—	Grommet	Yes	3-wire (Equiv. to NPN)	24 V	5 V	—	A96V	A96	●	—	●	—	—	IC circuit	—			
				2-wire				100 V	A93V*2	A93	●	●	●	●			—	—	Relay, PLC
								100 V or less	A90V	A90	●	—	●	—			—	—	

*1 Water-resistant type auto switches can be mounted on the above models, but SMC cannot guarantee water resistance. A water-resistant type cylinder is recommended for use in an environment which requires water resistance.

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

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

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

* Since there are applicable auto switches other than those listed above, refer to page 125 for details.

* For details about auto switches with pre-wired connectors, refer to the **Web Catalog**.

* Auto switches are shipped together, but not assembled.



Made to Order

(For details, refer to pages 127 to 156.)

Symbol	Specifications
-X7	PTFE grease
-X9	Grease for food processing equipment
-X11	Long adjustment bolt (10 mm longer adjustment range)
-X12	Long adjustment bolt (20 mm longer adjustment range)
-X28	Long adjustment nut and bolt
-X33	Without built-in auto switch magnet
-X39	Fluororubber seal
-X42	Anti-corrosive guide unit
-X580	Low-speed specification (15 to 50 mm/s)
-X2100	End plate compatible with the current MXQ series
-X2128	Heat-resistant specification (-10 to 100°)
-X2200	Side adjuster specification
-X2201	Combined use of shock absorber + metal stopper
-X2202	Extension stroke end adjuster fixed from the axial direction

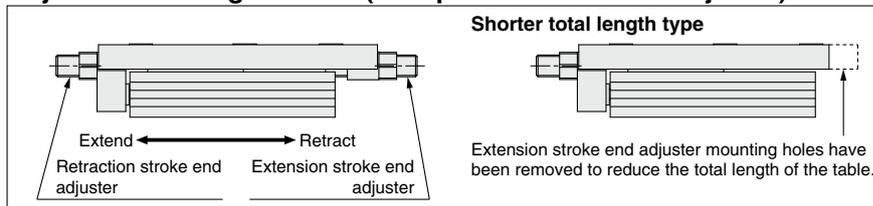
Moisture Control Tube IDK Series



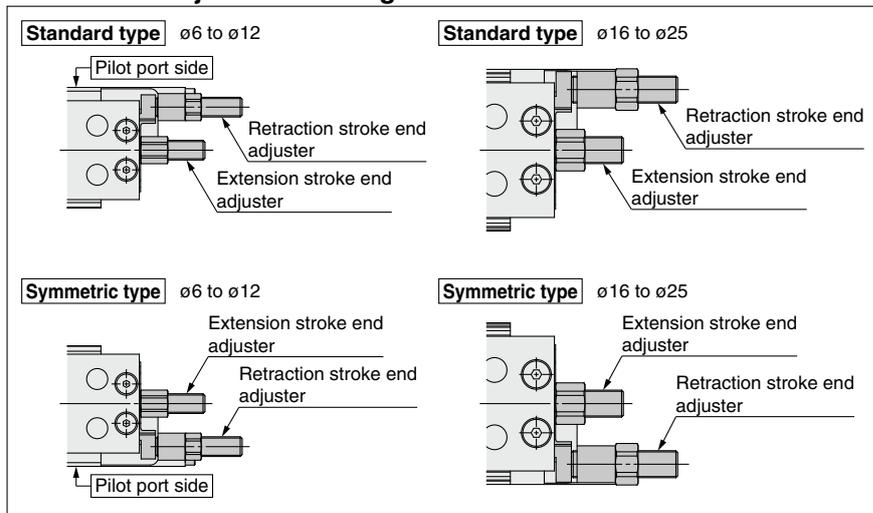
When operating an actuator with a small diameter and a short stroke at a high frequency, dew condensation (water droplets) may occur inside the piping depending on the conditions.

Simply connecting the moisture control tube to the actuator will prevent dew condensation from occurring. For details, refer to the **Web Catalog**.

Adjuster Mounting Position (Exception: Centralized Adjuster)



Centralized Adjuster Mounting Position



⚠ Precautions

Be sure to read "Specific Product Precautions" before handling. Refer to page 195.

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*1 (End lock: 0.35 to 0.7 MPa)					
Proof pressure	1.05 MPa					
Ambient and fluid temperatures	-10 to 60°C					
Operating speed range (Average operating speed)	50 to 500 mm/s (Metal stopper with bumper: 50 to 300 mm/s) (Metal stopper: 50 to 200 mm/s) * in the standard stroke table on page 83: 50 to 300 mm/s					
Cushion (Without adjuster)	Internal rubber bumper					
Cushion (With adjuster)	Metal stopper with bumper, Rubber stopper, Shock absorber, Metal stopper					
Lubrication	Non-lube					
Auto switch	Solid state auto switch, Reed auto switch (2-wire, 3-wire) 2-color indicator solid state auto switch (2-wire, 3-wire)					
Stroke length tolerance	+2 to 0 mm					

*1 Refer to page 86 for the minimum operating pressure of the metal stopper with bumper. If the operating pressure is lower than the minimum operating pressure, the repeated accuracy will decline.
Minimum operating pressure of the metal stopper with bumper: Pressure required to fully compress the protrusion of the bumper to get in contact with the metal part
The operating pressure of the bore size 20 cylinder with shock absorber is 0.15 to 0.6 MPa.

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	Extension stroke end For end lock	Retraction stroke end	Buffer	End lock	Axial piping
MXQ6	120	120	160	180	190	—	—	—	—	-6	10	11 (9)	8	30	40	No addition
MXQ8	150	180	190	230	310	350	—	—	—	-6	10	11 (9)	8	30	60	
MXQ12	290	310	340	400	430	590	670	—	—	-12	20	22 (20)	16	70	80	
MXQ16	500	520	570	650	690	840	1,100	1,200	—	-21	40	38 (34)	30	120	150	
MXQ20	870	870	900	990	1,100	1,300	1,700	2,000	2,100	-33	70	62 (34)	50 (80)	190	400	
MXQ25	1,400	1,400	1,500	1,600	1,900	2,100	2,300	3,000	3,300	-60	110	102 (95)	80	310	700	

* Value in () is the additional weight of the shock absorber.

Weight of Centralized Adjuster

Model	Standard stroke [mm]									Reduction only when the product comes with a retraction stroke end adjuster
	10	20	30	40	50	75	100	125	150	
MXQ6	160	165	210	230	240	—	—	—	—	-10
MXQ8	195	225	235	275	355	410	—	—	—	-10
MXQ12	375	405	435	495	525	685	765	—	—	-20
MXQ16	660	690	740	820	860	1,010	1,270	1,370	—	-40
MXQ20	1,140 (-60)	1,170 (-60)	1,200 (-60)	1,290 (-60)	1,400 (-60)	1,600 (-60)	2,050 (-60)	2,350 (-60)	2,450 (-60)	-60 (-25)
MXQ25	1,880	1,920	2,020	2,120	2,420	2,620	2,930	3,630	3,930	-100

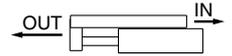
* Value in () is the additional weight of the shock absorber.

Weight of Moving Parts

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	Buffer	End lock	Axial piping
MXQ6	61	66	80	89	97	—	—	—	—	-6	10	8	30	10	No addition
MXQ8	68	76	85	97	116	138	—	—	—	-6	10	8	30	10	
MXQ12	143	154	168	192	206	263	300	—	—	-12	20	16	70	20	
MXQ16	240	257	277	309	329	389	469	520	—	-21	40	30	120	35	
MXQ20	408	410	437	464	503	588	747	815	882	-33	70	50 (80)	190	65	
MXQ25	674	681	721	761	836	935	1,078	1,284	1,384	-60	110	80	310	110	

* Value in () is the additional weight of the shock absorber.

Theoretical Output



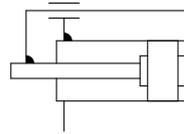
The dual rod ensures an output twice that of current cylinders. [N]

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	

* When the metal stopper with bumper is used for positioning, the theoretical output may vary depending on the full compression force of the bumper. For details, refer to the adjuster specifications on page 86.

Symbol

Rubber bumper



Maximum Load Weight

Model	[kg]					
	Without adjuster	Adjuster option				
	Internal rubber bumper	Rubber stopper	Metal stopper with bumper	Shock absorber/RJ		
			Horizontal	Vertical	Metal stopper	
MXQ6	0.6	0.6	—	0.6		0.6
MXQ8	1	1	1	1		1
MXQ12	2	2	2	1.5	1	2
MXQ16	4	4	4	4	2.5	4
MXQ20	6	6	6	6		6
MXQ25	9	9	9	9	6	9

Allowable Kinetic Energy

Model	[J]				
	Without adjuster	Adjuster option			
	Internal rubber bumper	Metal stopper with bumper	Rubber stopper	Shock absorber/RJ	Metal stopper
MXQ6	0.03	—	0.06	0.175	0.009
MXQ8	0.04	0.018	0.06	0.2	0.009
MXQ12	0.11	0.04	0.12	0.33	0.02
MXQ16	0.12	0.08	0.2	0.76	0.04
MXQ20	0.24	0.12	0.4	1.47	0.06
MXQ25	0.39	0.18	0.6	1.73	0.09

* When selecting a model, refer to Model Selection on page 157 or use the Model Selection Software. Keep in mind that a model cannot be selected with only the allowable kinetic energy.

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

Auto Switches Applicable 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

For adjuster option models and dimensions, refer to pages 123 and 124.

Metal Stopper with Bumper

Model	MXQ8	MXQ12	MXQ16	MXQ20	MXQ25
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
Min. operating pressure of metal stopper with bumper*1*2 [MPa]	0.3	0.3	0.2	0.2	0.2
<small>Reference</small> Full compression force of bumper [N]	20	42	65	97	154
Mounting screw size [mm]	M6 x 0.75	M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

*1 Minimum operating pressure required to fully compress the protrusion of the bumper to get in contact with the metal part
When using the metal stopper with bumper for positioning, use it at a pressure level exceeding the minimum operating pressure. For vertical mounting, the workpiece mass should be taken into consideration. For details, refer to Specific Product Precautions on page 196.

*2 Not available for ø6

Rubber Stopper

Model	MXQ6	MXQ8	MXQ12	MXQ16	MXQ20	MXQ25
Max. absorbed energy [J]	0.06					
Mounting screw size [mm]	M6 x 0.75					
			M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

Shock Absorber/RJ

Model	MXQ6	MXQ8	MXQ12	MXQ16	MXQ20	MXQ25
Max. absorbed energy [J]	0.35					
Stroke absorption [mm]	3					
Collision speed [mm/s]	50 to 500					
Max. operating frequency [cycle/min]	80		80		70	
Max. allowable thrust [N]	150		245		422	
Spring force (Extended) [N]	1.3		2.8		5.4	
Spring force (Compressed) [N]	3.9		4.9		8	
Mounting screw size [mm]	M6 x 0.75		M8 x 1		M10 x 1	
					M12 x 1	M14 x 1.5

Metal Stopper

Model	MXQ6	MXQ8	MXQ12	MXQ16	MXQ20	MXQ25
Max. absorbed energy [J]	0.009					
Mounting screw size [mm]	M6 x 0.75					
			M8 x 1	M10 x 1	M12 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

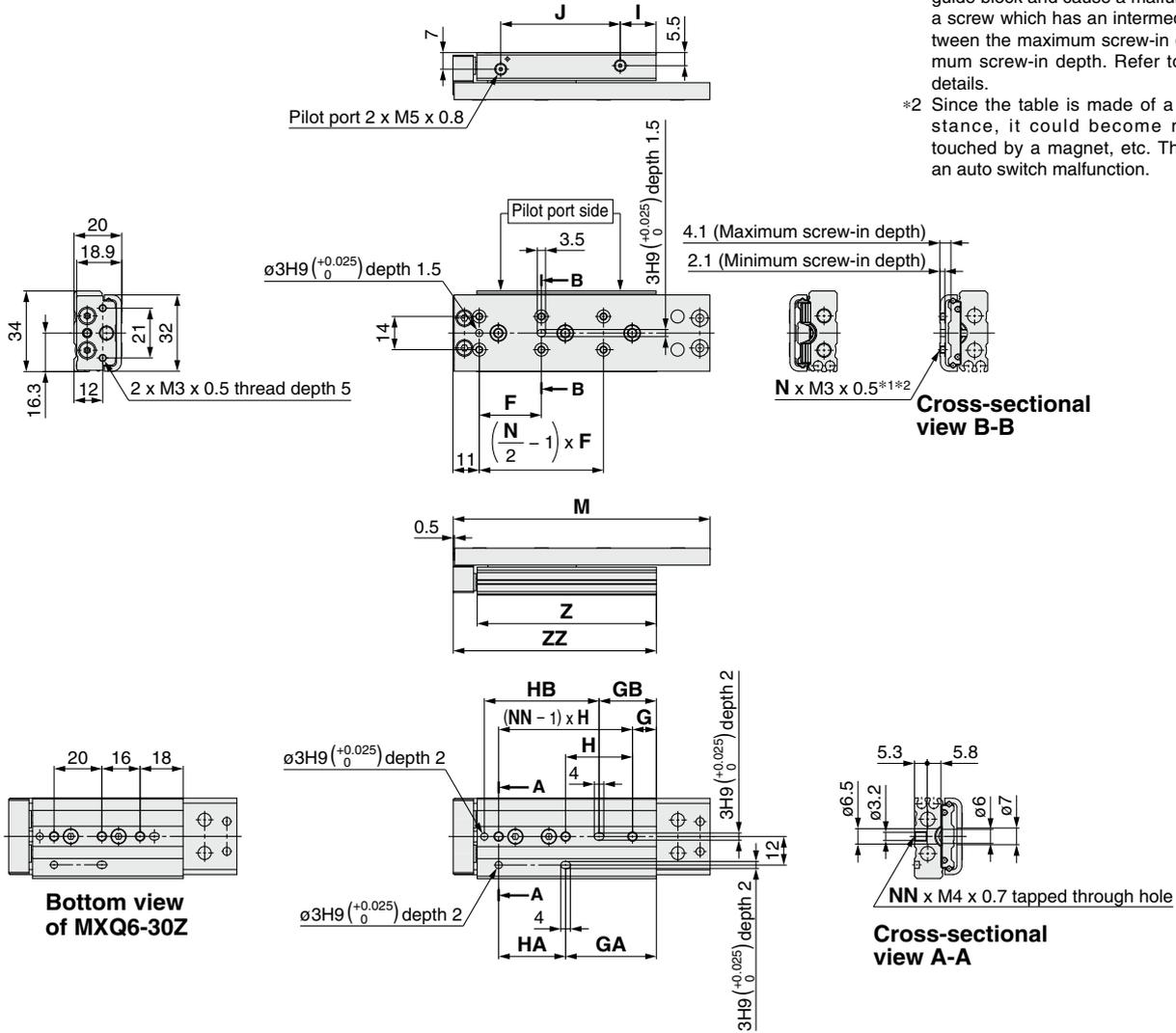
Auto Switch Mounting

Made to Order

Model Selection

Dimensions: MXQ **6** [Standard]

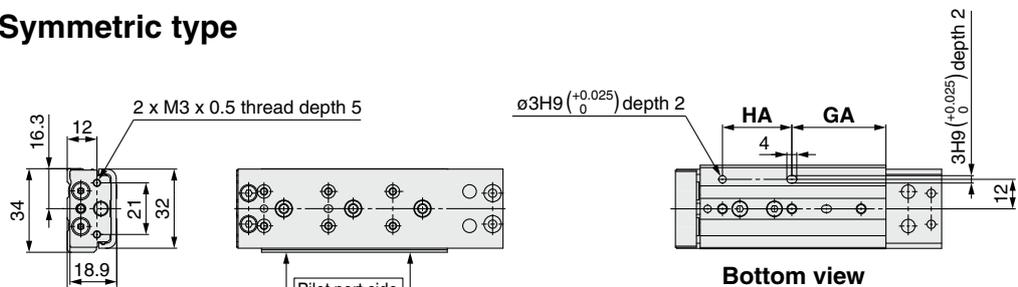
MXQ **6**-□**Z** Standard type



*1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.

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

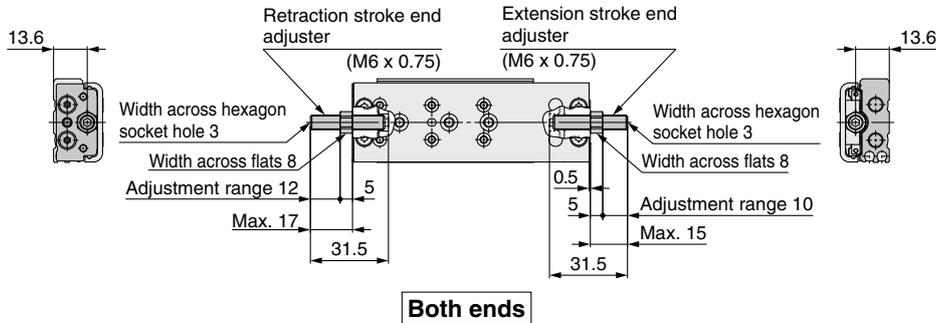
Dimensions

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

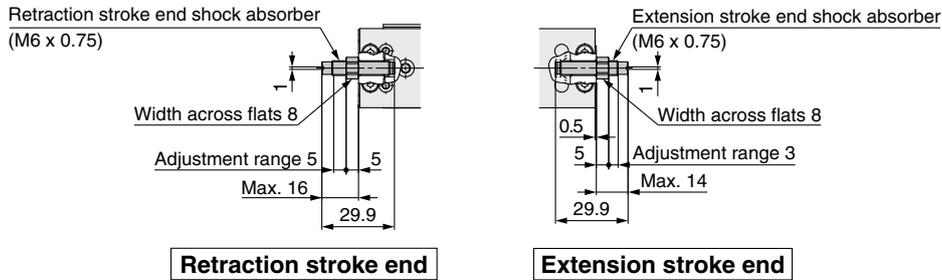
Dimensions: MXQ **6** [Adjuster Option]

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

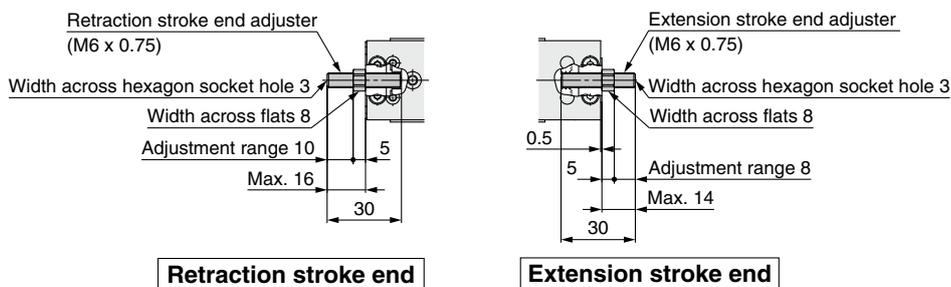
Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)



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

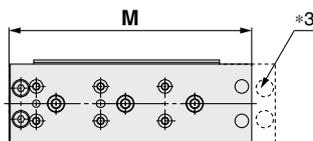


Metal stopper **ZK**: Both ends, **ZL**: Extension stroke end, **ZM**: Retraction stroke end, **ZT**: Retraction stroke end (Shorter total length type)



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

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



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

Dimensions [mm]	
Model	M
MXQ6-10ZN	55
MXQ6-20ZN	65
MXQ6-30ZN	86
MXQ6-40ZN	98
MXQ6-50ZN	108

* Dimensions other than those 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

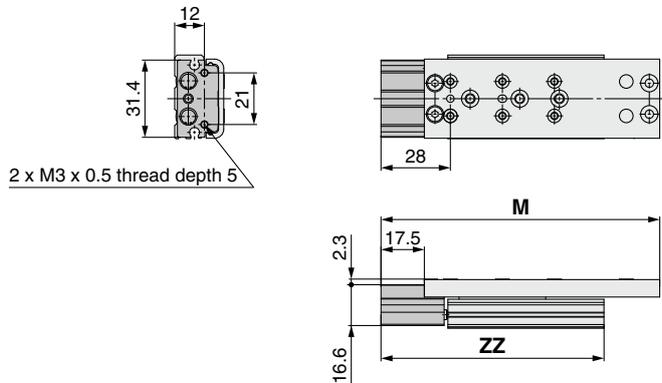
Made to Order

Model Selection

MXQ Series

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

MXQ **6-□□1** With buffer (ø6)

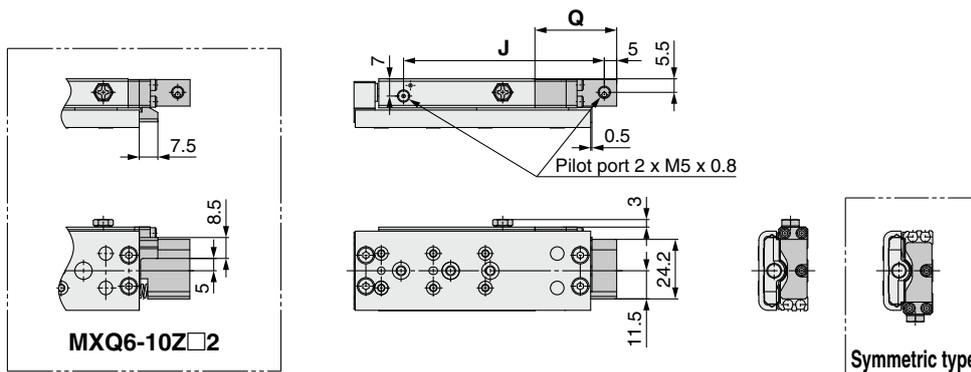


Dimensions [mm]

Model	Standard type	Shorter total length type	ZZ
	M	M	
MXQ6-10Z□1	81.5	72	77
MXQ6-20Z□1	91.5	82	
MXQ6-30Z□1	112.5	103	90
MXQ6-40Z□1	124.5	115	102
MXQ6-50Z□1	134.5	125	112

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

MXQ **6-□□2** With end lock (ø6)



Dimensions [mm]

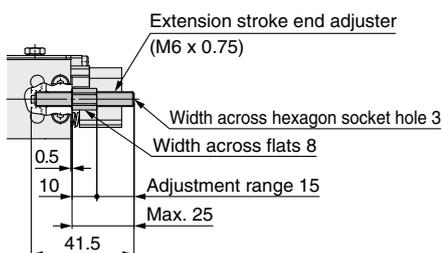
Model	J Q	
	J	Q
MXQ6-10Z□2	60	25
MXQ6-20Z□2		
MXQ6-30Z□2	81	33
MXQ6-40Z□2	93	
MXQ6-50Z□2	103	

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

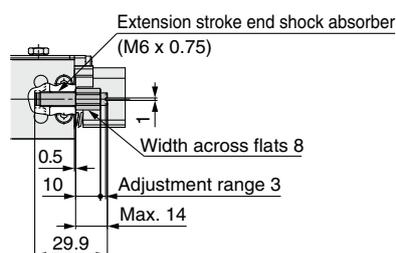
MXQ **6-□□2** With end lock, extension stroke end adjuster (ø6)

A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

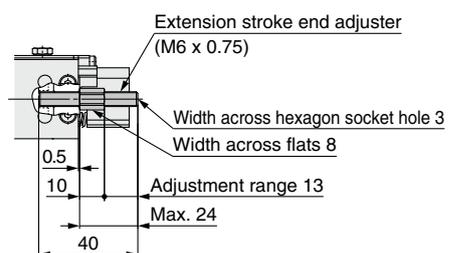
Rubber stopper: **ZE**



Shock absorber/RJ: **ZH**



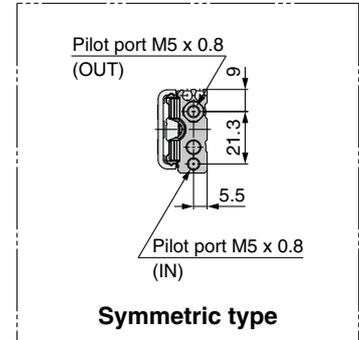
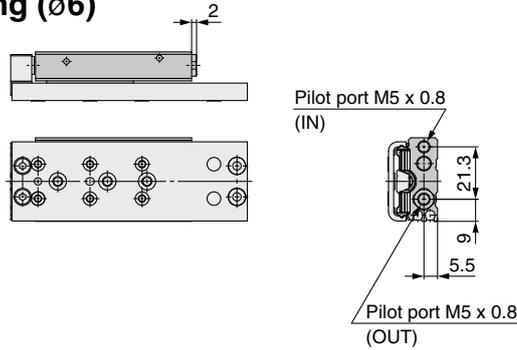
Metal stopper: **ZL**



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

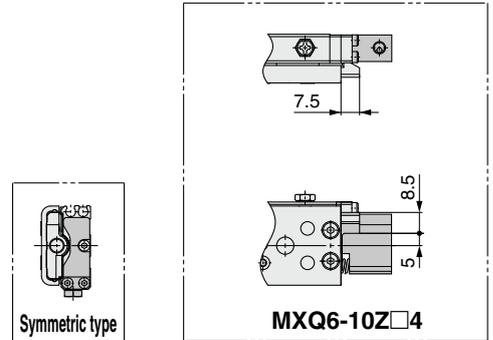
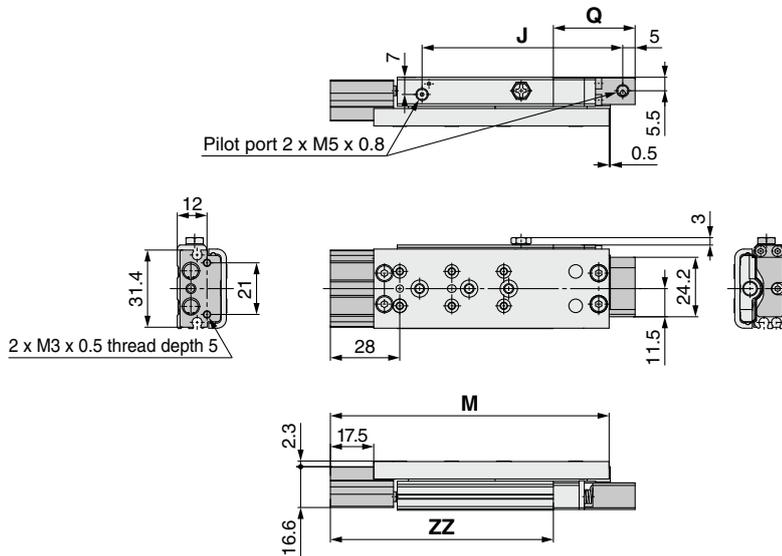
Dimensions: MXQ **6** [Functional Option]

MXQ 6-□□**3** Axial piping (ø6)



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

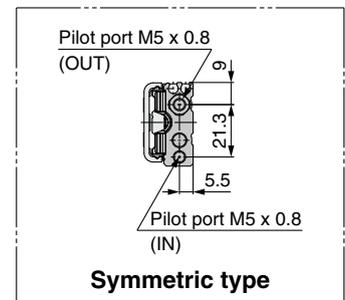
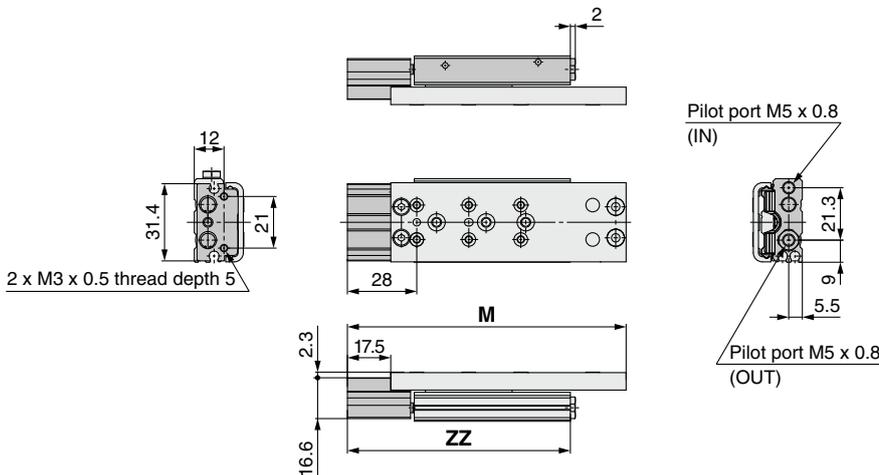
MXQ 6-□□**4** With buffer, end lock (ø6)



Dimensions [mm]				
Model	J	Q	Standard type	
			M	ZZ
MXQ6-10Z□4	60	25	81.5	77
MXQ6-20Z□4			91.5	
MXQ6-30Z□4	81		112.5	90
MXQ6-40Z□4	93	33	124.5	102
MXQ6-50Z□4	103		134.5	112

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

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



Dimensions [mm]			
Model	Standard type		ZZ
	M	Shorter total length type M	
MXQ6-10Z□5	81.5	72	77
MXQ6-20Z□5	91.5	82	
MXQ6-30Z□5	112.5	103	90
MXQ6-40Z□5	124.5	115	102
MXQ6-50Z□5	134.5	125	112

* Dimensions other than those 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

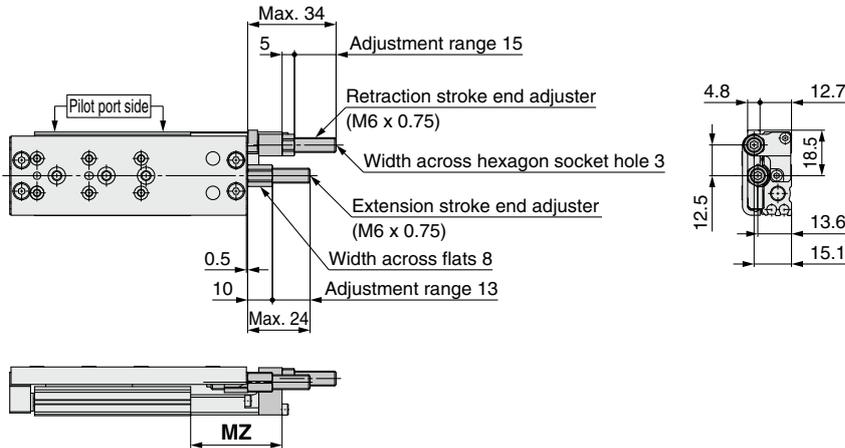
MXQ Series

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

MXQ 6-□□6 Centralized adjuster (∅6)

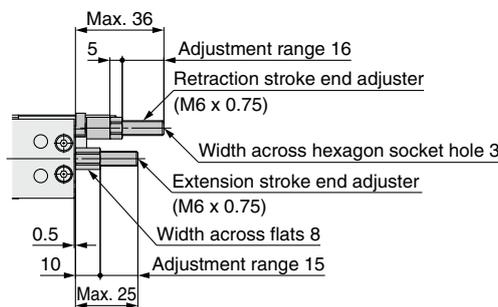
For adjuster part numbers, refer to page 124-1.

Metal stopper **ZK**: Both ends,
ZM: Retraction stroke end

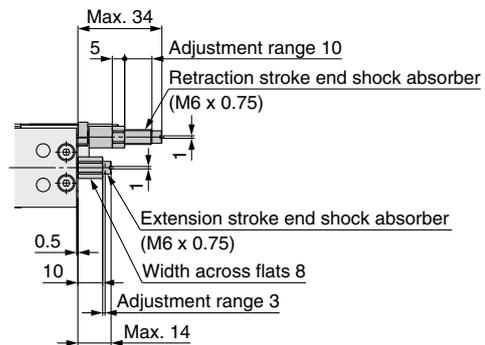


Dimensions [mm]	
Model	MZ
MXQ6-10Z□6	18.9
MXQ6-20Z□6	28.9
MXQ6-30Z□6	
MXQ6-40Z□6	36.9
MXQ6-50Z□6	

Rubber stopper **ZD**: Both ends,
ZF: Retraction stroke end



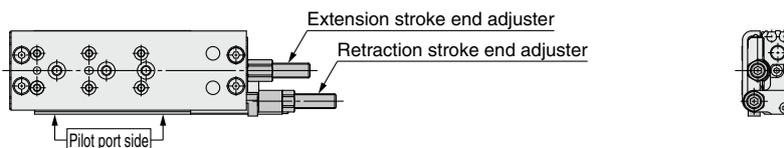
Shock absorber/RJ **ZG**: Both ends,
ZJ: Retraction stroke end



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

MXQ 6L-□□7 Centralized adjuster / Symmetric type (∅6)

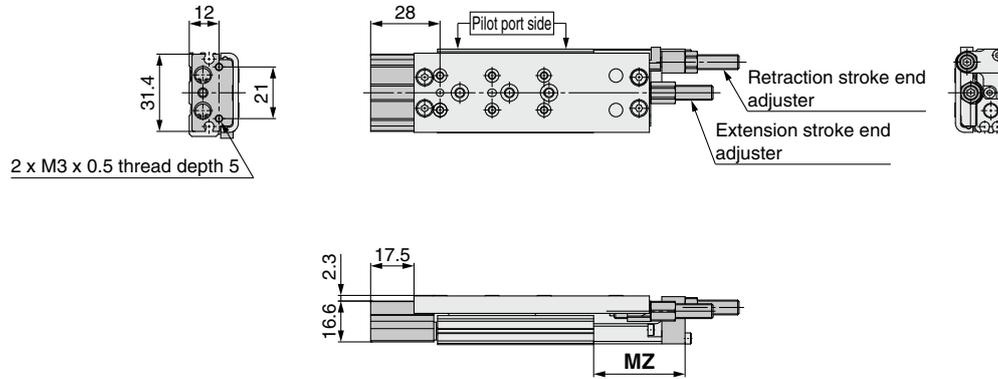
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.



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

MXQ 6-□□8 Buffer, Centralized adjuster (ø6)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.

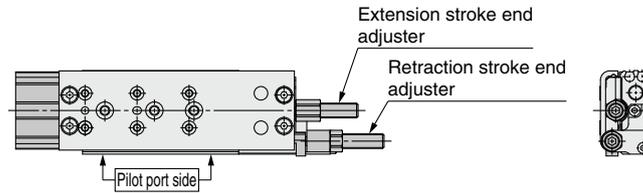


* Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]	
Model	MZ
MXQ6-10Z□8	18.9
MXQ6-20Z□8	28.9
MXQ6-30Z□8	36.9
MXQ6-40Z□8	
MXQ6-50Z□8	

MXQ 6L-□□9 Buffer, Centralized adjuster / Symmetric type (ø6)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.



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

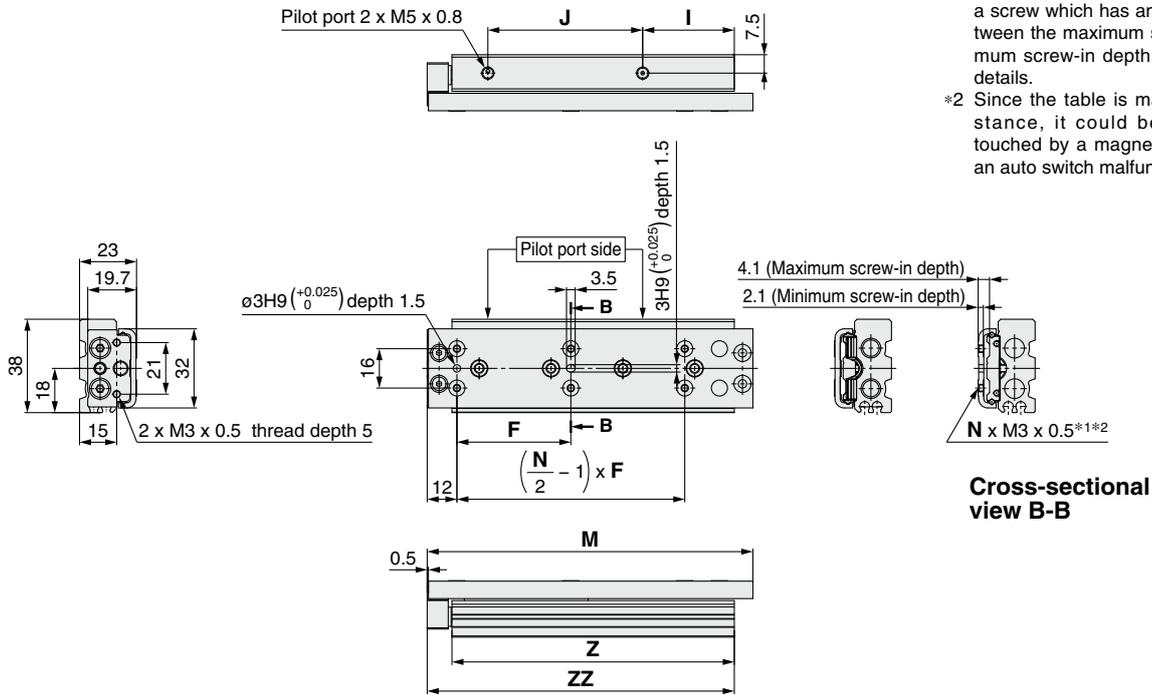
Made to Order

Model Selection

MXQ Series

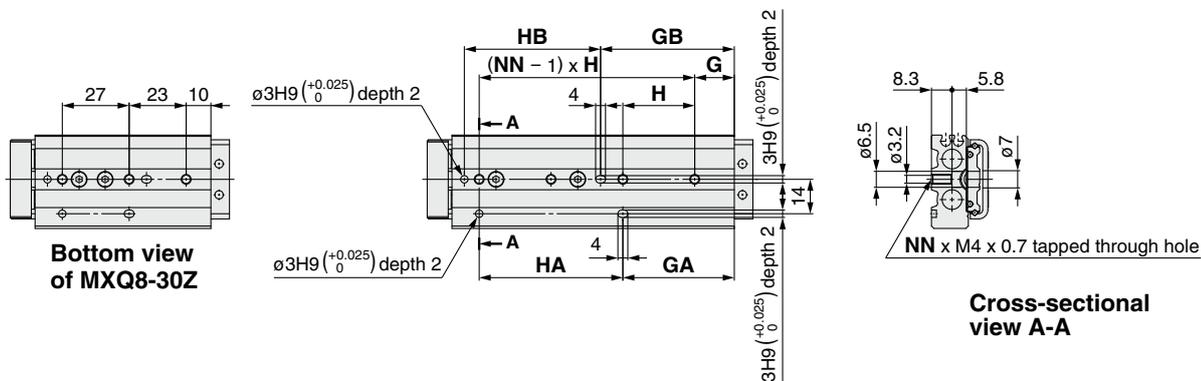
Dimensions: MXQ **8** [Standard]

MXQ **8-Z** Standard type

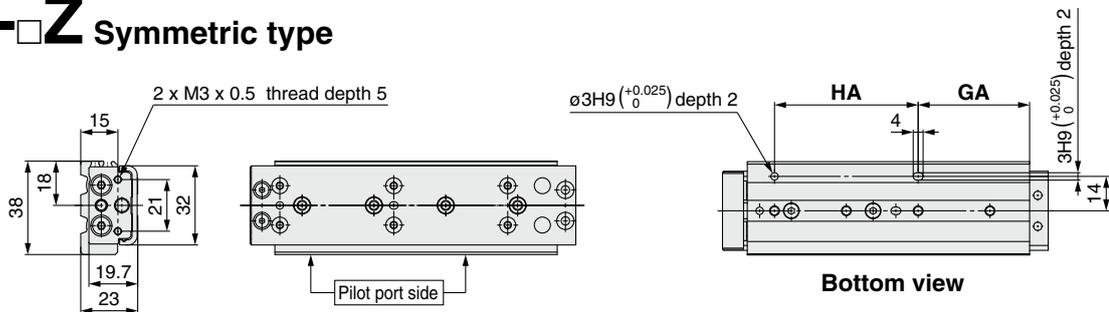


*1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.

*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 **8L-Z** Symmetric type



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

Dimensions

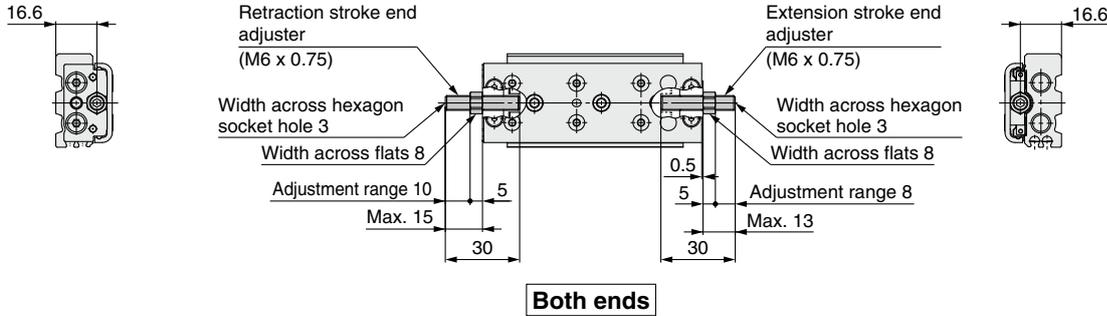
Model	F	G	GA	GB	H	HA	HB	I	J	M	N	NN	Z	ZZ
MXQ8-10Z	25	15	21	9	25	19	37	10	26.5	68.5	4	2	51	61
MXQ8-20Z	25	22	22	16	28	28	40	14	32.5	78.5	4	2	61	71
MXQ8-30Z	26	—	33	26	—	27	40	14.5	42	88.5	6	3	71	81
MXQ8-40Z	32	14	45	27	31	31	55	20	52.5	104.5	6	3	87	97
MXQ8-50Z	46	16	45	54	29	58	55	37	62.5	131.5	6	4	114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

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

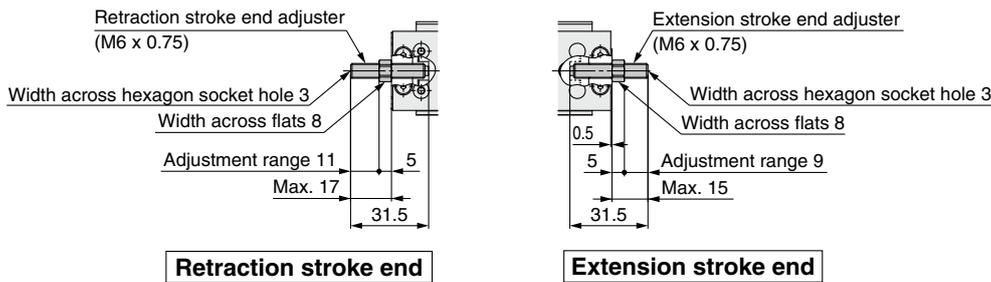
MXQ 8-□ □ With adjuster option (ø8)

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

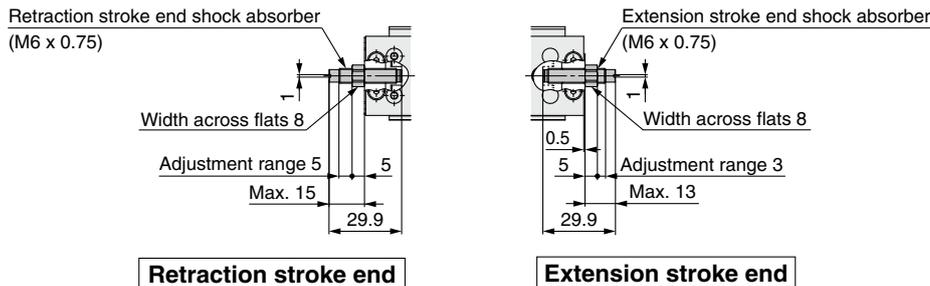
Metal stopper **ZK**: Both ends, **ZL**: Extension stroke end, **ZM**: Retraction stroke end, **ZT**: Retraction stroke end (Shorter total length type)



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

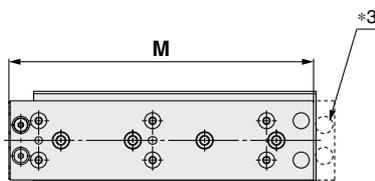


Shock absorber/RJ **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



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

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



*3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters 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 those 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

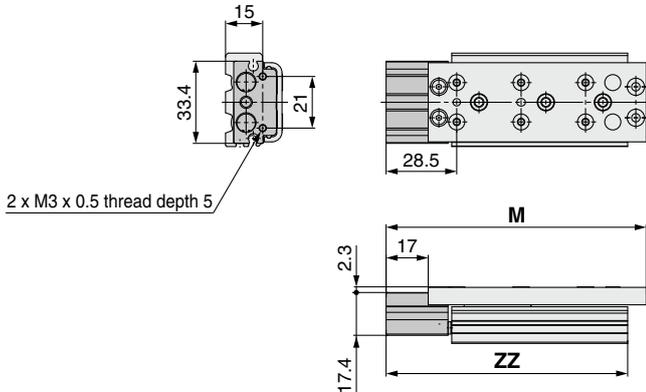
Made to Order

Model Selection

MXQ Series

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

MXQ 8-□□1 With buffer (ø8)

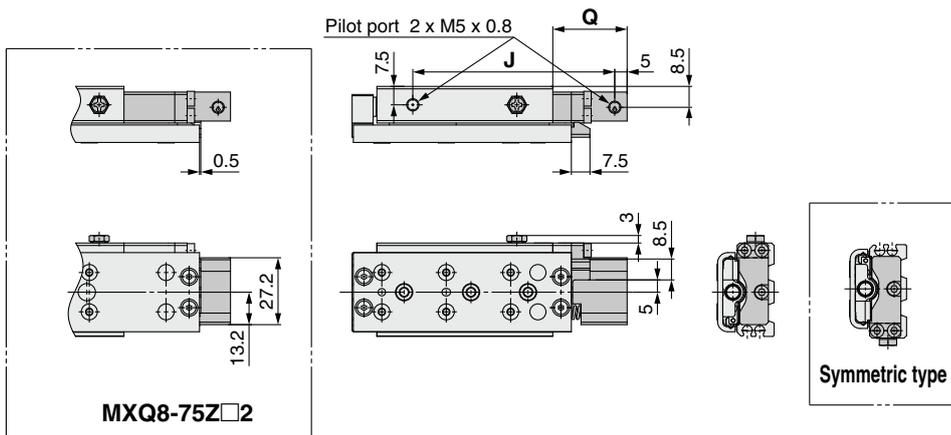


Dimensions [mm]

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

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

MXQ 8-□□2 With end lock (ø8)



Dimensions [mm]

Model	Symmetric type	
	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 those listed above are the same as those for the standard type.

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

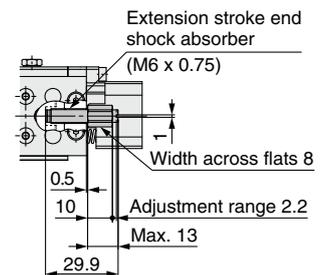
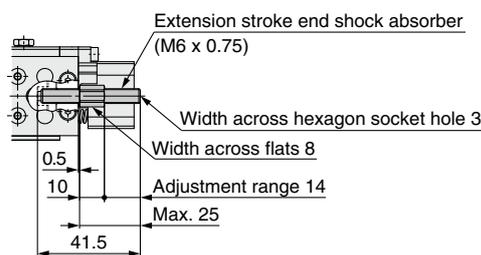
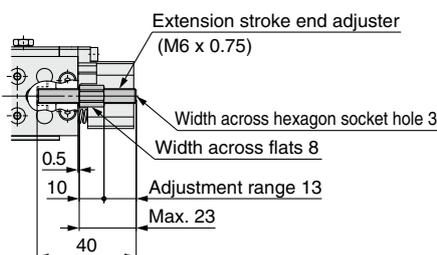
A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper: **ZB**

Metal stopper: **ZL**

Rubber stopper: **ZE**

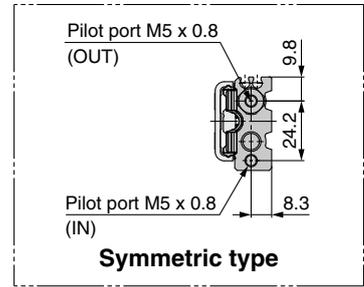
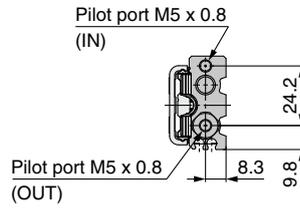
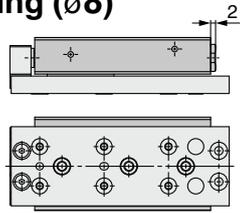
Shock absorber/RJ: **ZH**



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

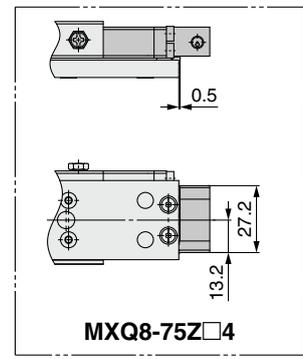
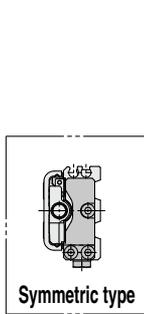
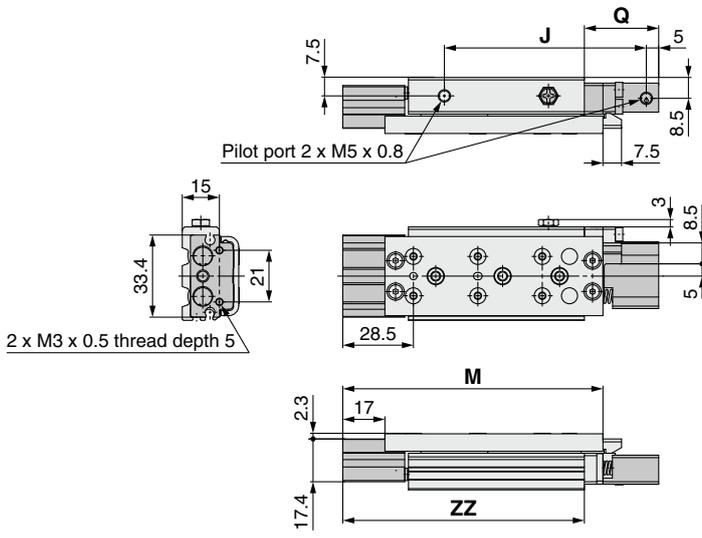
Dimensions: MXQ **8** [Functional Option]

MXQ 8-□□**3** Axial piping (ø8)



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

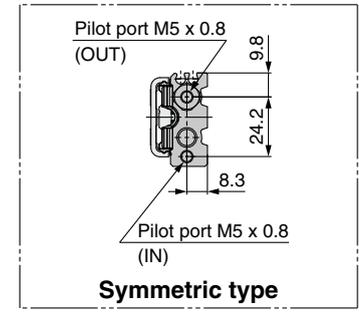
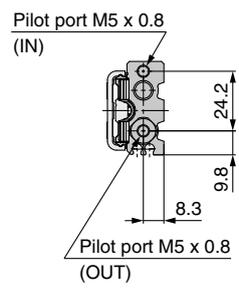
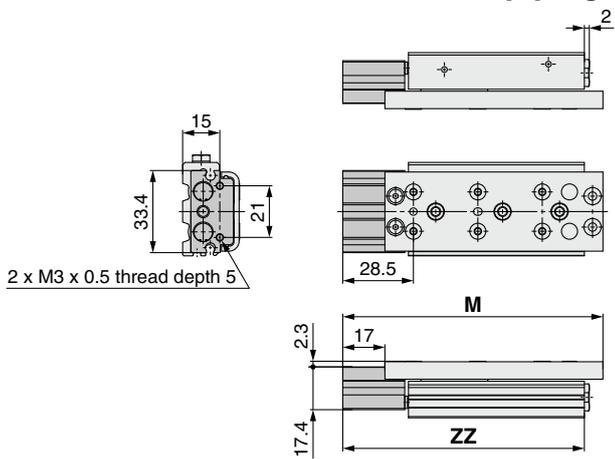
MXQ 8-□□**4** With buffer, end lock (ø8)



Dimensions [mm]				
Model	J	Q	Standard type	
			M	ZZ
MXQ8-10Z□4	61.5	30	85	77.5
MXQ8-20Z□4	71.5		95	87.5
MXQ8-30Z□4	81.5		105	97.5
MXQ8-40Z□4	97.5		121	113.5
MXQ8-50Z□4	124.5		148	140.5
MXQ8-75Z□4	139.5	43	173	142.5

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

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



Dimensions [mm]			
Model	Standard type		ZZ
	M	Shorter total length type M	
MXQ8-10Z□5	85	76.5	77.5
MXQ8-20Z□5	95	86.5	87.5
MXQ8-30Z□5	105	96.5	97.5
MXQ8-40Z□5	121	112.5	113.5
MXQ8-50Z□5	148	139.5	140.5
MXQ8-75Z□5	173	164.5	142.5

* Dimensions other than those 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

MXQ Series

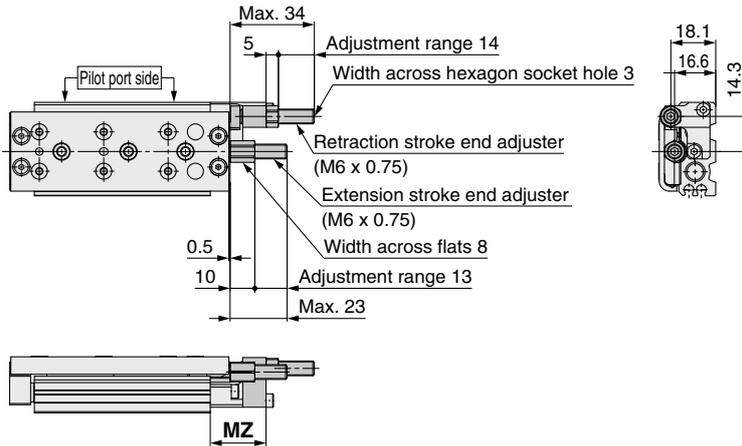
Dimensions: MXQ **8** [Functional Option]

MXQ 8-□□6 Centralized adjuster (ø8)

For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper **ZA**: Both ends, **ZC**: Retraction stroke end

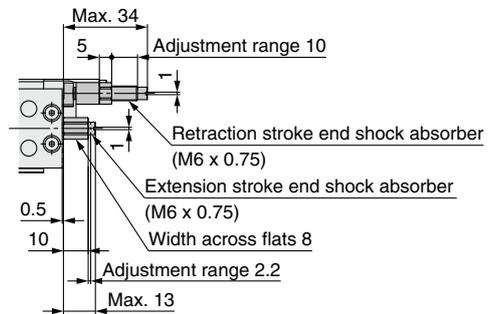
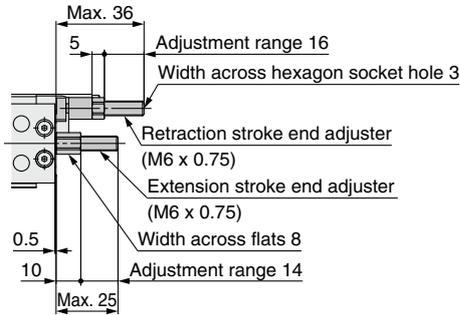
Metal stopper **ZK**: Both ends, **ZM**: Retraction stroke end



Dimensions [mm]	
Model	MZ
MXQ8-10Z□6	22.5
MXQ8-20Z□6	
MXQ8-30Z□6	
MXQ8-40Z□6	
MXQ8-50Z□6	
MXQ8-75Z□6	46.5

Rubber stopper **ZD**: Both ends, **ZF**: Retraction stroke end

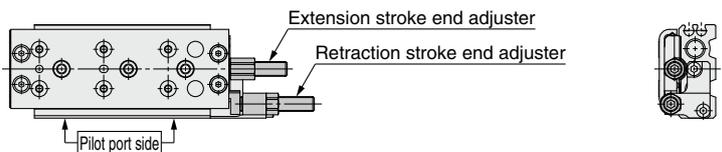
Shock absorber/RJ **ZG**: Both ends, **ZJ**: Retraction stroke end



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

MXQ 8L-□□7 Centralized adjuster / Symmetric type (ø8)

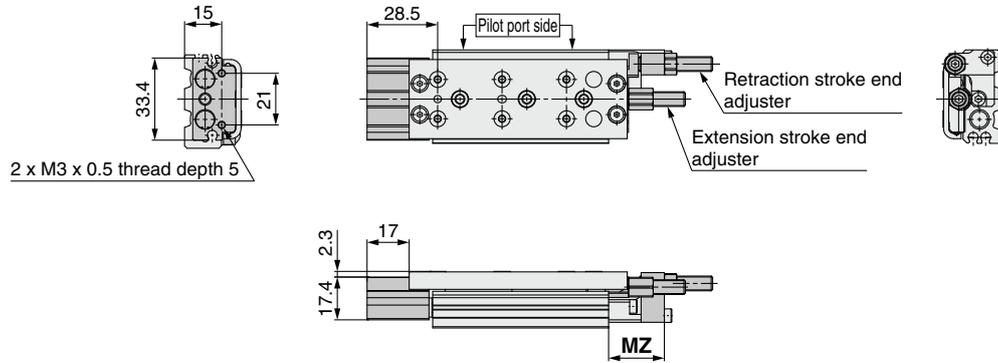
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.



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

MXQ **8**-□□**8** Buffer, Centralized adjuster (ø8)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.

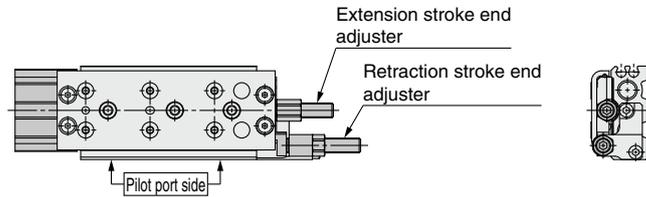


* Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]	
Model	MZ
MXQ8-10Z□8	22.5
MXQ8-20Z□8	
MXQ8-30Z□8	
MXQ8-40Z□8	
MXQ8-50Z□8	46.5
MXQ8-75Z□8	

MXQ **8L**-□□**9** Buffer, Centralized adjuster / Symmetric type (ø8)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.



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

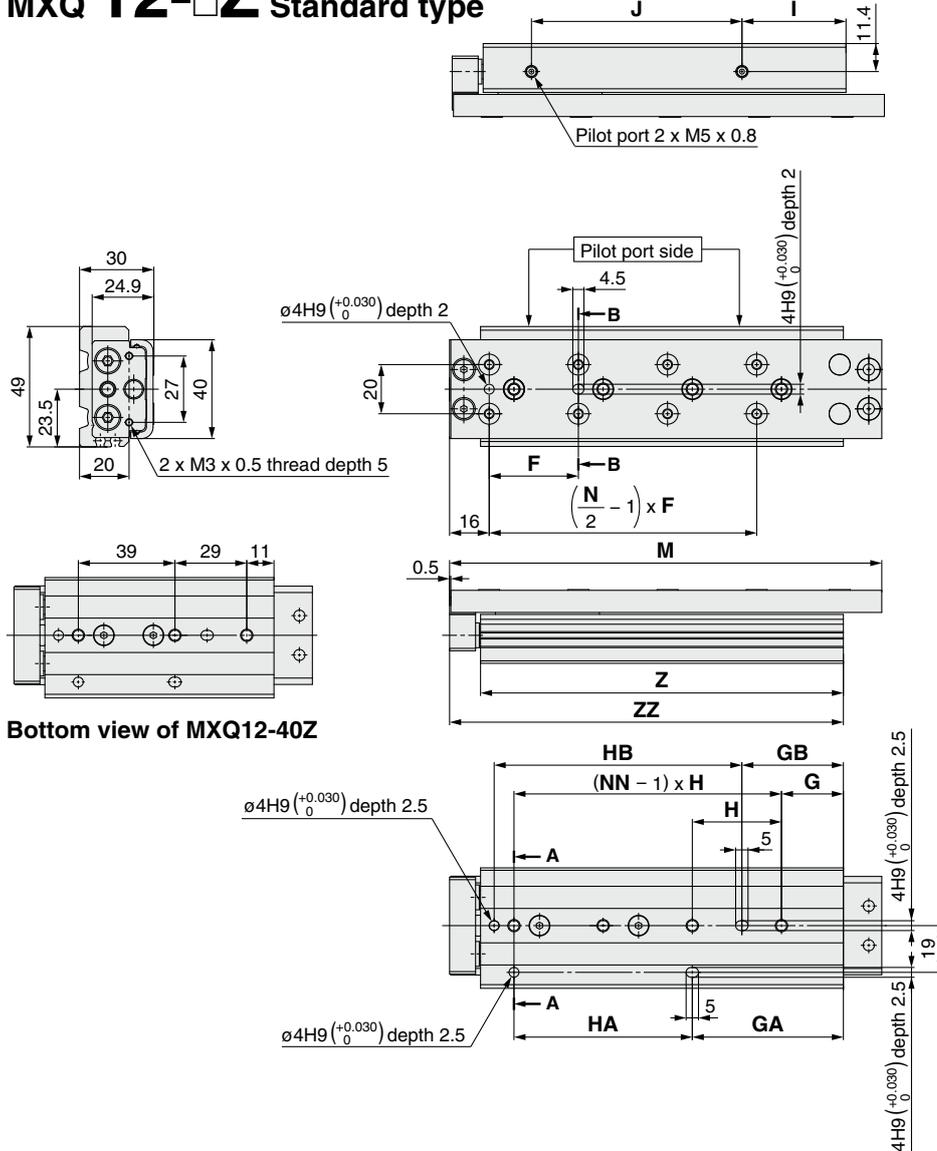
Made to Order

Model Selection

MXQ Series

Dimensions: MXQ **12** [Standard]

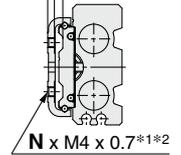
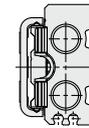
MXQ **12**-□**Z** Standard type



*1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.

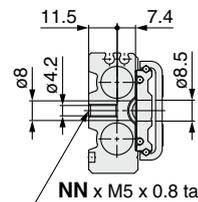
*2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.

5.7 (Maximum screw-in depth)
2.7 (Minimum screw-in depth)



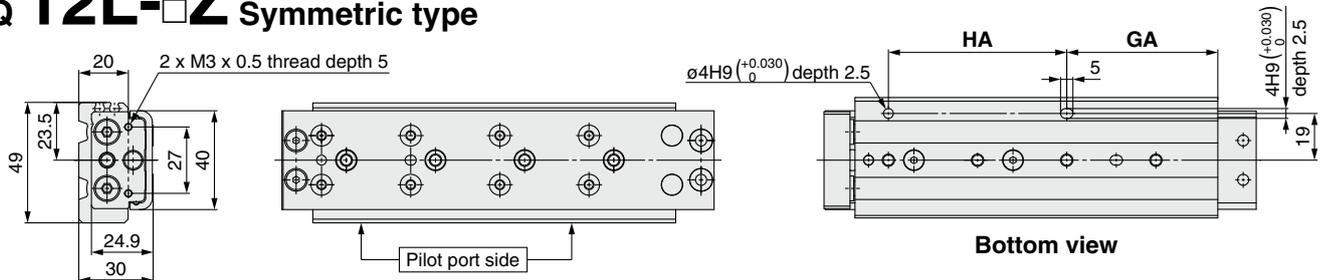
Cross-sectional view B-B

Bottom view of MXQ12-40Z



Cross-sectional view A-A

MXQ **12L**-□**Z** Symmetric type



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

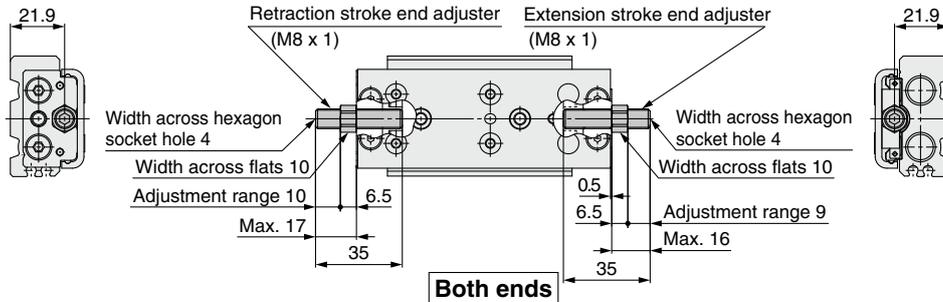
Dimensions

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

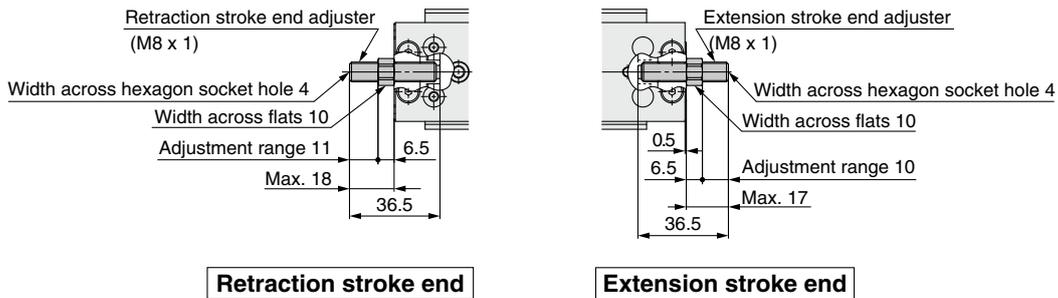
Dimensions: MXQ **12** [Adjuster Option]

MXQ 12-□ □ With adjuster option (∅12)

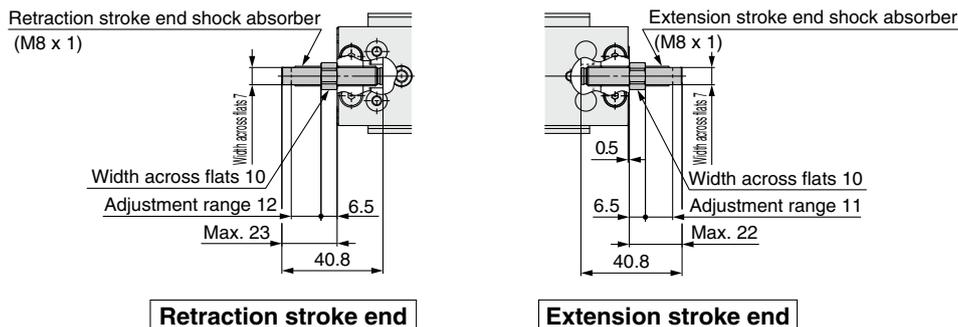
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)
 Metal stopper **ZK**: Both ends, **ZL**: Extension stroke end, **ZM**: Retraction stroke end, **ZT**: Retraction stroke end (Shorter total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



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

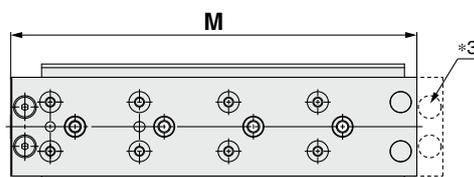


Shock absorber/RJ **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



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

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



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

* Dimensions other than those 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

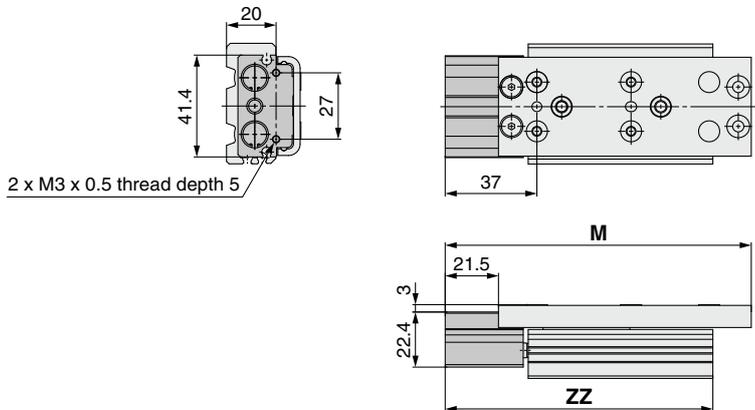
Made to Order

Model Selection

MXQ Series

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

MXQ 12-□□1 With buffer (∅12)

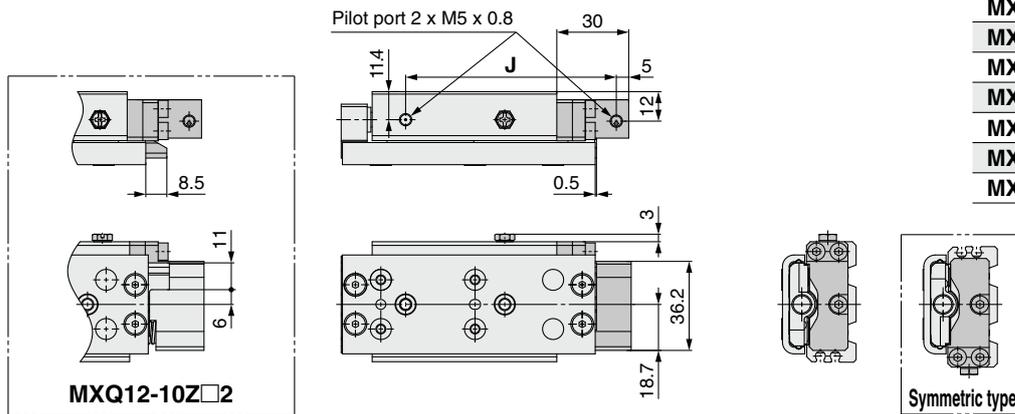


Dimensions [mm]

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

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

MXQ 12-□□2 With end lock (∅12)



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 those listed above are the same as those for the standard type.

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

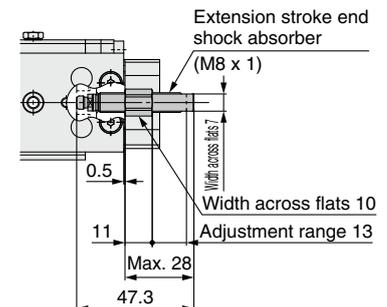
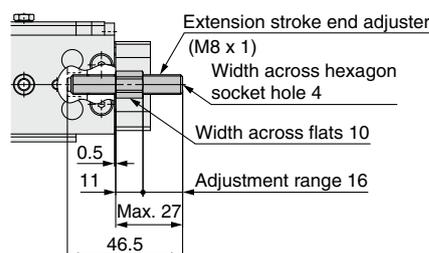
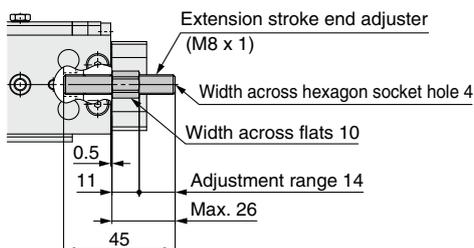
A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper: **ZB**

Metal stopper: **ZL**

Rubber stopper: **ZE**

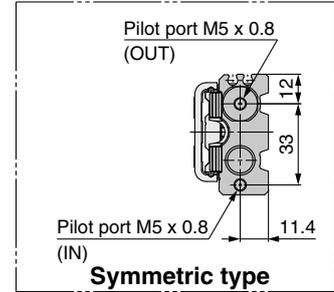
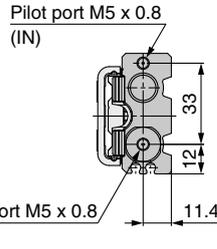
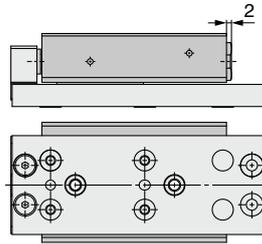
Shock absorber/RJ: **ZH**



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

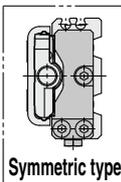
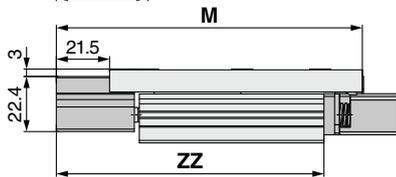
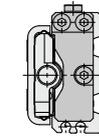
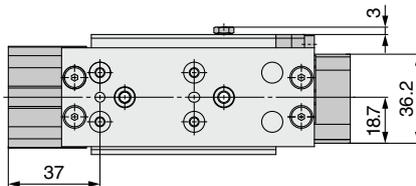
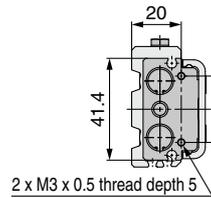
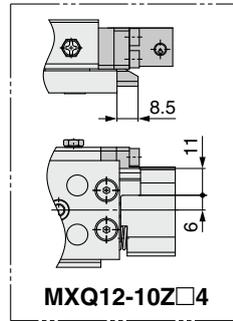
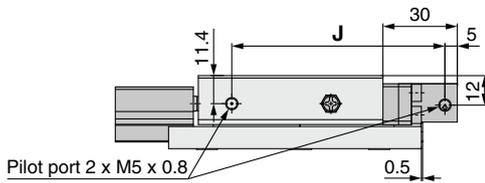
Dimensions: MXQ **12** [Functional Option]

MXQ 12-□□3 Axial piping (ø12)



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

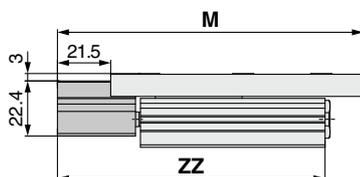
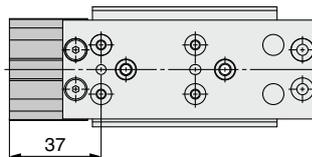
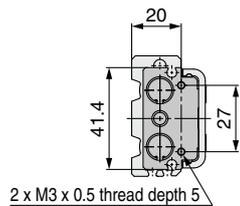
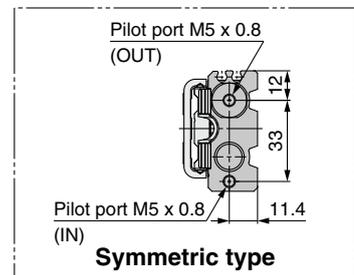
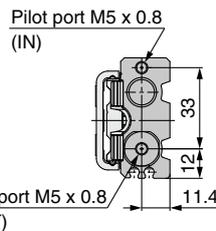
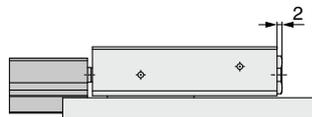
MXQ 12-□□4 With buffer, end lock (ø12)



Model	J	Standard type	
		M	ZZ
MXQ12-10Z□4	68	103.5	96
MXQ12-20Z□4	70	113.5	98
MXQ12-30Z□4	80	123.5	108
MXQ12-40Z□4	98	141.5	126
MXQ12-50Z□4	108	151.5	136
MXQ12-75Z□4	152	195.5	180
MXQ12-100Z□4	177	220.5	205

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

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



Model	Standard type		Shorter total length type	ZZ
	M	M		
MXQ12-10Z□5	103.5	93	96	
MXQ12-20Z□5	113.5	103	98	
MXQ12-30Z□5	123.5	113	108	
MXQ12-40Z□5	141.5	131	126	
MXQ12-50Z□5	151.5	141	136	
MXQ12-75Z□5	195.5	185	180	
MXQ12-100Z□5	220.5	210	205	

* Dimensions other than those 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

MXQ Series

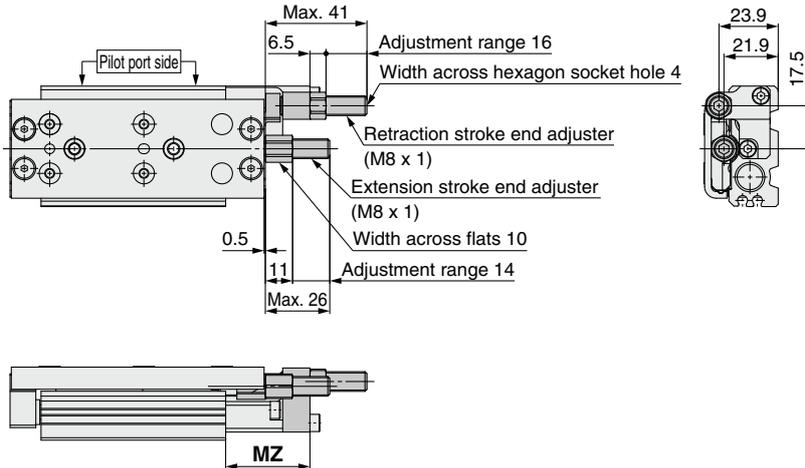
Dimensions: MXQ **12** [Functional Option]

MXQ 12-□□6 Centralized adjuster (ø12)

For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper **ZA**: Both ends, **ZC**: Retraction stroke end

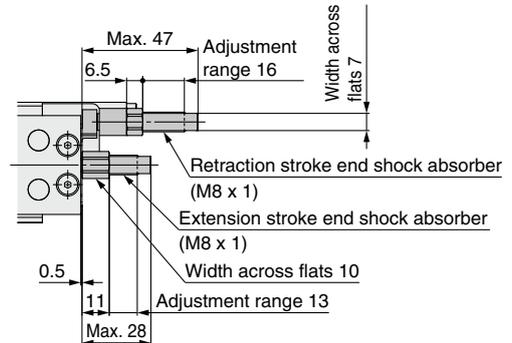
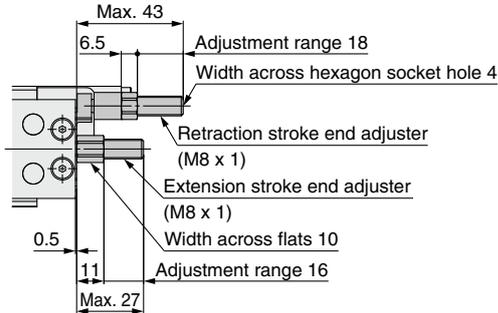
Metal stopper **ZK**: Both ends, **ZM**: Retraction stroke end



Dimensions [mm]	
Model	MZ
MXQ12-10Z□6	26
MXQ12-20Z□6	34
MXQ12-30Z□6	
MXQ12-40Z□6	
MXQ12-50Z□6	
MXQ12-75Z□6	
MXQ12-100Z□6	

Rubber stopper **ZD**: Both ends,
ZF: Retraction stroke end

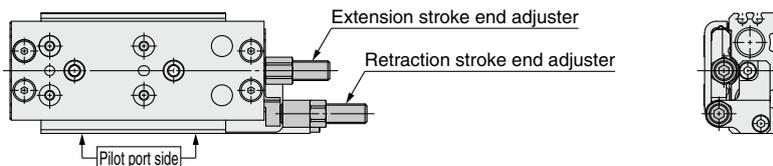
Shock absorber/RJ **ZG**: Both ends,
ZJ: Retraction stroke end



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

MXQ 12L-□□7 Centralized adjuster / Symmetric type (ø12)

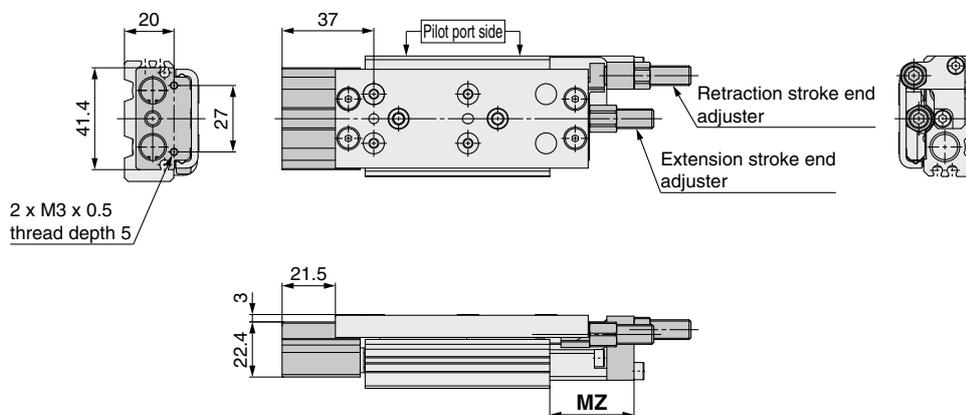
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.



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

MXQ 12-□□8 Buffer, Centralized adjuster (ø12)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.

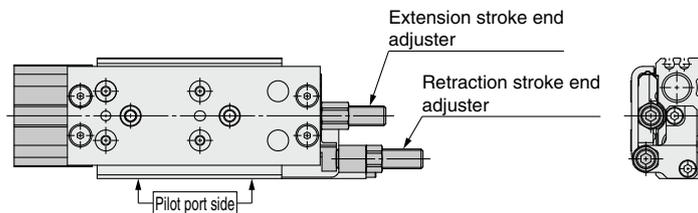


Dimensions [mm]	
Model	MZ
MXQ12-10Z□8	26
MXQ12-20Z□8	34
MXQ12-30Z□8	
MXQ12-40Z□8	
MXQ12-50Z□8	
MXQ12-75Z□8	
MXQ12-100Z□8	

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

MXQ 12L-□□9 Buffer, Centralized adjuster / Symmetric type (ø12)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.



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

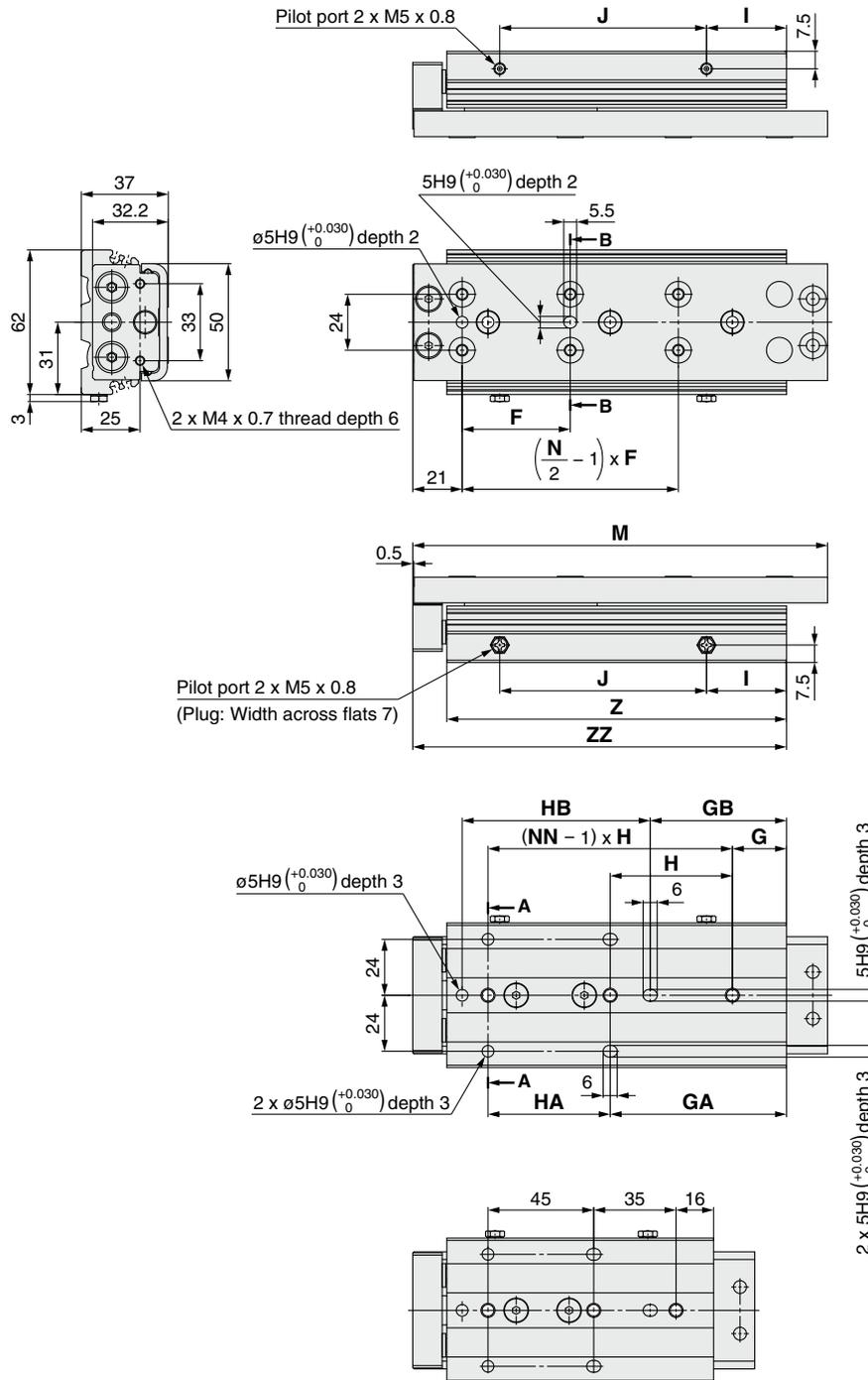
Made to Order

Model Selection

MXQ Series

Dimensions: MXQ **16** [Standard]

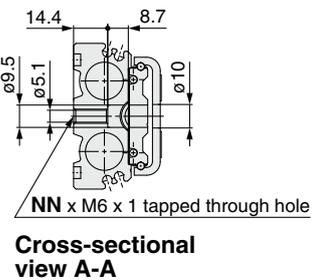
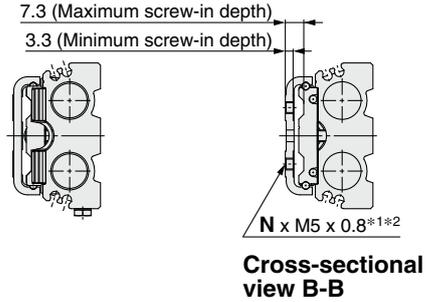
MXQ 16-□Z Standard type



Bottom view of MXQ16-50Z

*1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.

*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.



Cross-sectional view A-A

Dimensions

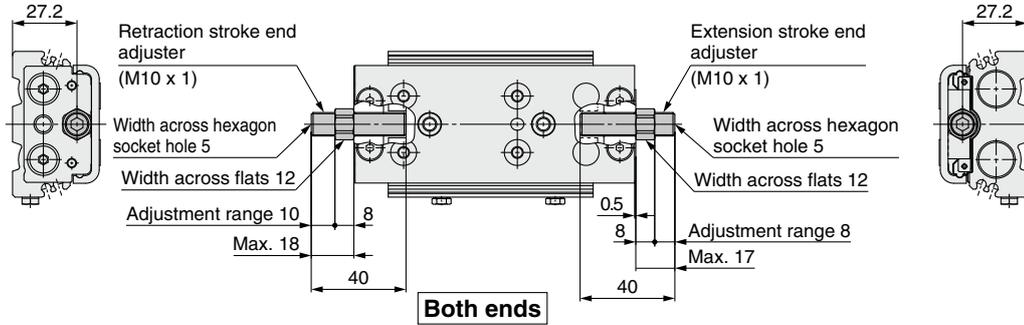
Model	F	G	GA	GB	H	HA	HB	I	J	M	N	NN	Z	ZZ
MXQ16-10Z	38	16	16	8	39	39	58	22	28	98.5	4	2	72.5	87
MXQ16-20Z	38	20	20	12	39	39	58	15	39	108.5	4	2	76.5	91
MXQ16-30Z	48	21	21	30	48	48	50	16	48	118.5	4	2	86.5	101
MXQ16-40Z	58	28	28	17	58	58	80	23	58	135.5	4	2	103.5	118
MXQ16-50Z	40	—	51	27	—	45	80	28	63	145.5	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]

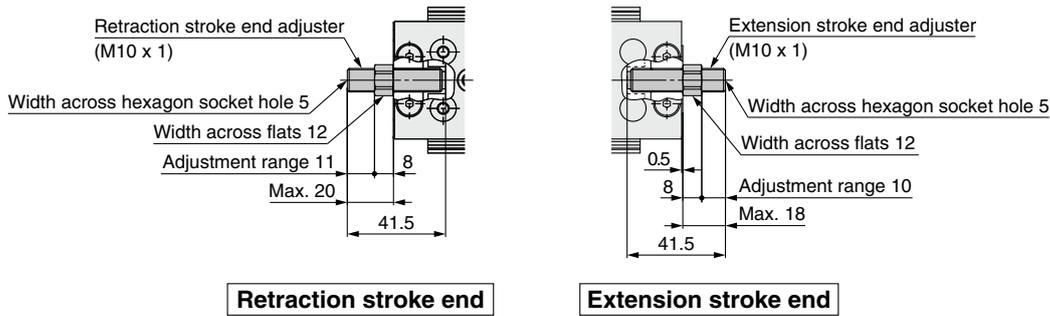
MXQ 16-□ □ With adjuster option (∅16)

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

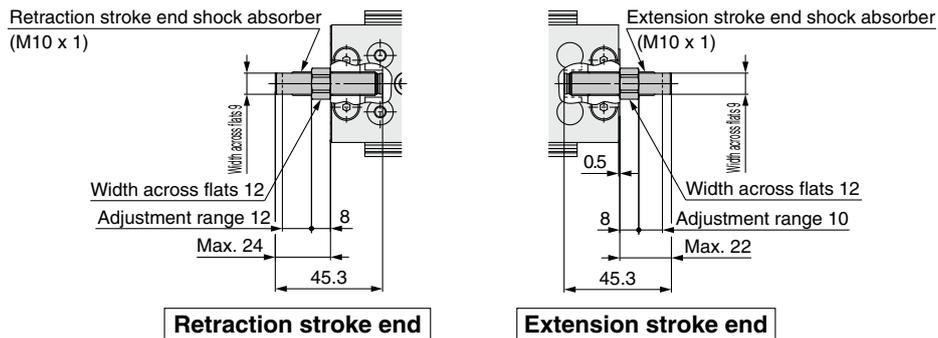
Metal stopper **ZK**: Both ends, **ZL**: Extension stroke end, **ZM**: Retraction stroke end, **ZT**: Retraction stroke end (Shorter total length type)



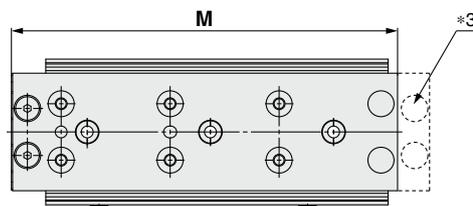
Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)



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



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

* Dimensions other than those 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

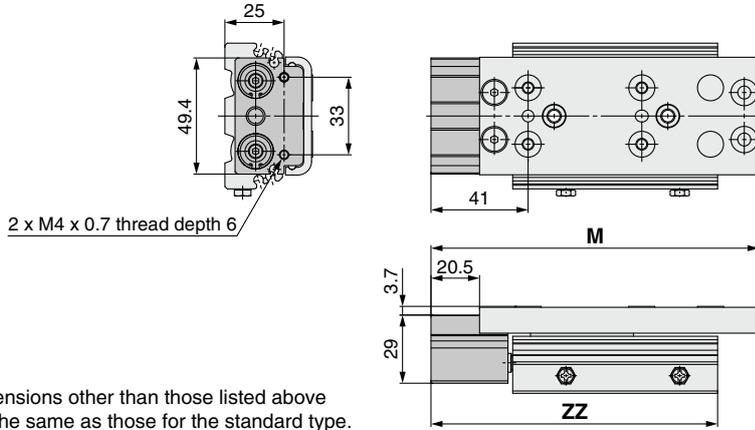
Made to Order

Model Selection

MXQ Series

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

MXQ 16-□□1 With buffer (ø16)

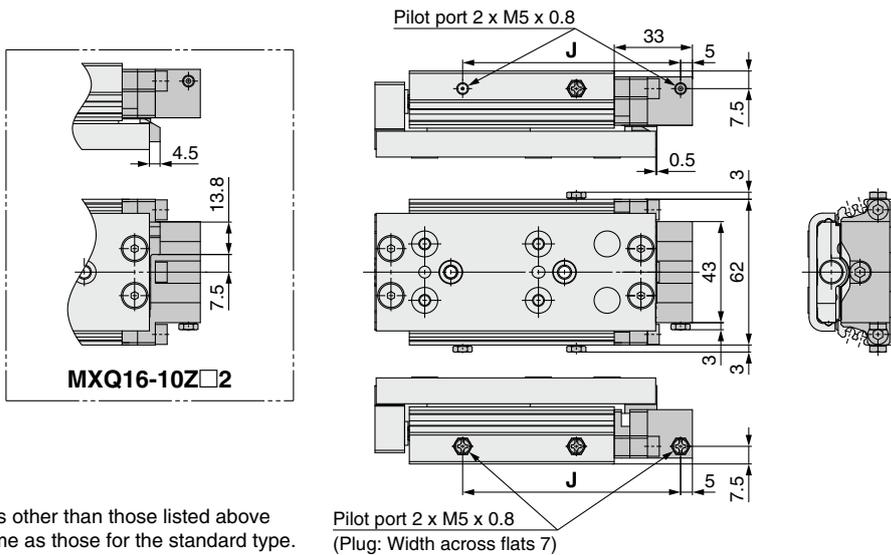


* Dimensions other than those listed above are the same as those for the standard type.

Dimensions

Model	[mm]		
	Standard type	Shorter total length type	ZZ
MXQ16-10Z□1	118.5	105	107
MXQ16-20Z□1	128.5	115	111
MXQ16-30Z□1	138.5	125	121
MXQ16-40Z□1	155.5	142	138
MXQ16-50Z□1	165.5	152	148
MXQ16-75Z□1	196.5	183	179
MXQ16-100Z□1	240.5	227	223
MXQ16-125Z□1	265.5	252	248

MXQ 16-□□2 With end lock (ø16)



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

Dimensions

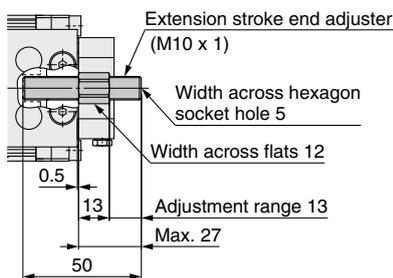
Model	[mm]
	J
MXQ16-10Z□2	78
MXQ16-20Z□2	82
MXQ16-30Z□2	92
MXQ16-40Z□2	109
MXQ16-50Z□2	119
MXQ16-75Z□2	150
MXQ16-100Z□2	194
MXQ16-125Z□2	219

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

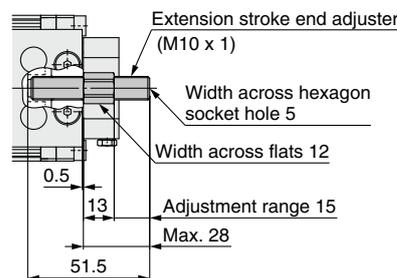
A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper: **ZB**

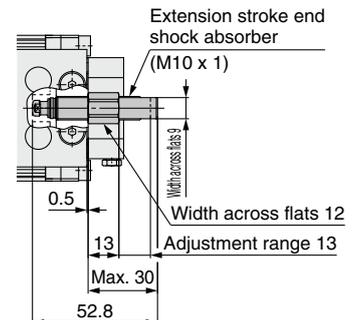
Metal stopper: **ZL**



Rubber stopper: **ZE**



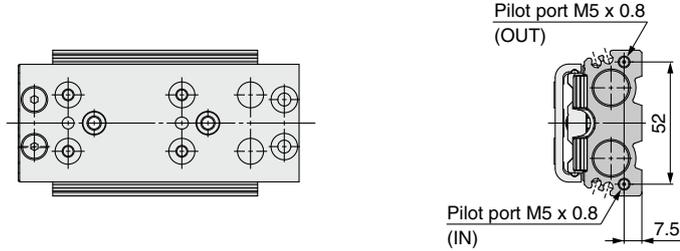
Shock absorber/RJ: **ZH**



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

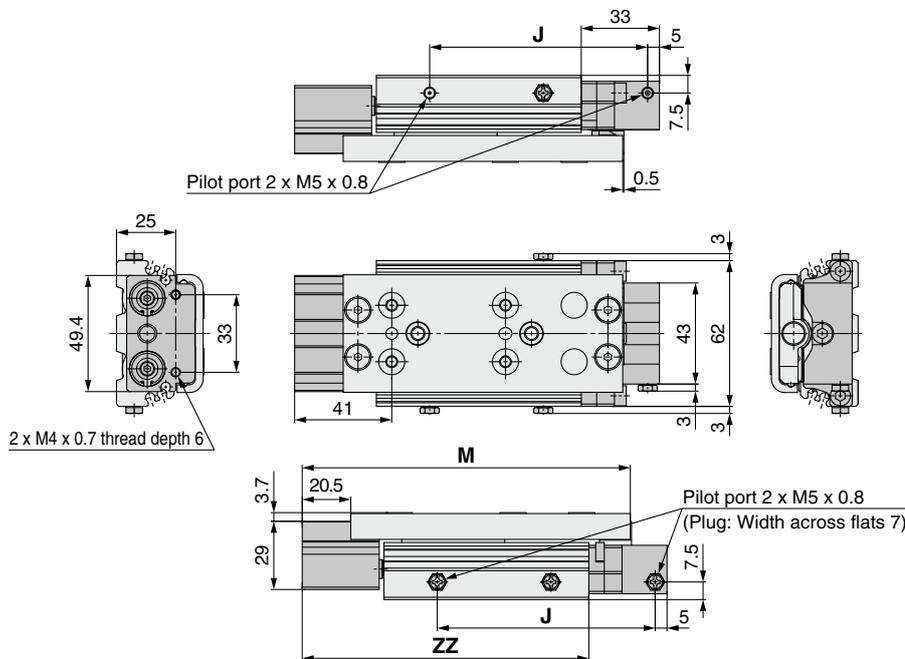
Dimensions: MXQ **16** [Functional Option]

MXQ 16-□□3 Axial piping (ø16)

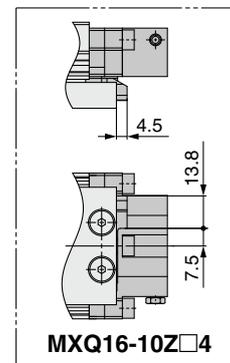


* Dimensions other than those listed above are the same as those for the standard type.

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



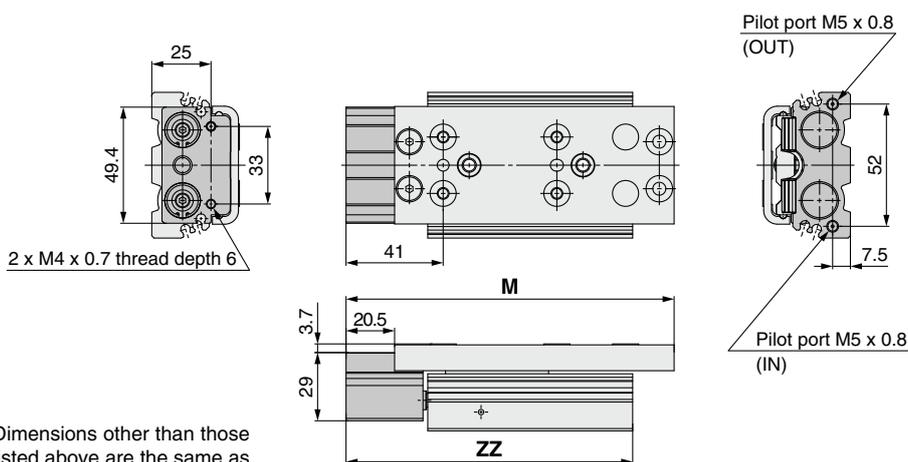
* Dimensions other than those listed above are the same as those for the standard type.



Dimensions [mm]

Model	J	Standard type	
		M	ZZ
MXQ16-10Z□4	78	118.5	107
MXQ16-20Z□4	82	128.5	111
MXQ16-30Z□4	92	138.5	121
MXQ16-40Z□4	109	155.5	138
MXQ16-50Z□4	119	165.5	148
MXQ16-75Z□4	150	196.5	179
MXQ16-100Z□4	194	240.5	223
MXQ16-125Z□4	219	265.5	248

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



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

Dimensions [mm]

Model	Standard type		ZZ
	M	Shorter total length type M	
MXQ16-10Z□5	118.5	105	107
MXQ16-20Z□5	128.5	115	111
MXQ16-30Z□5	138.5	125	121
MXQ16-40Z□5	155.5	142	138
MXQ16-50Z□5	165.5	152	148
MXQ16-75Z□5	196.5	183	179
MXQ16-100Z□5	240.5	227	223
MXQ16-125Z□5	265.5	252	248

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 Series

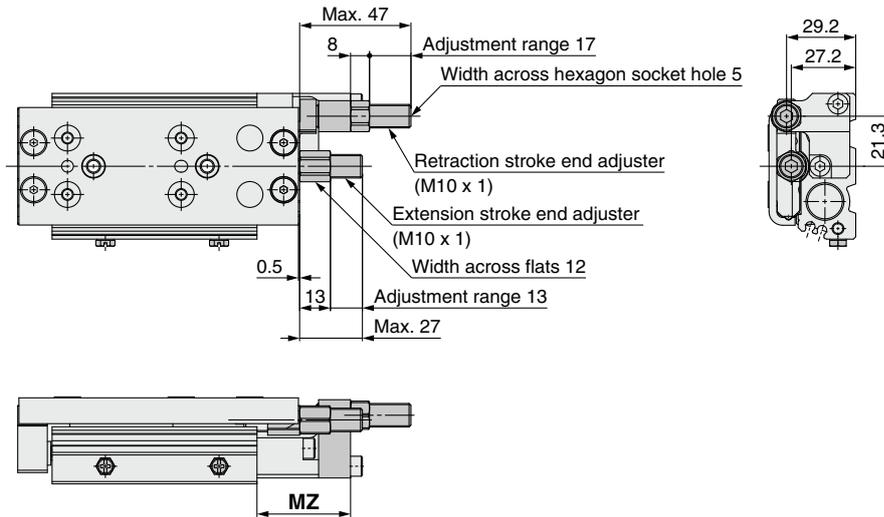
Dimensions: MXQ **16** [Functional Option]

MXQ 16-□□6 Centralized adjuster (ø16)

For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper **ZA**: Both ends, **ZC**: Retraction stroke end

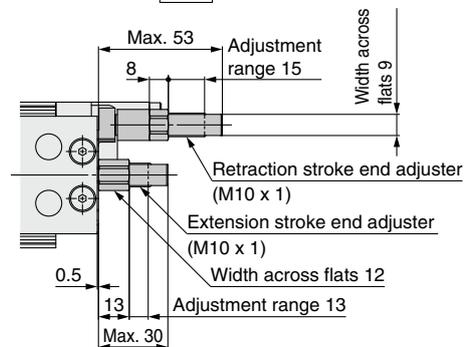
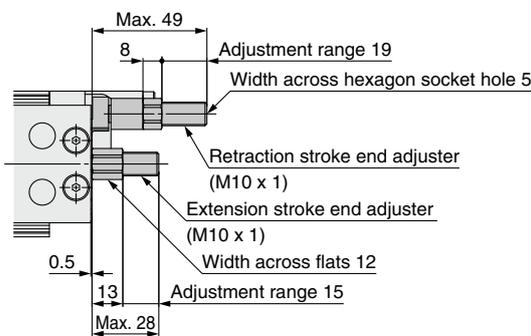
Metal stopper **ZK**: Both ends, **ZM**: Retraction stroke end



Dimensions [mm]	
Model	MZ
MXQ16-10Z□6	33.5
MXQ16-20Z□6	39.5
MXQ16-30Z□6	
MXQ16-40Z□6	
MXQ16-50Z□6	
MXQ16-75Z□6	
MXQ16-100Z□6	
MXQ16-125Z□6	

Rubber stopper **ZD**: Both ends,
ZF: Retraction stroke end

Shock absorber/RJ **ZG**: Both ends,
ZJ: Retraction stroke end



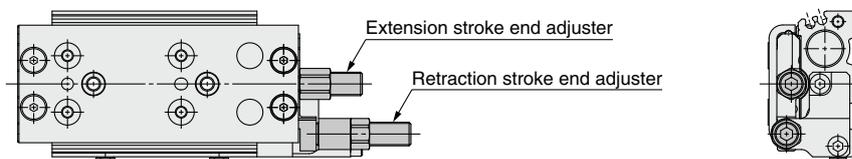
* Dimensions other than those listed above are the same as those for the standard type.

* In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 16-□□7 Centralized adjuster / Symmetric type (ø16)

The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.

For adjuster part numbers, refer to page 124-1.

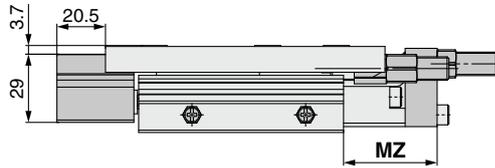
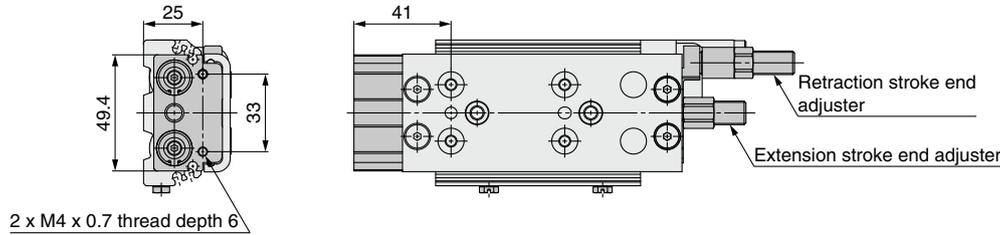


* In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

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

MXQ 16-□□8 Buffer, Centralized adjuster (ø16)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.

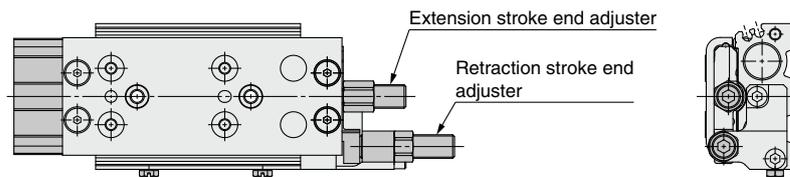


Dimensions [mm]	
Model	MZ
MXQ16-10Z□8	33.5
MXQ16-20Z□8	39.5
MXQ16-30Z□8	
MXQ16-40Z□8	
MXQ16-50Z□8	
MXQ16-75Z□8	
MXQ16-100Z□8	
MXQ16-125Z□8	

- * Dimensions other than those listed above are the same as those for the standard type.
- * In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 16-□□9 Buffer, Centralized adjuster / Symmetric type (ø16)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.



- * In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

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

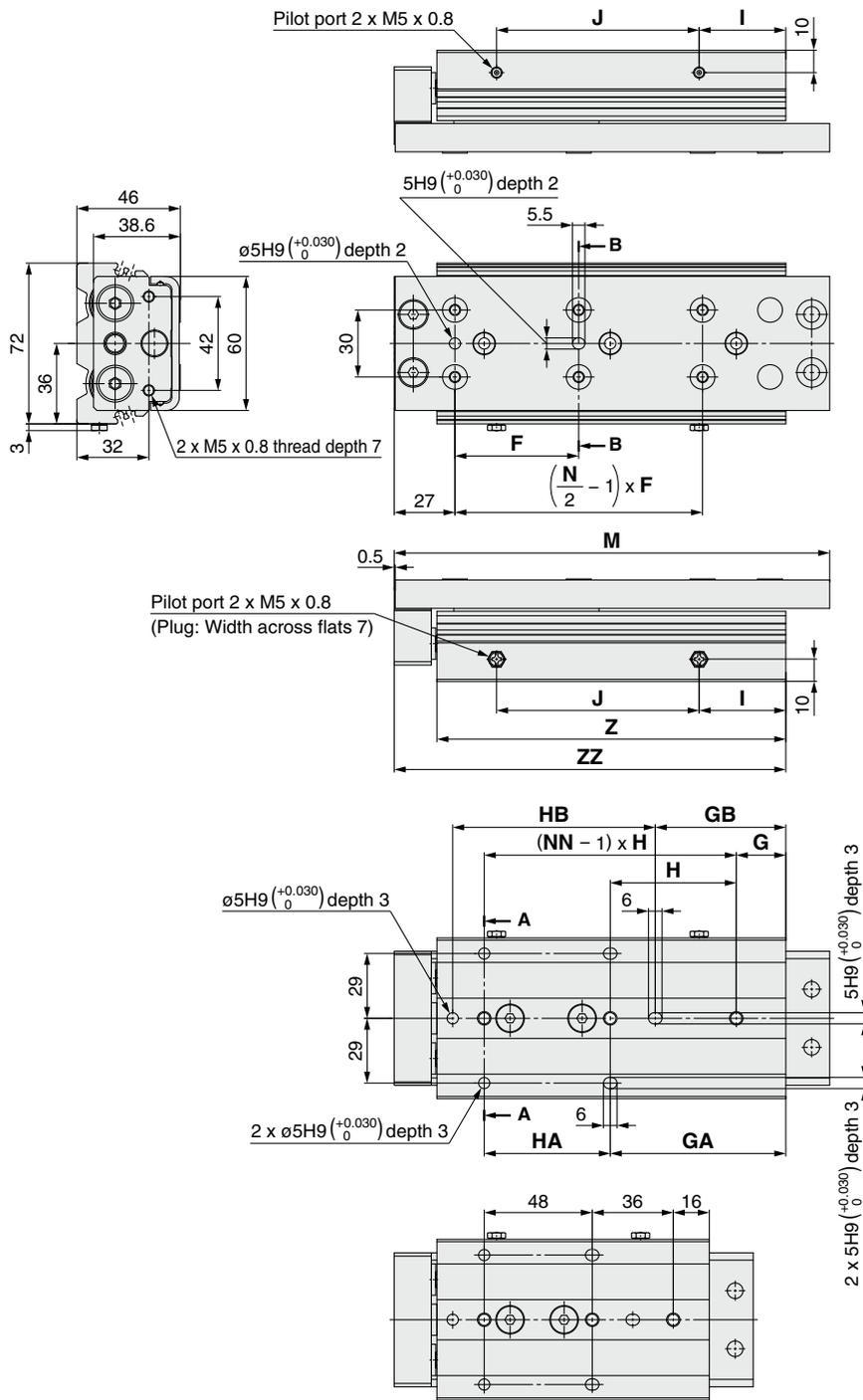
Auto Switch Mounting

Made to Order

Model Selection

Dimensions: MXQ **20** [Standard]

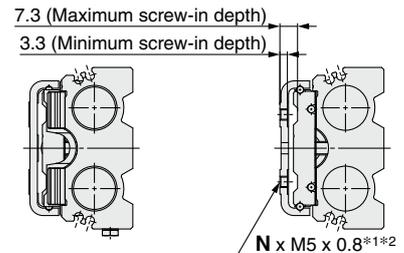
MXQ 20-□Z Standard type



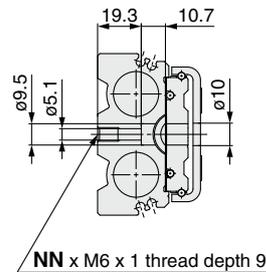
Bottom view of MXQ20-50Z

*1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.

*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.



Cross-sectional view B-B



Cross-sectional view A-A

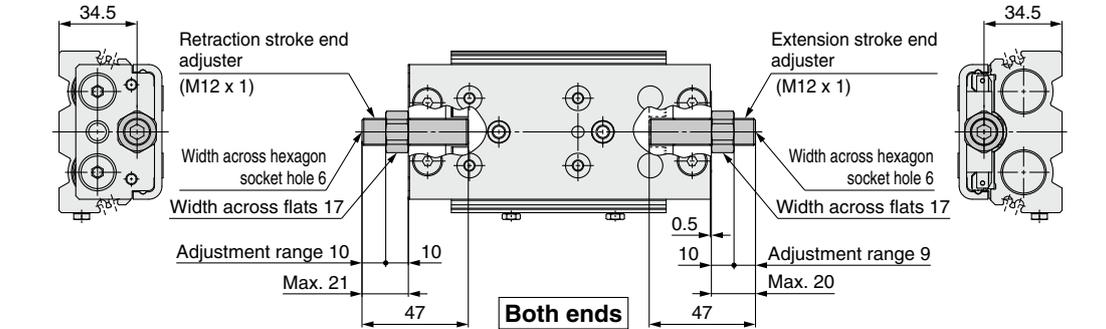
Dimensions

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

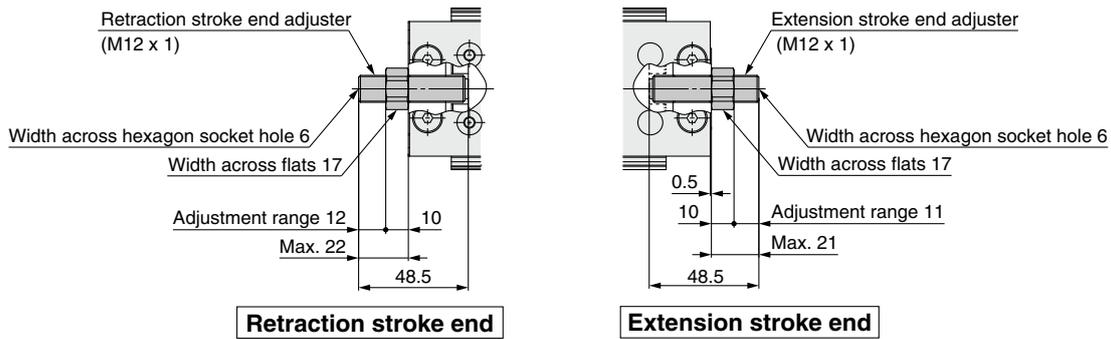
Dimensions: MXQ **20** [Adjuster Option]

MXQ 20-□ □ With adjuster option (ø20)

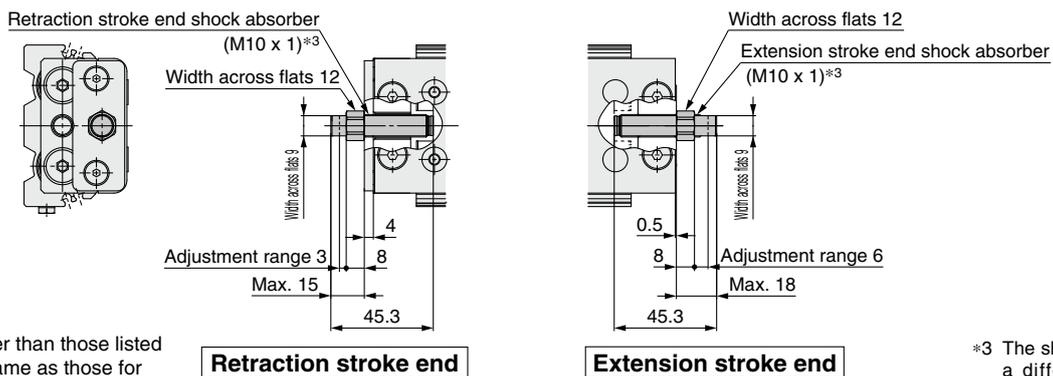
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)
 Metal stopper **ZK**: Both ends, **ZL**: Extension stroke end, **ZM**: Retraction stroke end, **ZT**: Retraction stroke end (Shorter total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



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



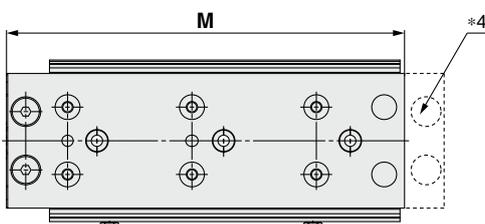
Shock absorber/RJ **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



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

*3 The shock absorber uses a different size thread than the other adjusters.

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



*4 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

* Dimensions other than those 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

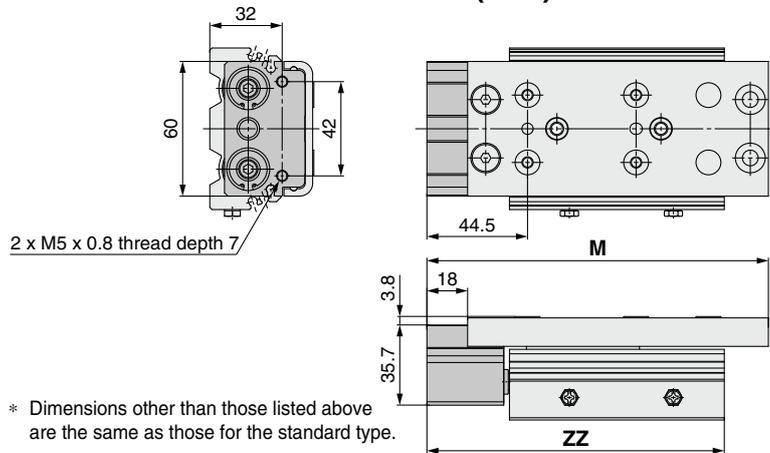
Made to Order

Model Selection

MXQ Series

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

MXQ 20-□□1 With buffer (∅20)

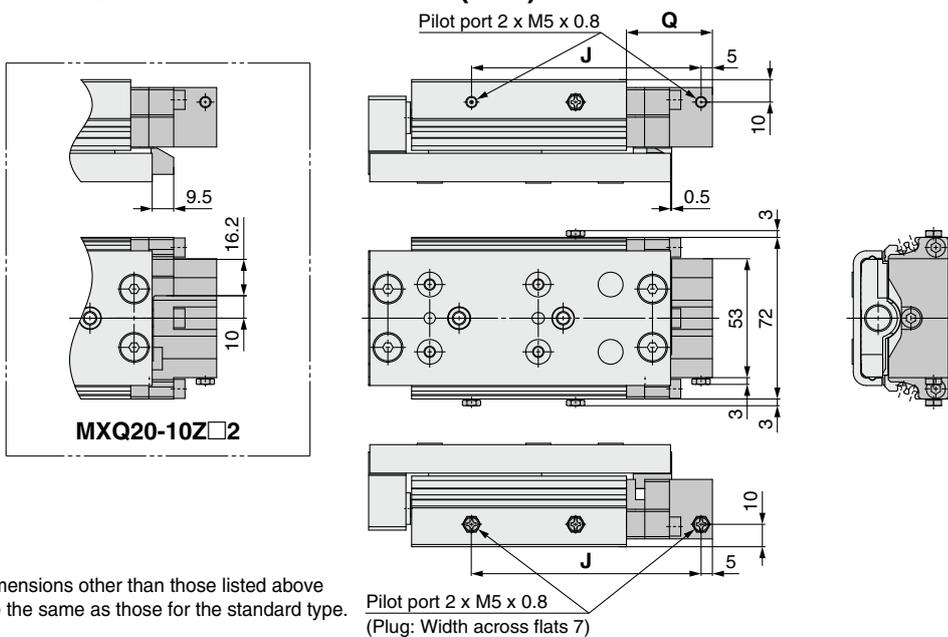


* Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

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

MXQ 20-□□2 With end lock (∅20)



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

Dimensions [mm]

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

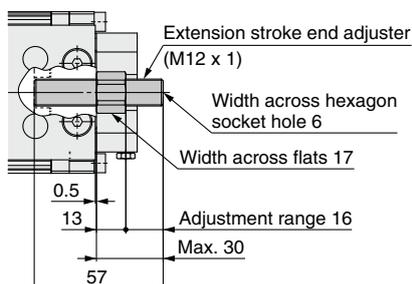
MXQ 20-□□2 With end lock, extension stroke end adjuster (∅20)

A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

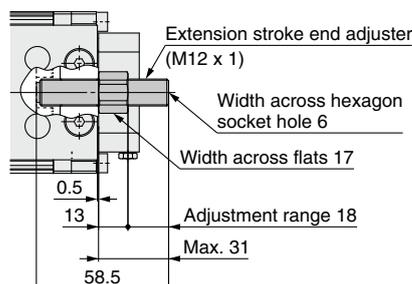
*1 The shock absorber uses a different size thread than the other adjusters.

Metal stopper with bumper: **ZB**

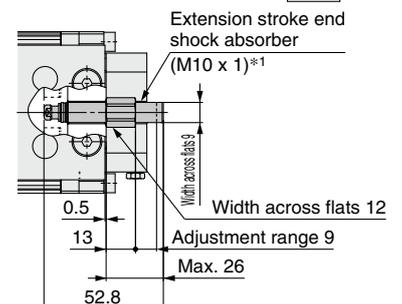
Metal stopper: **ZL**



Rubber stopper: **ZE**



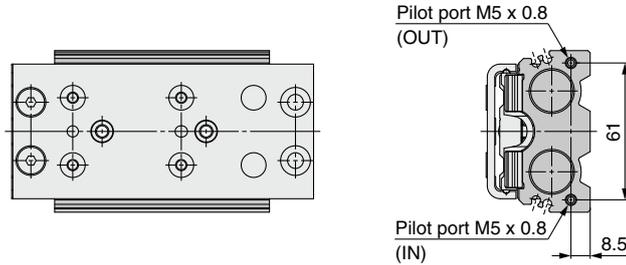
Shock absorber/RJ: **ZH**



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

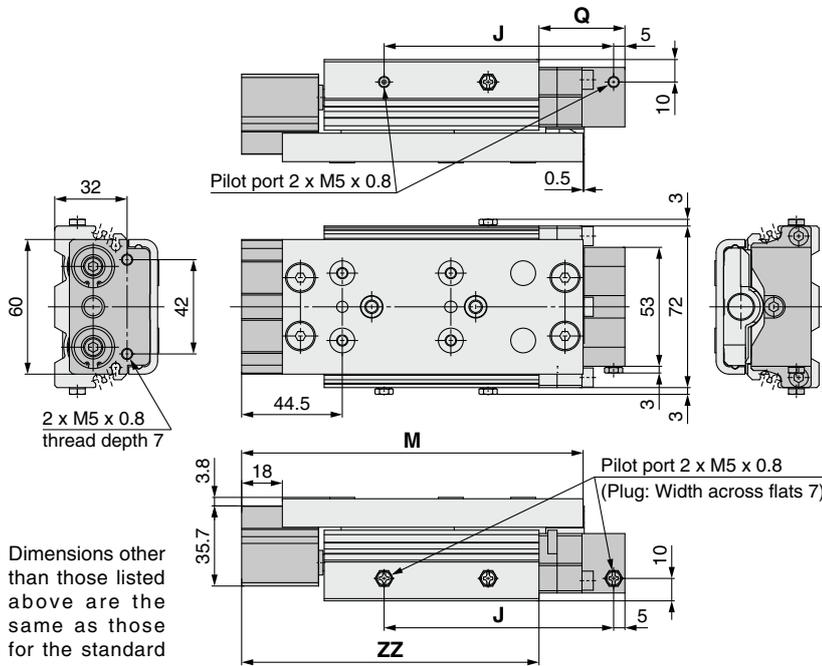
Dimensions: MXQ **20** [Functional Option]

MXQ 20-□□3 Axial piping (ø20)



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

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

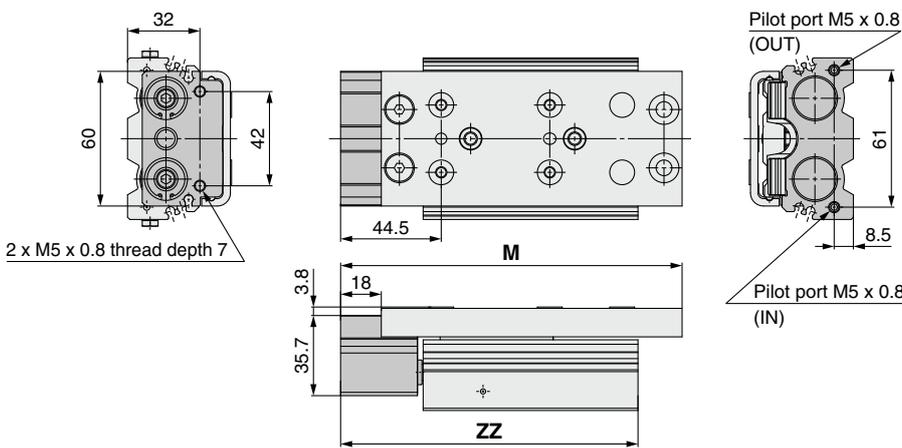


* Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	J	Q	Standard type	
			M	ZZ
MXQ20-10Z□4	91.5	38	131	121.5
MXQ20-20Z□4			141	
MXQ20-30Z□4	101.5	61	151	131.5
MXQ20-40Z□4	111.5		161	141.5
MXQ20-50Z□4	127.5	177	157.5	
MXQ20-75Z□4	161.5	211	191.5	
MXQ20-100Z□4	234.5	284	241.5	
MXQ20-125Z□4	259.5	309	266.5	
MXQ20-150Z□4	284.5	334	291.5	

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



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

Dimensions [mm]

Model	Standard type		ZZ
	M	Shorter total length type M	
MXQ20-10Z□5	131	113.5	121.5
MXQ20-20Z□5	141	123.5	
MXQ20-30Z□5	151	133.5	131.5
MXQ20-40Z□5	161	143.5	141.5
MXQ20-50Z□5	177	159.5	157.5
MXQ20-75Z□5	211	193.5	191.5
MXQ20-100Z□5	284	266.5	241.5
MXQ20-125Z□5	309	291.5	266.5
MXQ20-150Z□5	334	316.5	291.5

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

MXQ Series

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

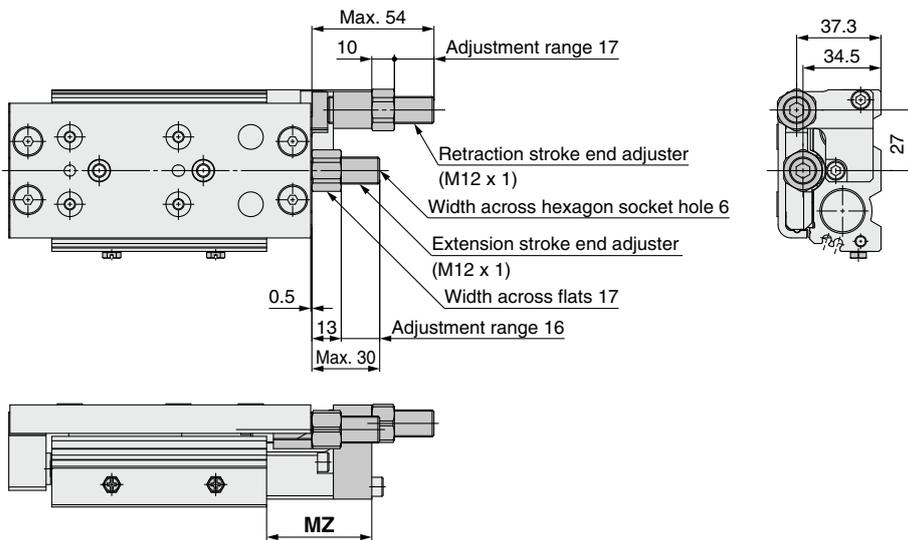
MXQ 20-□□6 Centralized adjuster (ø20)

For adjuster part numbers, refer to page 124-1.

*1 The shock absorber uses a different size thread than the other adjusters.

Metal stopper with bumper **ZA**: Both ends, **ZC**: Retraction stroke end

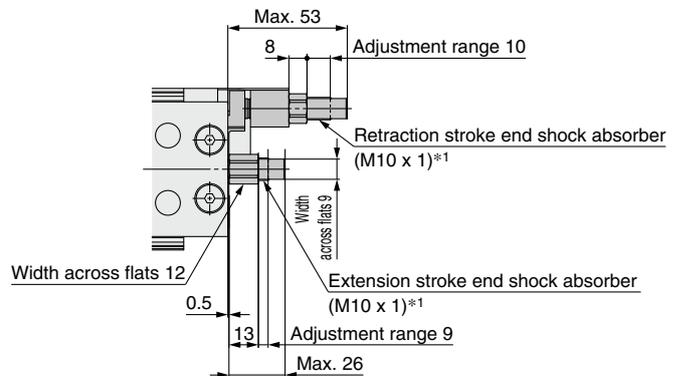
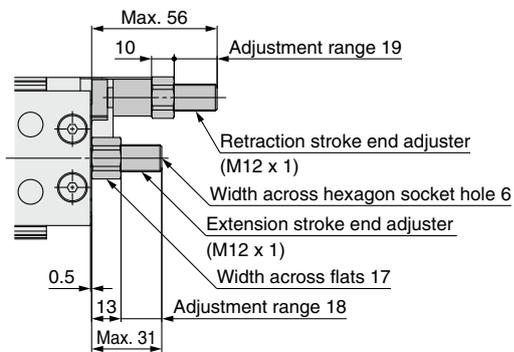
Metal stopper **ZK**: Both ends, **ZM**: Retraction stroke end



Dimensions [mm]	
Model	MZ
MXQ20-10Z□6	36.5
MXQ20-20Z□6	46.5
MXQ20-30Z□6	
MXQ20-40Z□6	
MXQ20-50Z□6	
MXQ20-75Z□6	69.5
MXQ20-100Z□6	
MXQ20-125Z□6	
MXQ20-150Z□6	

Rubber stopper **ZD**: Both ends,
ZF: Retraction stroke end

Shock absorber/RJ **ZG**: Both ends,
ZJ: Retraction stroke end



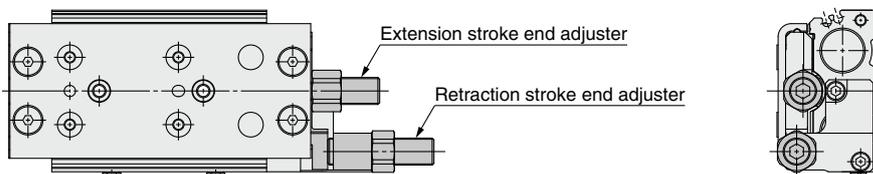
* Dimensions other than those listed above are the same as those for the standard type.

* In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 20-□□7 Centralized adjuster / Symmetric type (ø20)

The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.

For adjuster part numbers, refer to page 124-1.

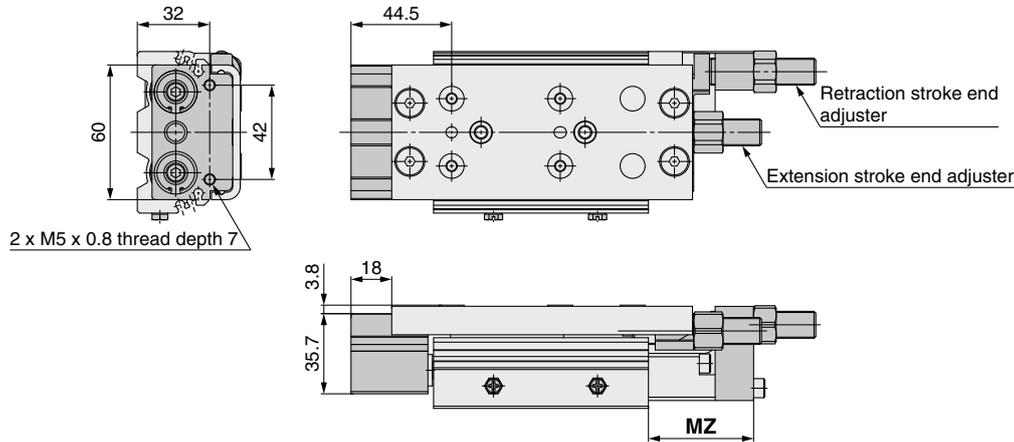


* In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

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

MXQ 20-□□8 Buffer, Centralized adjuster (ø20)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.

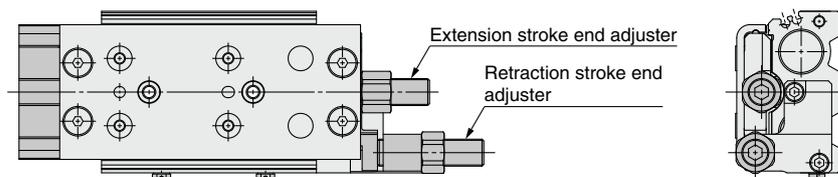


Dimensions [mm]	
Model	MZ
MXQ20-10Z□8	36.5
MXQ20-20Z□8	46.5
MXQ20-30Z□8	
MXQ20-40Z□8	
MXQ20-50Z□8	
MXQ20-75Z□8	
MXQ20-100Z□8	69.5
MXQ20-125Z□8	
MXQ20-150Z□8	

- * Dimensions other than those listed above are the same as those for the standard type.
- * In the case of a short stroke, there are some places where an auto switch cannot be mounted.
For details, refer to page 126.

MXQ 20-□□9 Buffer, Centralized adjuster / Symmetric type (ø20)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.



- * In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

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

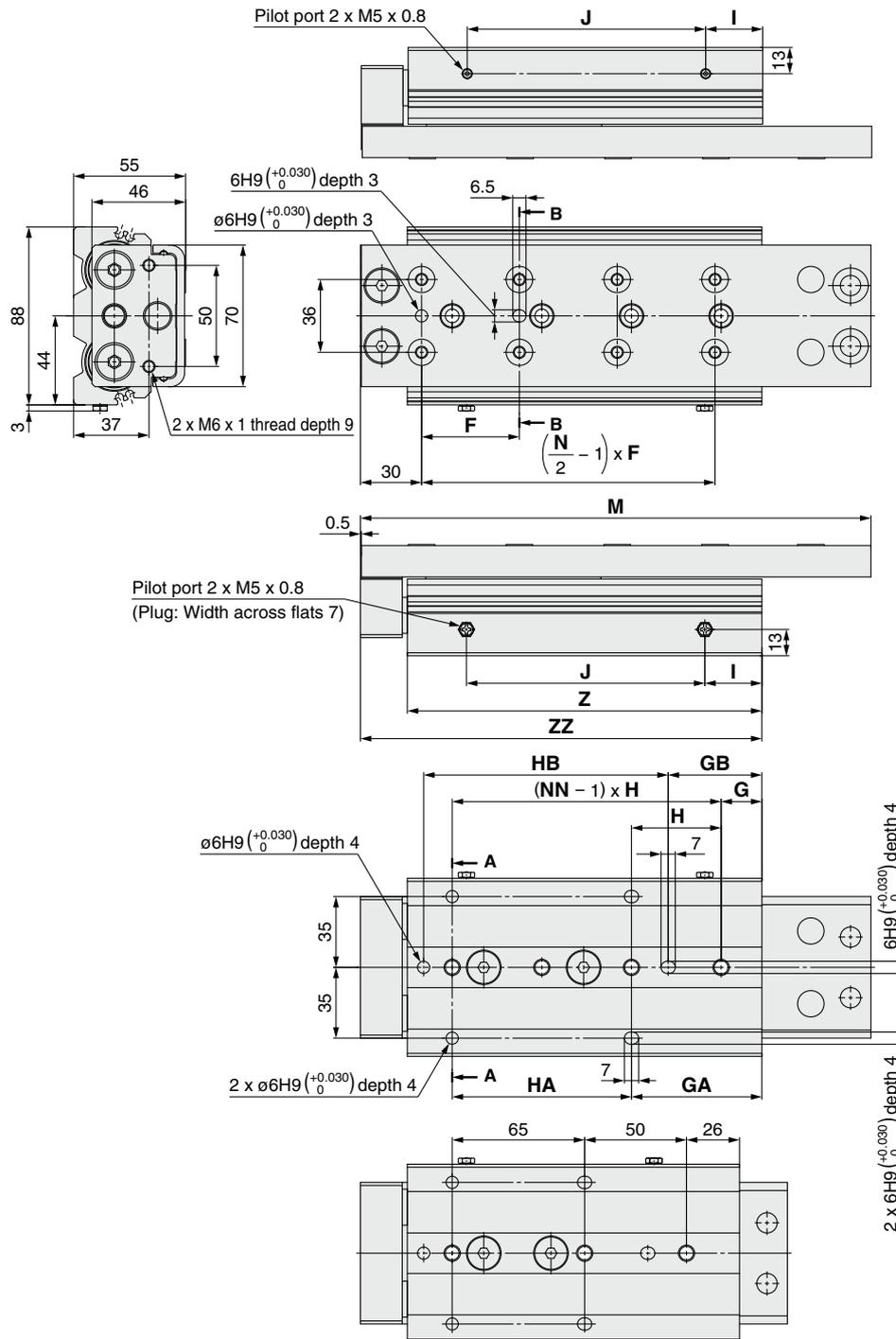
Auto Switch Mounting

Made to Order

Model Selection

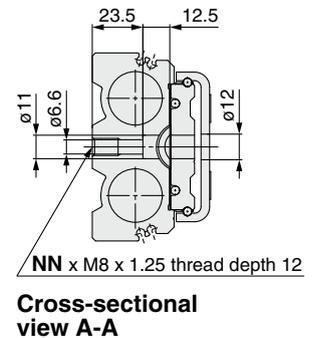
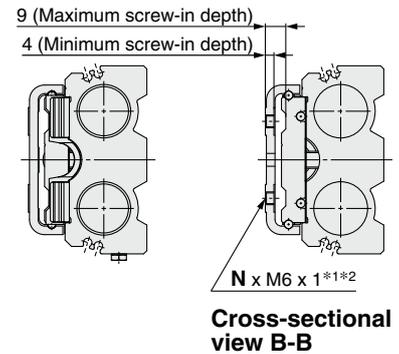
Dimensions: MXQ **25** [Standard]

MXQ 25-□Z Standard type



*1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.

*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

Bottom view of MXQ25-75Z

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)

Metal stopper **ZK**: Both ends, **ZL**: Extension stroke end, **ZM**: Retraction stroke end, **ZT**: Retraction stroke end (Shorter total length type)

Double-ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side-ported type
MXQ□C

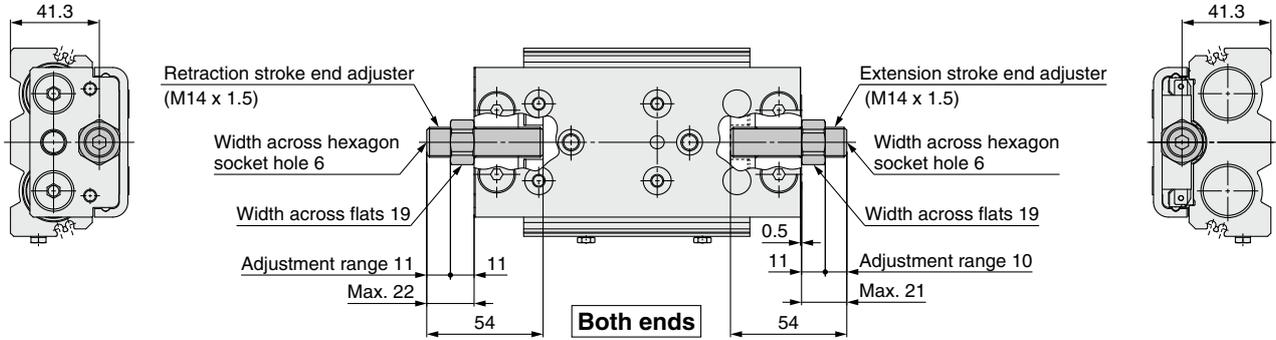
Height interchangeable type
MXQ□

Common Adjuster Options

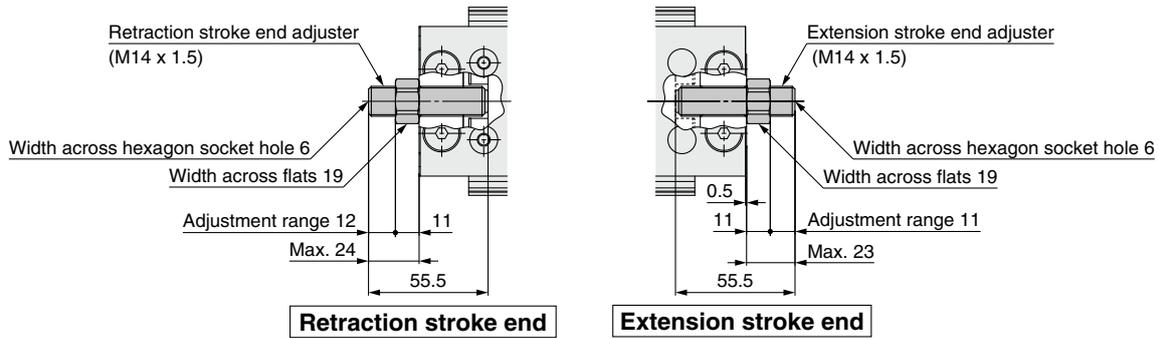
Auto Switch Mounting

Made to Order

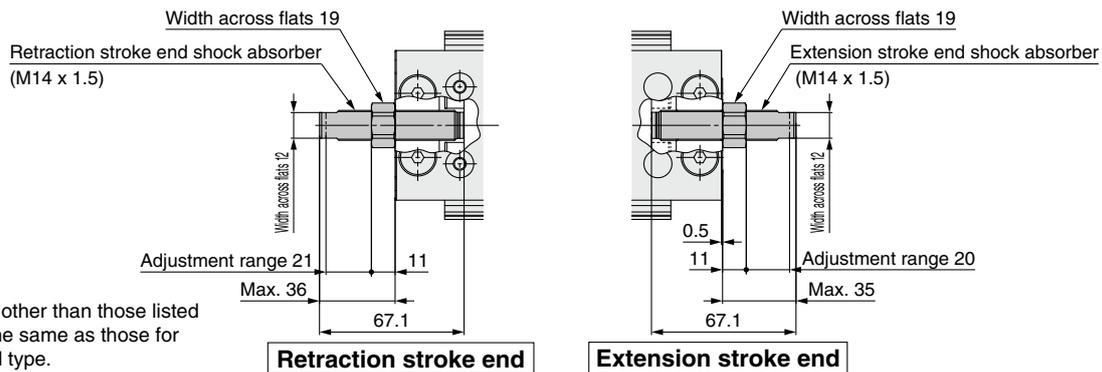
Model Selection



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

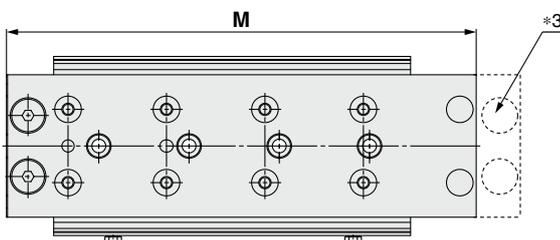


Shock absorber/RJ **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



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

MXQ 25-□ ZN Shorter total length type



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

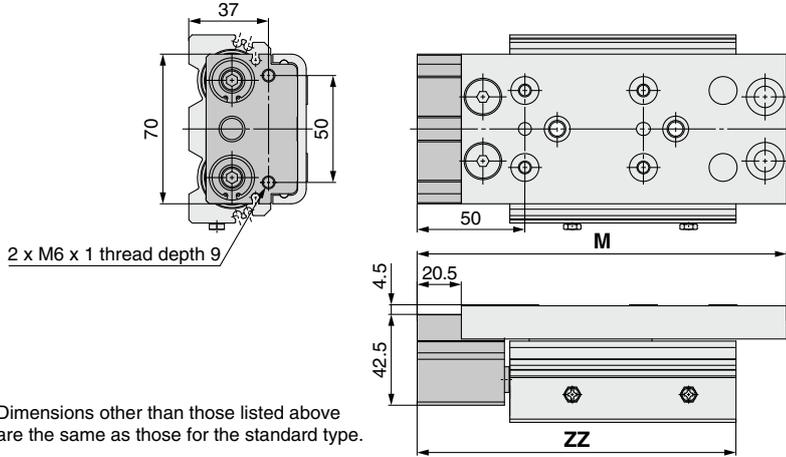
* Dimensions other than those listed above are the same as those for the standard type.

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

MXQ Series

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

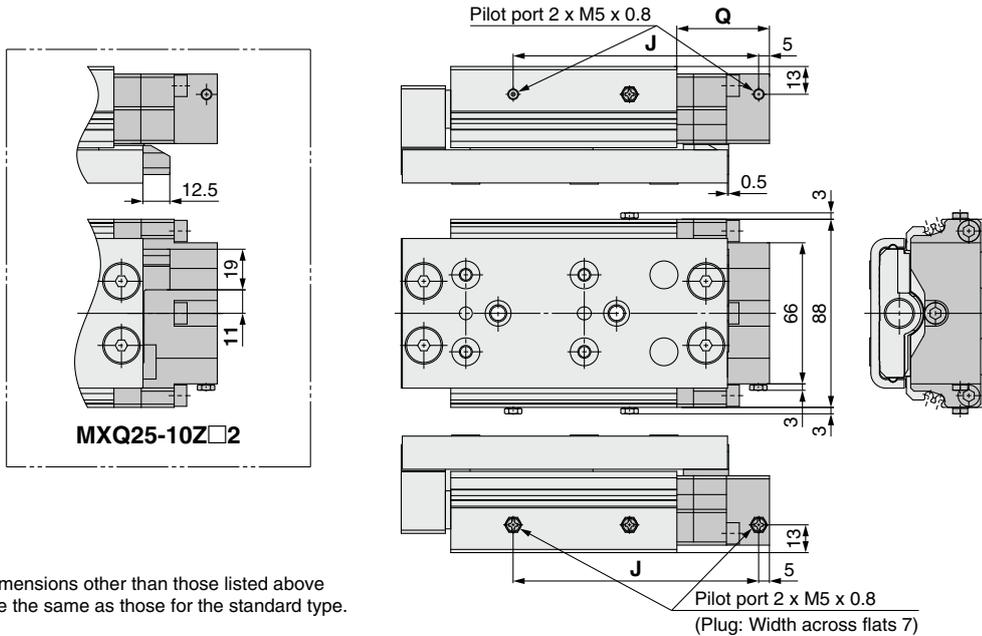
MXQ **25**-□□**1** With buffer (ø25)



Dimensions [mm]

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

MXQ **25**-□□**2** With end lock (ø25)



Dimensions [mm]

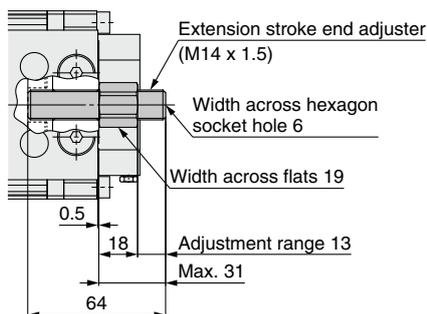
Model	J	Q
MXQ25-10Z□2	109	48
MXQ25-20Z□2	104	
MXQ25-30Z□2	114	43
MXQ25-40Z□2	124	
MXQ25-50Z□2	147	
MXQ25-75Z□2	172	73
MXQ25-100Z□2	213	
MXQ25-125Z□2	277	
MXQ25-150Z□2	302	

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

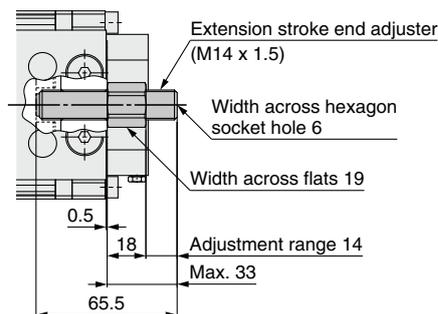
A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper: **ZB**

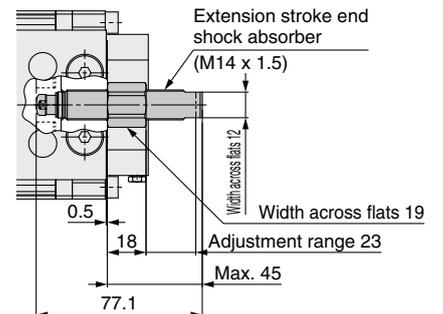
Metal stopper: **ZL**



Rubber stopper: **ZE**



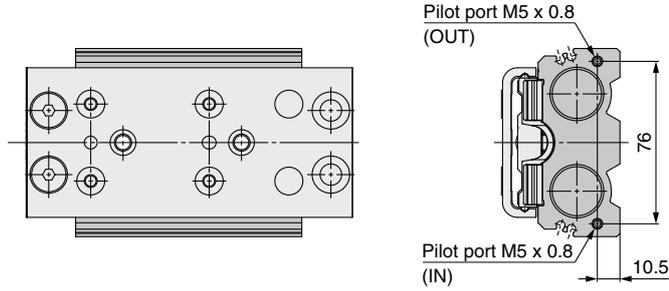
Shock absorber/RJ: **ZH**



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

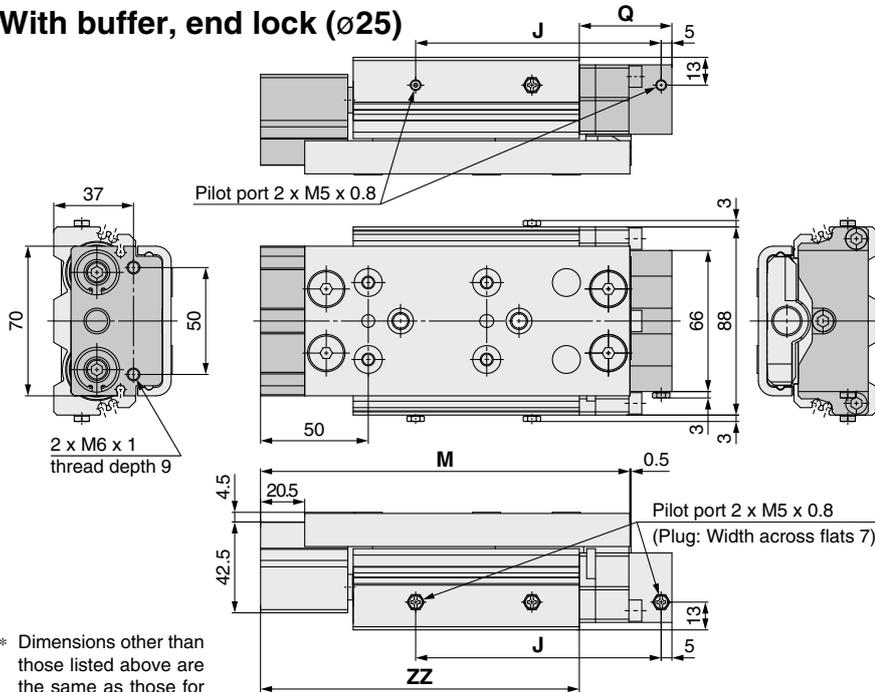
Dimensions: MXQ **25** [Functional Option]

MXQ 25-□□3
Axial piping (ø25)



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

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

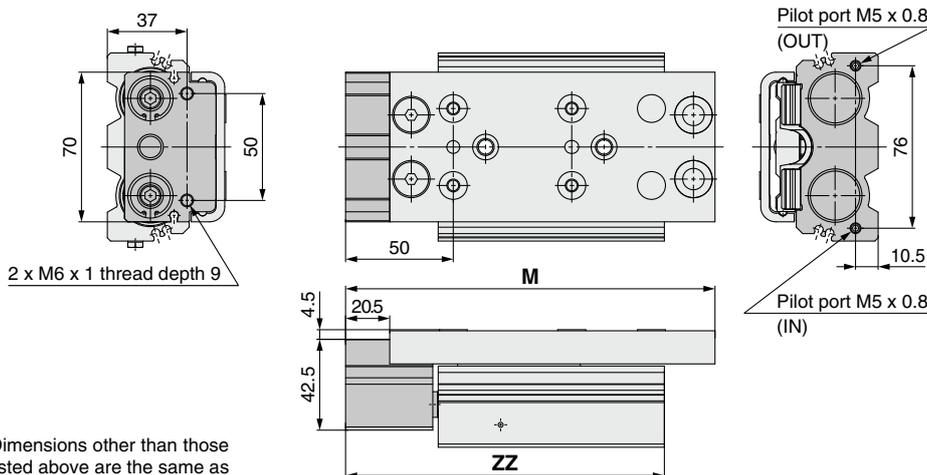


* Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	J	Q	Standard type	
			M	ZZ
MXQ25-10Z□4	109	48	151.5	138
MXQ25-20Z□4	104		161.5	
MXQ25-30Z□4	114	43	171.5	148
MXQ25-40Z□4	124		181.5	158
MXQ25-50Z□4	147		204.5	181
MXQ25-75Z□4	172		229.5	206
MXQ25-100Z□4	213	73	270.5	217
MXQ25-125Z□4	277		334.5	281
MXQ25-150Z□4	302		359.5	306

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



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

Dimensions [mm]

Model	Standard type		ZZ
	M	Shorter total length type M	
MXQ25-10Z□5	151.5	130	138
MXQ25-20Z□5	161.5	140	
MXQ25-30Z□5	171.5	150	148
MXQ25-40Z□5	181.5	160	158
MXQ25-50Z□5	204.5	183	181
MXQ25-75Z□5	229.5	208	206
MXQ25-100Z□5	270.5	249	217
MXQ25-125Z□5	334.5	313	281
MXQ25-150Z□5	359.5	338	306

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 Series

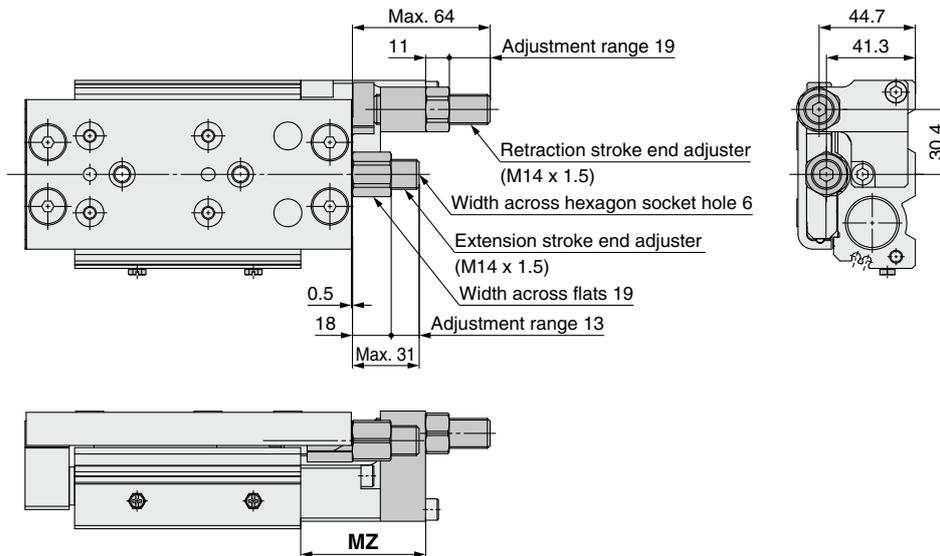
Dimensions: MXQ **25** [Functional Option]

MXQ 25-□□6 Centralized adjuster (ø25)

For adjuster part numbers, refer to page 124-1.

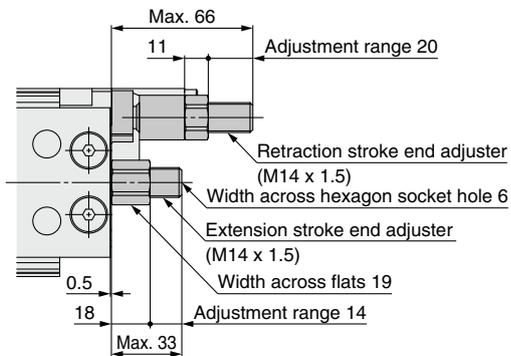
Metal stopper with bumper **ZA**: Both ends, **ZC**: Retraction stroke end

Metal stopper **ZK**: Both ends, **ZM**: Retraction stroke end

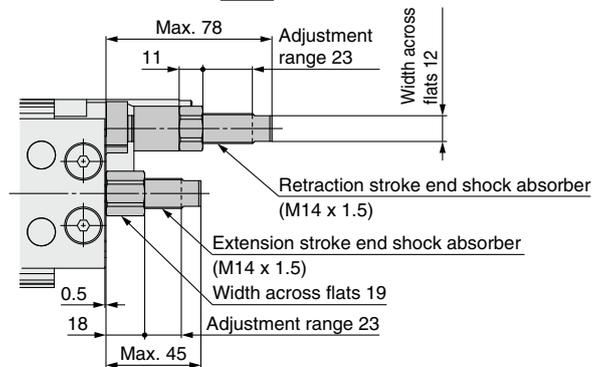


Dimensions [mm]	
Model	MZ
MXQ25-10Z□6	48
MXQ25-20Z□6	58
MXQ25-30Z□6	
MXQ25-40Z□6	
MXQ25-50Z□6	
MXQ25-75Z□6	88
MXQ25-100Z□6	
MXQ25-125Z□6	
MXQ25-150Z□6	

Rubber stopper **ZD**: Both ends, **ZF**: Retraction stroke end



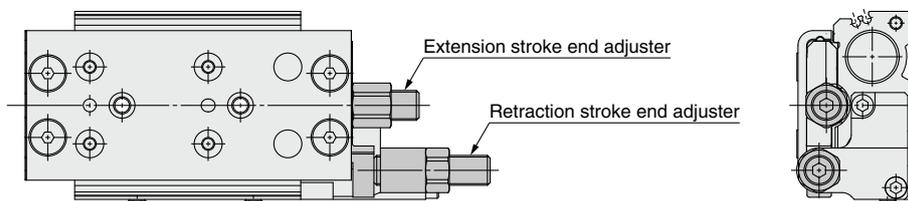
Shock absorber/RJ **ZG**: Both ends, **ZJ**: Retraction stroke end



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

MXQ 25-□□7 Centralized adjuster / Symmetric type (ø25)

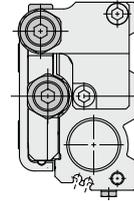
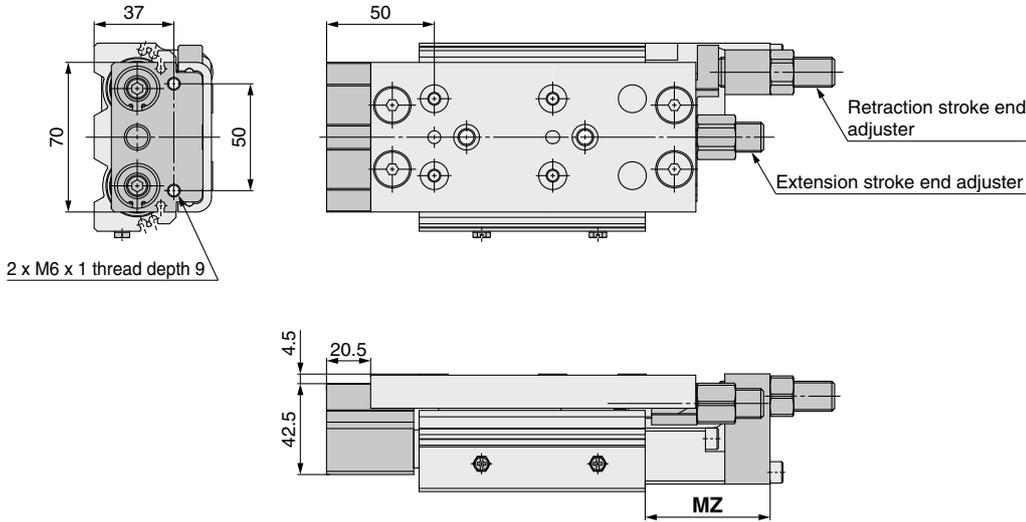
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.



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

MXQ 25-□□8 Buffer, Centralized adjuster (ø25)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.

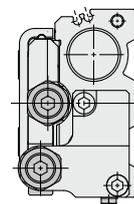
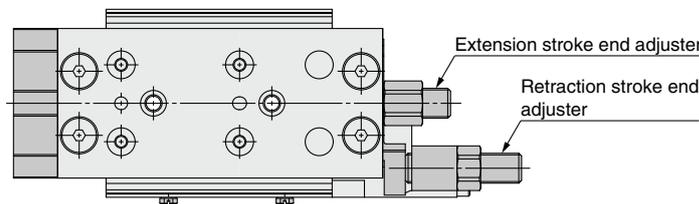


Dimensions [mm]	
Model	MZ
MXQ25-10Z□8	48
MXQ25-20Z□8	
MXQ25-30Z□8	
MXQ25-40Z□8	58
MXQ25-50Z□8	
MXQ25-75Z□8	
MXQ25-100Z□8	88
MXQ25-125Z□8	
MXQ25-150Z□8	

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

MXQ 25-□□9 Buffer, Centralized adjuster / Symmetric type (ø25)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.



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

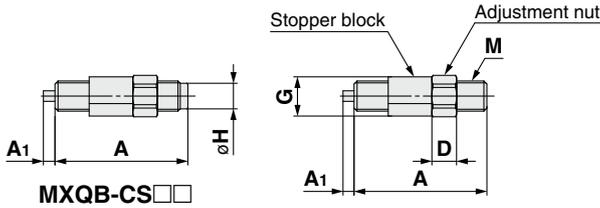
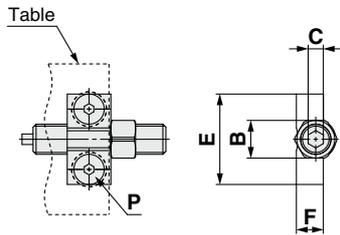
Made to Order

Model Selection

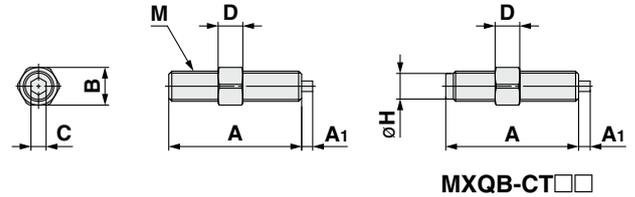
Common Adjuster Options

Metal Stopper with Bumper

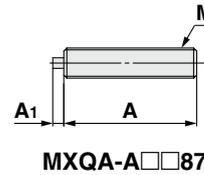
Extension stroke end



Retraction stroke end



Single metal stopper with bumper



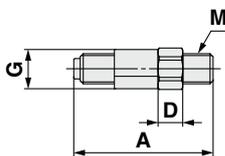
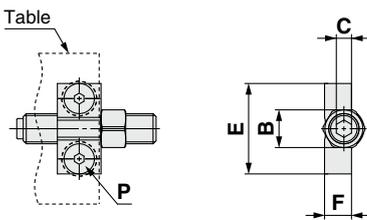
Model	Adjuster part no.			A	A1	B	C	D	E	F	G	M (Fine pitch)	P*2	øH	
	Extension stroke end	Retraction stroke end	Single metal stopper with bumper*1												
MXQ8(A, C)	—	MXQA-CS8	MXQA-CT8	MXQA-A887	30	2	8	3	5	18	5.8	8.3	M6 x 0.75	M3 x 6	—
MXQ12(A, C)	—	MXQA-CS12	MXQA-CT12	MXQA-A1287	35	2.8	10	4	6.5	24	7.1	10.4	M8 x 1	M4 x 8	—
MXQ16(A)	—	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	—
—	MXQ8B	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

*1 Single metal stopper with bumper: A single unit of the stopper without a stopper block, adjustment nut, or hexagon socket flat countersunk head cap screw

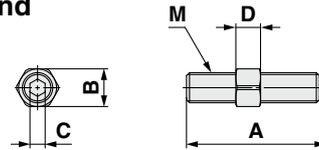
*2 Size of the hexagon socket flat countersunk head cap screw

Rubber Stopper

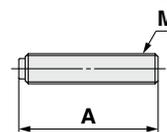
Extension stroke end



Retraction stroke end



Single rubber stopper



MXQA-A□□27

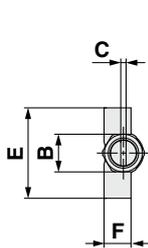
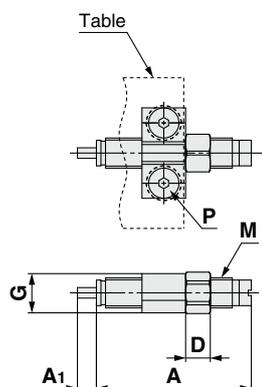
Model	Adjuster part no.			A	B	C	D	E	F	G	M (Fine pitch)	P*2
	Extension stroke end	Retraction stroke end	Single rubber stopper*1									
MXQ6(A)	—	—	—	31.5	8	3	5	18	5.8	8.3	M6 x 0.75	M3 x 6
MXQ6B	MXQA-AS8	MXQA-AT8	MXQA-A827	31.5	8	3	5	18	5.8	8.3	M6 x 0.75	M3 x 6
MXQ8(A, C)	—	—	—	36.5	10	4	6.5	24	7.1	10.4	M8 x 1	M4 x 8
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	MXQA-AS12	MXQA-AT12	MXQA-A1227	36.5	10	4	6.5	24	7.1	10.4	M8 x 1	M4 x 8
MXQ16(A)	—	—	—	41.5	12	5	8	29.4	9.2	12.6	M10 x 1	M5 x 10
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)	—	—	—	48.5	17	6	10	36	11.2	16.2	M12 x 1	M6 x 12
MXQ16B	MXQA-AS20	MXQA-AT20	MXQA-A2027	48.5	17	6	10	36	11.2	16.2	M12 x 1	M6 x 12
MXQ25(A)	—	—	—	55.5	19	6	11	44	13.5	19.3	M14 x 1.5	M8 x 16
MXQ20B	MXQA-AS25	MXQA-AT25	MXQA-A2527	55.5	19	6	11	44	13.5	19.3	M14 x 1.5	M8 x 16

*1 Single rubber stopper: A single unit of the stopper without a stopper block, adjustment nut, or hexagon socket flat countersunk head cap screw

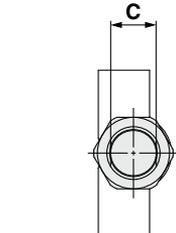
*2 Size of the hexagon socket flat countersunk head cap screw

Shock Absorber/RJ

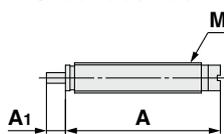
Extension stroke end



MXQA-JS8



MXQA-JS12 to JS25
Shock absorber only

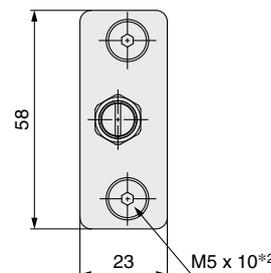
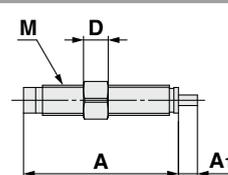
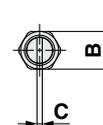


RJ□□□□(H)N

Retraction stroke end



MXQA-JT12 to JT25 MXQA-JT8



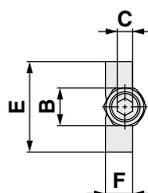
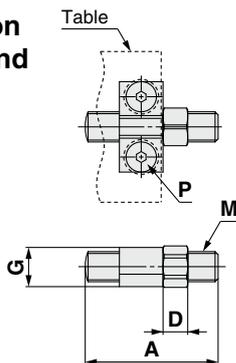
MXQA-JT20P*3

Model	Adjuster part no.			A	A1	B	C	D	E	F	G	M (Fine pitch)	P*2
	Extension stroke end	Retraction stroke end	Shock absorber only*1										
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)	MXQA-JS16	MXQA-JT16	RJ1006N	45.3	6	12	9	8	29.4	9.2	12.6	M10 x 1	M5 x 10
MXQ12B													
MXQ20(A)	MXQA-JS20	MXQA-JT20P	RJ1007HN	45.3	7	12	9	8	36	11.2	16.2	M10 x 1	M6 x 12
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													

*1 Shock absorber only: A single unit of the shock absorber without a stopper block, adjustment nut, or hexagon socket flat countersunk head cap screw
 *2 Size of the hexagon socket flat countersunk head cap screw
 *3 Since the retraction stroke end shock absorber of the MXQ20(A) and MXQ16B has a different thread size from that of the product, use the mounting plate to mount the shock absorber. For this reason, the part number will differ from other sizes. (The part number has a "P" suffix.)

Metal Stopper

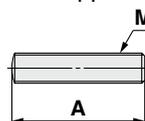
Extension stroke end



Retraction stroke end



Metal stopper only



MXQA-A□□38

Model	Adjuster part no.			A	B	C	D	E	F	G	M (Fine pitch)	P*2
	Extension stroke end	Retraction stroke end	Metal stopper only*1									
MXQ6(A)	MXQA-DS8	MXQA-DT8	MXQA-A838	30	8	3	5	18	5.8	8.3	M6 x 0.75	M3 x 6
MXQ6B												
MXQ8(A, C)												
MXQ12(A, C)	MXQA-DS12	MXQA-DT12	MXQA-A1238	35	10	4	6.5	24	7.1	10.4	M8 x 1	M4 x 8
MXQ8B												
MXQ16(A)	MXQA-DS16	MXQA-DT16	MXQA-A1638	40	12	5	8	29.4	9.2	12.6	M10 x 1	M5 x 10
MXQ12B												
MXQ20(A)	MXQA-DS20	MXQA-DT20	MXQA-A2038	47	17	6	10	36	11.2	16.2	M12 x 1	M6 x 12
MXQ16B												
MXQ25(A)	MXQA-DS25	MXQA-DT25	MXQA-A2538	54	19	6	11	44	13.5	19.3	M14 x 1.5	M8 x 16
MXQ20B												

*1 Metal stopper only: A single unit of the stopper without a stopper block, adjustment nut, or hexagon socket flat countersunk head cap screw
 *2 Size of the hexagon socket flat countersunk head cap screw

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 Series

With Functional Option/Adjuster

Applicable model	Type	End lock (2)		Buffer, end lock (4)		Centralized adjuster (6) Centralized adjuster/Symmetric (7)		Buffer, Centralized adjuster (8) Buffer, Centralized adjuster/Symmetric (9)	
		Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end
MXQ6A MXQ6(L)	Rubber stopper	MXQA-AT8-X28	MXQA-AT8-X28	MXQA-AT8-X28	MXQA-AT8	MXQA-AT8-X28	MXQA-AT8	MXQA-AT8	MXQA-AT8
	Shock absorber	MXQA-JT8-X28	—	MXQA-JT8-X28	MXQA-JT8	—	—	MXQA-JT8	MXQA-JT8
	Metal stopper	MXQA-DT8-X28	MXQA-DT8-X28	MXQA-DT8-X28	MXQA-DT8	MXQA-DT8-X28	MXQA-DT8	MXQA-DT8	MXQA-DT8
MXQ8A MXQ8(L) MXQ8C(L)	Metal stopper with bumper	MXQA-CT8-X28	—	MXQA-CT8-X28	MXQA-CT8	—	—	MXQA-CT8	MXQA-CT8
	Rubber stopper	MXQA-AT8-X28	MXQA-AT8-X28	MXQA-AT8-X28	MXQA-AT8	MXQA-AT8-X28	MXQA-AT8	MXQA-AT8	MXQA-AT8
	Shock absorber	MXQA-JT8-X28	—	MXQA-JT8-X28	MXQA-JT8	—	—	MXQA-JT8	MXQA-JT8
MXQ12A MXQ12(L) MXQ12C(L)	Metal stopper with bumper	MXQA-CT12-X28	—	MXQA-CT12-X28	MXQA-CT12	—	—	MXQA-CT12	MXQA-CT12
	Rubber stopper	MXQA-AT12-X28	MXQA-AT12-X28	MXQA-AT12-X28	MXQA-AT12	MXQA-AT12-X28	MXQA-AT12	MXQA-AT12	MXQA-AT12
	Shock absorber	MXQA-JT12-X28	—	MXQA-JT12-X28	MXQA-JT12	—	—	MXQA-JT12	MXQA-JT12
	Metal stopper	MXQA-DT12-X28	MXQA-DT12-X28	MXQA-DT12-X28	MXQA-DT12	MXQA-DT12-X28	MXQA-DT12	MXQA-DT12	MXQA-DT12
MXQ16(A)	Metal stopper with bumper	MXQA-CT16-X28	—	MXQA-CT16-X28	MXQA-CT16	—	—	MXQA-CT16	MXQA-CT16
	Rubber stopper	MXQA-AT16-X28	MXQA-AT16-X28	MXQA-AT16-X28	MXQA-AT16	MXQA-AT16-X28	MXQA-AT16	MXQA-AT16	MXQA-AT16
	Shock absorber	MXQA-JT16-X28	—	MXQA-JT16-X28	MXQA-JT16	—	—	MXQA-JT16	MXQA-JT16
	Metal stopper	MXQA-DT16-X28	MXQA-DT16-X28	MXQA-DT16-X28	MXQA-DT16	MXQA-DT16-X28	MXQA-DT16	MXQA-DT16	MXQA-DT16
MXQ20(A)	Metal stopper with bumper	MXQA-CT20-X28	—	MXQA-CT20-X28	MXQA-CT20	—	—	MXQA-CT20	MXQA-CT20
	Rubber stopper	MXQA-AT20-X28	MXQA-AT20-X28	MXQA-AT20-X28	MXQA-AT20	MXQA-AT20-X28	MXQA-AT20	MXQA-AT20	MXQA-AT20
	Shock absorber	MXQA-JT20-X28	—	MXQA-JT20-X28	MXQA-JT20	—	—	MXQA-JT20	MXQA-JT20
	Metal stopper	MXQA-DT20-X28	MXQA-DT20-X28	MXQA-DT20-X28	MXQA-DT20	MXQA-DT20-X28	MXQA-DT20	MXQA-DT20	MXQA-DT20
MXQ25(A)	Metal stopper with bumper	MXQA-CT25-X28	—	MXQA-CT25-X28	MXQA-CT25	—	—	MXQA-CT25	MXQA-CT25
	Rubber stopper	MXQA-AT25-X28	MXQA-AT25-X28	MXQA-AT25-X28	MXQA-AT25	MXQA-AT25-X28	MXQA-AT25	MXQA-AT25	MXQA-AT25
	Shock absorber	MXQA-JT25-X28	—	MXQA-JT25-X28	MXQA-JT25	—	—	MXQA-JT25	MXQA-JT25
	Metal stopper	MXQA-DT25-X28	MXQA-DT25-X28	MXQA-DT25-X28	MXQA-DT25	MXQA-DT25-X28	MXQA-DT25	MXQA-DT25	MXQA-DT25

* For details on adjusters applicable to each functional option, refer to pages 11, 67, and 83.

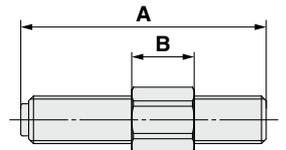
* Adjusters for functional options (1) With buffer, (3) Axial piping, and (5) With buffer, axial piping are standard adjusters. Refer to pages 123 and 124 for details.

* For dimensions, refer to the dimensions for the type with an adjuster indicated for each functional option.

* The metal stopper with bumper option is not available for ø6.

* The ø20 shock absorber uses a different size thread than the other adjusters.

[mm]											
Metal stopper with bumper			Rubber stopper			Shock absorber/RJ			Metal stopper		
Model	A	B	Model	A	B	Model	A	B	Model	A	B
MXQA-CT8-X28	40	10	MXQA-AT8-X28	41.5	10	MXQA-JT8-X28	29.9	10	MXQA-DT8-X28	40	10
MXQA-CT12-X28	45	11	MXQA-AT12-X28	46.5	11	MXQA-JT12-X28	47.3	11	MXQA-DT12-X28	45	11
MXQA-CT16-X28	50	13	MXQA-AT16-X28	51.5	13	MXQA-JT16-X28	52.8	13	MXQA-DT16-X28	50	13
MXQA-CT20-X28	57	13	MXQA-AT20-X28	58.5	13	MXQA-JT20-X28	52.8	13	MXQA-DT20-X28	57	13
MXQA-CT25-X28	64	18	MXQA-AT25-X28	65.5	18	MXQA-JT25-X28	77.1	18	MXQA-DT25-X28	64	18



With Functional Option/Single Adjustment Bolt

This part number is for a single adjustment bolt without a nut. It can be used as a replacement part when the bolt wears out.

Applicable model	Type	End lock (2)		Buffer, end lock (4)		Centralized adjuster (6) Centralized adjuster/Symmetric (7)		Buffer, Centralized adjuster (8) Buffer, Centralized adjuster/Symmetric (9)	
		Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end
MXQ6A MXQ6(L)	Single rubber stopper	MXQA-A827-X11	MXQA-A827-X11	MXQA-A827-X11	MXQA-A827	MXQA-A827-X11	MXQA-A827	MXQA-A827	MXQA-A827
	Single shock absorber	RJ0603N	—	RJ0603N	RJ0603N	—	—	RJ0603N	RJ0603N
	Metal stopper only	MXQA-A838-X11	MXQA-A838-X11	MXQA-A838-X11	MXQA-A838	MXQA-A838-X11	MXQA-A838	MXQA-A838-X11	MXQA-A838
MXQ8A MXQ8(L) MXQ8C(L)	Single metal stopper with bumper	MXQA-A887-X11	—	MXQA-A887-X11	MXQA-A887	—	—	MXQA-A887	MXQA-A887
	Single rubber stopper	MXQA-A827-X11	MXQA-A827-X11	MXQA-A827-X11	MXQA-A827	MXQA-A827-X11	MXQA-A827	MXQA-A827-X11	MXQA-A827
	Shock absorber only	RJ0603N	—	RJ0603N	RJ0603N	—	—	RJ0603N	RJ0603N
MXQ12A MXQ12(L) MXQ12C(L)	Metal stopper only	MXQA-A1238-X11	MXQA-A1238-X11	MXQA-A1238-X11	MXQA-A1238	MXQA-A1238-X11	MXQA-A1238	MXQA-A1238-X11	MXQA-A1238
	Single metal stopper with bumper	MXQA-A1687-X11	—	MXQA-A1687-X11	MXQA-A1687	—	—	MXQA-A1687	MXQA-A1687
	Single rubber stopper	MXQA-A1627-X11	MXQA-A1627-X11	MXQA-A1627-X11	MXQA-A1627	MXQA-A1627-X11	MXQA-A1627	MXQA-A1627-X11	MXQA-A1627
	Shock absorber only	RJ0805U-X2300	—	RJ0805U-X2300	RJ0805N	—	—	RJ0805N	RJ0805N
MXQ16(A)	Single metal stopper with bumper	MXQA-A2087-X11	—	MXQA-A2087-X11	MXQA-A2087	—	—	MXQA-A2087	MXQA-A2087
	Single rubber stopper	MXQA-A2027-X11	MXQA-A2027-X11	MXQA-A2027-X11	MXQA-A2027	MXQA-A2027-X11	MXQA-A2027	MXQA-A2027-X11	MXQA-A2027
	Shock absorber only	RJ1007HU-X2300	—	RJ1007HU-X2300	RJ1007HN	—	—	RJ1007HN	RJ1007HN
	Metal stopper only	MXQA-A2038-X11	MXQA-A2038-X11	MXQA-A2038-X11	MXQA-A2038	MXQA-A2038-X11	MXQA-A2038	MXQA-A2038-X11	MXQA-A2038
MXQ20(A)	Single metal stopper with bumper	MXQA-A2587-X11	—	MXQA-A2587-X11	MXQA-A2587	—	—	MXQA-A2587	MXQA-A2587
	Single rubber stopper	MXQA-A2527-X11	MXQA-A2527-X11	MXQA-A2527-X11	MXQA-A2527	MXQA-A2527-X11	MXQA-A2527	MXQA-A2527-X11	MXQA-A2527
	Shock absorber only	RJ1410U-X2300	—	RJ1410U-X2300	RJ1410N	—	—	RJ1410N	RJ1410N
	Metal stopper only	MXQA-A2538-X11	MXQA-A2538-X11	MXQA-A2538-X11	MXQA-A2538	MXQA-A2538-X11	MXQA-A2538	MXQA-A2538-X11	MXQA-A2538

* For details on adjusters applicable to each functional option, refer to pages 11, 67, and 83.

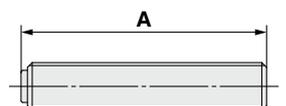
* Adjusters for functional options (1) With buffer, (3) Axial piping, and (5) With buffer, axial piping are standard adjusters. Refer to pages 123 and 124 for details.

* For dimensions, refer to the dimensions for the type with an adjuster indicated for each functional option.

* The metal stopper with bumper option is not available for ø6.

* The ø20 shock absorber uses a different size thread than the other adjusters.

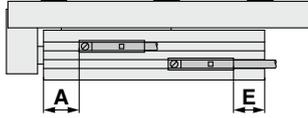
[mm]											
Single metal stopper with bumper		Single rubber stopper		Single shock absorber		Metal stopper only					
Model	A	Model	A	Model	A	Model	A				
MXQA-A887-X11	40	MXQA-A827-X11	41.5	RJ0603N	29.9	MXQA-A838-X11	40				
MXQA-A1287-X11	45	MXQA-A1227-X11	46.5	RJ0805U-X2300	47.3	MXQA-A1238-X11	45				
MXQA-A1687-X11	50	MXQA-A1627-X11	51.5	RJ1007HU-X2300	52.8	MXQA-A1638-X11	50				
MXQA-A2087-X11	57	MXQA-A2027-X11	58.5	RJ1007HU-X2300	52.8	MXQA-A2038-X11	57				
MXQA-A2087-X11	64	MXQA-A2027-X11	65.5	RJ1410U-X2300	77.1	MXQA-A2538-X11	64				



MXQ Series Auto Switch Mounting

Auto Switch Proper Mounting Position (Detection at stroke end)

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



Solid State Auto 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)	26.5	16.5	16.5	16.5	16.5	16.5	—	—	—	4.1	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	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	—	20.9	21.9	21.9	21.9	27.9	36.9	61.9	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	—	—	—	2	9.1	9.1	17.1	17.1	36.1	36.1	—	—		
MXQ12B	26.5	16.5	16.5	16.5	16.5	16.5	16.5	—	—	14	18	18	25	25	31	50	50	—		
MXQ16B	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	—	32.9	22.9	22.9	22.9	28.9	37.9	62.9	62.9	62.9		
MXQ20B	32.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	—	30.8	31.8	31.8	31.8	44.8	44.8	30.8	69.8	69.8		

Solid State Auto 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)	26.5	16.5	16.5	16.5	16.5	16.5	16.5	—	—	6.1	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	—	—	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	—	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	—	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	—	—	—	4	11.1	11.1	19.1	19.1	38.1	38.1	—	—		
MXQ12B	26.5	16.5	16.5	16.5	16.5	16.5	16.5	—	—	16	20	20	27	27	33	52	52	—		
MXQ16B	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	—	34.9	24.9	24.9	24.9	30.9	30.9	64.9	64.9	64.9		
MXQ20B	32.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	—	32.9	33.8	33.8	33.8	46.8	46.8	32.8	71.8	71.8		

Reed Auto Switch: D-A9□/A9□V

[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)	14	3.4	3.4	3.4	3.4	—	—	—	—	4 (1.5)	4.6 (2)	7.6 (5.1)	9.6 (7.1)	9.6 (7.1)	—	—	—	—		
MXQ8(A, C)	9.9	9.9	9.9	9.9	9.9	9.9	—	—	—	9.1 (6.6)	9.1 (6.6)	9.1 (6.6)	15.1 (12.6)	32.1 (29.6)	9.1 (6.6)	—	—	—		
MXQ12(A, C)	22.5	12.5	12.5	12.5	12.5	12.5	—	—	—	8.1 (5.6)	10.1 (7.6)	10.1 (7.6)	18.1 (15.6)	18.1 (15.6)	37.1 (34.6)	37.1 (34.6)	—	—		
MXQ16(A)	16.6	16.6	16.6	16.6	16.6	16.6	16.6	—	—	24 (21.5)	18 (15.5)	18 (15.5)	25 (22.5)	25 (22.5)	31 (28.5)	50 (47.5)	50 (47.5)	—		
MXQ20(A)	28.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	—	24.9 (22.4)	25.9 (23.4)	25.9 (23.4)	25.9 (23.4)	31.9 (29.4)	40.9 (38.4)	65.9 (63.4)	65.9 (63.4)	65.9 (63.4)		
MXQ25(A)	30.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	—	32.7 (30.2)	31.7 (30.2)	31.7 (30.2)	31.7 (30.2)	44.7 (42.2)	44.7 (42.2)	46.7 (44.2)	69.4 (66.9)	69.7 (67.2)		
MXQ6B	14	3.4	3.4	3.4	3.4	3.4	—	—	—	5 (2.5)	15.6 (13.1)	15.6 (13.1)	21.6 (19.1)	38.6 (36.1)	15.6 (13.1)	—	—	—		
MXQ8B	25	9.9	9.9	9.9	9.9	9.9	—	—	—	6 (3.5)	13.1 (10.6)	13.1 (10.6)	21.1 (18.6)	21.1 (18.6)	40.1 (37.6)	40.1 (37.6)	—	—		
MXQ12B	22.5	12.5	12.5	12.5	12.5	12.5	12.5	—	—	18 (15.5)	22 (19.5)	22 (19.5)	29 (26.5)	29 (26.5)	35 (32.5)	54 (51.5)	54 (51.5)	—		
MXQ16B	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	—	36.9 (34.4)	26.9 (24.4)	26.9 (24.4)	26.9 (24.4)	32.9 (30.4)	41.9 (39.4)	66.9 (64.4)	66.9 (64.4)	66.9 (64.4)		
MXQ20B	28.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	—	34.8 (32.3)	35.8 (33.3)	35.8 (33.3)	35.8 (33.3)	48.8 (46.3)	48.8 (46.3)	34.8 (32.3)	73.8 (71.3)	73.8 (71.3)		

(): Denotes the values of D-A93.

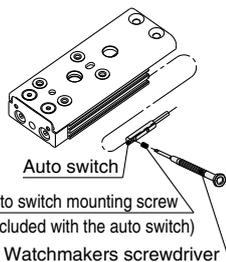
Auto Switch Mounting

⚠ Caution

■ Tightening torque

Tightening Torque of Auto Switch Mounting Screw [N·m]

Auto switch model	Tightening torque
D-A9□(V)	0.10 to 0.20
D-M9□(V)/M9□W(V)	0.05 to 0.15
D-M9□A(V)	0.05 to 0.10



■ Auto switch mounting tool

When tightening the auto switch mounting screw (included with the auto switch), use a watchmakers screwdriver with a handle diameter of about 5 to 6 mm.

Operating Range

[mm]

Auto switch model	Applicable bore size					
	6	8	12	16	20	25
D-M9□(V)/M9□W(V)/M9□	2.5	2.5	3	4	4.5	5
D-A9□(V)	4.5	5	6	7	8	9

* Values which include hysteresis are for reference purposes only. They are not a guarantee (assuming approximately ±30% dispersion) and may change substantially depending on the ambient environment.

Other than the applicable auto switches listed in "How to Order," the following auto switches are also mountable.

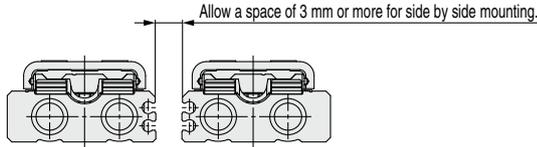
Normally closed (NC = b contact) solid state auto switches (D-M9□E(V)) and solid state auto switch (D-F8) are also available. For details, refer to the Web Catalog or Best Pneumatics Catalog.

Caution on Mounting Auto Switches

⚠ Caution

1. Allow a space of 3 mm or more if a standard type and symmetric type are used side by side.

Otherwise, the auto switches may malfunction.



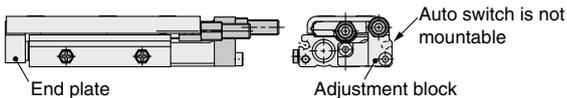
2. Note that an auto switch with a functional option centralized adjuster may not be able to be installed in some places because of the adjustment block. Use the method listed below. In the case of a stroke that is not indicated by [x] in the table below, it is possible to use the auto switch after inserting it from the end plate side.

- 1) Install the auto switch in another auto switch groove.
- 2) First, remove the adjustment block unit, and then insert the switch.
(For details on the removal method of the adjustment block unit, refer to "How to Remove the Adjustment Block Unit.")
- 3) Replace the auto switch with a D-F8 auto switch.

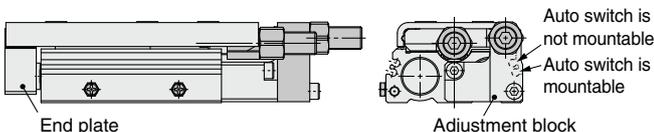
Double-ported type									
Model	Stroke								
	10	20	30	40	50	75	100	125	150
MXQ6A-□Z□(6, 7, 8, 9)	×	×	○	○	○	/	/	/	/
MXQ8A-□Z□(6, 7, 8, 9)	×	×	○	○	○	○	/	/	/
MXQ12A-□Z□(6, 7, 8, 9)	×	×	○	○	○	○	○	/	/
MXQ16A-□Z□(6, 7, 8, 9)	×	○	○	○	○	○	○	○	○
MXQ20A-□Z□(6, 7, 8, 9)	×	○	○	○	○	○	○	○	○
MXQ25A-□Z□(6, 7, 8, 9)	○	○	○	○	○	○	○	○	○

Height interchangeable type									
Model	Stroke								
	10	20	30	40	50	75	100	125	150
MXQ6(L)-□Z□(6, 7, 8, 9)	○	○	○	○	○	/	/	/	/
MXQ8(L)-□Z□(6, 7, 8, 9)	○	○	○	○	○	○	/	/	/
MXQ12(L)-□Z□(6, 7, 8, 9)	○	○	○	○	○	○	○	/	/
MXQ16-□Z□(6, 7, 8, 9)	×	○	○	○	○	○	○	○	○
MXQ20-□Z□(6, 7, 8, 9)	×	○	○	○	○	○	○	○	○
MXQ25-□Z□(6, 7, 8, 9)	○	○	○	○	○	○	○	○	○

MXQ6A, 8A, 12A 10, 20 mm stroke

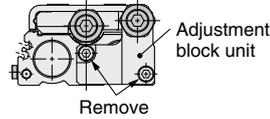


MXQ16(A), 20(A) 10 mm stroke



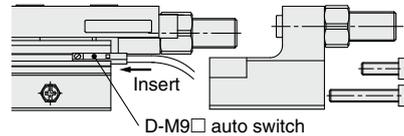
How to Remove the Adjustment Block Unit

1. Remove the hexagon socket head cap screws shown in the drawing.



Model	Hexagon socket head cap screw		
	Screw size [mm]	Width across hexagon socket hole [mm]	Tightening torque [N·m]
MXQ6□-□Z□(6, 7, 8, 9)	M2.5	2	0.36
MXQ8□-□Z□(6, 7, 8, 9)	M3	2.5	0.63
MXQ12□-□Z□(6, 7, 8, 9)	M4	3	1.5
MXQ16□-□Z□(6, 7, 8, 9)	M5	4	3
MXQ20□-□Z□(6, 7, 8, 9)	M5	4	3

2. Insert the D-M9 auto switch.



3. Apply locking adhesive to the female thread of the body, and then install the adjustment block unit once again.

* For the tightening torque and other values, refer to the table in item 1.



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



Made to Order

Symbol	Specifications	Double-ported type	Low thrust with high rigidity type	Single side-ported type	Height interchangeable type	Page
		MXQ□A	MXQ□B	MXQ□C	MXQ□	
-X7	PTFE grease	●	●	●	●	128
-X9	Grease for food processing equipment	●	●	●	●	128
-X11	Long adjustment bolt (10 mm longer adjustment range)	●	●	●	●	128
-X12	Long adjustment bolt (20 mm longer adjustment range)	●	●	●	●	129
-X28	Long adjustment nut and bolt	●	●	●	●	130
-X33	Without built-in auto switch magnet	●	●	●	●	131
-X39	Fluororubber seal	●	●	●	●	131
-X42	Anti-corrosive guide unit	●	●	●	●	131
-X580	Low-speed specification (15 to 50 mm/s)	●	●	●	●	131
-X2100	End plate compatible with the current MXQ series				●	132
-X2128	Heat-resistant specification (-10°C to 100°C)	●	●	●	●	132
-X2192	Dual stroke specification	● ^{*1}				133
-X2200	Side adjuster specification				●	141
-X2201	Combined use of shock absorber + metal stopper				●	147
-X2202	Extension stroke end adjuster fixed from the axial direction	●	●	●	●	153

*1 Excludes ø6

1 PTFE Grease Symbol **-X7**

PTFE grease is used for all parts to which grease is applied.
 * For the type with a shock absorber, standard grease is used on the shock absorber part.

MXQ Standard model no. - **X7**
 ● PTFE grease

Specifications

Bore size [mm]	6, 8, 12, 16, 20, 25
-----------------------	----------------------

* Dimensions and specifications other than the above are the same as 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.

2 Grease for Food Processing Equipment Symbol **-X9**

Grease for food is used for all parts to which grease is applied.

* For the type with a shock absorber, standard grease is used on the shock absorber part.

MXQ Standard model no. - **X9**
 ● Grease for food processing equipment

Specifications

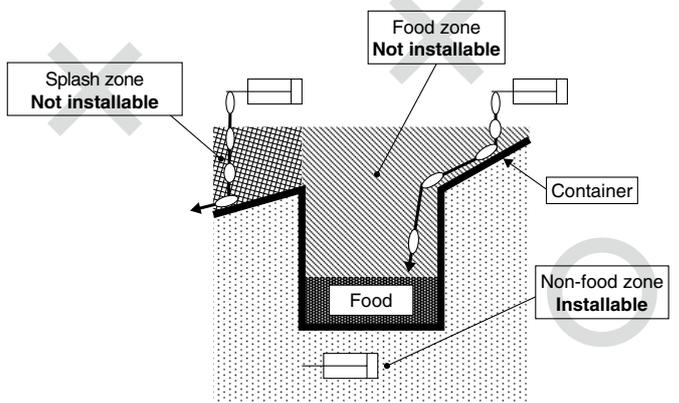
Bore size [mm]	6, 8, 12, 16, 20, 25
-----------------------	----------------------

* Dimensions and specifications other than the above are the same as the standard type.

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.

<Not installable>
 Food zone.....An environment where food which will be sold as merchandise directly touches the cylinder's components
 Splash zone.....An environment where food which will not be sold as merchandise directly touches the cylinder's components
 <Installable>
 Non-food zone..An environment where there is no contact with food



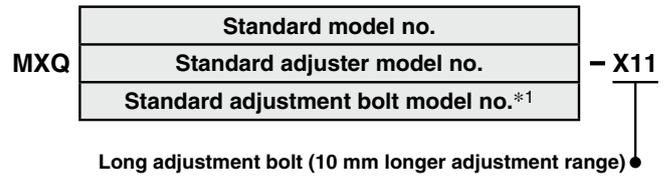
Double-ported type **MXQ□A**
 Low thrust with high rigidity type **MXQ□B**
 Single side-ported type **MXQ□C**
 Height interchangeable type **MXQ□**
 Common Adjuster Options
 Auto Switch Mounting
 Made to Order
 Model Selection

3 Long Adjustment Bolt (10 mm longer adjustment range)

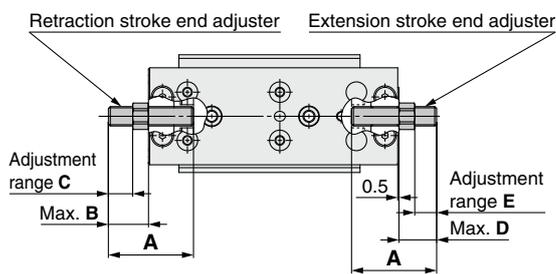
Symbol
-X11

Metal stopper with bumper, Rubber stopper: The stroke adjustment range has been increased by 10 mm compared with the standard product by making the adjustment bolt longer.
Shock absorber/RJ: The adjustment range has been increased through the use of a cap bracket mounted at the rod end of the shock absorber.

- *1 Refer to the table below for the shock absorber unit applicable to "-X11."
- * "-X11" is not available for products with end locks or centralized adjusters. Please consult with SMC when a product with a 10 mm longer adjustment range is required.
- * As there are models with no buffer stroke, the -X11 type cannot be used with a buffer.

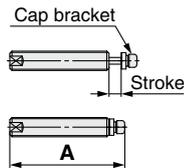


Dimensions



RJ□-X2300

A cap bracket is mounted to lengthen the A dimension.



Metal Stopper with Bumper

Model		[mm]				
		A	B	C	D	E
MXQ8(A, C)	—	40	25	20	23	18
MXQ12(A, C)	—	45	27	20	26	19
MXQ16(A)	—	50	28	20	27	18
MXQ20(A)	—	57	31	20	30	19
MXQ25(A)	—	64	32	21	31	20
—	MXQ8B	45	27	18	26	17
—	MXQ12B	50	28	18	27	16
—	MXQ16B	57	31	18	30	17
—	MXQ20B	64	32	18	31	17

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

Rubber Stopper

Model		[mm]				
		A	B	C	D	E
MXQ6(A)	—	41.5	27	22	25	20
MXQ8(A, C)	MXQ6B	41.5	27	21	25	19
MXQ12(A, C)	MXQ8B	46.5	28	21	27	20
MXQ16(A)	MXQ12B	51.5	30	21	28	20
MXQ20(A)	MXQ16B	58.5	32	22	31	21
MXQ25(A)	MXQ20B	65.5	34	22	33	21

Shock Absorber/RJ

Model		[mm]					Applicable shock absorber unit model
		A	B	C	D	E	
MXQ12(A, C)	MXQ8B	47.3	29	19	28	18	RJ0805U-X2300
MXQ16(A)	MXQ12B	52.8	31	19	30	18	RJ1006U-X2300
MXQ20(A)	MXQ16B	52.8	23	11	26	14	RJ1007HU-X2300
MXQ25(A)	MXQ20B	77.1	46	31	45	30	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.

Metal Stopper

Model		[mm]				
		A	B	C	D	E
MXQ6(A)	—	40	26	20	24	18
MXQ8(A, C)	MXQ6B	40	25	20	23	18
MXQ12(A, C)	MXQ8B	45	27	20	26	19
MXQ16(A)	MXQ12B	50	28	20	27	18
MXQ20(A)	MXQ16B	57	31	20	30	19
MXQ25(A)	MXQ20B	64	32	21	31	20

4 Long Adjustment Bolt (20 mm longer adjustment range)

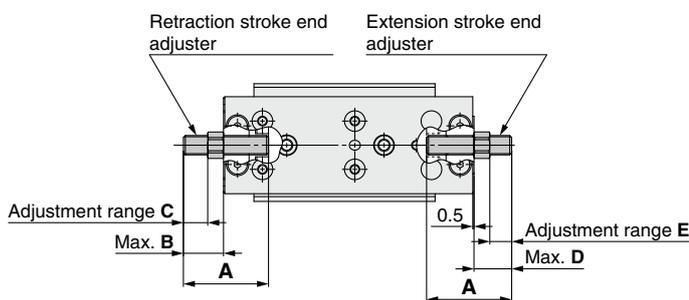
-X12

The stroke adjustment range has been increased by 20 mm compared with the standard product by making the adjustment bolt longer. For the adjustment range, refer to the table below.

- * "-X12" is not available for the shock absorber (RJ).
- * "-X12" is not available for products with end locks or centralized adjusters. Please consult with SMC when a product with a 20 mm longer adjustment range is required.
- * As there is no buffer stroke for the -X12 type, it cannot be used with a buffer.

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

Dimensions



Metal Stopper with Bumper

Model		A	B	C	D	E
MXQ8(A,C)	—	50	35	30	33	28
MXQ12(A,C)	—	55	37	30	36	29
MXQ16(A)	—	60	38	30	37	28
MXQ20(A)	—	67	41	30	40	29
MXQ25(A)	—	74	42	31	41	30
—	MXQ8B	55	37	28	36	27
—	MXQ12B	60	38	28	37	26
—	MXQ16B	67	41	28	40	27
—	MXQ20B	74	42	28	41	27

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

Rubber Stopper

Model		A	B	C	D	E
MXQ6(A)	—	51.5	37	32	35	30
MXQ8(A, C)	MXQ6B	51.5	37	31	35	29
MXQ12(A, C)	MXQ8B	56.5	38	31	37	30
MXQ16(A)	MXQ12B	61.5	40	31	38	30
MXQ20(A)	MXQ16B	68.5	42	32	41	31
MXQ25(A)	MXQ20B	75.5	44	32	43	31

Metal Stopper

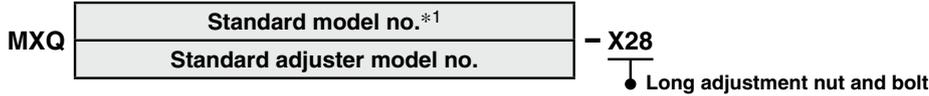
Model		A	B	C	D	E
MXQ6(A)	—	50	36	30	34	28
MXQ8(A, C)	MXQ6B	50	35	30	33	28
MXQ12(A, C)	MXQ8B	55	37	30	36	29
MXQ16(A)	MXQ12B	60	38	30	37	28
MXQ20(A)	MXQ16B	67	41	30	40	29
MXQ25(A)	MXQ20B	74	42	31	41	30

Symbol
-X28

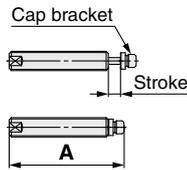
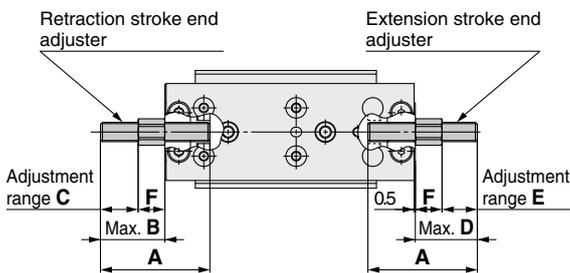
5 Long Adjustment Nut and Bolt

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.

* The extension stroke end adjuster for the types with an end lock and a centralized adjuster uses a standard adjuster with a long adjustment nut and bolt specification (-X28).
The "-X28" product number suffix is not required.



Dimensions



RJ□-X2300

A cap bracket is mounted to lengthen the A dimension.

Metal Stopper with Bumper

Model	A	B	C	D	E	F
MXQ8(A, C)	—	40	25	15	23	13
MXQ12(A, C)	—	45	27	15	26	14
MXQ16(A)	—	50	28	15	27	13
MXQ20(A)	—	57	31	17	30	16
MXQ25(A)	—	64	32	14	31	13
—	MXQ8B	45	27	13	26	12
—	MXQ12B	50	28	13	27	11
—	MXQ16B	57	31	15	30	14
—	MXQ20B	64	32	11	31	10
—	MXQ25B	71	33	14	32	13

The MXQ6(A, B) is not available.

Rubber Stopper

Model	A	B	C	D	E	F
MXQ6(A)	—	41.5	27	17	25	15
MXQ8(A, C)	MXQ6B	41.5	27	16	25	14
MXQ12(A, C)	MXQ8B	46.5	28	17	27	16
MXQ16(A)	MXQ12B	51.5	30	16	28	15
MXQ20(A)	MXQ16B	58.5	32	19	31	18
MXQ25(A)	MXQ20B	65.5	34	15	33	14

Shock Absorber/RJ

Model	A	B	C	D	E	F	Applicable part no. (Shock absorber only)
MXQ6(A)	—	29.9	16	3	14	3	RJ0603N
MXQ8(A, C)	MXQ6B	29.9	15	3	13	2.2	
MXQ12(A, C)	MXQ8B	47.3	29	14	28	13	RJ0805U-X2300
MXQ16(A)	MXQ12B	52.8	31	14	30	13	RJ1006U-X2300
MXQ20(A)	MXQ16B	52.8	23	6	26	9	RJ1007HU-X2300
MXQ25(A)	MXQ20B	77.1	46	24	45	23	RJ1410U-X2300

For the MXQ6(A, B) and MXQ8(A, C), only the adjustment nut is long.

Metal Stopper

Model	A	B	C	D	E	F
MXQ6(A)	—	40	26	15	24	13
MXQ8(A, C)	MXQ6B	40	25	15	23	13
MXQ12(A, C)	MXQ8B	45	27	15	26	14
MXQ16(A)	MXQ12B	50	28	15	27	13
MXQ20(A)	MXQ16B	57	31	17	30	16
MXQ25(A)	MXQ20B	64	32	14	31	13

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

6 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 and specifications other than the above are the same as the standard type.

7 Fluororubber Seal

Symbol
-X39

This specification changes the materials for the piston seal, rod seal, and O-rings to fluororubber.

* For the type with a shock absorber, a standard shock absorber is used.

MXQ Standard model no. - **X39**
● Fluororubber seal

Specifications

Bore size [mm]	6, 8, 12, 16, 20, 25
Seal material	Fluororubber

* Dimensions and specifications other than the above are the same as the standard type.

8 Anti-corrosive Guide Unit

Symbol
-X42

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*1

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

* Dimensions and specifications other than the above are the same as the standard type.

10 Low-speed Specification (15 to 50 mm/s)

Symbol
-X580

Stick-slip phenomenon can be prevented, and smooth operation can be achieved even at lower driving speeds between 15 to 50 mm/s.

MXQ Standard model no. - **X580**
● Low speed

* Operate without lubrication from a pneumatic system lubricator.
* Does not have an end lock

Specifications

Bore size [mm]	6, 8, 12, 16, 20, 25
Operating speed range (Average operating speed)	15 to 50 mm/s
Applicable adjuster type	Rubber stopper, Metal stopper

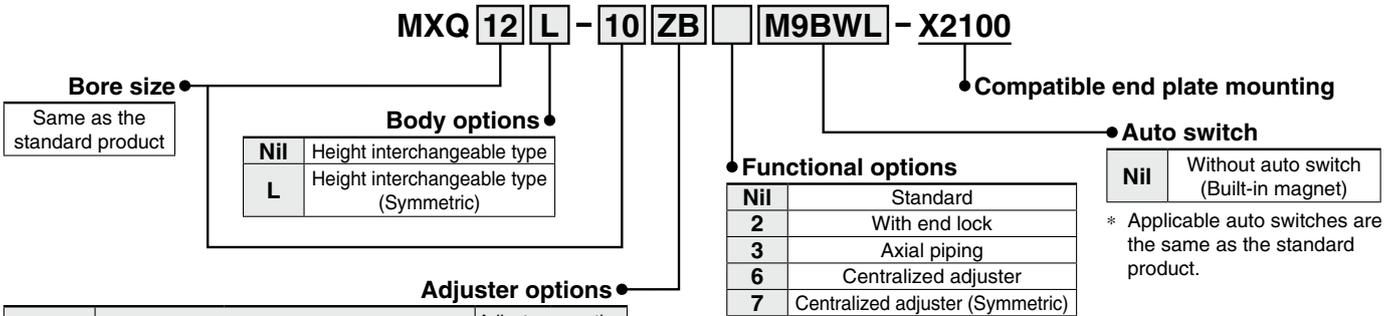
* Dimensions and specifications other than the above are the same as the standard type.

11 End Plate Compatible with the Current MXQ Series

Symbol
-X2100

Dimensions for mounting a workpiece on the end plate are the same as those of the current MXQ series.

How to Order



Symbol	Adjuster type		Adjuster mounting position ^{*3}	
	Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end
Z	Without adjuster			
ZA ^{*1}			○	○
ZB	Metal stopper with bumper ^{*2}		○	○
ZC ^{*1}				○
ZD ^{*1}			○	○
ZE	Rubber stopper		○	○
ZF ^{*1}				○
ZG ^{*1}			○	○
ZH	Shock absorber/RJ		○	○
ZJ ^{*1}				○
ZK ^{*1}			○	○
ZL	Metal stopper		○	○
ZM ^{*1}				○
ZN	Shorter total length type (without adjuster)			
ZBF ^{*1}	Metal stopper with bumper ^{*2}	Rubber stopper	○	○
ZBJ ^{*1}		Shock absorber/RJ	○	○
ZBM ^{*1}		Metal stopper	○	○
ZEC ^{*1}		Metal stopper with bumper ^{*2}	○	○
ZEJ ^{*1}	Rubber stopper	Shock absorber/RJ	○	○
ZEM ^{*1}		Metal stopper	○	○
ZHC ^{*1}		Metal stopper with bumper ^{*2}	○	○
ZHF ^{*1}	Shock absorber/RJ	Rubber stopper	○	○
ZHM ^{*1}		Metal stopper	○	○
ZLC ^{*1}		Metal stopper with bumper ^{*2}	○	○
ZLF ^{*1}	Metal stopper	Rubber stopper	○	○
ZLJ ^{*1}		Shock absorber/RJ	○	○

- *1 Only for use with a centralized adjuster
- *2 Not available for ø6
- *3 Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.

Adjuster Options/Functional Option Combinations

Adjuster option	Functional option Nil	2	3	6	7
ZA, ZD, ZG, ZK, ZC, ZF, ZJ, ZM, ZBF, ZBJ, ZBM, ZEC, ZEJ, ZEM, ZHC, ZHF, ZHM, ZLC, ZLF, ZLJ	×	×	×	○	○
ZB, ZH	○	○	○	×	×
ZE, ZL	○	○	○	×	×
ZN	○	×	○	×	×

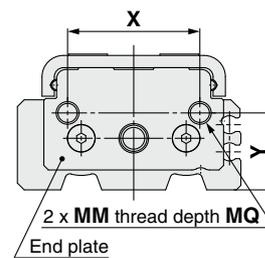
Specifications

Series	Height interchangeable type	
Bore size [mm]	6, 8, 12, 16, 20, 25	
Adjuster mounting position	Standard	Extension stroke end adjuster
	Centralized adjuster	Adjuster on both ends, Retraction stroke end adjuster
Functional option type	Without functional option (Standard), With end lock, Axial piping, Centralized adjuster, Centralized adjuster (Symmetric)	

* Specifications other than the above are the same as the standard type.

Dimensions

(Dimensions other than those shown below are the same as the standard type.)



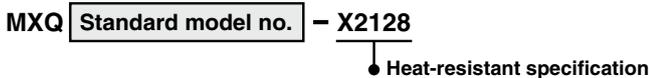
Series	X	Y	MM	MQ
MXQ6	20	11	M3 x 0.5	5
MXQ8	24	13	M4 x 0.7	6
MXQ12	29	17	M5 x 0.8	6
MXQ16	29	23	M6 x 1	10
MXQ20	35	28	M6 x 1	13
MXQ25	44	33.5	M8 x 1.25	15

* There are no mounting holes in the center of the end plate.

12 Heat-resistant Specification (-10 to 100°C)

Symbol
-X2128

Seal material and grease have been changed so that the product can be used at temperatures between -10 up to 100°C.



- * Magnet is built-in, but when using an auto switch, the acceptable temperature range becomes -10 to 60°C.
- * It is not possible to order a model with an auto switch.
- * Does not have an end lock

Specifications

Ambient temperature	-10°C to 100°C (No freezing)
Seal material	Fluororubber
Grease	Heat-resistant grease
Applicable adjuster type	Metal stopper

* Specifications other than the above are the same as 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.

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

13 Dual Stroke Specification

Two cylinders can be integrated by connecting them in line, and the cylinder stroke can be controlled in two stages in both directions.

How to Order

MXQ **12** **A** - **15** - **25** **ZA** - **M9BWL** - **X2192** • Dual stroke

Bore size

8
12
16
20
25

Body option
A Double-ported type

	A stroke	B-A stroke
5	15	15
	25	25
	35	35
	45	45
10	10	20
	20	30
	30	40
	40	40
15	15	15
	25	25
	35	35
	45	45
20	20	20
	30	30
25	25	25
	25	25

• **Auto switch**

Nil Without auto switch (Built-in magnet)

* Applicable auto switches are the same as the standard product.

• **Adjuster options**

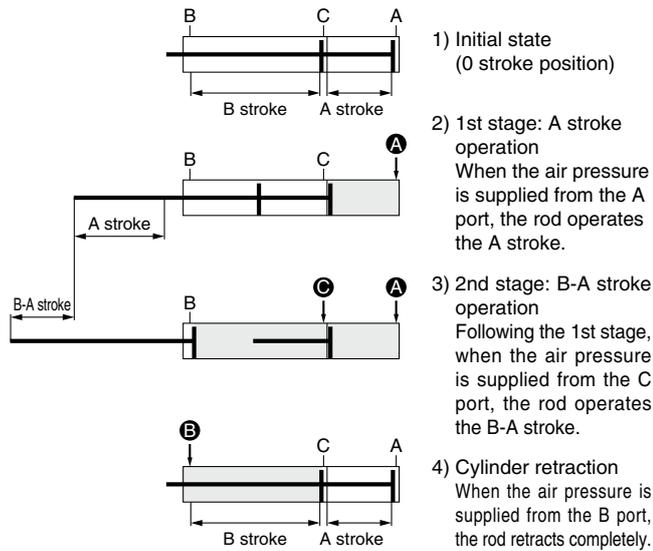
Symbol	Adjuster type*2*3		Adjuster mounting position*1	
	Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end
Z	Without adjuster			
ZA	Metal stopper with bumper		●	●
ZB	Rubber stopper		●	
ZC	Shock absorber/RJ		●	●
ZD	Metal stopper		●	●
ZE	Rubber stopper		●	
ZF	Shock absorber/RJ		●	●
ZG	Metal stopper with bumper		●	●
ZH	Shock absorber/RJ		●	●
ZJ	Rubber stopper		●	
ZK	Shock absorber/RJ		●	●
ZL	Metal stopper		●	●
ZM	Rubber stopper		●	●
ZBF	Metal stopper with bumper	Rubber stopper	●	●
ZBJ	Metal stopper with bumper	Shock absorber/RJ	●	●
ZBM	Metal stopper with bumper	Metal stopper	●	●
ZEC	Rubber stopper	Metal stopper with bumper	●	●
ZEJ	Rubber stopper	Shock absorber/RJ	●	●
ZEM	Rubber stopper	Metal stopper	●	●
ZHC	Shock absorber/RJ	Metal stopper with bumper	●	●
ZHF	Shock absorber/RJ	Rubber stopper	●	●
ZHM	Shock absorber/RJ	Metal stopper	●	●
ZLC	Metal stopper	Metal stopper with bumper	●	●
ZLF	Metal stopper	Rubber stopper	●	●
ZLJ	Metal stopper	Shock absorber/RJ	●	●

Specifications

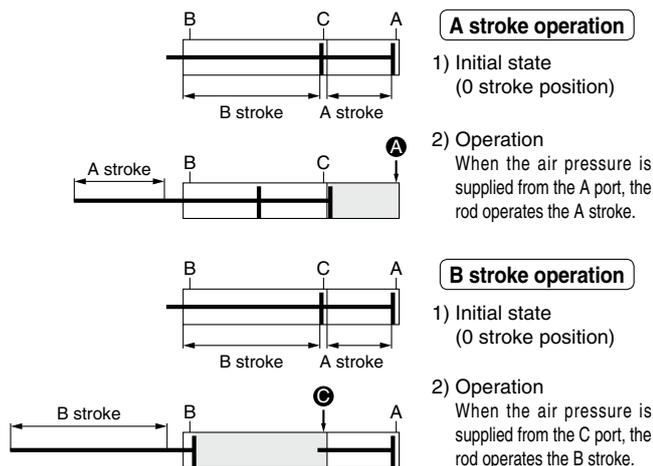
Series	Double-ported type
Bore size [mm]	8, 12, 16, 20, 25
Max. stroke [mm]	50

* Specifications other than the above are the same as the standard type.

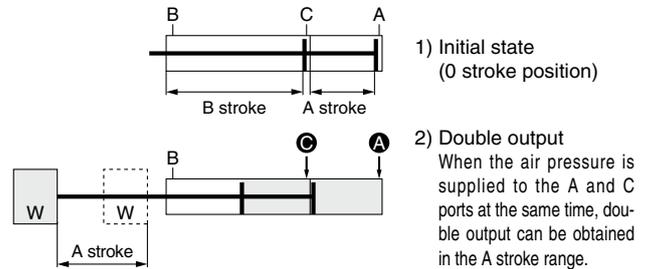
Functional description of dual stroke cylinder



A stroke or B stroke operation can be made individually.



Double output is possible.



Precautions

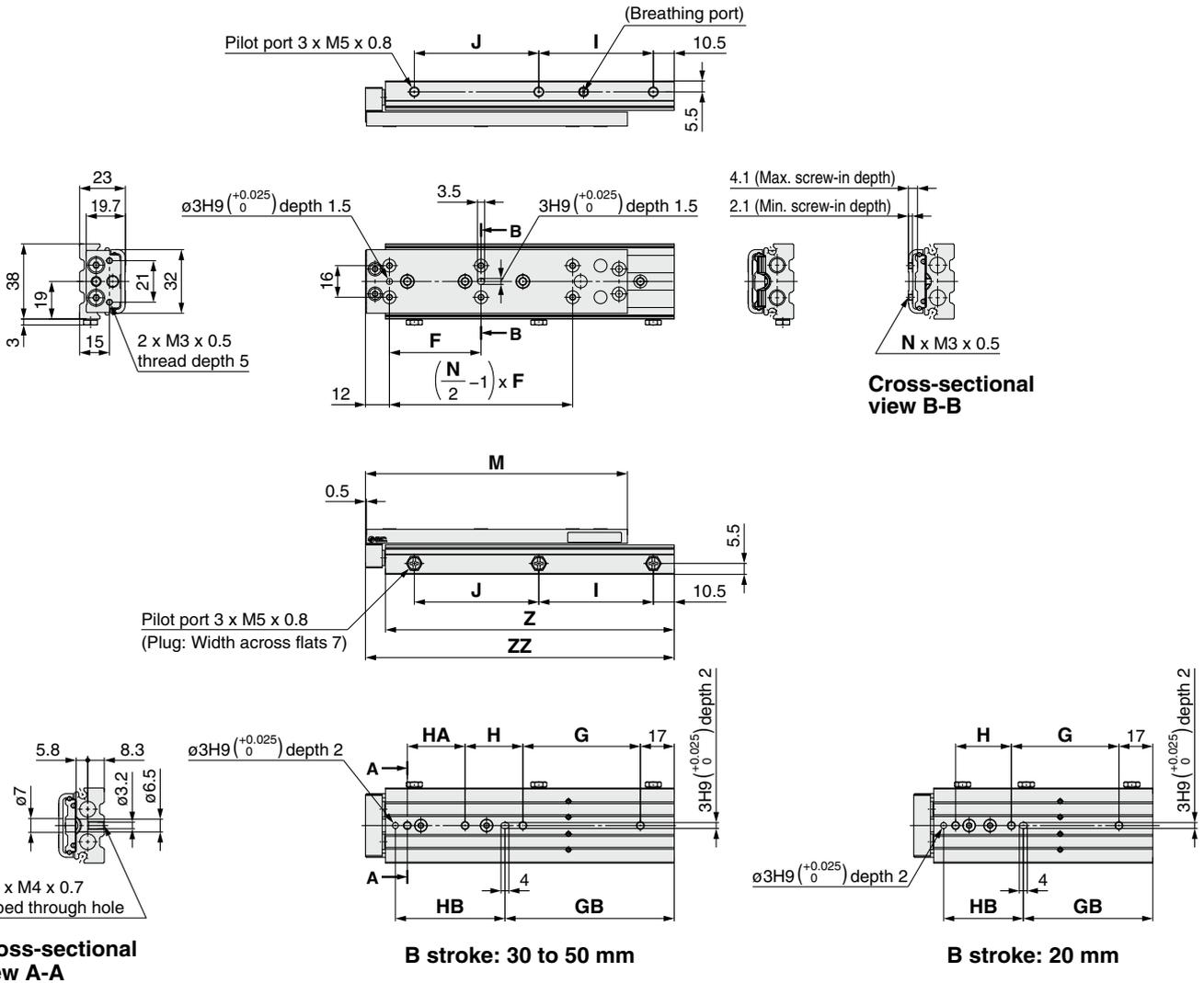
⚠ Caution

1. Adjustment can be performed by the adjusters at the positions of the extension stroke end and the retraction stroke end, but not at the center position.

Symbol
-X2192

Dimensions

MXQ8A-□-□Z-X2192



Dimensions/Weights

Stroke A	Stroke B	Model	Dimension [mm]												Weight [g]				
			F	N	G	H	HA	NN	GB	HB	I	J	M	Z	ZZ	Standard type	Additional weight of adjuster option		
																	Extension stroke end	Retraction stroke end	
5	20	MXQ8A-5-15Z□-X2192	25	4	54	28	—	3	65	40	52.5	32.5	78.5	110	120	230			
10		MXQ8A-10-10Z□-X2192																	
5	30	MXQ8A-5-25Z□-X2192	26	6	52	23	27	4	85	40	63	42	88.5	130	140	270			
10		MXQ8A-10-20Z□-X2192																	
15		MXQ8A-15-15Z□-X2192																	
5	40	MXQ8A-5-35Z□-X2192	32	6	40	31	31	4	70	55	52.5	52.5	104.5	130	140	280	15	8	
10		MXQ8A-10-30Z□-X2192																	
15		MXQ8A-15-25Z□-X2192																	
20		MXQ8A-20-20Z□-X2192																	
5	50	MXQ8A-5-45Z□-X2192	46	6	59	29	29	4	85	55	57.5	62.5	131.5	145	155	330			
10		MXQ8A-10-40Z□-X2192																	
15		MXQ8A-15-35Z□-X2192																	
20		MXQ8A-20-30Z□-X2192																	
25		MXQ8A-25-25Z□-X2192																	

* The first stage stroke adjustment cannot be performed.
* For dimensions of the model with an adjuster option, refer to pages 139 and 140.

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

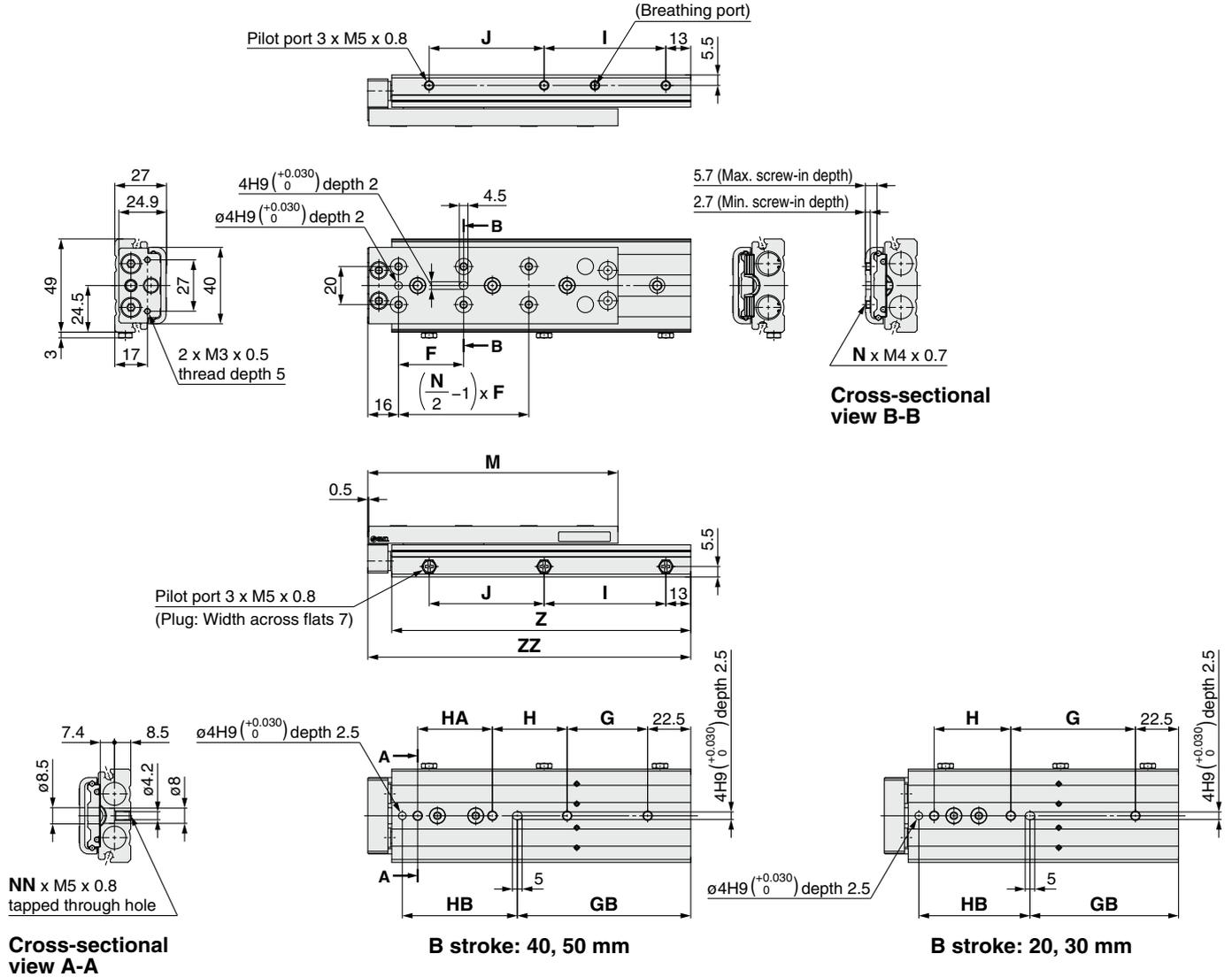
Made to Order

Model Selection

13 Dual Stroke Specification

Dimensions

MXQ12A-□-□-X2192



Dimensions/Weights

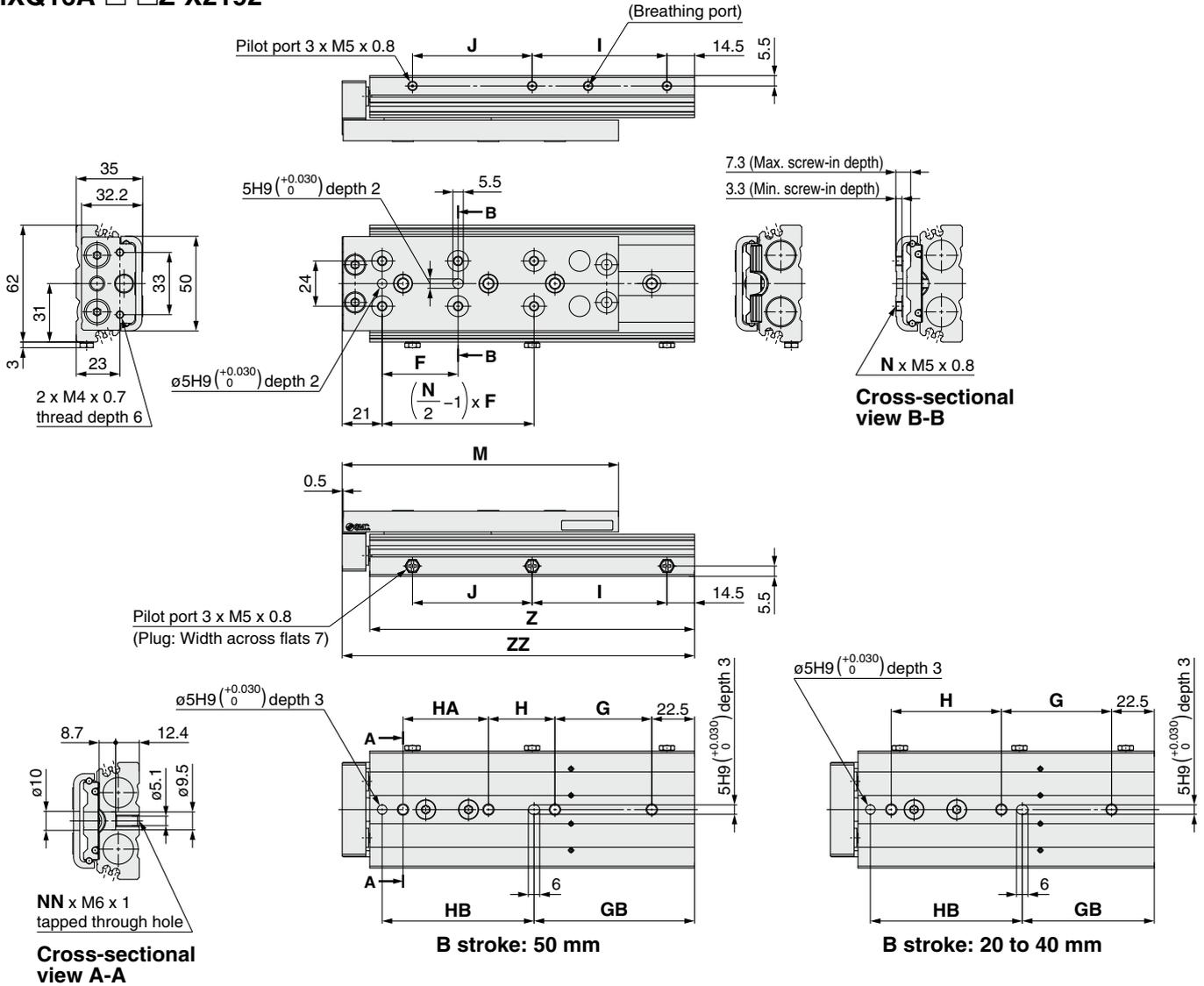
Stroke A	Stroke B	Model	Dimension [mm]											Weight [g]				
			F	N	G	H	HA	NN	GB	HB	I	J	M	Z	ZZ	Standard type	Additional weight of adjuster option	Retraction stroke end
5	20	MXQ12A-5-15Z□-X2192	28	4	53	32	—	3	67.5	48	56.5	32	92.5	121	133.5	420	30 (25)*1	16
10		MXQ12A-10-10Z□-X2192														420		
5	30	MXQ12A-5-25Z□-X2192	38	4	65	40	—	3	77.5	58	68.5	40	102.5	141	153.5	480		
10		MXQ12A-10-20Z□-X2192														460		
15		MXQ12A-15-15Z□-X2192																
5	40	MXQ12A-5-35Z□-X2192	34	6	37	29	39	4	75.5	60	58.5	50	120.5	141	153.5	490		
10		MXQ12A-10-30Z□-X2192																
15		MXQ12A-15-25Z□-X2192																
20		MXQ12A-20-20Z□-X2192																
5	50	MXQ12A-5-45Z□-X2192	34	6	42	39	39	4	90.5	60	63.5	60	130.5	156	168.5	530		
10		MXQ12A-10-40Z□-X2192																
15		MXQ12A-15-35Z□-X2192																
20		MXQ12A-20-30Z□-X2192																
25		MXQ12A-25-25Z□-X2192																

*1 Value in () is the additional weight of the shock absorber.
 * The first stage stroke adjustment cannot be performed.
 * For dimensions of the model with an adjuster option, refer to pages 139 and 140.

Symbol
-X2192

Dimensions

MXQ16A-□-□Z-X2192



Dimensions/Weights

Stroke A	Stroke B	Model	Dimension [mm]													Weight [g]		
			F	N	G	H	HA	NN	GB	HB	I	J	M	Z	ZZ	Standard type	Additional weight of adjuster option	
																	Extension stroke end	Retraction stroke end
5	20	MXQ16A-5-15Z□-X2192	38	4	57	39	—	3	71.5	58	60	39	108.5	136	150.5	760	50 (40)*1	30
10		MXQ16A-10-10Z□-X2192																
5	30	MXQ16A-5-25Z□-X2192	48	4	68	48	—	3	99.5	50	71	48	118.5	156	170.5	830		
10		MXQ16A-10-20Z□-X2192																
15		MXQ16A-15-15Z□-X2192																
5	40	MXQ16A-5-35Z□-X2192	58	4	58	58	—	3	69.5	80	61	58	135.5	156	170.5	860		
10		MXQ16A-10-30Z□-X2192																
15		MXQ16A-15-25Z□-X2192																
20		MXQ16A-20-20Z□-X2192																
5	50	MXQ16A-5-45Z□-X2192	40	6	51	35	45	4	84.5	80	71	63	145.5	171	185.5	920		
10		MXQ16A-10-40Z□-X2192																
15		MXQ16A-15-35Z□-X2192																
20		MXQ16A-20-30Z□-X2192																
25		MXQ16A-25-25Z□-X2192																

*1 Value in () is the additional weight of the shock absorber.
 * The first stage stroke adjustment cannot be performed.
 * For dimensions of the model with an adjuster option, refer to pages 139 and 140.

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

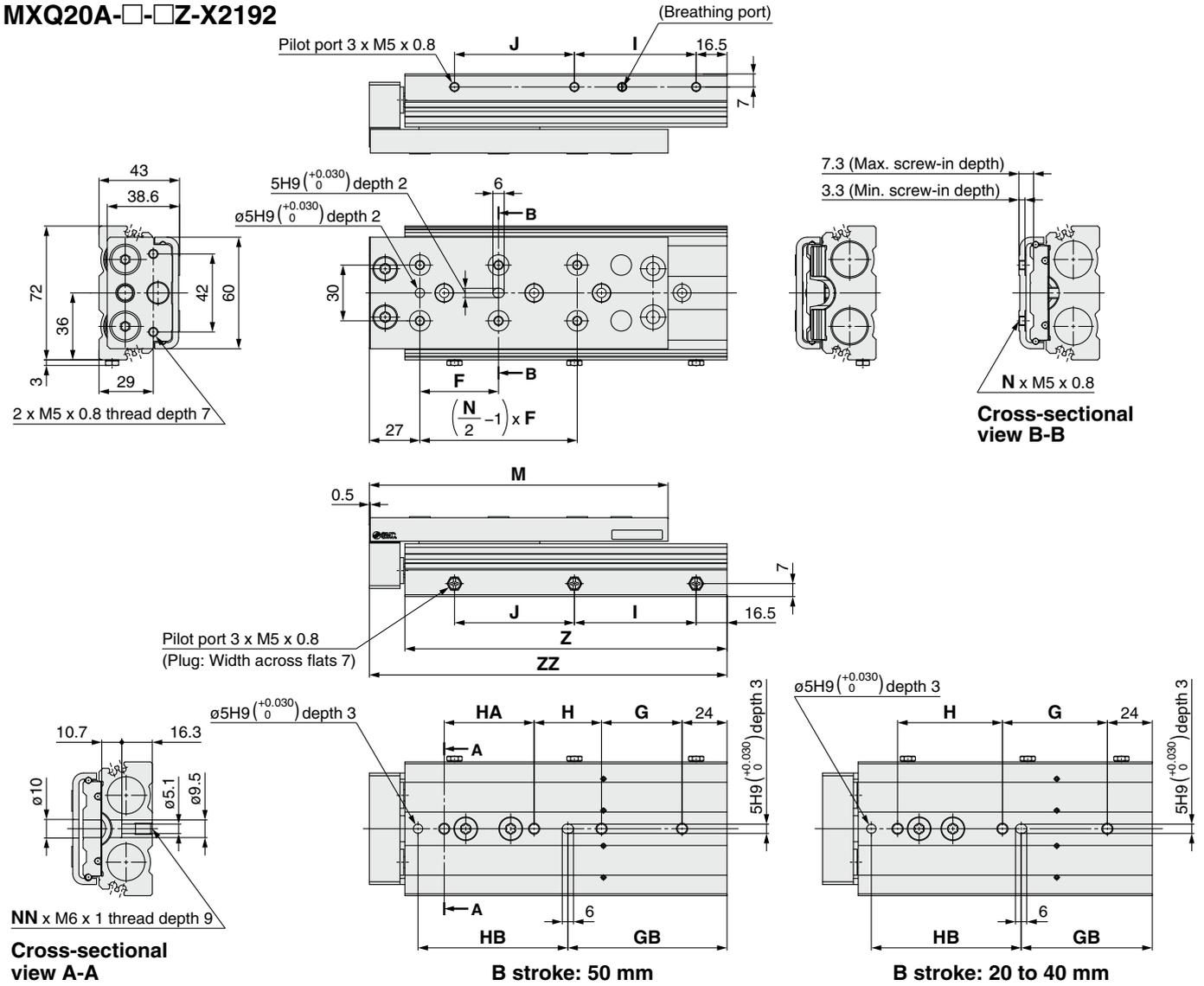
Made to Order

Model Selection

13 Dual Stroke Specification

Dimensions

MXQ20A-□-□Z-X2192



Dimensions/Weights

Stroke A	Stroke B	Model	Dimension [mm]													Weight [g]			
			F	N	G	H	HA	NN	GB	HB	I	J	M	Z	ZZ	Standard type	Additional weight of adjuster option	Retraction stroke end	
5	20	MXQ20A-5-15Z□-X2192	40	4	46	46	—	3	60	70	60	34	123.5	137	156	1200	85 (55)*1	50 (80)*1	
10		MXQ20A-10-10Z□-X2192																	
5	30	MXQ20A-5-25Z□-X2192	48	4	66	46	—	3	80	70	68	46	133.5	157	176	1300			
10		MXQ20A-10-20Z□-X2192																	
15		MXQ20A-15-15Z□-X2192																	
5	40	MXQ20A-5-35Z□-X2192	58	4	56	56	—	3	70	80	58	56	143.5	157	176	1300			
10		MXQ20A-10-30Z□-X2192																	
15		MXQ20A-15-25Z□-X2192																	
20		MXQ20A-20-20Z□-X2192																	
5	50	MXQ20A-5-45Z□-X2192	42	6	43	36	48	4	85	80	65	64	159.5	172	191	1500			
10		MXQ20A-10-40Z□-X2192																	
15		MXQ20A-15-35Z□-X2192																	
20		MXQ20A-20-30Z□-X2192																	
25		MXQ20A-25-25Z□-X2192																	

*1 Value in () is additional weight of the shock absorber.

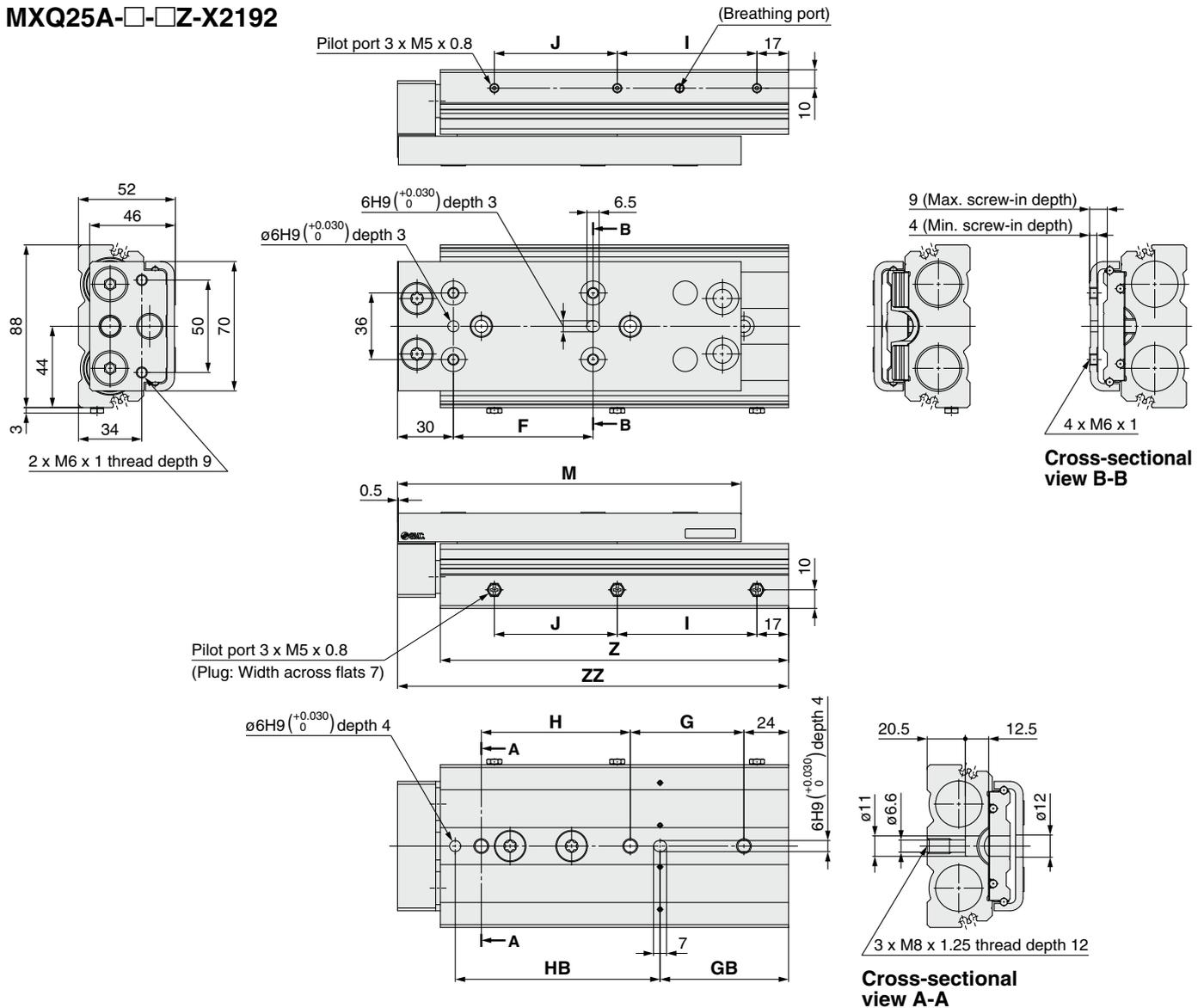
* The first stage stroke adjustment cannot be performed.

* For dimensions of the model with an adjuster option, refer to pages 139 and 140.

Symbol
-X2192

Dimensions

MXQ25A-□-□Z-X2192



Dimensions/Weights

Stroke A	Stroke B	Model	Dimension [mm]										Weight [g]		
			F	G	H	GB	HB	I	J	M	Z	ZZ	Standard type	Additional weight of adjuster option	
														Extension stroke end	Retraction stroke end
5	20	MXQ25A-5-15Z□-X2192	46	51	55	64	80	70	36	141.5	152	175	2000	135 (120)*1	80
10		MXQ25A-10-10Z□-X2192													
5	30	MXQ25A-5-25Z□-X2192	55	71	55	84	80	72	54	151.5	172	195	2200		
10		MXQ25A-10-20Z□-X2192													
15		MXQ25A-15-15Z□-X2192													
5	40	MXQ25A-5-35Z□-X2192	65	61	65	74	90	62	64	161.5	172	195	2100		
10		MXQ25A-10-30Z□-X2192													
15		MXQ25A-15-25Z□-X2192													
20		MXQ25A-20-20Z□-X2192													
5	50	MXQ25A-5-45Z□-X2192	75	61	80	69	110	75	66	184.5	187	210	2500		
10		MXQ25A-10-40Z□-X2192													
15		MXQ25A-15-35Z□-X2192													
20		MXQ25A-20-30Z□-X2192													
25		MXQ25A-25-25Z□-X2192													

*1 Value in () is the additional weight of the shock absorber.
 * The first stage stroke adjustment cannot be performed.
 * For dimensions of the model with an adjuster option, refer to pages 139 and 140.

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

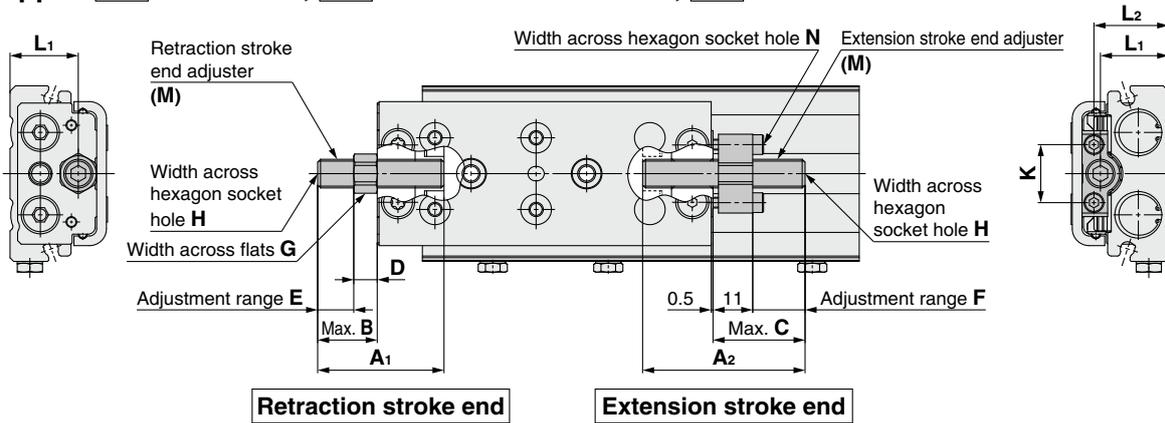
13 Dual Stroke Specification

Dimensions

MXQ□□A-□□Z□-X2192 With adjuster option

Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end

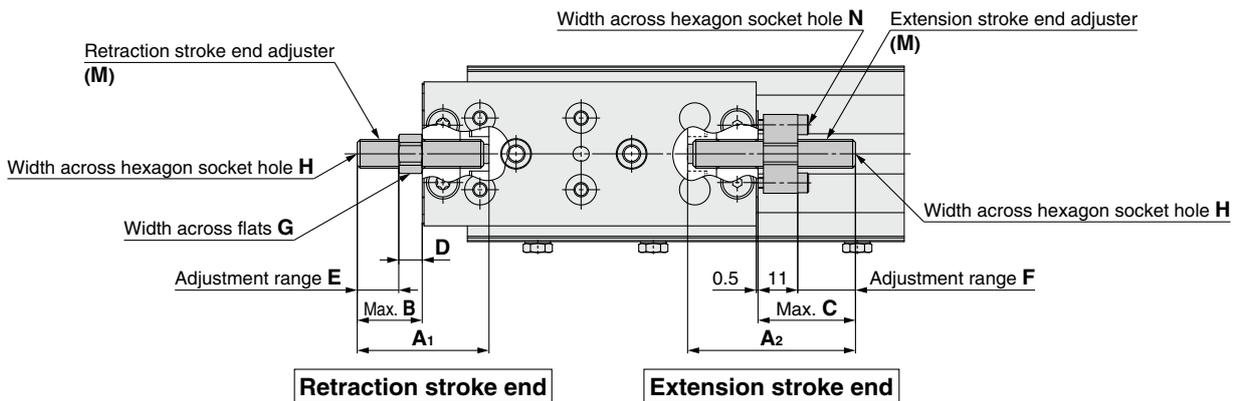
Metal stopper **ZK**: Both ends, **ZL**: Extension stroke end, **ZM**: Retraction stroke end



Metal Stopper with Bumper/Metal Stopper

Model	A ₁	A ₂	B	C	D	E	F	G	H	K	L ₁	L ₂	M	N	Metal stopper with bumper Adjuster part no.		Metal stopper Adjuster part no.	
															Extension stroke end adjuster	Retraction stroke end adjuster	Extension stroke end adjuster	Retraction stroke end adjuster
MXQ8A-□-X2192	30	40	15	23	5	10	12	8	3	13	16.6	18.2	M6 x 0.75	2.5	MXQA-CS8-X2202	MXQA-CT8	MXQA-DS8-X2202	MXQA-DT8
MXQ12A-□-X2192	35	45	17	26	6.5	10	14	10	4	16.2	18.9	20.7	M8 x 1	2.5	MXQA-CS12-X2202	MXQA-CT12	MXQA-DS12-X2202	MXQA-DT12
MXQ16A-□-X2192	40	50	18	27	8	10	15	12	5	20	25.2	26.9	M10 x 1	3	MXQA-CS16-X2202	MXQA-CT16	MXQA-DS16-X2202	MXQA-DT16
MXQ20A-□-X2192	47	57	21	30	10	10	18	17	6	27	31.5	34.1	M12 x 1	4	MXQA-CS20-X2202	MXQA-CT20	MXQA-DS20-X2202	MXQA-DT20
MXQ25A-□-X2192	54	64	22	31	11	11	20	19	6	27	38.3	40.8	M14 x 1.5	5	MXQA-CS25-X2202	MXQA-CT25	MXQA-DS25-X2202	MXQA-DT25

Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end



Rubber Stopper

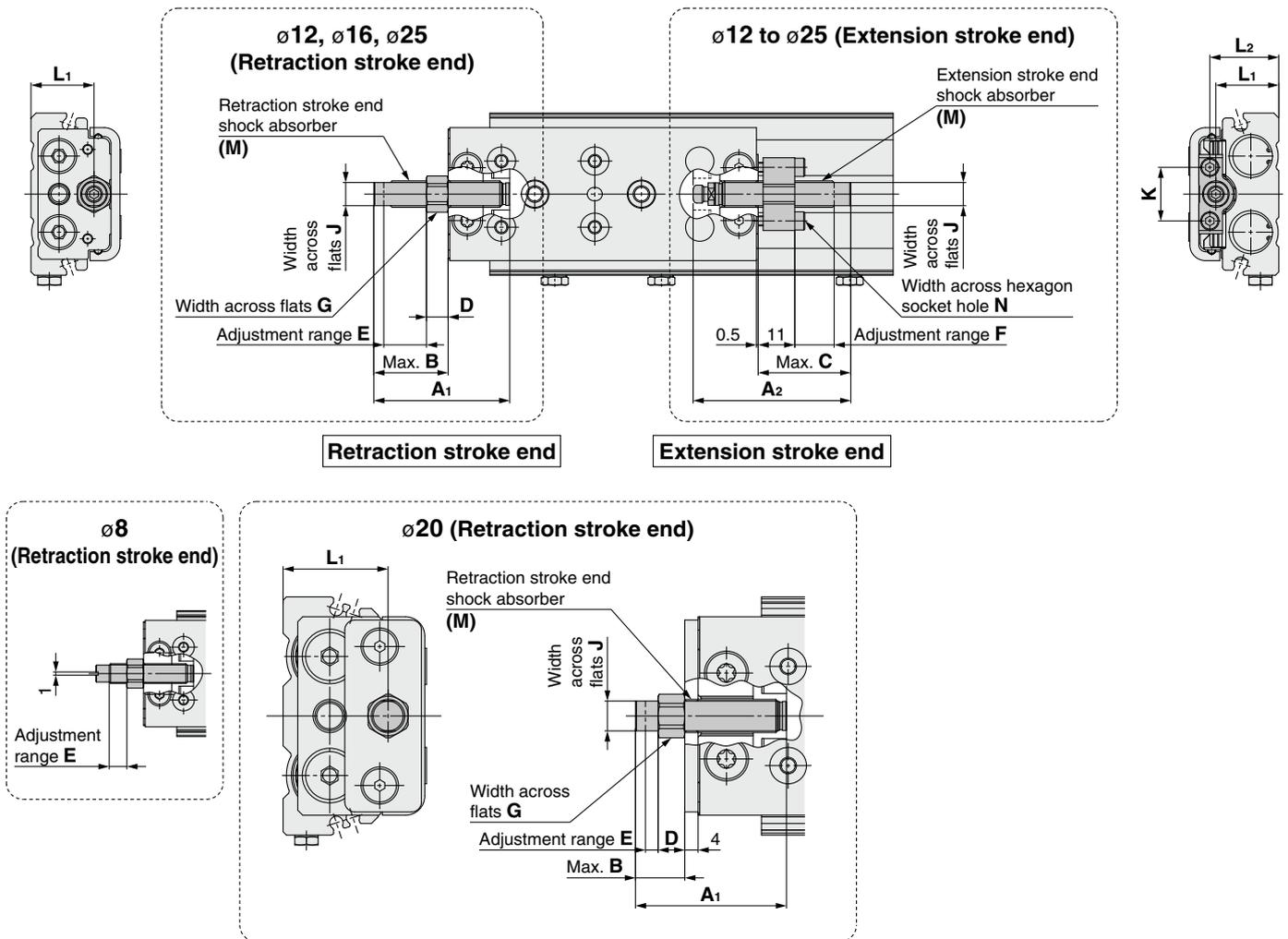
Model	A ₁	A ₂	B	C	D	E	F	G	H	K	L ₁	L ₂	M	N	Adjuster part no.	
															Extension stroke end adjuster	Retraction stroke end adjuster
MXQ8A-□-X2192	31.5	41.5	17	25	5	11	13	8	3	13	16.6	18.2	M6 x 0.75	2.5	MXQA-AS8-X2202	MXQA-AT8
MXQ12A-□-X2192	36.5	46.5	18	27	6.5	11	16	10	4	16.2	18.9	20.7	M8 x 1	2.5	MXQA-AS12-X2202	MXQA-AT12
MXQ16A-□-X2192	41.5	51.5	20	28	8	11	17	12	5	20	25.2	26.9	M10 x 1	3	MXQA-AS16-X2202	MXQA-AT16
MXQ20A-□-X2192	48.5	58.5	22	31	10	12	20	17	6	27	31.5	34.1	M12 x 1	4	MXQA-AS20-X2202	MXQA-AT20
MXQ25A-□-X2192	55.5	65.5	24	33	11	12	21	19	6	27	38.3	40.8	M14 x 1.5	5	MXQA-AS25-X2202	MXQA-AT25

Symbol
-X2192

Dimensions

MXQ□□A-□□Z□-X2192 With adjuster option

Shock absorber/RJ **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end



Shock Absorber/RJ

Model	A ₁	A ₂	B	C	D	E	F	G	J	K	L ₁	L ₂	M	N	Adjuster part no.	
															Extension stroke end adjuster	Retraction stroke end adjuster
MXQ8A-□-X2192	29.3	—	15	—	5	5	—	8	—	—	—	—	M6 x 0.75	—	—*1	MXQA-JT8
MXQ12A-□-X2192	40.8	47.3	23	29	6.5	12	11	10	7	16.2	18.9	20.7	M8 x 1	2.5	MXQA-JS12-X2202	MXQA-JT12
MXQ16A-□-X2192	45.3	52.8	24	30	8	12	11	12	9	20	25.2	26.9	M10 x 1	3	MXQA-JS16-X2202	MXQA-JT16
MXQ20A-□-X2192	45.3	52.8	15	26	8	3	6	12	9	27	31.5	34.1	M10 x 1	4	MXQA-JS20-X2202	MXQA-JT20P
MXQ25A-□-X2192	67.1	77.1	36	45	11	21	25	19	12	27	38.3	40.8	M14 x 1.5	5	MXQA-JS25-X2202	MXQA-JT25

*1 Both ends and extension stroke end options are not available for ø8.

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

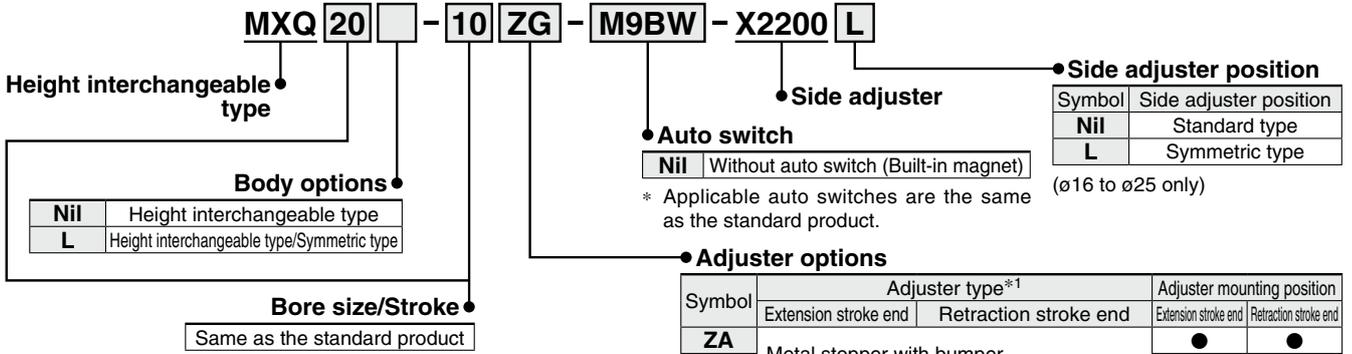
Made to Order

Model Selection

14 Side Adjuster Specification

Specifications in which the extension stroke end adjuster is installed on the side of the body

How to Order



Specifications

Series	Height interchangeable type

* Specifications other than the above are the same as the standard type.

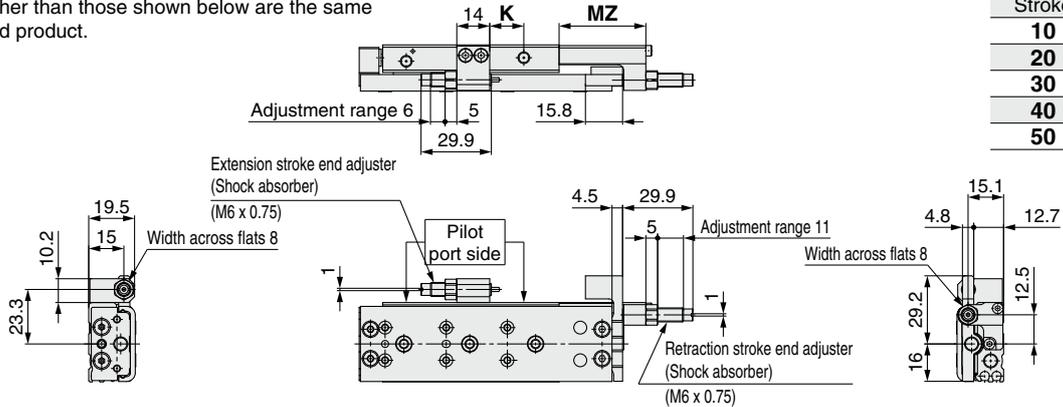
Symbol	Adjuster type*1		Adjuster mounting position	
	Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end
ZA	Metal stopper with bumper		●	●
ZB	Rubber stopper		●	●
ZD	Rubber stopper		●	●
ZE	Rubber stopper		●	●
ZG	Shock absorber/RJ		●	●
ZH	Shock absorber/RJ		●	●
ZBF	Metal stopper with bumper	Rubber stopper	●	●
ZBJ	Metal stopper with bumper	Shock absorber/RJ	●	●
ZEC	Rubber stopper	Metal stopper with bumper	●	●
ZEJ	Rubber stopper	Shock absorber/RJ	●	●
ZHC	Shock absorber/RJ	Metal stopper with bumper	●	●
ZHF	Shock absorber/RJ	Rubber stopper	●	●

*1 The metal stopper with bumper option is not available for ø6.

Dimensions

Standard type/MXQ6-□ZG-X2200: Shock absorber/RJ

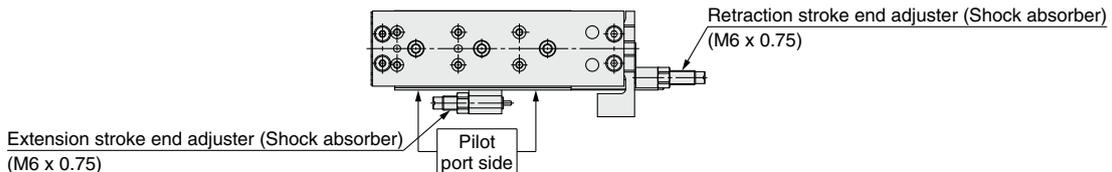
* Dimensions other than those shown below are the same as the standard product.



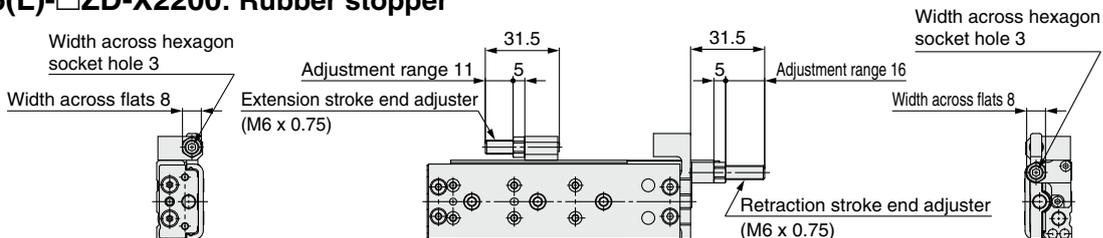
Dimensions

Stroke	K	MZ
10	7.5	18.9
20	7.5	28.9
30	6.5	36.9
40	14.5	36.9
50	24.5	36.9

Symmetric type/MXQ6L-□ZG-X2200: Shock absorber/RJ



MXQ6(L)-□ZD-X2200: Rubber stopper

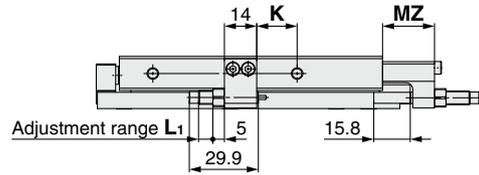


Symbol
-X2200

Dimensions

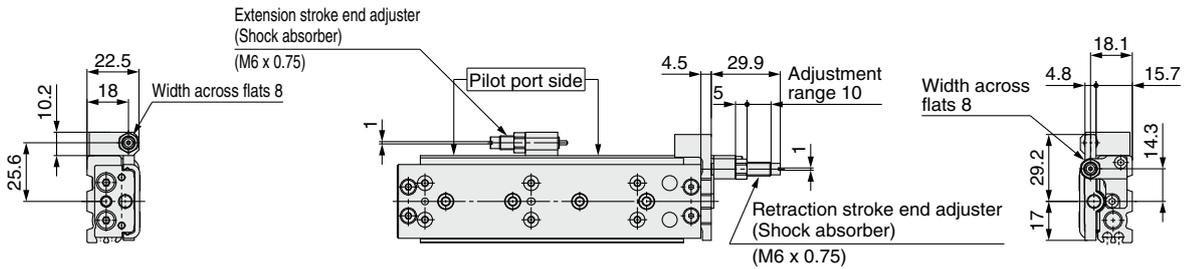
Standard type/MXQ8-□ZG-X2200: Shock absorber/RJ

* Dimensions other than those shown below are the same as the standard product.

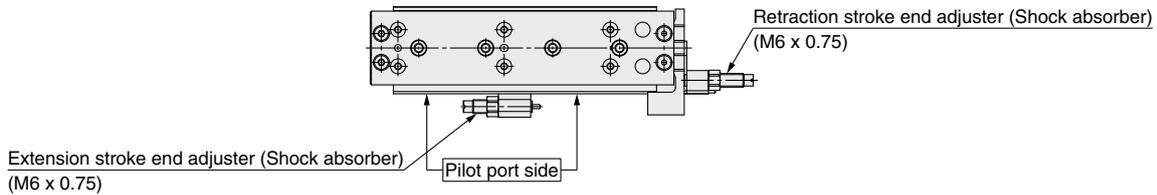


Dimensions

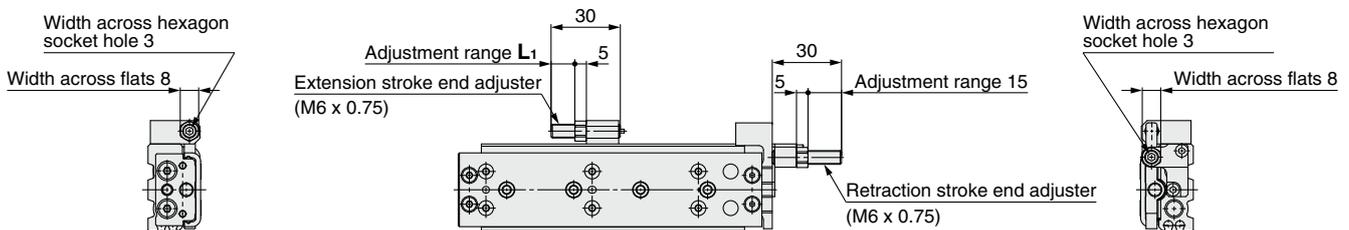
Stroke	K	MZ	Extension stroke end adjuster adjustment range		
			Metal stopper with bumper L ₁	Rubber stopper L ₁	Shock absorber L ₁
10	5.5	22.5	9	10	5
20	10.5	22.5	10	11	6
30	20	22.5	10	11	6
40	24.5	22.5	10	11	6
50	17.5	22.5	10	11	6
75	46.5	46.5	10	11	6



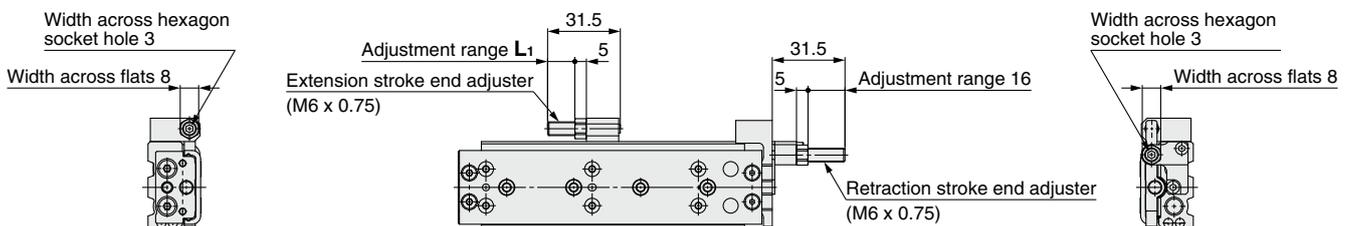
Symmetric type/MXQ8L-□ZG-X2200: Shock absorber/RJ



MXQ8(L)-□ZA-X2200: Metal stopper with bumper



MXQ8(L)-□ZD-X2200: Rubber stopper



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

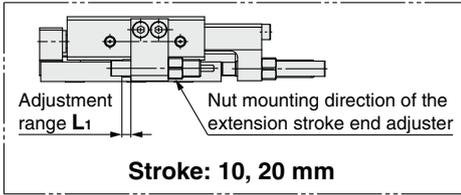
Model Selection

14 Side Adjuster Specification

Dimensions

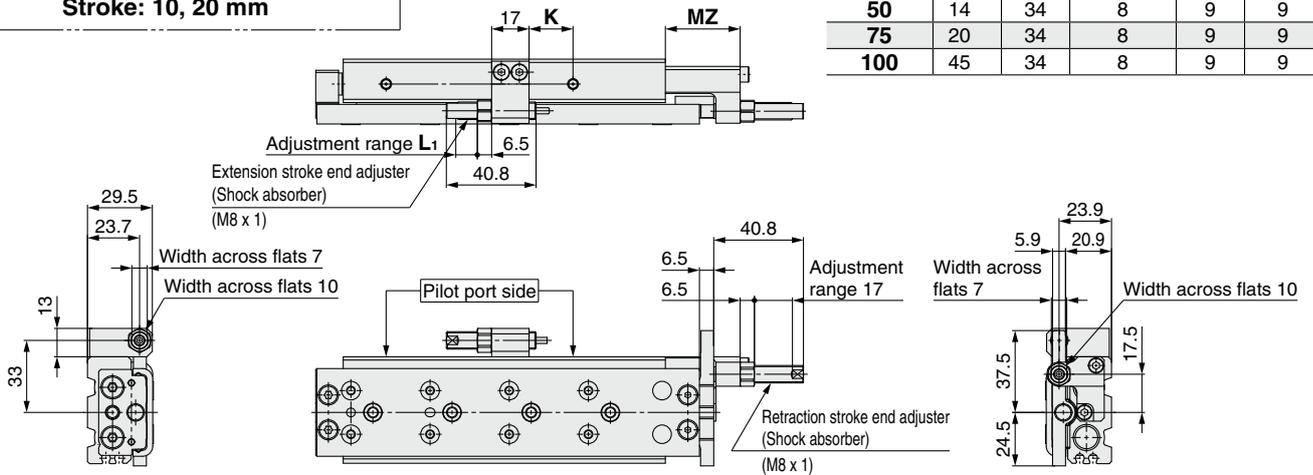
Standard type/MXQ12-□ZG-X2200: Shock absorber/RJ

* Dimensions other than those shown below are the same as the standard product.

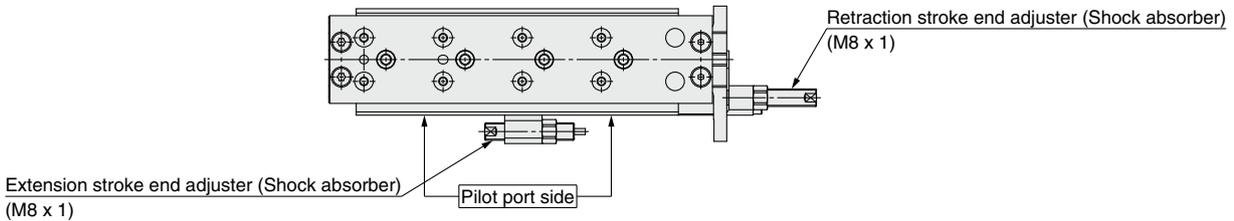


Dimensions

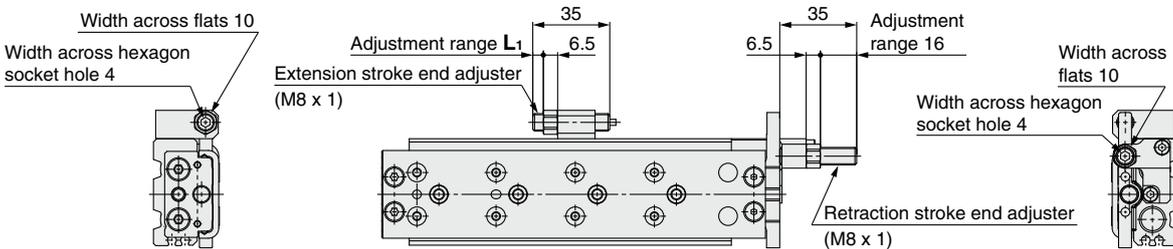
Stroke	K	MZ	Extension stroke end adjuster adjustment range		
			Metal stopper with bumper	Rubber stopper	Shock absorber
			L_1	L_1	L_1
10	5.5	26	3	4	4
20	5.5	34	3	4	4
30	5.5	34	4	6	5
40	5.5	34	6	8	7
50	14	34	8	9	9
75	20	34	8	9	9
100	45	34	8	9	9



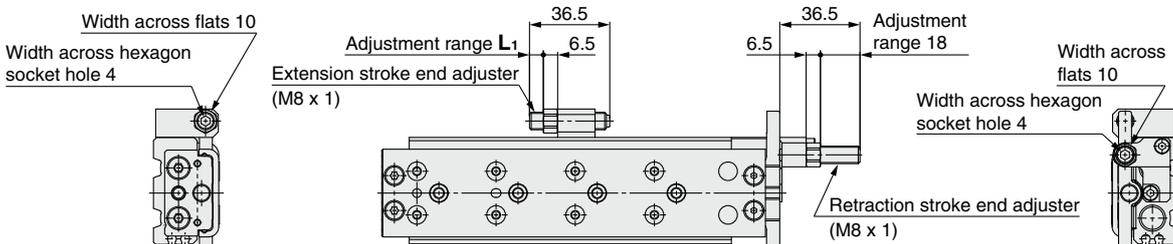
Symmetric type/MXQ12L-□ZG-X2200: Shock absorber/RJ



MXQ12(L)-□ZA-X2200: Metal stopper with bumper



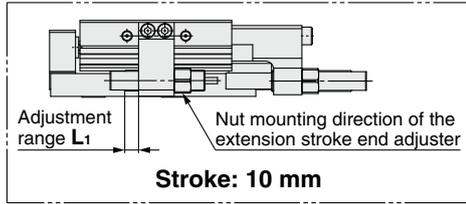
MXQ12(L)-□ZD-X2200: Rubber stopper



Dimensions

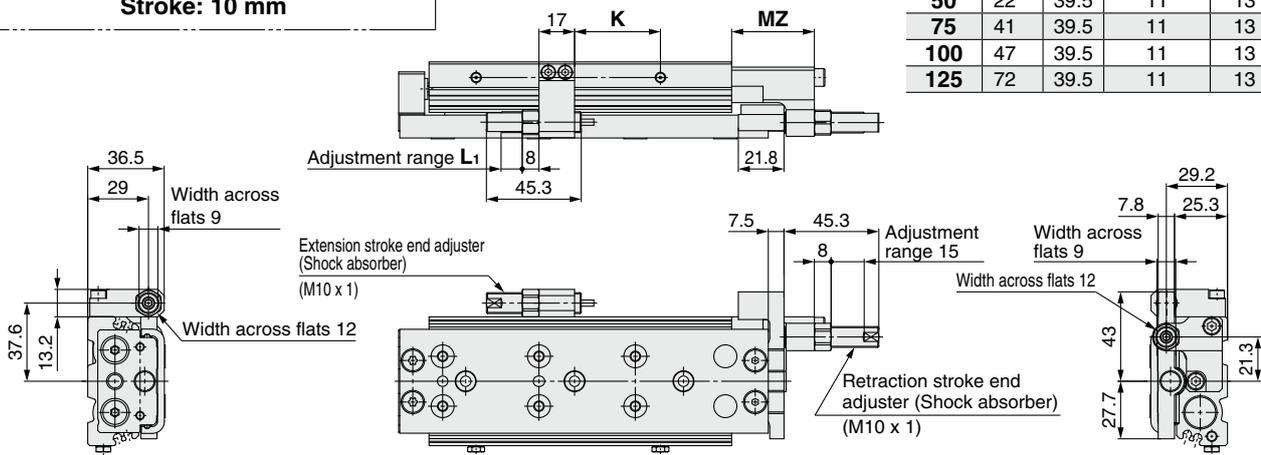
Standard type/MXQ16-□ZG-X2200: Shock absorber/RJ

* Dimensions other than those shown below are the same as the standard product.



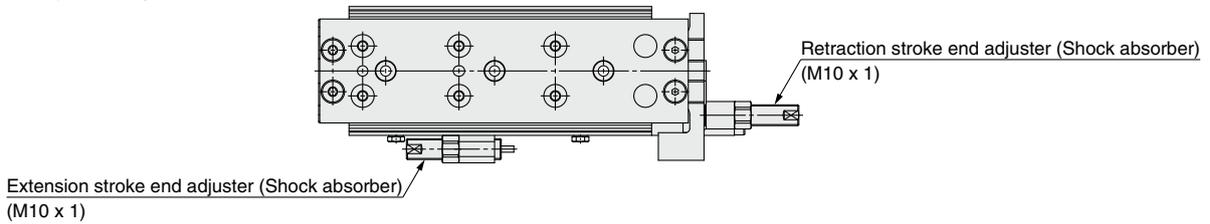
Dimensions

Stroke	K	MZ	Extension stroke end adjuster adjustment range		
			Metal stopper with bumper	Rubber stopper	Shock absorber
			L ₁	L ₁	L ₁
10	5.5	33.5	8	9	6
20	5.5	39.5	11	12	9
30	14	39.5	11	13	10
40	17	39.5	11	13	10
50	22	39.5	11	13	10
75	41	39.5	11	13	10
100	47	39.5	11	13	10
125	72	39.5	11	13	10

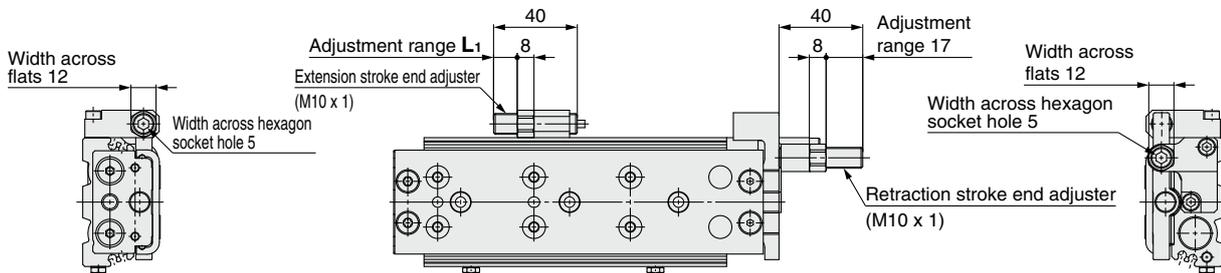


Symmetric type/MXQ16-□ZG-X2200L: Shock absorber/RJ

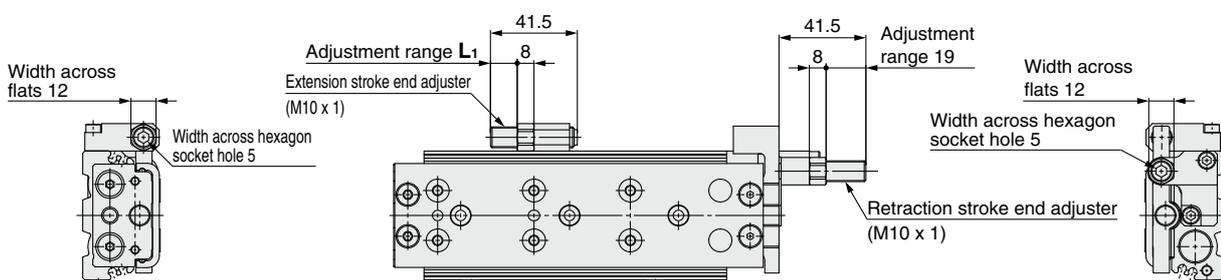
* Only the side adjuster is symmetric.



MXQ16-□ZA-X2200(L): Metal stopper with bumper



MXQ16-□ZD-X2200(L): Rubber stopper



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

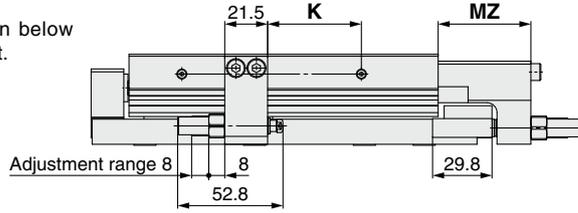
Model Selection

14 Side Adjuster Specification

Dimensions

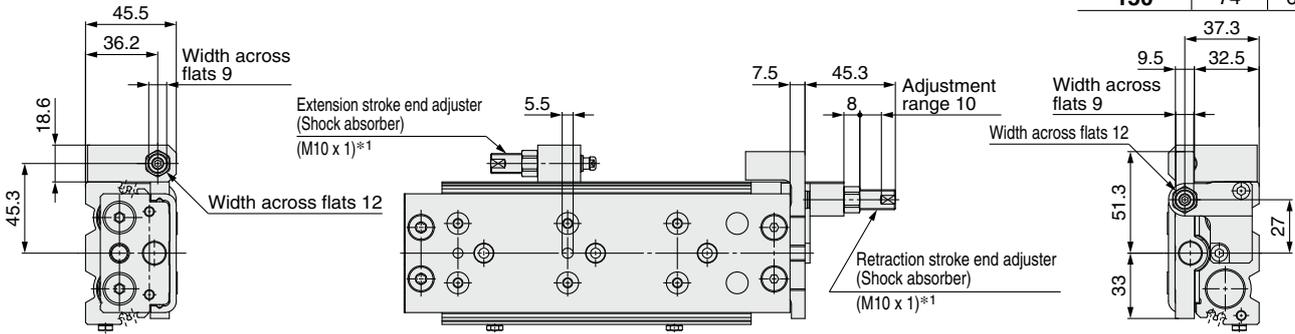
Standard type/MXQ20-□ZG-X2200: Shock absorber/RJ

- *1 The shock absorber uses a different size thread than the other adjusters.
- * Dimensions other than those shown below are the same as the standard product.



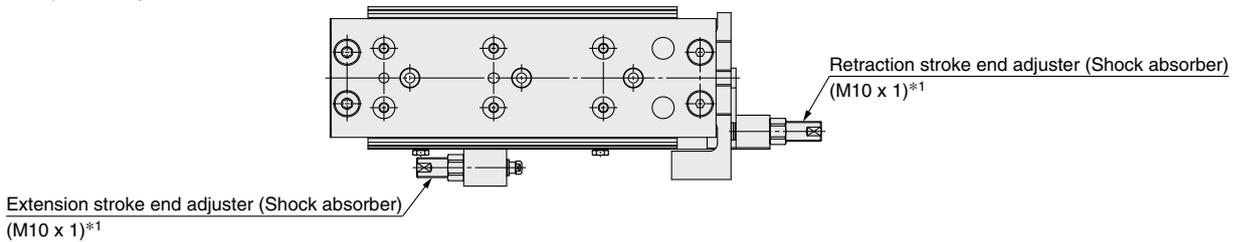
Dimensions

Stroke	K	MZ
10	6	36.5
20	6	46.5
30	18	46.5
40	28	46.5
50	30	46.5
75	47	46.5
100	24	69.5
125	49	69.5
150	74	69.5

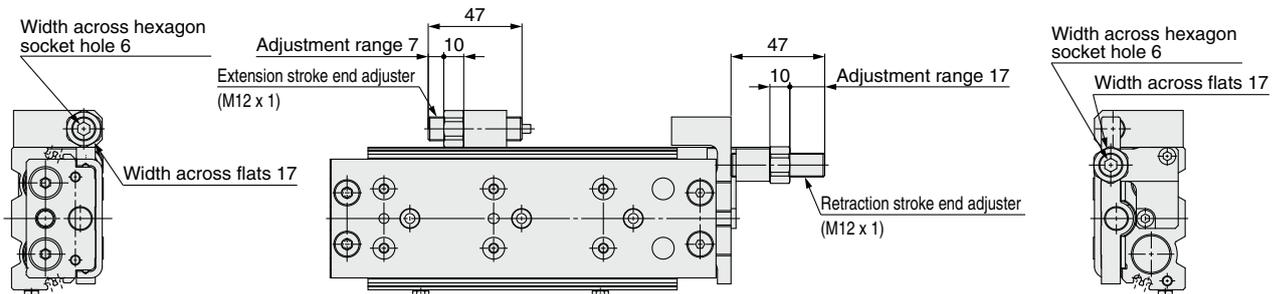


Symmetric type/MXQ20-□ZG-X2200L: Shock absorber/RJ

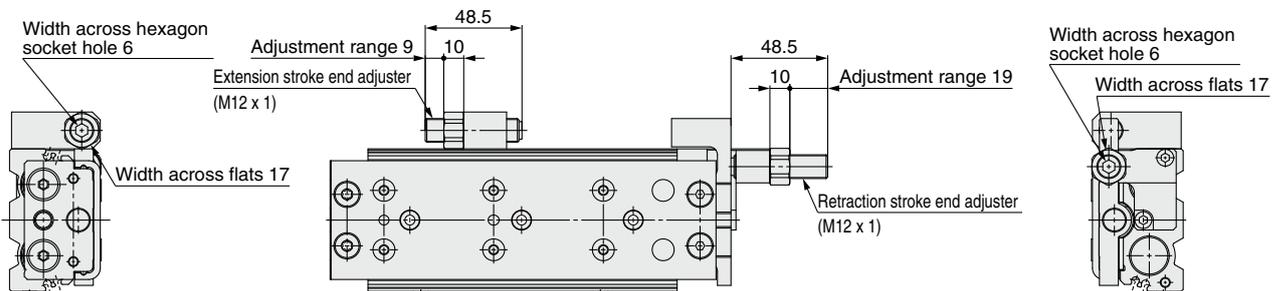
- * Only the side adjuster is symmetric.



MXQ20-□ZA-X2200(L): Metal stopper with bumper



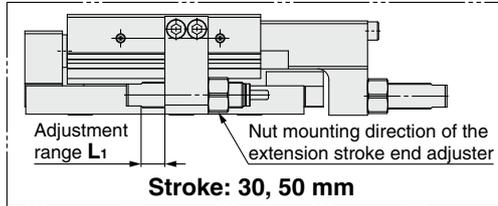
MXQ20-□ZD-X2200(L): Rubber stopper



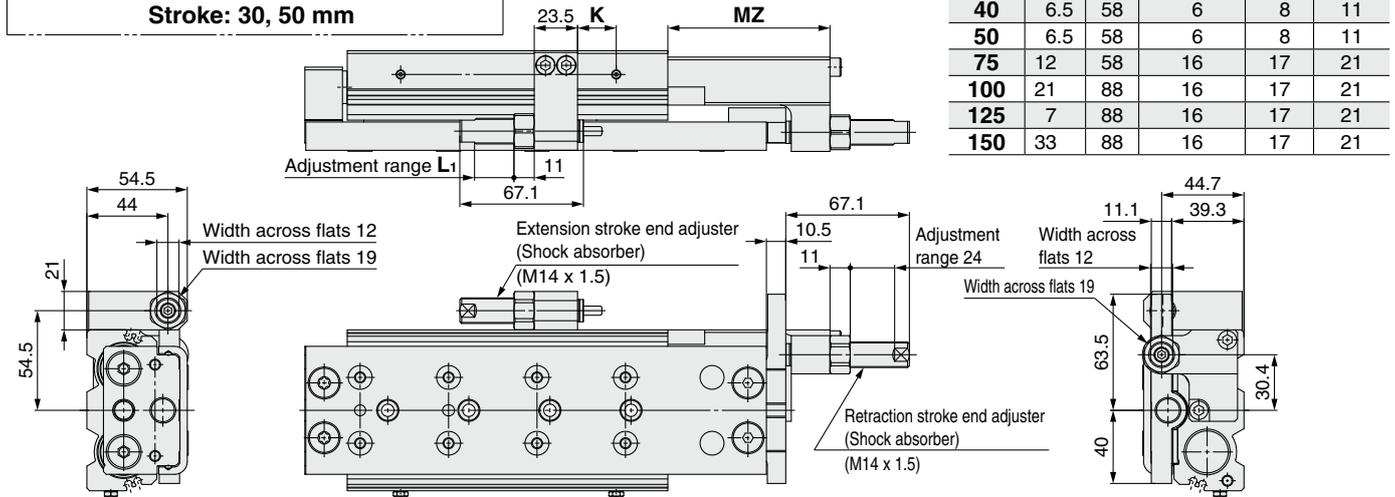
Symbol
-X2200

Dimensions

Standard type/MXQ25-□ZG-X2200: Shock absorber/RJ

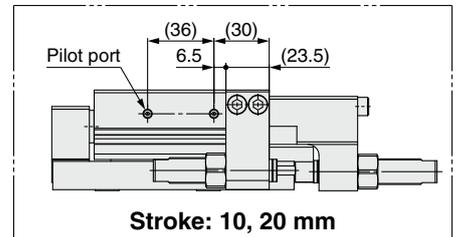
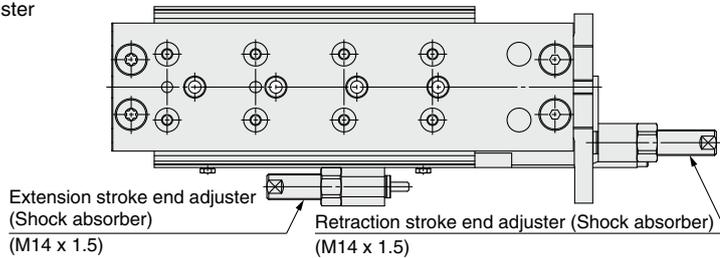


* Dimensions other than those shown below are the same as the standard product.

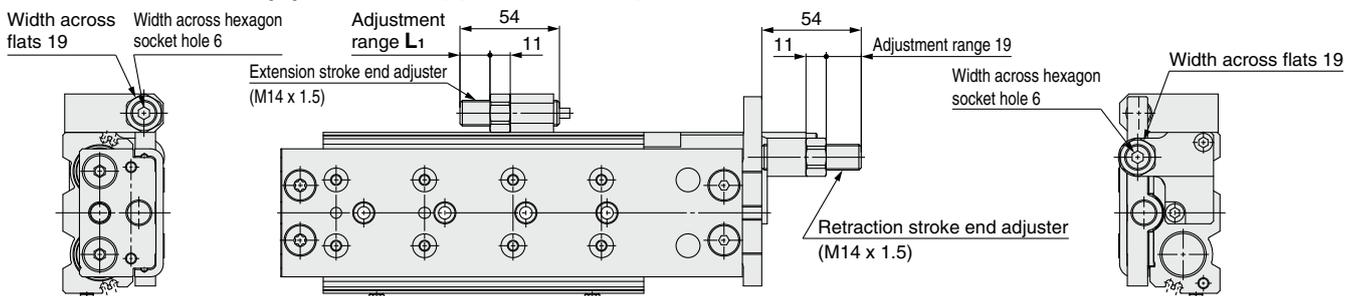


Symmetric type/MXQ25-□ZG-X2200L: Shock absorber/RJ

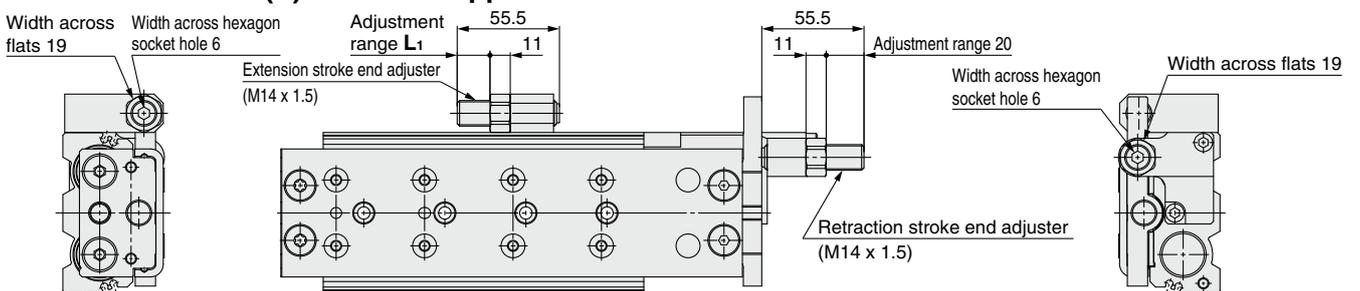
* Only the side adjuster is symmetric.



MXQ25-□ZA-X2200(L): Metal stopper with bumper



MXQ25-□ZD-X2200(L): Rubber stopper



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

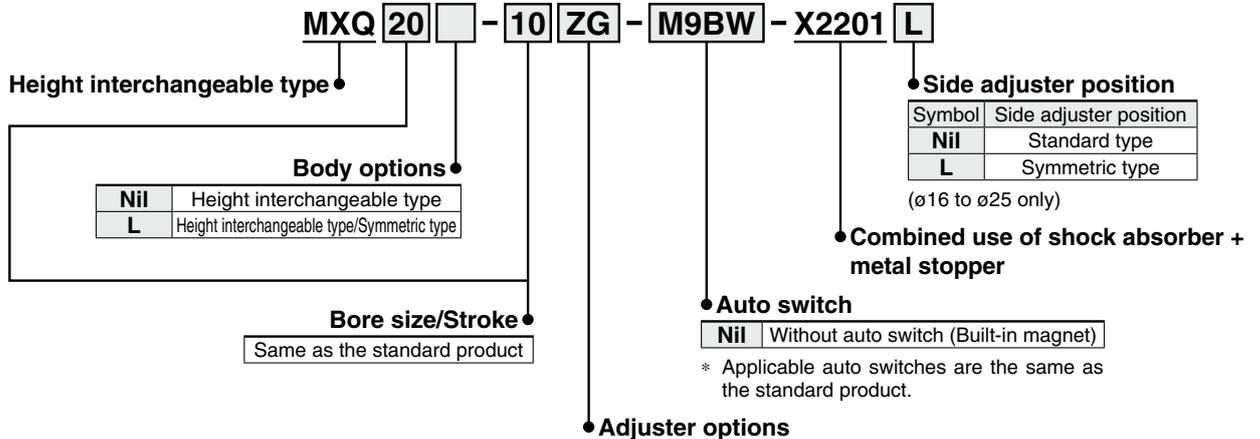
Made to Order

Model Selection

15 Combined Use of Shock Absorber + Metal Stopper

These are specifications in which shock absorbers and metal stoppers are used in combination with the extension stroke end adjuster and the retraction stroke end adjuster. The shock absorbers absorb energy, and the metal stoppers are used for positioning.

How to Order



Specifications

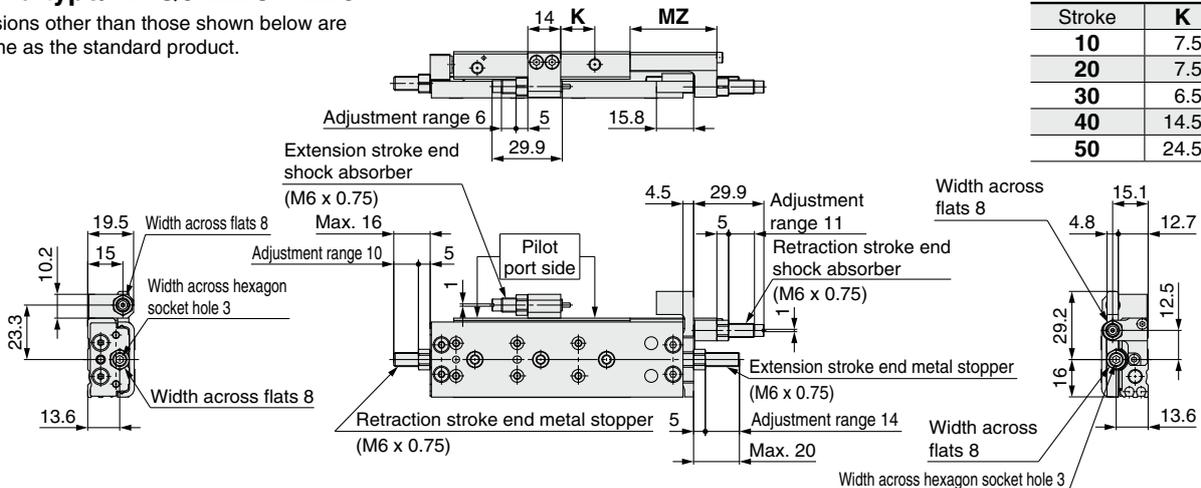
Series	Height interchangeable type
--------	-----------------------------

* Specifications other than the above are the same as the standard type.

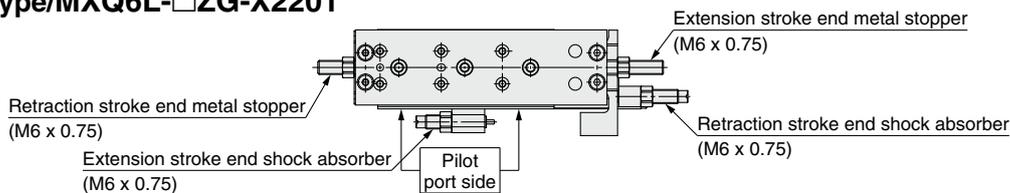
Dimensions

Standard type/MXQ6-□ZG-X2201

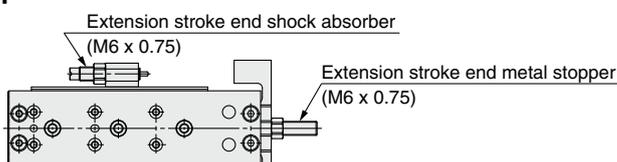
* Dimensions other than those shown below are the same as the standard product.



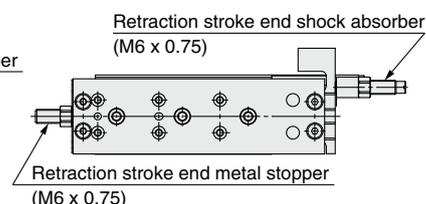
Symmetric type/MXQ6L-□ZG-X2201



Standard type/MXQ6-□ZH-X2201



Standard type/MXQ6-□ZJ-X2201



Symbol
-X2201

Dimensions

Standard type/MXQ8-□ZG-X2201

* Dimensions other than those shown below are the same as the standard product.

Dimensions

Stroke	K	MZ
10	5.5	22.5
20	10.5	22.5
30	20	22.5
40	24.5	22.5
50	17.5	22.5
75	46.5	46.5

Double-ported type
MXQ□A

Low thrust with high rigidity type
MXQ□B

Single side-ported type
MXQ□C

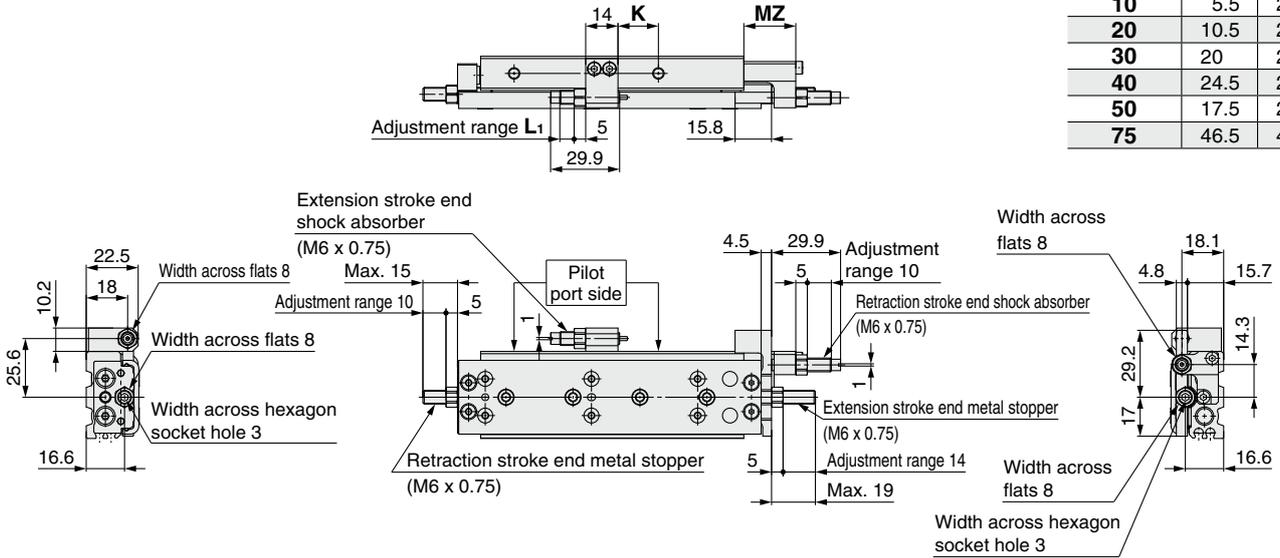
Height interchangeable type
MXQ□

Common Adjuster Options

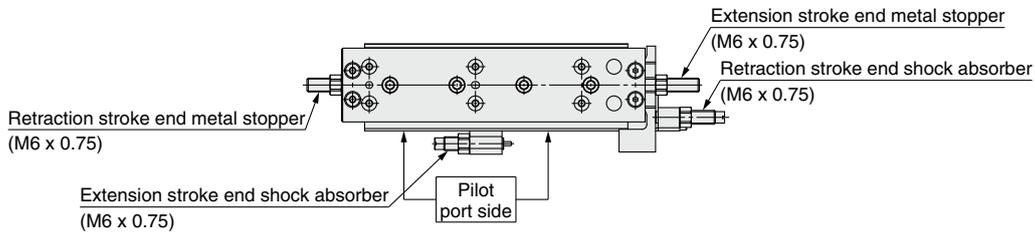
Auto Switch Mounting

Made to Order

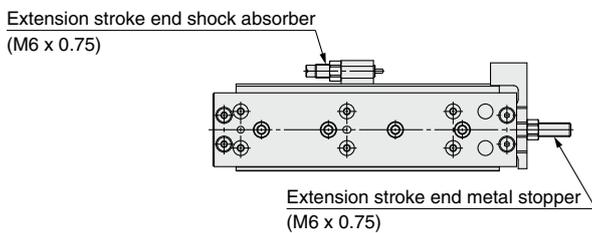
Model Selection



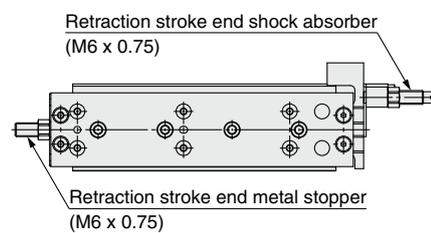
Symmetric type/MXQ8L-□ZG-X2201



Standard type/MXQ8-□ZH-X2201



Standard type/MXQ8-□ZJ-X2201

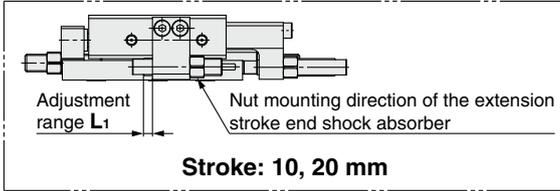


15 Combined Use of Shock Absorber + Metal Stopper

Dimensions

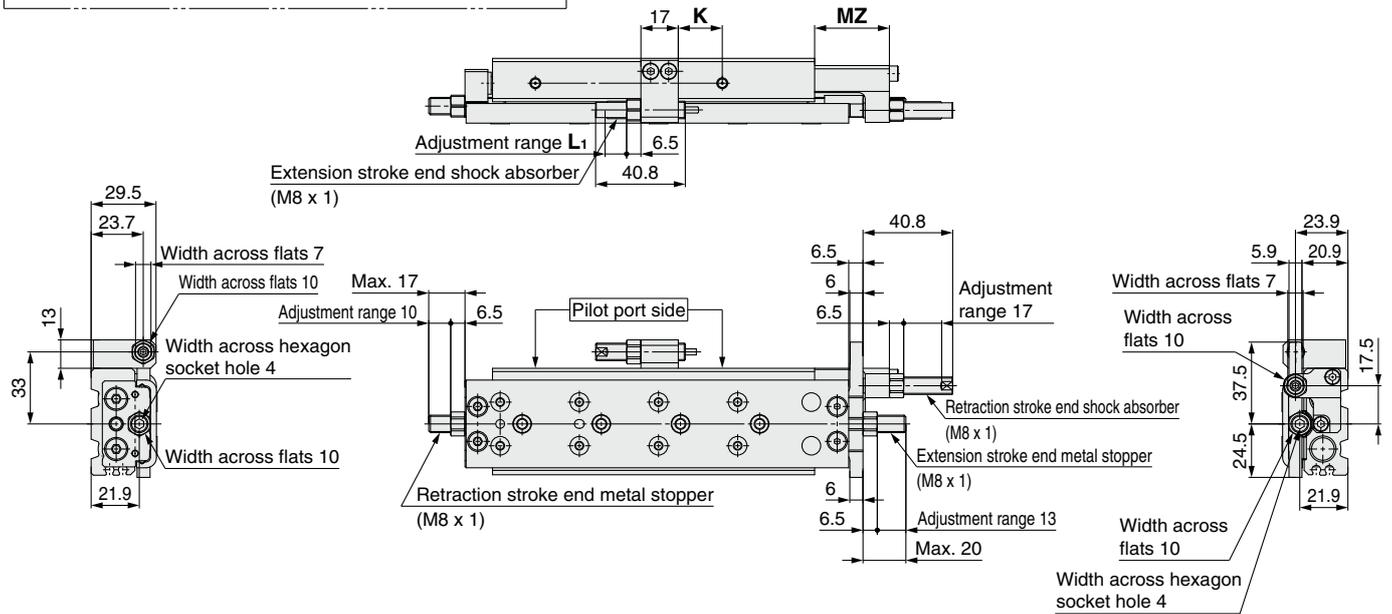
Standard type/MXQ12-□ZG-X2201

* Dimensions other than those shown below are the same as the standard product.

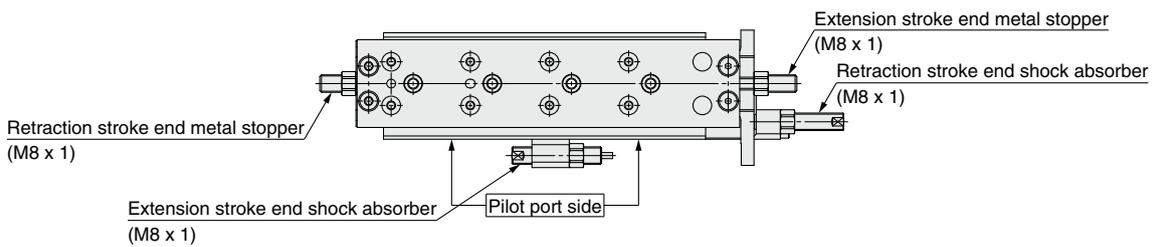


Dimensions

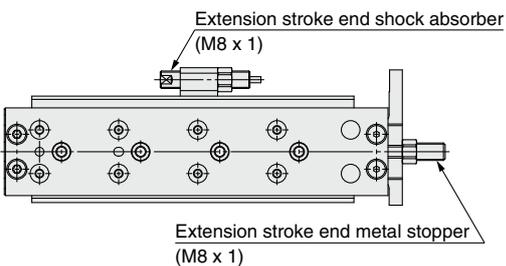
Stroke	K	MZ	L_1
10	5.5	26	4
20	5.5	34	4
30	5.5	34	5
40	5.5	34	7
50	14	34	9
75	20	34	9
100	45	34	9



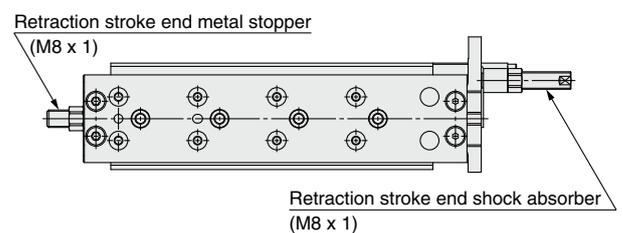
Symmetric type/MXQ12L-□ZG-X2201



Standard type/MXQ12-□ZH-X2201



Standard type/MXQ12-□ZJ-X2201

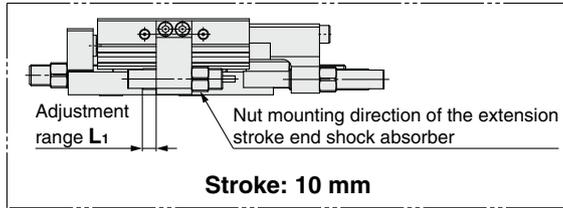


Symbol
-X2201

Dimensions

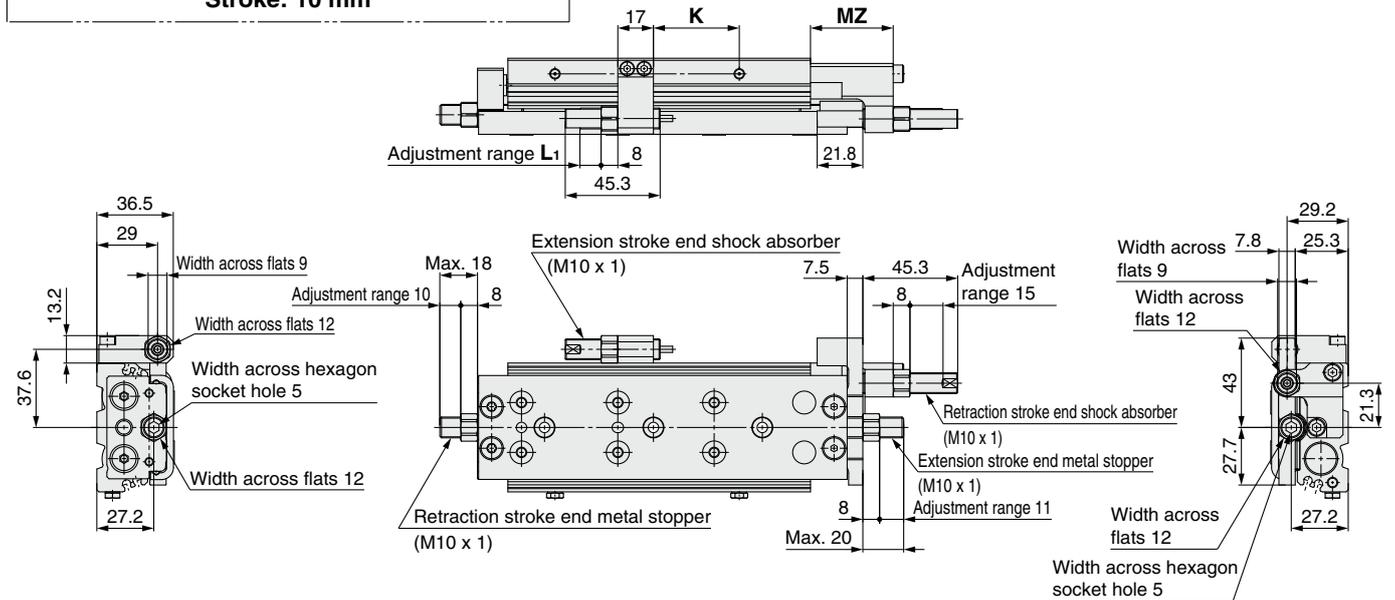
Standard type/MXQ16-□ZG-X2201

* Dimensions other than those shown below are the same as the standard product.



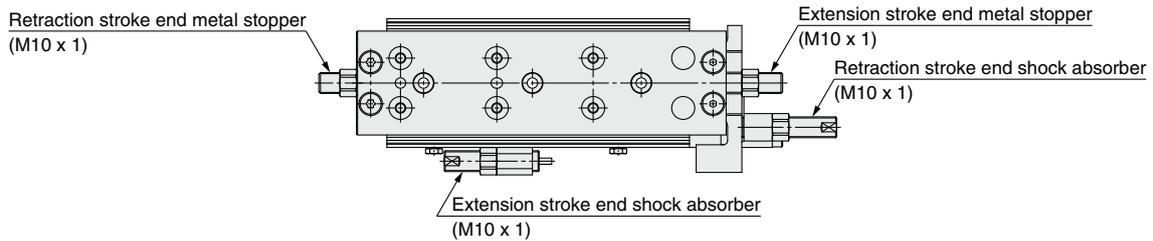
Dimensions

Stroke	K	MZ	L_1
10	5.5	33.5	6
20	5.5	39.5	9
30	14	39.5	10
40	17	39.5	10
50	22	39.5	10
75	41	39.5	10
100	47	39.5	10
125	72	39.5	10

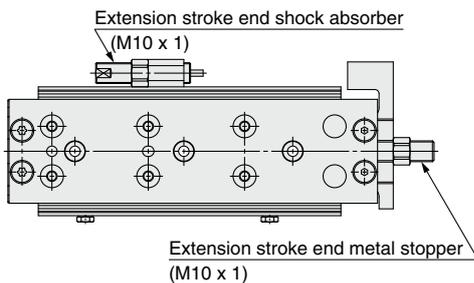


Symmetric type/MXQ16-□ZG-X2201L

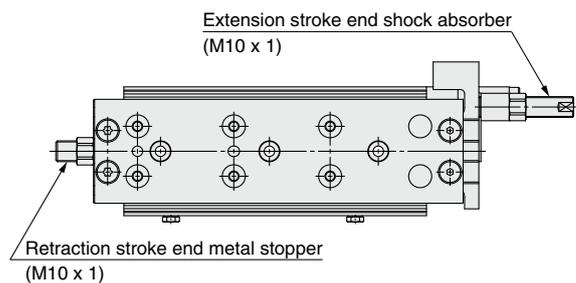
* Only the adjuster part is symmetric.



Standard type/MXQ16-□ZH-X2201



Standard type/MXQ16-□ZJ-X2201



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

15 Combined Use of Shock Absorber + Metal Stopper

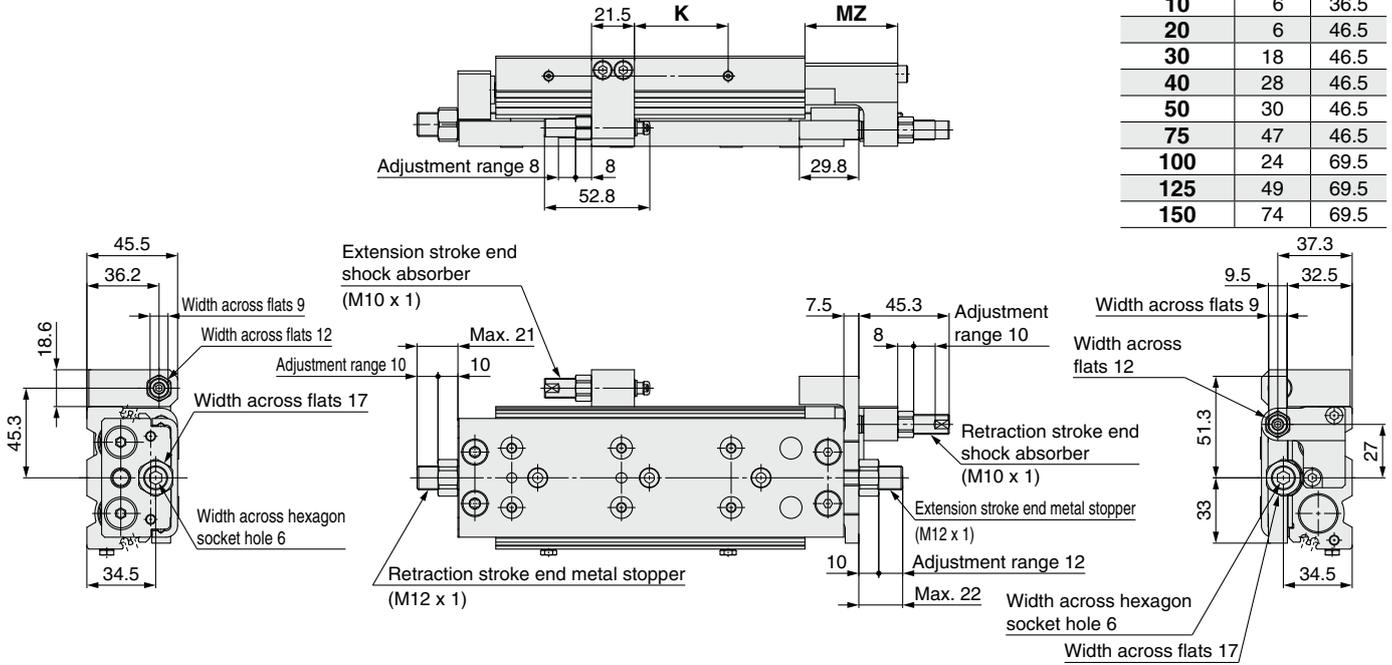
Dimensions

Standard type/MXQ20-□ZG-X2201

* Dimensions other than those shown below are the same as the standard product.

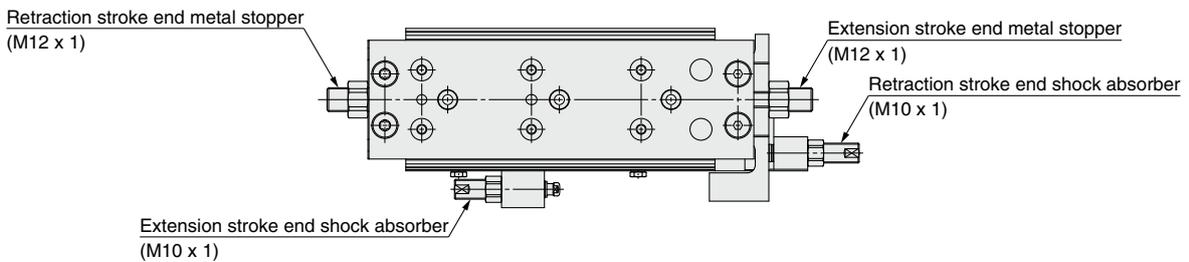
Dimensions

Stroke	K	MZ
10	6	36.5
20	6	46.5
30	18	46.5
40	28	46.5
50	30	46.5
100	24	69.5
125	49	69.5
150	74	69.5

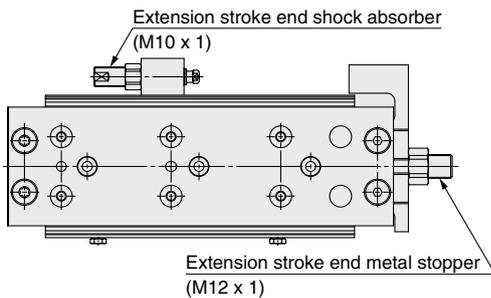


Symmetric type/MXQ20-□ZG-X2201L

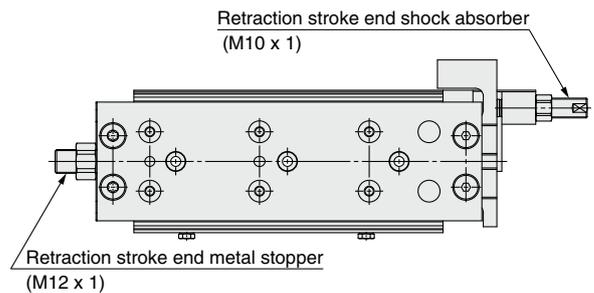
* Only the adjuster part is symmetric.



Standard type/MXQ20-□ZH-X2201



Standard type/MXQ20-□ZJ-X2201



Symbol
-X2201

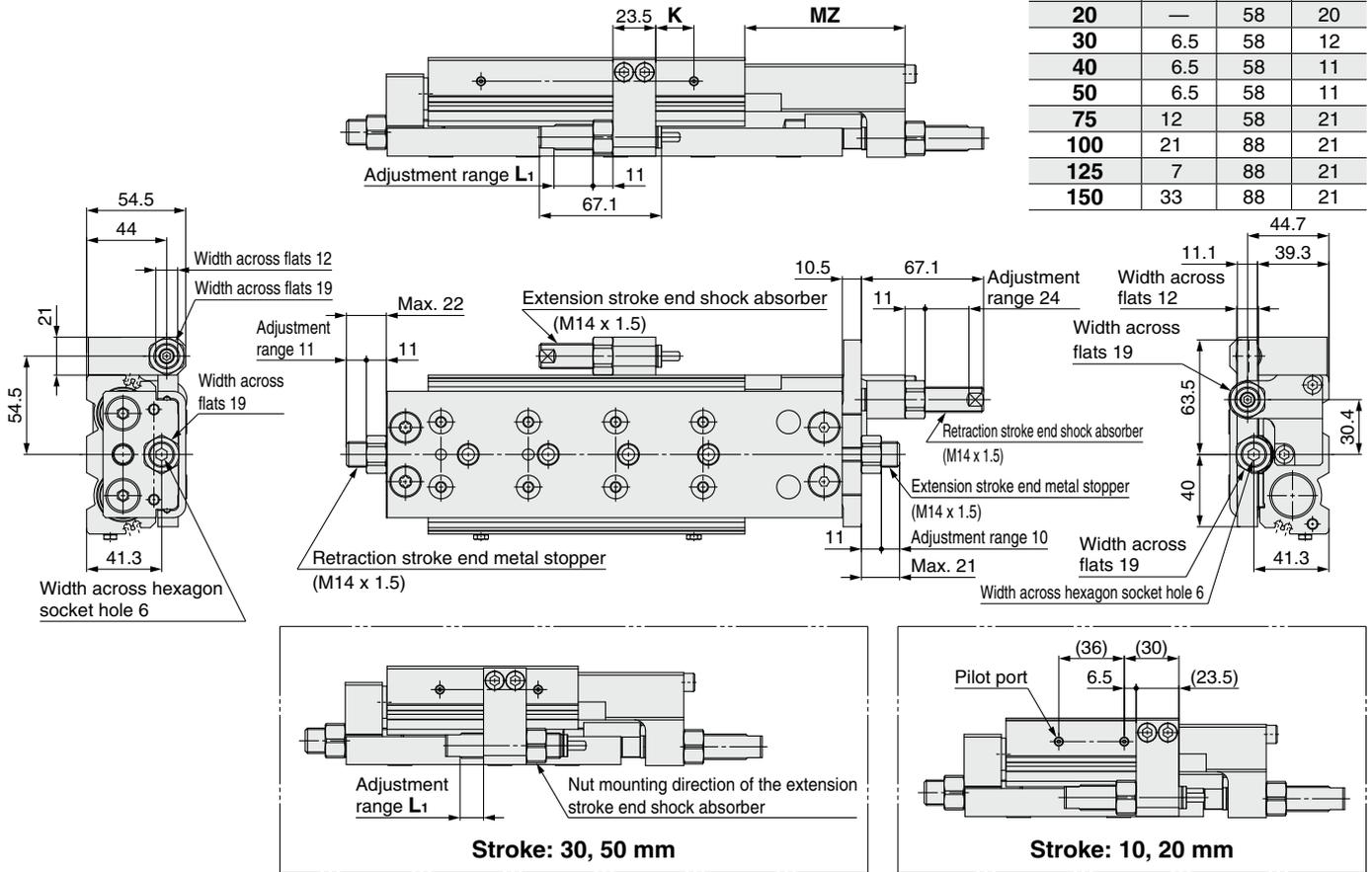
Dimensions

Standard type/MXQ25-□ZG-X2201

* Dimensions other than those shown below are the same as the standard product.

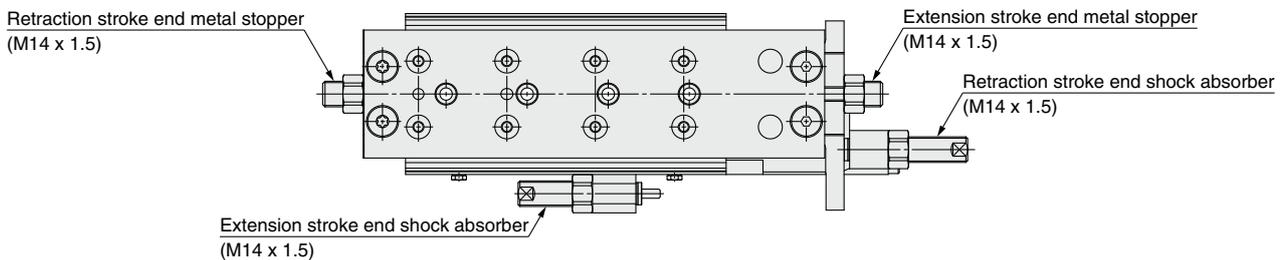
Dimensions

Stroke	K	MZ	L ₁
10	—	48	20
20	—	58	20
30	6.5	58	12
40	6.5	58	11
50	6.5	58	11
75	12	58	21
100	21	88	21
125	7	88	21
150	33	88	21

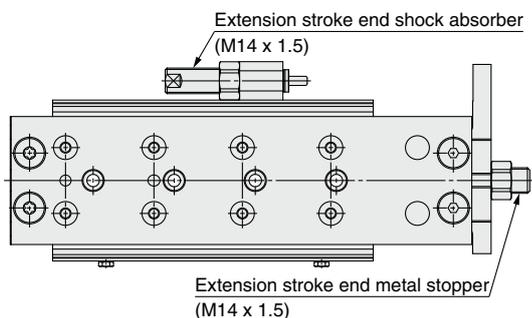


Symmetric type/MXQ25-□ZG-X2201L

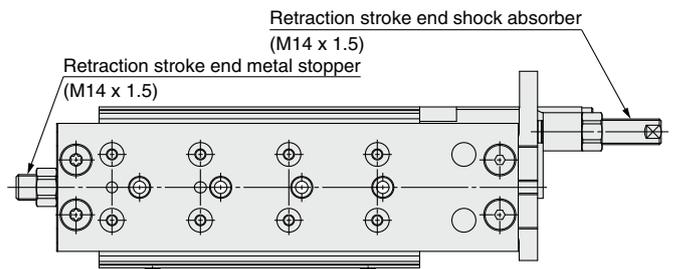
* Only the adjuster part is symmetric.



Standard type/MXQ25-□ZH-X2201



Standard type/MXQ25-□ZJ-X2201



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

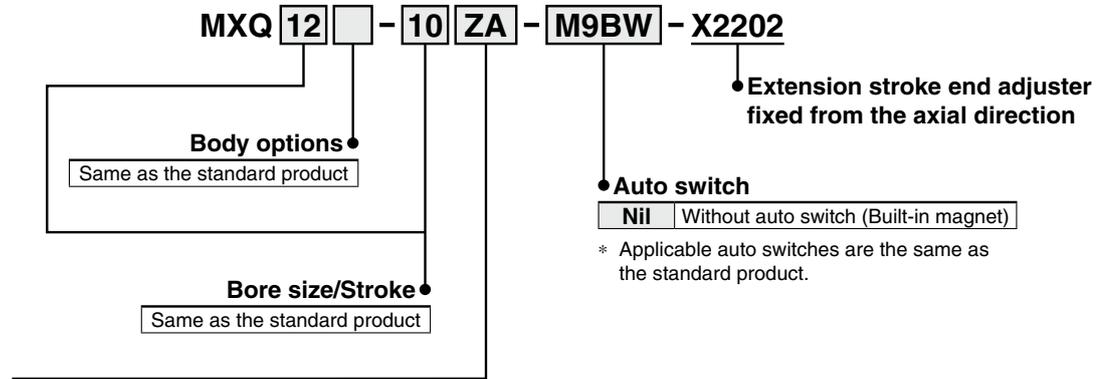
Made to Order

Model Selection

16 Extension Stroke End Adjuster Fixed from the Axial Direction

This product has been designed to enable the method of locking the extension stroke end adjuster to be fixed from the axial direction using a hexagon wrench.

How to Order



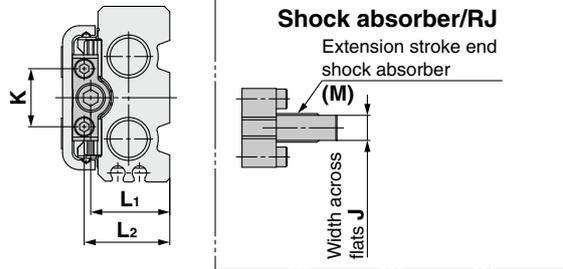
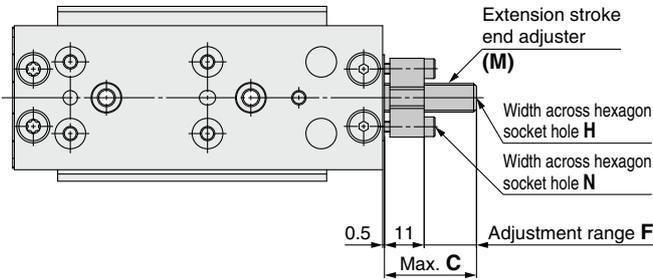
Adjuster options

Symbol	Adjuster type*2*3*4	Adjuster mounting position*1	
		Extension stroke end	Retraction stroke end
ZA	Metal stopper with bumper	●	●
ZB		●	●
ZD	Rubber stopper	●	●
ZE		●	
ZG	Shock absorber/RJ	●	●
ZH		●	
ZK	Metal stopper	●	●
ZL		●	

Symbol	Adjuster type*2*3*4		Adjuster mounting position	
	Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end
ZBF	Metal stopper with bumper	Rubber stopper	●	●
ZBJ		Shock absorber/RJ	●	●
ZBM		Metal stopper	●	●
ZEC	Rubber stopper	Metal stopper with bumper	●	●
ZEJ		Shock absorber/RJ	●	●
ZEM		Metal stopper	●	●
ZHC	Shock absorber/RJ	Metal stopper with bumper	●	●
ZHF		Rubber stopper	●	●
ZHM		Metal stopper	●	●
ZLC	Metal stopper	Metal stopper with bumper	●	●
ZLF		Rubber stopper	●	●
ZLJ		Shock absorber/RJ	●	●

- *1 ●: Shipped together with the product, but not assembled
Without any symbol for the adjuster mounting position:
The adjuster can be mounted afterward.
- *2 The metal stopper with bumper option is not available for the MXQ6(A, B).
- *3 The shock absorber option is not available for the MXQ6(A, B) and MXQ8(A, C).
- *4 When the product comes with adjusters on both ends, the retraction stroke end is standard.

Dimensions



Metal Stopper with Bumper [mm]

Model	C	F	H	K	L ₁	L ₂	M	N
MXQ8, MXQ8A	23	12	3	13	16.6	18.2	M6 x 0.75	2.5
MXQ8C					14.6	16.2		
MXQ12	26	14	4	16.2	21.9	23.7	M8 x 1	2.5
MXQ12A, MXQ12C					18.9	20.7		
MXQ16	27	15	5	20	27.2	28.9	M10 x 1	3
MXQ16A					25.2	26.9		
MXQ20	30	18	6	27	34.5	37.1	M12 x 1	4
MXQ20A					31.5	34.1		
MXQ25	31	20	6	27	41.3	43.8	M14 x 1.5	5
MXQ25A					38.3	40.8		
MXQ8B	26	12	4	16.2	14.9	16.7	M8 x 1	2.5
MXQ12B	27	13	5	20	20.2	21.9	M10 x 1	3
MXQ16B	30	16	6	27	25.5	28.1	M12 x 1	4
MXQ20B	31	17	6	27	32.3	34.8	M14 x 1.5	5

Rubber Stopper [mm]

Model	C	F	H	K	L ₁	L ₂	M	N
MXQ6	25	14	3	13	13.6	15.2	M6 x 0.75	2.5
MXQ6A					16.6	18.2		
MXQ8, MXQ8A	25	13	3	13	16.6	18.2	M6 x 0.75	2.5
MXQ8C					14.6	16.2		
MXQ12	27	16	4	16.2	21.9	23.7	M8 x 1	2.5
MXQ12A, MXQ12C					18.9	20.7		
MXQ16	28	17	5	20	27.2	28.9	M10 x 1	3
MXQ16A					25.2	26.9		
MXQ20	31	20	6	27	34.5	37.1	M12 x 1	4
MXQ20A					31.5	34.1		
MXQ25	33	21	6	27	41.3	43.8	M14 x 1.5	5
MXQ25A					38.3	40.8		
MXQ6B	25	13	3	13	13.6	15.2	M6 x 0.75	2.5
MXQ8B	27	16	4	16.2	14.9	16.7	M8 x 1	2.5
MXQ12B	28	17	5	20	20.2	21.9	M10 x 1	3
MXQ16B	31	20	6	27	25.5	28.1	M12 x 1	4
MXQ20B	33	21	6	27	32.3	34.8	M14 x 1.5	5

Shock Absorber/RJ [mm]

Model	C	F	J	K	L ₁	L ₂	M	N
MXQ12	29	11	7	16.2	21.9	23.7	M8 x 1	2.5
MXQ12A, MXQ12C					18.9	20.7		
MXQ16	30	11	9	20	27.2	28.9	M10 x 1	3
MXQ16A					25.2	26.9		
MXQ20	26	6	9	27	34.5	37.1	M10 x 1	4
MXQ20A					31.5	34.1		
MXQ25	45	25	12	27	41.3	43.8	M14 x 1.5	5
MXQ25A					38.3	40.8		
MXQ8B	28	11	7	16.2	14.9	16.7	M8 x 1	2.5
MXQ12B	30	11	9	20	20.2	21.9	M10 x 1	3
MXQ16B	26	7	9	27	25.5	28.1	M10 x 1	4
MXQ20B	45	25	12	27	32.3	34.8	M14 x 1.5	5

Metal Stopper [mm]

Model	C	F	H	K	L ₁	L ₂	M	N
MXQ6	24	12	3	13	13.6	15.2	M6 x 0.75	2.5
MXQ6A					16.6	18.2		
MXQ8, MXQ8A	23	12	3	13	16.6	18.2	M6 x 0.75	2.5
MXQ8C					14.6	16.2		
MXQ12	26	14	4	16.2	21.9	23.7	M8 x 1	2.5
MXQ12A, MXQ12C					18.9	20.7		
MXQ16	27	15	5	20	27.2	28.9	M10 x 1	3
MXQ16A					25.2	26.9		
MXQ20	30	18	6	27	34.5	37.1	M12 x 1	4
MXQ20A					31.5	34.1		
MXQ25	31	20	6	27	41.3	43.8	M14 x 1.5	5
MXQ25A					38.3	40.8		
MXQ6B	23	12	3	13	13.6	15.2	M6 x 0.75	2.5
MXQ8B	26	14	4	16.2	14.9	16.7	M8 x 1	2.5
MXQ12B	27	15	5	20	20.2	21.9	M10 x 1	3
MXQ16B	30	18	6	27	25.5	28.1	M12 x 1	4
MXQ20B	31	20	6	27	32.3	34.8	M14 x 1.5	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

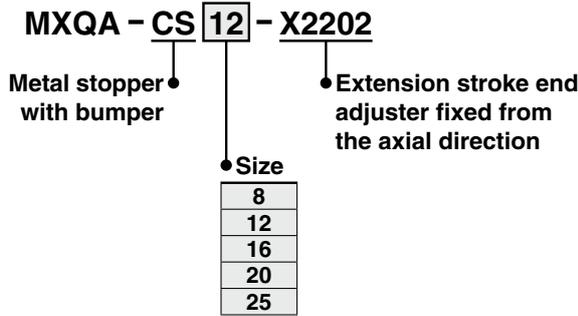
Model Selection

16 Extension Stroke End Adjuster Fixed from the Axial Direction (Order an extension stroke end adjuster as a single unit.)

This product has been designed to enable the method of locking the extension stroke end adjuster to be fixed from the axial direction using a hexagon wrench.

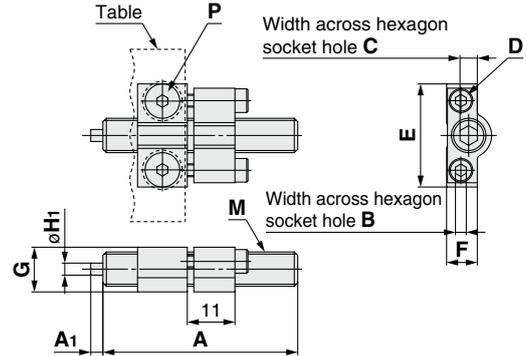
Stroke Adjusters (Accessories)

How to Order



Dimensions

Metal stopper with bumper



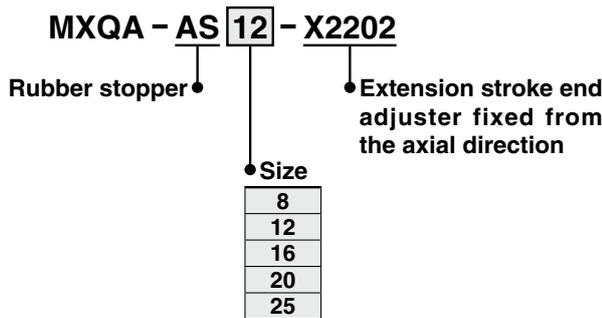
Metal Stopper with Bumper

Model	Adjuster part no.	A	A ₁	B	C	D*1	E	F	G	øH ₁	M (Fine pitch)	P*2
MXQ8(L, A, C, CL)	MXQA-CS8-X2202	40	2	2.5	3	M3 x 12	18	5.8	8.3	2	M6 x 0.75	M3 x 6
MXQ12(L, A, C, CL)	MXQA-CS12-X2202	45	2.8	2.5	4	M3 x 12	24	7.1	10.4	2.8	M8 x 1	M4 x 8
MXQ16(A)	MXQA-CS16-X2202	50	3.6	3	5	M4 x 12	29.4	9.2	12.6	3.6	M10 x 1	M5 x 10
MXQ20(A)	MXQA-CS20-X2202	57	4.4	4	6	M5 x 12	36	11.2	16.2	4.4	M12 x 1	M6 x 12
MXQ25(A)	MXQA-CS25-X2202	64	5.5	5	6	M6 x 12	44	13.5	19.3	5.5	M14 x 1.5	M8 x 16

*1 Size of the hexagon socket head cap screw

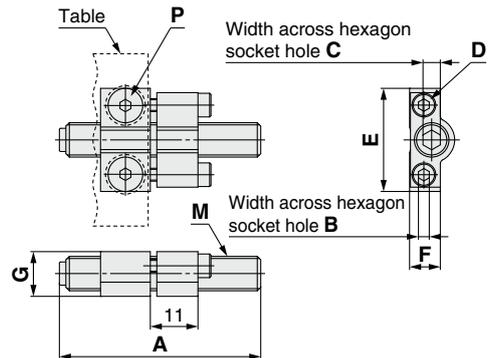
*2 Size of the hexagon socket flat countersunk head cap screw

How to Order



Dimensions

Rubber stopper



Rubber Stopper

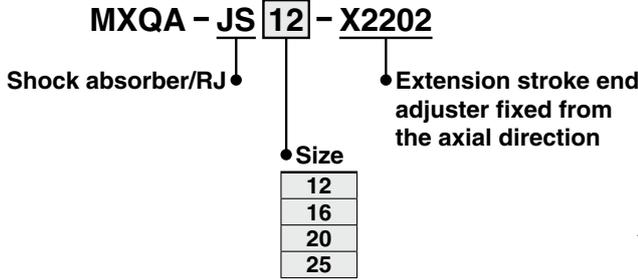
Model	Adjuster part no.	A	B	C	D*1	E	F	G	M (Fine pitch)	P*2
MXQ6(L, A)	MXQA-AS8-X2202	41.5	2.5	3	M3 x 12	18	5.8	8.3	M6 x 0.75	M3 x 6
MXQ8(L, A, C, CL)										
MXQ12(L, A, C, CL)	MXQA-AS12-X2202	46.5	2.5	4	M3 x 12	24	7.1	10.4	M8 x 1	M4 x 8
MXQ16(A)	MXQA-AS16-X2202	51.5	3	5	M4 x 12	29.4	9.2	12.6	M10 x 1	M5 x 10
MXQ20(A)	MXQA-AS20-X2202	58.5	4	6	M5 x 12	36	11.2	16.2	M12 x 1	M6 x 12
MXQ25(A)	MXQA-AS25-X2202	65.5	5	6	M6 x 12	44	13.5	19.3	M14 x 1.5	M8 x 16

*1 Size of the hexagon socket head cap screw

*2 Size of the hexagon socket flat countersunk head cap screw

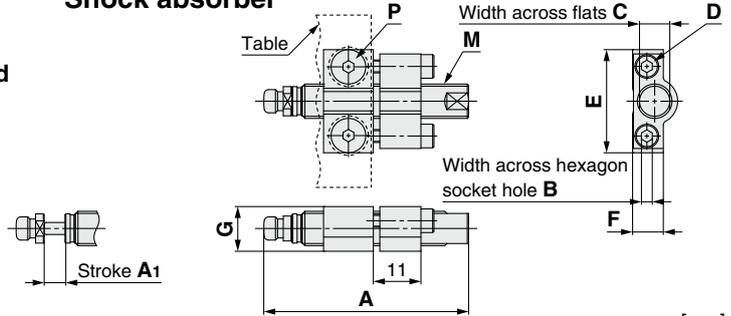
Symbol
-X2202

How to Order



Dimensions

Shock absorber

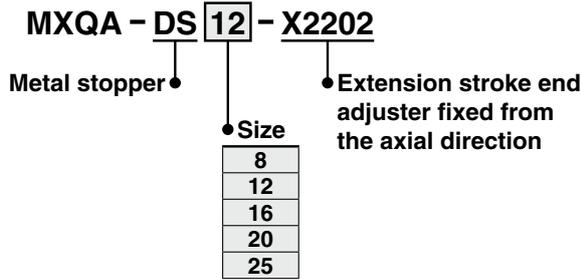


Shock Absorber/RJ

Model	Adjuster part no.	Single shock absorber part no.	A	A ₁	B	C	D*1	E	F	G	M (Fine pitch)	P*2	
MXQ12(L, A, C, CL)	MXQ8B(L)	MXQA-JS12-X2202	RJ0805U-X2300	47.3	5	2.5	7	M3 x 12	24	7.1	10.4	M8 x 1	M4 x 8
MXQ16(A)	MXQ12B(L)	MXQA-JS16-X2202	RJ1006U-X2300	52.8	6	3	9	M4 x 12	29.4	9.2	12.6	M10 x 1	M5 x 10
MXQ20(A)	MXQ16B	MXQA-JS20-X2202	RJ1007HU-X2300	52.8	7	4	9	M5 x 12	36	11.2	16.2	M12 x 1	M6 x 12
MXQ25(A)	MXQ20B	MXQA-JS25-X2202	RJ1410U-X2300	77.1	10	5	12	M6 x 12	44	13.5	19.3	M14 x 1.5	M8 x 16

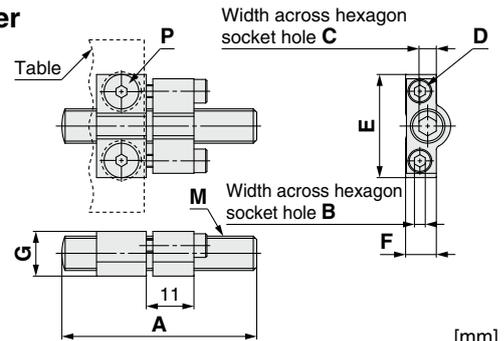
*1 Size of the hexagon socket head cap screw *2 Size of the hexagon socket flat countersunk head cap screw

How to Order



Dimensions

Metal stopper



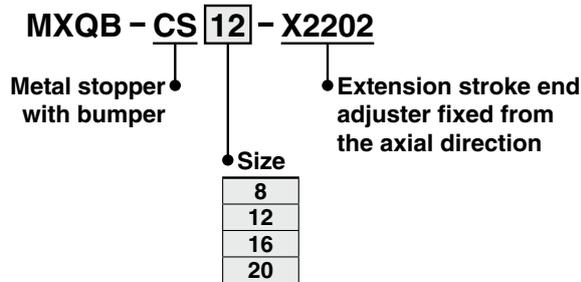
Metal Stopper

Model	Adjuster part no.	A	B	C	D*1	E	F	G	M (Fine pitch)	P*2	
MXQ6(L, A)											
MXQ8(L, A, C, CL)	MXQ6B(L)	MXQA-DS8-X2202	40	2.5	3	M3 x 12	18	5.8	8.3	M6 x 0.75	M3 x 6
MXQ12(L, A, C, CL)	MXQ8B(L)	MXQA-DS12-X2202	45	2.5	4	M3 x 12	24	7.1	10.4	M8 x 1	M4 x 8
MXQ16(A)	MXQ12B(L)	MXQA-DS16-X2202	50	3	5	M4 x 12	29.4	9.2	12.6	M10 x 1	M5 x 10
MXQ20(A)	MXQ16B	MXQA-DS20-X2202	57	4	6	M5 x 12	36	11.2	16.2	M12 x 1	M6 x 12
MXQ25(A)	MXQ20B	MXQA-DS25-X2202	64	5	6	M6 x 12	44	13.5	19.3	M14 x 1.5	M8 x 16

*1 Size of the hexagon socket head cap screw *2 Size of the hexagon socket flat countersunk head cap screw

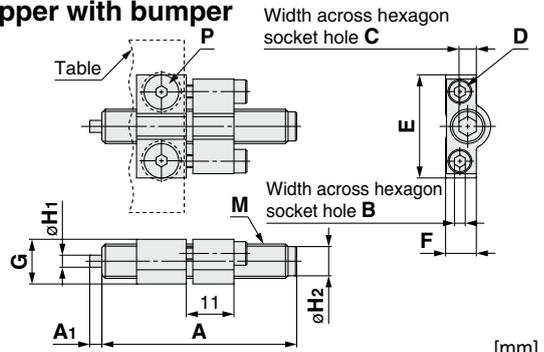
Low thrust with high rigidity type

How to Order



Dimensions

Metal stopper with bumper



Metal Stopper with Bumper

Model	Adjuster part no.	A	A ₁	B	C	D*1	E	F	G	øH ₁	øH ₂	M (Fine pitch)	P*2
MXQ8B(L)	MXQB-CS8-X2202	45	2.8	2.5	4	M3 x 12	24	7.1	10.4	2.8	6.8	M8 x 1	M4 x 8
MXQ12B(L)	MXQB-CS12-X2202	50	3.6	3	5	M4 x 12	29.4	9.2	12.6	3.6	8.8	M10 x 1	M5 x 10
MXQ16B	MXQB-CS16-X2202	57	4.4	4	6	M5 x 12	36	11.2	16.2	4.4	10.8	M12 x 1	M6 x 12
MXQ20B	MXQB-CS20-X2202	64	5.5	5	6	M6 x 12	44	13.5	19.3	5.5	12.3	M14 x 1.5	M8 x 16

*1 Size of the hexagon socket head cap screw *2 Size of the hexagon socket flat countersunk head cap screw

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 Series Model Selection

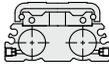
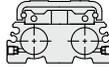
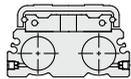
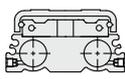
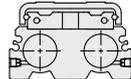
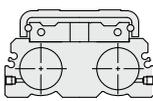
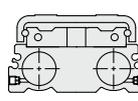
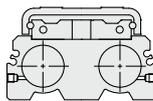
Model Selection Software is available.
For details, refer to Model Selection
Software on the **SMC website**.

Guidelines 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
When an air slide table without preset piping directions is required (The piping direction can be set when mounting to application.) * $\phi 16$, $\phi 20$, $\phi 25$: Standard type, Low thrust with high rigidity type (excluding $\phi 25$): Double piping direction type	Double-ported type (MXQ□A)	$\phi 6$	23	34	32	210	29	6	6	14
		$\phi 8$	23	38	32	270	51	10	10	19
		$\phi 12$	27	49	40	400	113	9	9	24
		$\phi 16$	35	62	50	670	201	16	16	46
		$\phi 20$	43	72	60	1,100	314	21	21	65
		$\phi 25$	52	88	70	1,900	491	41	41	119
For applications which require more guide rigidity than thrust	Low thrust with high rigidity type (MXQ□B)	$\phi 6$	20	34	32	230	29	10	10	19
		$\phi 8$	23	42	40	330	51	9	9	24
		$\phi 12$	30	52	50	580	113	16	16	46
		$\phi 16$	37	70	60	920	201	21	21	65
• When a lower height is required • When two indicator LEDs need to be observed on one side (including short stroke)	Single side-ported type (MXQ□C)	$\phi 8$	21	38	32	260	51	10	10	19
		$\phi 12$	27	49	40	400	113	9	9	24
To replace the current type (Mounting dimensions and height are interchangeable.)	Height interchangeable type (MXQ□)	$\phi 6$	20	34	32	190	29	6	6	14
		$\phi 8$	23	38	32	310	51	10	10	19
		$\phi 12$	30	49	40	430	113	9	9	24
		$\phi 16$	37	62	50	690	201	16	16	46
		$\phi 20$	46	72	60	1,100	314	21	21	65
$\phi 25$	55	88	70	1,900	491	41	41	119		

Guidelines 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)
32(1) ^{*1}	$\phi 6$		—	—	—	—	—	—	$\phi 6$		
32(2)	$\phi 8$		$\phi 6$			$\phi 8$			$\phi 8$		
40	$\phi 12$		$\phi 8$			$\phi 12$			$\phi 12$		
50	$\phi 16$		$\phi 12$			—	—	—	$\phi 16$		
60	$\phi 20$		$\phi 16$			—	—	—	$\phi 20$		
70	$\phi 25$		$\phi 20$			—	—	—	$\phi 25$		

*1 There are two rigidity types of actuator tables for width 32.

Selection Conditions

There are two model selection methods according to the usage. The model selection procedures are shown below.

The following is a simplified selection procedure using the graphs for when an MXQ is mounted onto a static table. When using the product mounted to an electric actuator, etc., it is necessary to perform model selection using another method as the product can be influenced by the acceleration of the electric actuator. For details, refer to Model Selection Software on the SMC website.

Application		Transfer					Pressing	
Workpiece mounting position Overhang								
		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 the Z direction					L1: Distance from the center of the table to the pressing part L2: Distance from the top surface of the table to the pressing part	
Stroke adjuster		Without adjuster	Metal stopper with bumper	Rubber stopper	Shock absorber/RJ	Metal stopper		
Selection graph	Double-ported type	Page 162	Page 168	Page 173	Page 179	Page 185	Page 191	
	Single side-ported type							
	Height interchangeable type	Page 165	Page 171	Page 176	Page 182	Page 188	Page 192	
	Low thrust with high rigidity type							

For Transfer

Model Selection Steps

1 Necessary conditions

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

2 Select a graph.

Select the applicable graph (from page 162) by body configuration and stroke adjuster type. When the extension stroke end and retraction stroke end use different adjuster types, check each adjuster graph to see if the adjuster can be used.

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 for L1max, L2max, and L3max during transfer.
- ① L1max: Check the overhang from the cross point of the load mass and driving speed.
 - ② L2max:
 - a: When mounted to the table
Check the allowable overhang from the cross point of the load mass and driving speed.
 - b: When mounted to the end plate
The allowable overhang is found by multiplying the allowable overhang by 1/2 (coefficient*1).
 - ③ L3max: It is possible to use within the "Allowable overhang range" in the selection graph if it is within the allowable range of the load mass and driving speed
- *1 Coefficient varies depending on the model and stroke. Refer to page 159 for details.

5 Overhang in the operating conditions

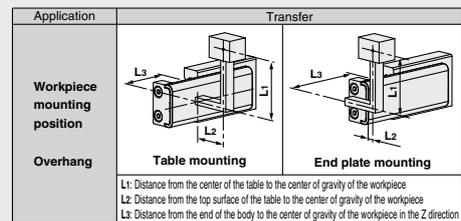
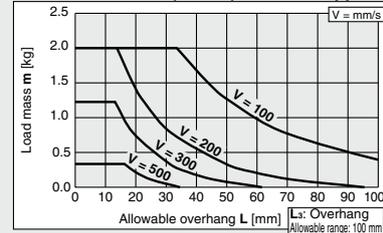
This product can be used with the overhang required (L1, L2, L3 of No.3) if it is within the allowable overhang range (L1max, L2max, L3max of No.4).

* When the required overhang exceeds the allowable overhang, review the overhang, load mass, driving speed, etc., and reconfirm that they are acceptable.

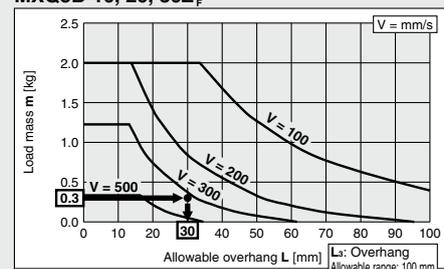
Precautions for Metal Stopper with Bumper

When a metal stopper with bumper is used in a vertical position, thrust larger than "the operating load mass + 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



MXQ8B-10, 20, 30Z^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

For Pressing

Model Selection Steps

1 Necessary conditions

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

2 Select a graph.

Select the applicable graph by body configuration (from page 191).

3 Determine the overhang.

Determine the overhang at L1 and L2.

- * Positional relationships between L1 and L2 do not change regardless of the body mounting direction.

4 Check the allowable pressing force.

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 at L1 and L2 and stroke.

② When mounted to the end plate

The allowable valve is found by multiplying the allowable pressing force by 1/2 (coefficient*1).

- *1 Coefficient varies depending on the model and stroke. Refer below for details.

5 Allowable pressing force in the operating conditions

This product can be used with the pressing force required if it is within the allowable pressing force range.

- * When the required pressing force exceeds the allowable pressing force, review the operating pressing force, operating pressure, overhang, etc., and reconfirm that they are acceptable.

6 Check the allowable supply pressure.

The allowable supply pressure can be confirmed with the selection graph.

- * Coefficient for the allowable overhang and the allowable pressing force of the models shown below is 1/4.

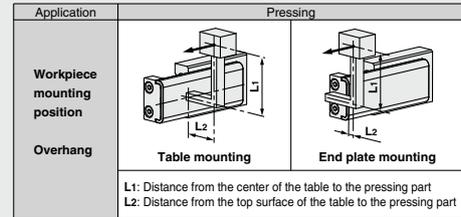
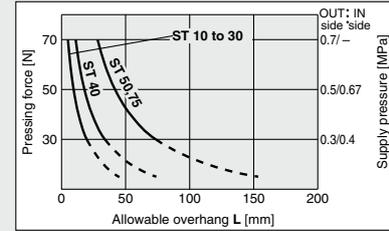
Model	Stroke
MXQ8(A, C)	50, 75
MXQ12(A, C)	75, 100
MXQ16(A)	100, 125
MXQ20(A)	100, 125, 150
MXQ25(A)	125, 150
MXQ6B	50, 75
MXQ8B	75, 100
MXQ12B	100, 125
MXQ16B	100, 125, 150
MXQ20B	125, 150

Precautions for Metal Stopper with Bumper

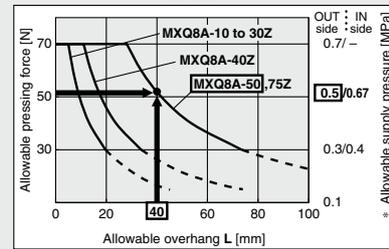
When a metal stopper with bumper is used in a vertical position, thrust larger than “the operating load mass + full compression force of metal stopper with bumper” is required. This needs to be considered when adjusting the operating pressure and selecting the cylinder size.

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

MXQ 8^AC-□Z



MXQ 8^AC-□Z



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

Selection Example 1 (Transfer, Table Mounting)

Selection conditions

Selected model: **MXQ8B-30ZEJ**

Load mass: 0.3 kg

Average operating speed: Extension stroke end: 300 mm/s

* 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**

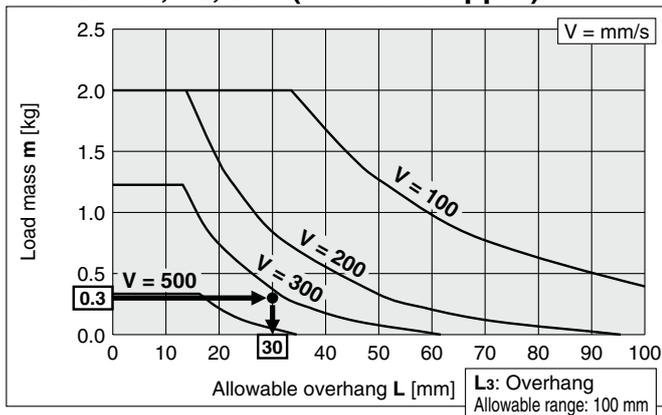
Stroke adjuster: Extension stroke end: Rubber stopper
Retraction stroke end: Shock absorber

Selection method

Determine the extension stroke end (rubber stopper).

- Find the max. overhang of **L1, L2, and L3** from the selection graph.
L1, L2: Use the graph to find the **L** when the speed is 300 mm/s and load mass is $m = 0.3$ kg. $L = 30$ mm → **L1, L2 max. overhang = 30 mm**
L3: Check the allowable overhang range shown at the bottom right of the graph. **L3 max. overhang = 100 mm**
- Confirm that **L1, L2, L3** are lower than the max. overhang.
L1 = 20 mm and L2 = 20 mm OK (L1, L2 max. overhang = 30 mm),
L3 = 50 mm OK (L3 max. overhang = 100 mm)

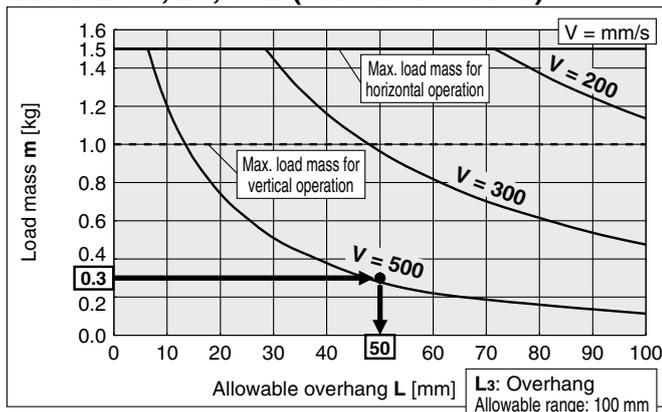
MXQ8B-10, 20, 30Z (Rubber stopper)



Determine the retraction stroke end (shock absorber).

- Find the max. overhang of **L1, L2, and L3** from the selection graph.
L1, L2: Use the graph to find the **L** when the speed is 500 mm/s and load mass is $m = 0.3$ kg. $L = 50$ mm → **L1, L2 max. overhang = 50 mm**
L3: Check the allowable overhang range shown at the bottom right of the graph. **L3 max. overhang = 100 mm**
- Confirm that **L1, L2, and L3** are lower than the max. overhang.
L1 = 20 mm and L2 = 20 mm OK (L1, L2 max. overhang = 50 mm),
L3 = 50 mm OK (L3 max. overhang = 100 mm)

MXQ8B-10, 20, 30Z (Shock absorber)



Therefore, the **MXQ8B-30ZEJ** can be used.

Selection Example 2 (Transfer, End Plate Mounting)

Selection conditions

Selected model: **MXQ8B-30ZD**

Load mass: 0.3 kg

Average operating speed: 300 mm/s

* 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**

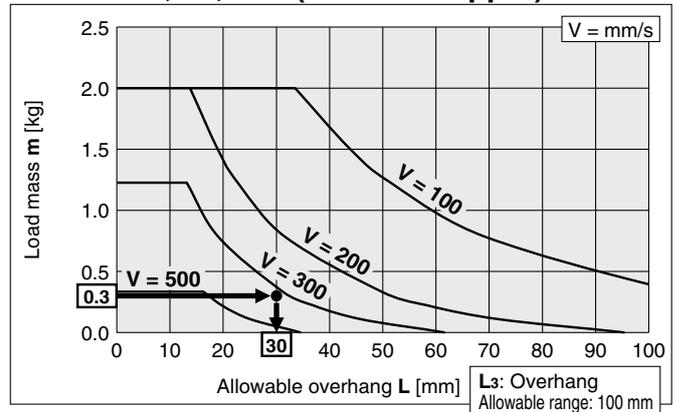
Stroke adjuster: Extension stroke end: Rubber stopper
Retraction stroke end: Rubber stopper

Selection method

- Find the max. overhang of **L1, L2, and L3** from the selection graph.
L1: Use the graph to find the **L** when the speed is 300 mm/s and load mass is $m = 0.3$ kg. $L = 30$ mm → **L1 max. overhang = 30 mm**
L2: Use the graph to find the **L** when the speed is 300 mm/s and load mass is $m = 0.3$ kg and multiply it by 1/2.
 $L = 30$ mm → **L2 max. overhang = 30 mm/2 = 15 mm**
 * 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 max. overhang shown at the bottom right of the graph. **L3 max. overhang = 100 mm**
- Confirm that **L1, L2, and L3** are lower than the max. overhang.
L1 = 20 mm OK (L1 max. overhang = 30 mm)
L2 = 10 mm OK (L2 max. overhang = 15 mm)
L3 = 50 mm OK (L3 max. overhang = 100 mm)

Therefore, the **MXQ8B-30ZD** can be used.

MXQ8B-10, 20, 30Z (Rubber stopper)



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 3 (Pressing, Table Mounting)

Selection conditions

Selected model: **MXQ8B-50Z**

Operating direction: OUT

Operating pressure: 0.5 MPa (Pressing force: 51 N)

Overhang: L1 = 20, L2 = 30

Selection method

- Find the max. overhang of L1 and L2 from the selection graph.
Find the L at an operating pressure of 0.5 MPa from the graph.
L1, L2 max. overhang = 45 mm
- Confirm that L1 and L2 are lower than the max. overhang.
L1 = 20 mm and L2 = 30 mm OK (L1, L2 max. overhang = 45 mm)

Therefore, the **MXQ8B-50Z** can be used with a supply pressure of 0.5 MPa.

Selection Example 4 (Pressing, End Plate Mounting)

Selection conditions

Selected model: **MXQ8B-50Z**

Operating direction: OUT

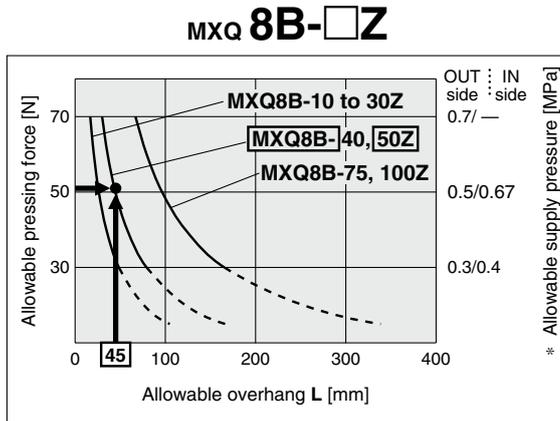
Operating pressure: 0.5 MPa (Pressing force: 50 N)

Overhang: L1 = 20, L2 = 10

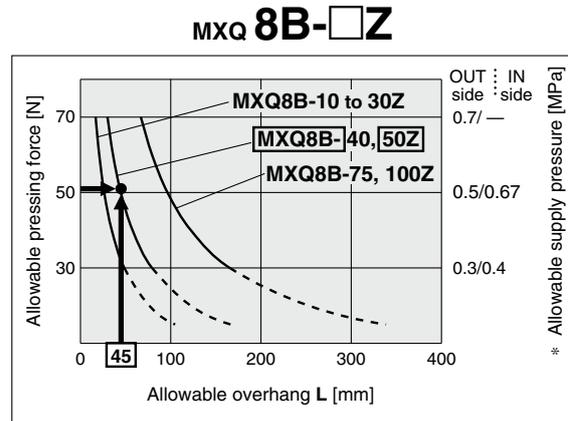
Selection method

- Find the max. overhang of L1 and L2 from the selection graph.
L1: Find the L at an operating pressure of 0.5 MPa from the graph, and multiply it by 1/2. L1 max. overhang = 22.5 mm
L2: Find an L at an operating pressure of 0.5 MPa from the graph, and multiply it by 1/2. L2 max. overhang = 22.5 mm
* For end plate mounting, L1 and L2 are 1/2 of the L which is found from the graph.
- Confirm that L1 and L2 are lower than the max. overhang.
L1 = 20 mm OK (L1 max. overhang = 22.5 mm)
L2 = 10 mm OK (L2 max. overhang = 22.5 mm)

Therefore, the **MXQ8B-50Z** can be used.



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



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

⚠ Caution

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

Select a model according to the model selection steps.

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

2. If an intermediate stop is performed by an external stopper, be careful of ejection when restarting.

If lurching occurs, damage can result. If a slide table is stopped at an intermediate position by an external stopper and then moved forwards, after the slide table is returned to the back to retract the stopper, supply pressure to the opposite port to operate the slide table.

3. Do not use the product in such a way that excessive external force or impact force is applied to it.

Malfunction or damage to the table may result.

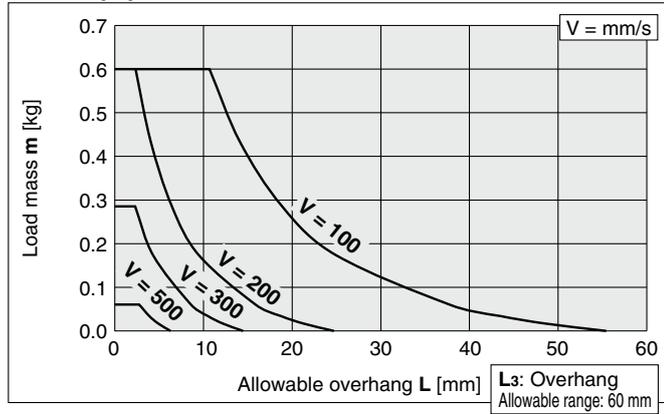
Although the table has adequate strength, if it is damaged, protect your hands with gloves. Otherwise, injury may result.

MXQ 6A-□Z□, MXQ 6-□Z□ (Height interchangeable type)
 MXQ 8^AC-□Z□, MXQ 8-□Z□ (Height interchangeable type)

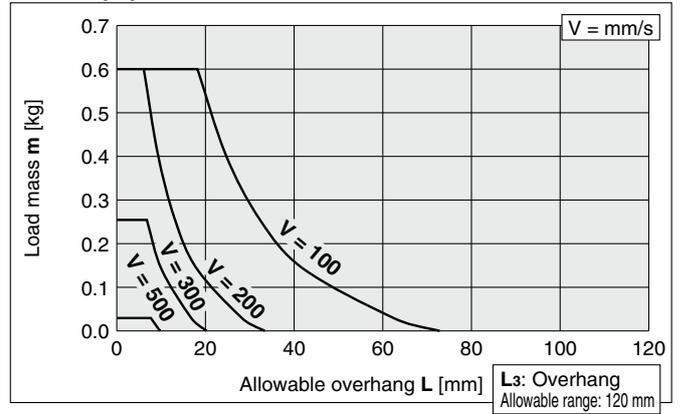
For Transfer/
Without Adjuster

Determine the overhang. (Refer to page 158 for details.)
 L1, L2: Check from the cross point of the load mass and driving speed.
 L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

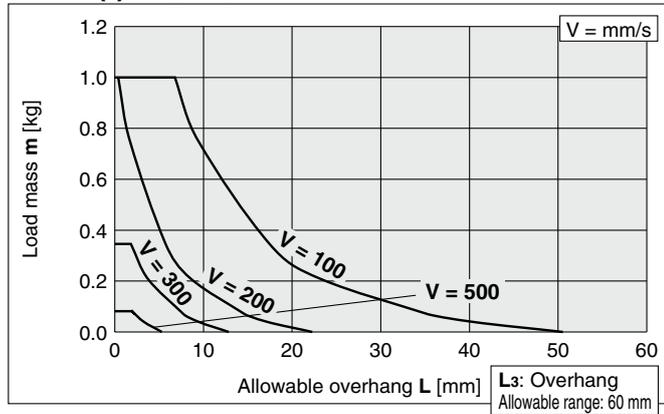
MXQ6(A)-10, 20Z□



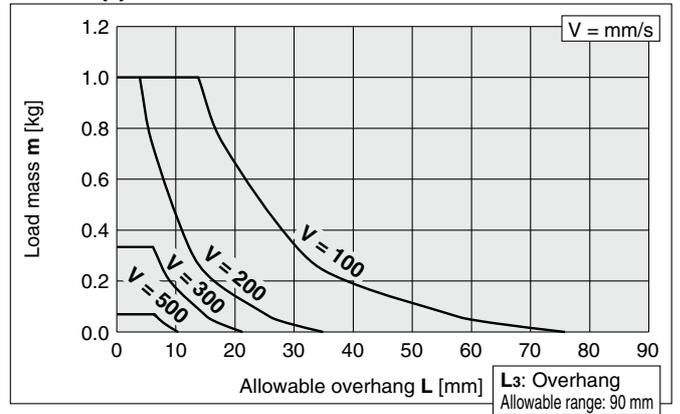
MXQ6(A)-30, 40, 50Z□



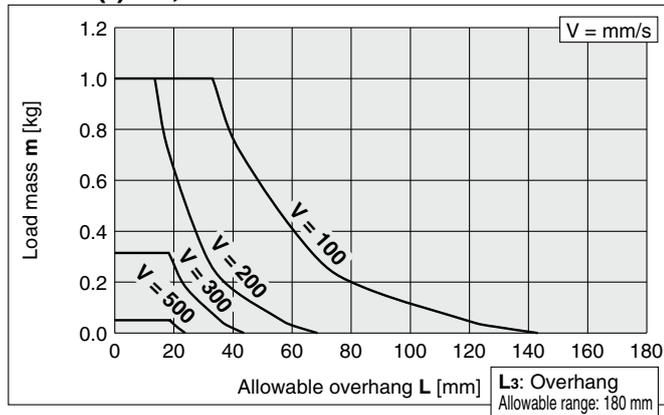
MXQ8(ε)-10, 20, 30Z□



MXQ8(ε)-40Z□



MXQ8(ε)-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 Series

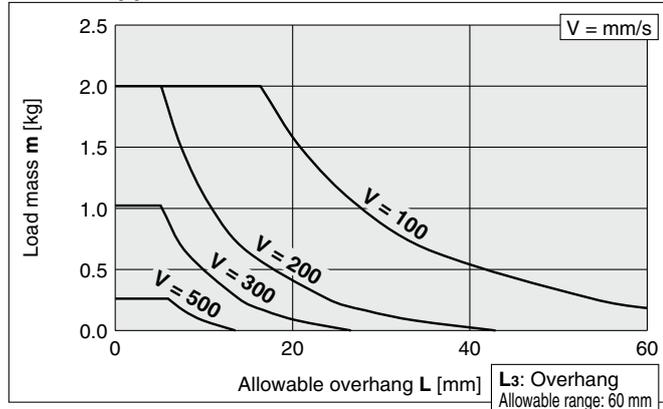
MXQ 12^A_C-□Z□, MXQ 12-□Z□ (interchangeable type) Height

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

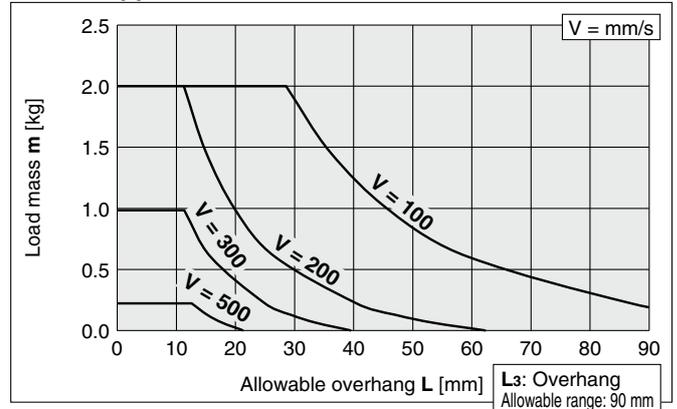
For Transfer/
Without Adjuster

Determine the overhang. (Refer to page 158 for details.)
L1, L2: Check from the cross point of the load mass and driving speed.
L3: Can be used within the "Allowable overhang range"
in the selection graph if the load mass and driving
speed values are within the allowable range

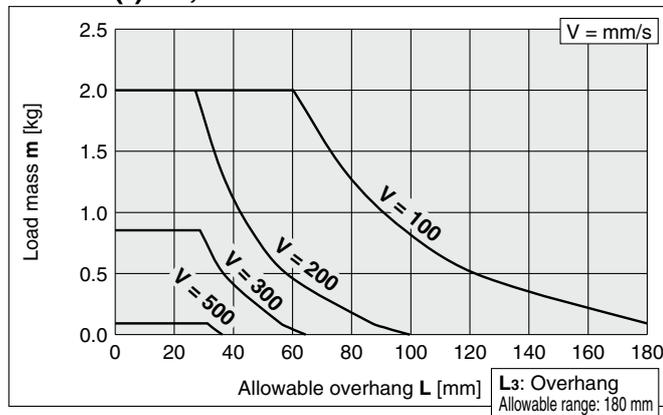
MXQ12(Δ)-10, 20, 30Z□



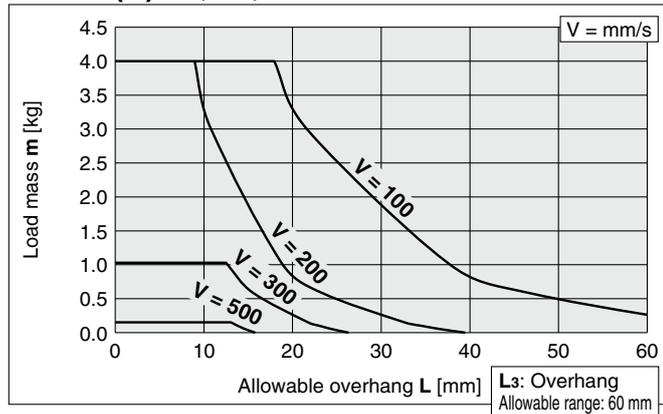
MXQ12(Δ)-40, 50Z□



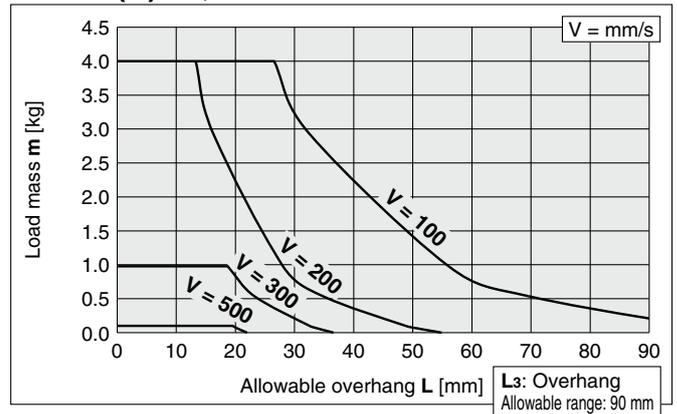
MXQ12(Δ)-75, 100Z□



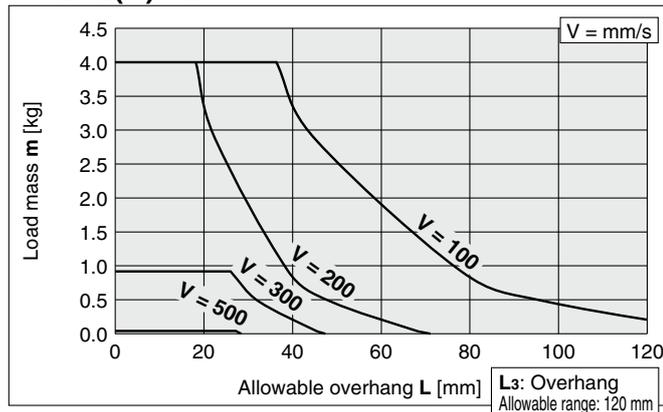
MXQ16(A)-10, 20, 30Z□



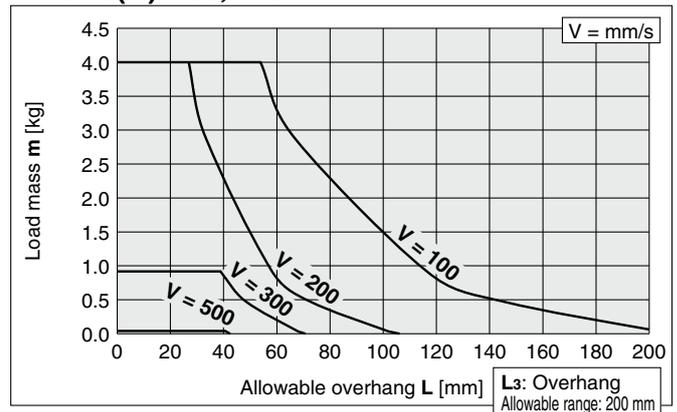
MXQ16(A)-40, 50Z□



MXQ16(A)-75Z□



MXQ16(A)-100, 125Z□

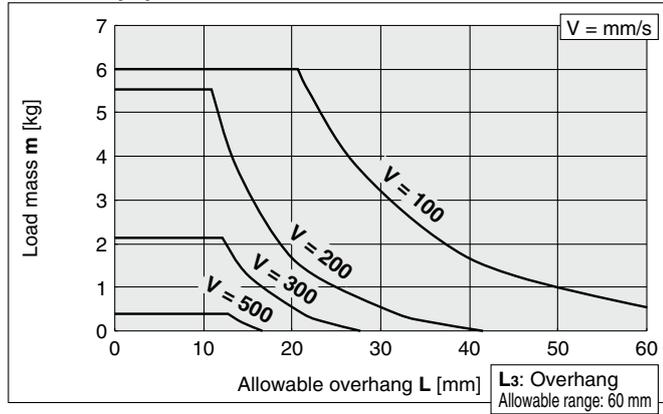


MXQ **20A**-□Z□, MXQ **20**-□Z□ (interchangeable type)
 MXQ **25A**-□Z□, MXQ **25**-□Z□ (interchangeable type)

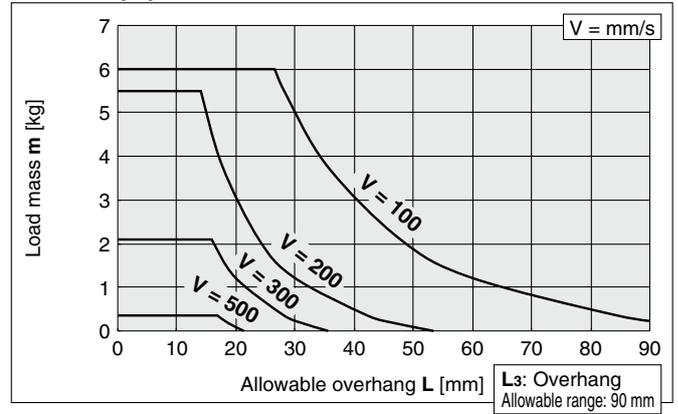
For Transfer/
Without Adjuster

Determine the overhang. (Refer to page 158 for details.)
 L1, L2: Check from the cross point of the load mass and driving speed.
 L3: Can be used within the "Allowable overhang range"
 in the selection graph if the load mass and driving
 speed values are within the allowable range

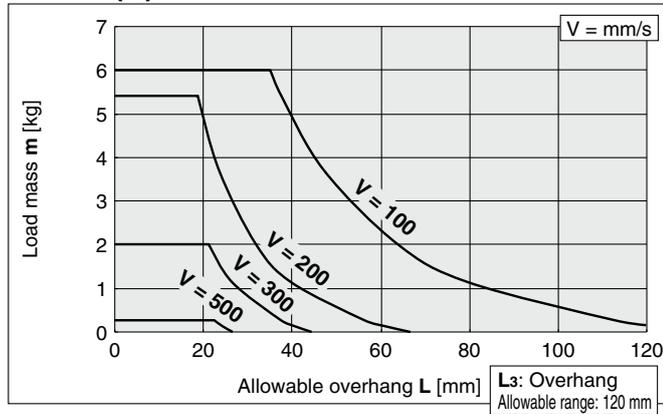
MXQ20(A)-10, 20, 30, 40Z□



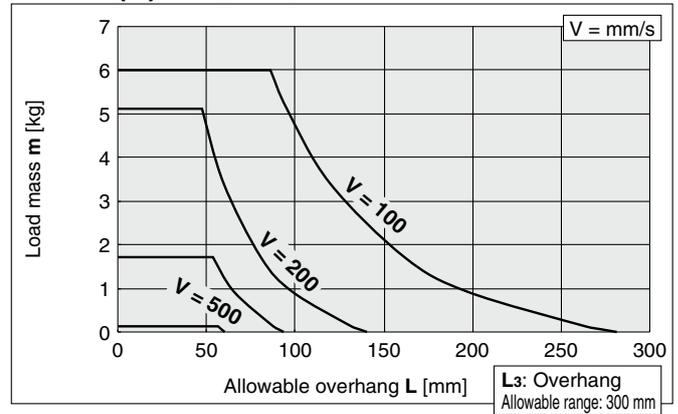
MXQ20(A)-50Z□



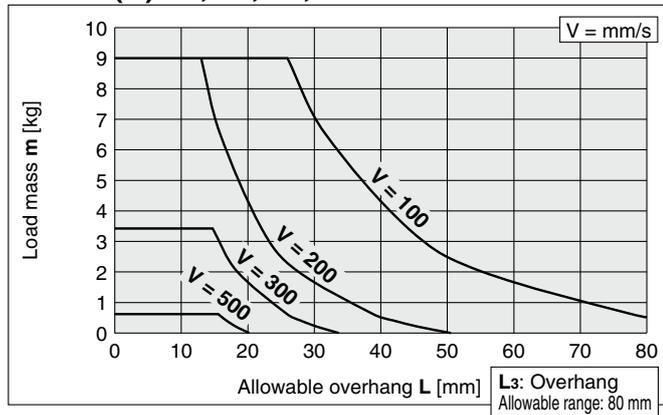
MXQ20(A)-75Z□



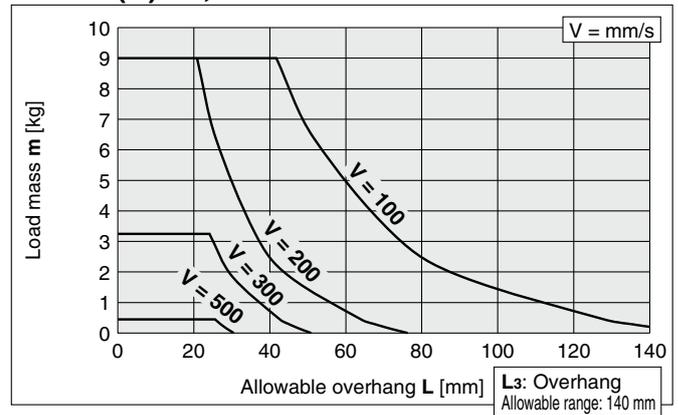
MXQ20(A)-100, 125, 150Z□



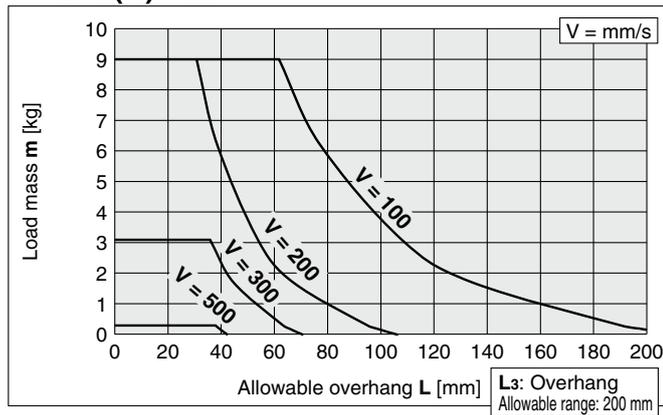
MXQ25(A)-10, 20, 30, 40Z□



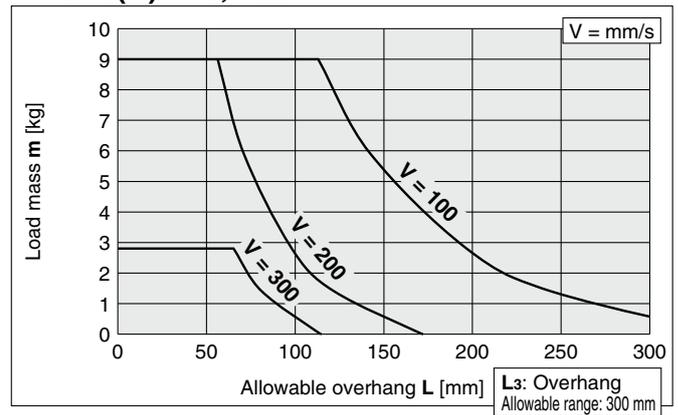
MXQ25(A)-50, 75Z□



MXQ25(A)-100Z□



MXQ25(A)-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

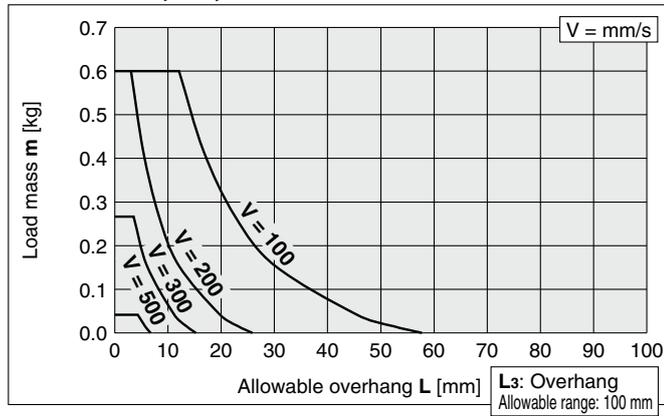
Made to Order

Model Selection

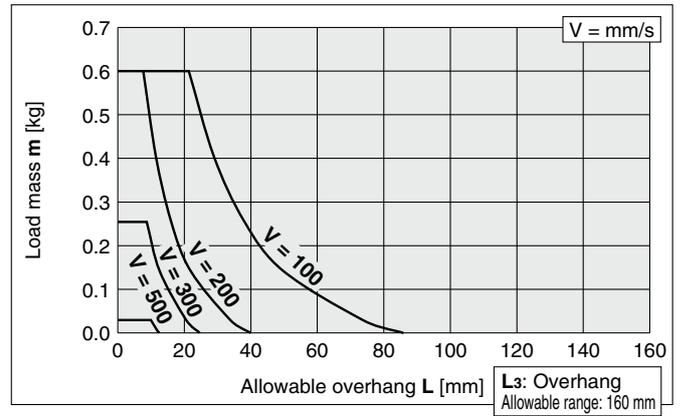
Determine the overhang. (Refer to page 158 for details.)
L₁, L₂: Check from the cross point of the load mass and driving speed.
L₃: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

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

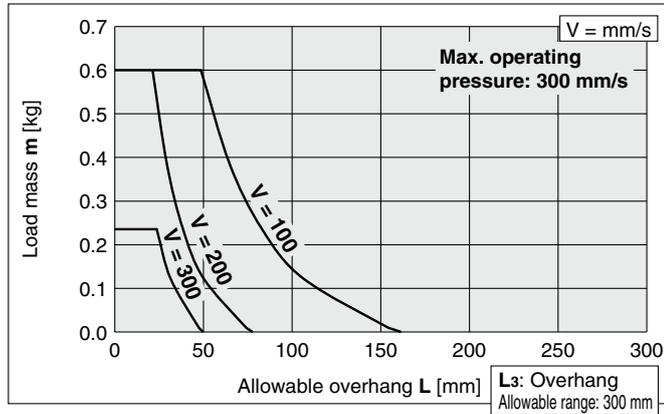
MXQ6B-10, 20, 30Z□



MXQ6B-40Z□



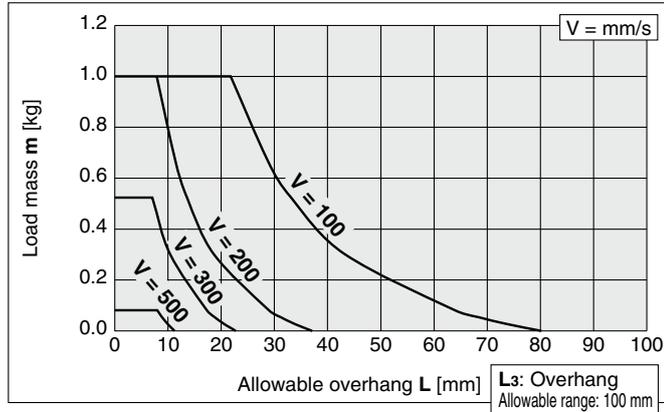
MXQ6B-50, 75Z□



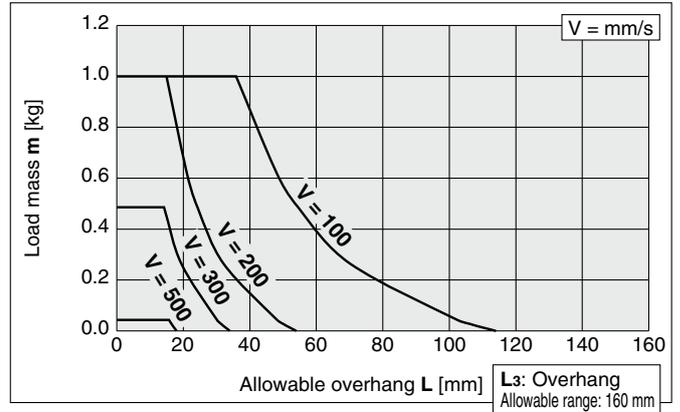
Determine the overhang. (Refer to page 158 for details.)
 L1, L2: Check from the cross point of the load mass and driving speed.
 L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

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

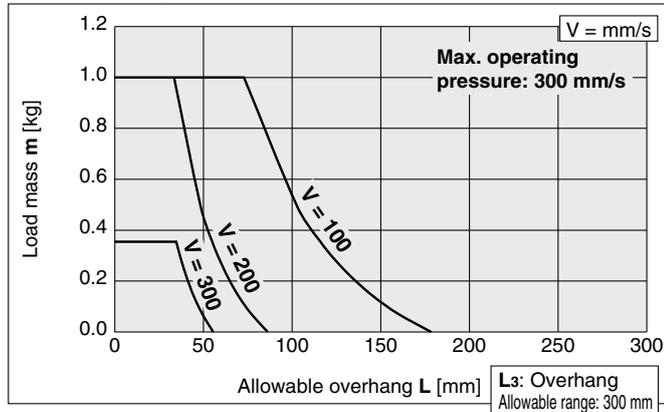
MXQ8B-10, 20, 30Z□



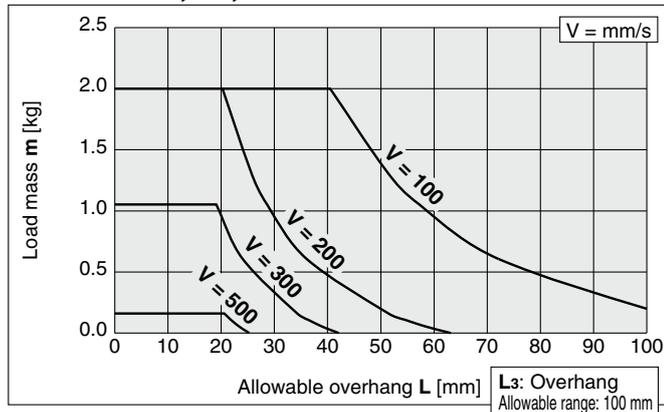
MXQ8B-40, 50Z□



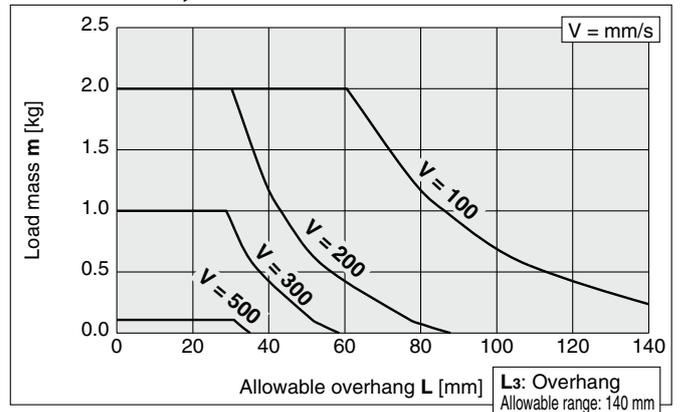
MXQ8B-75, 100Z□



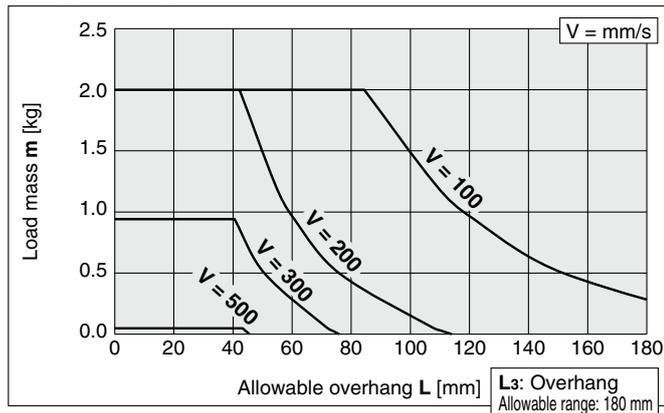
MXQ12B-10, 20, 30Z□



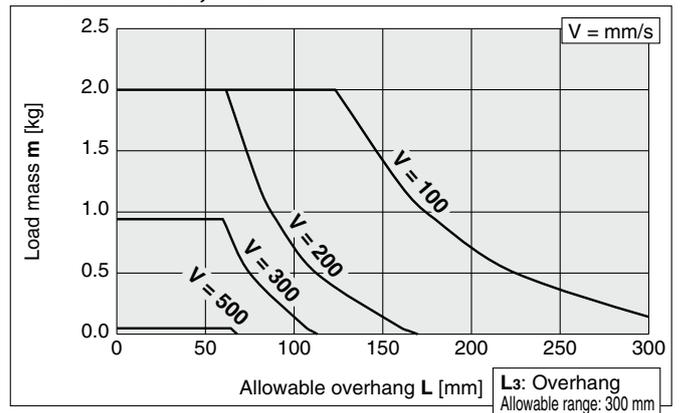
MXQ12B-40, 50Z□



MXQ12B-75Z□



MXQ12B-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

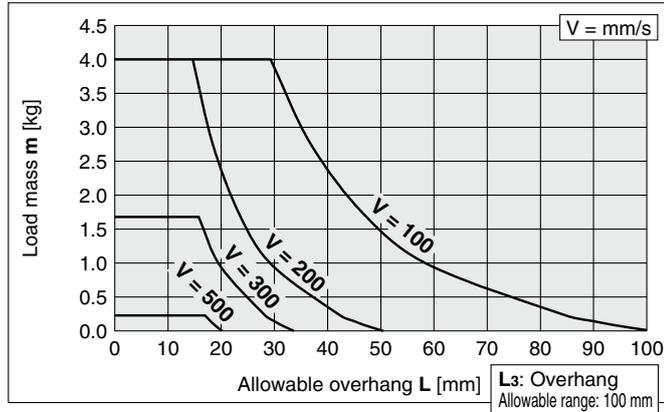
Model Selection

MXQ Series

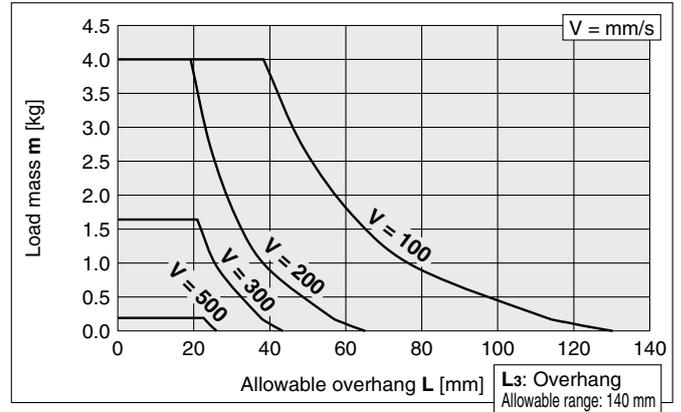
Determine the overhang. (Refer to page 158 for details.)
 L1, L2: Check from the cross point of the load mass and driving speed.
 L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

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

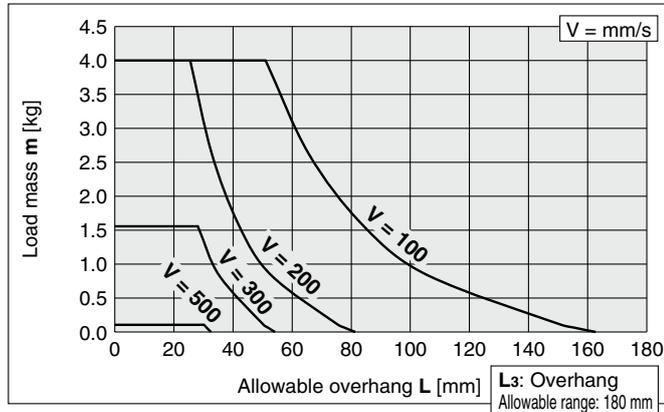
MXQ16B-10, 20, 30, 40Z□



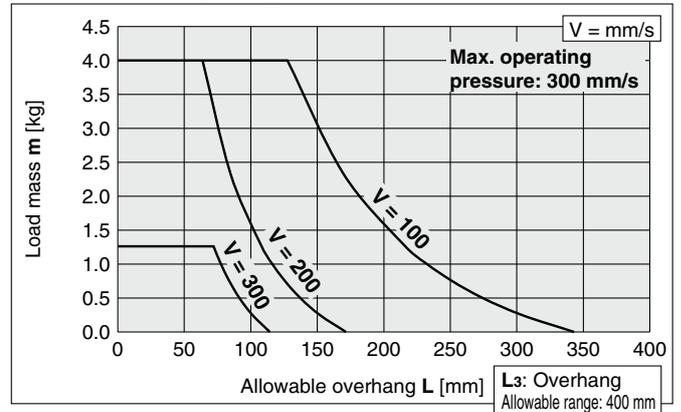
MXQ16B-50Z□



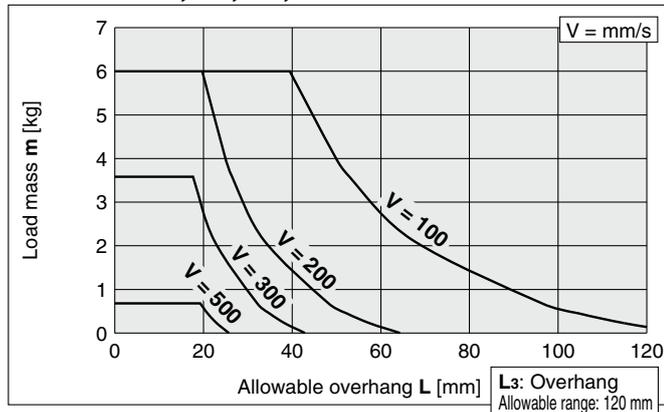
MXQ16B-75Z□



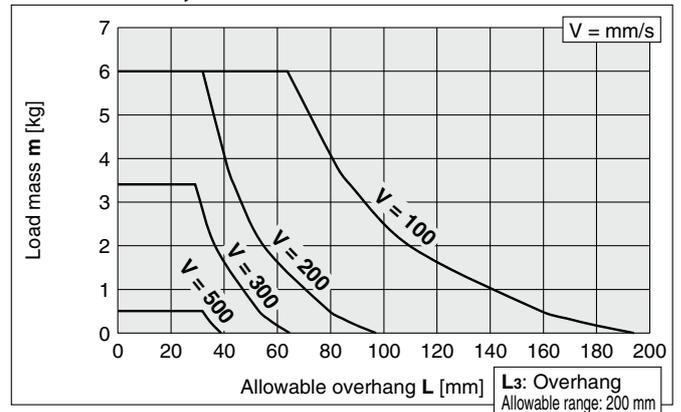
MXQ16B-100, 125, 150Z□



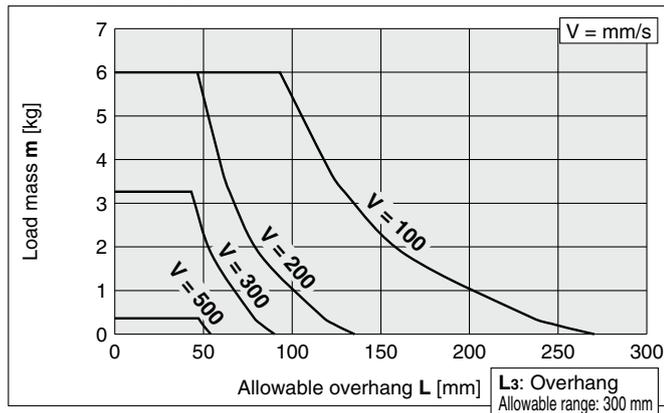
MXQ20B-10, 20, 30, 40Z□



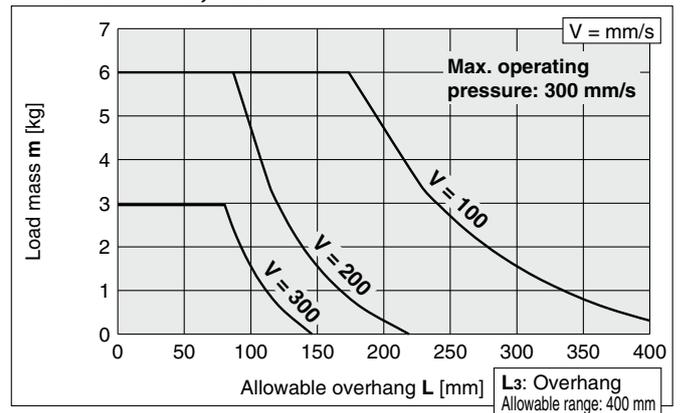
MXQ20B-50, 75Z□



MXQ20B-100Z□



MXQ20B-125, 150Z□

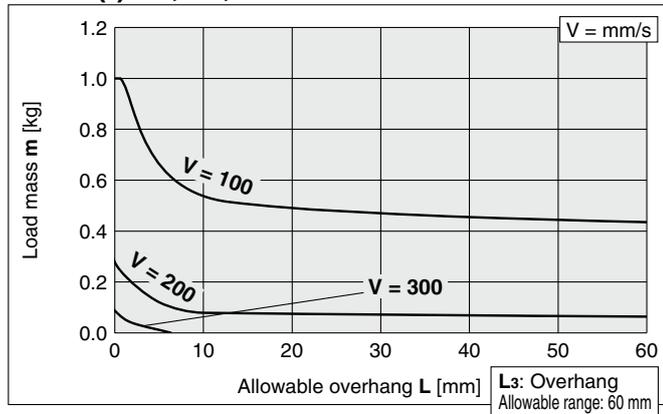


Determine the overhang. (Refer to page 158 for details.)
 L₁, L₂: Check from the cross point of the load mass and driving speed.
 L₃: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

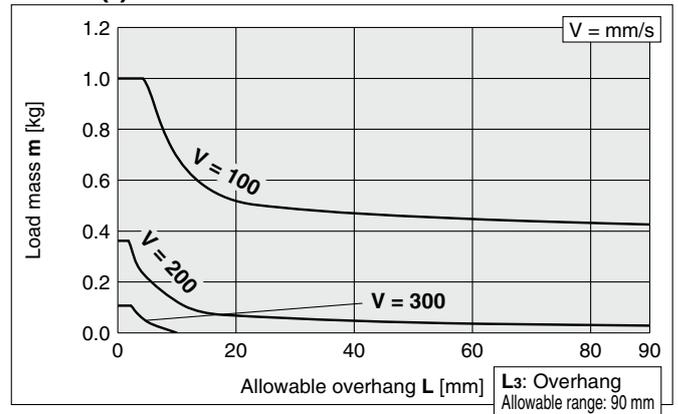
MXQ 8^AC-□Z□, MXQ 8-□Z□ (Height interchangeable type)

For Transfer/
Metal Stopper with Bumper

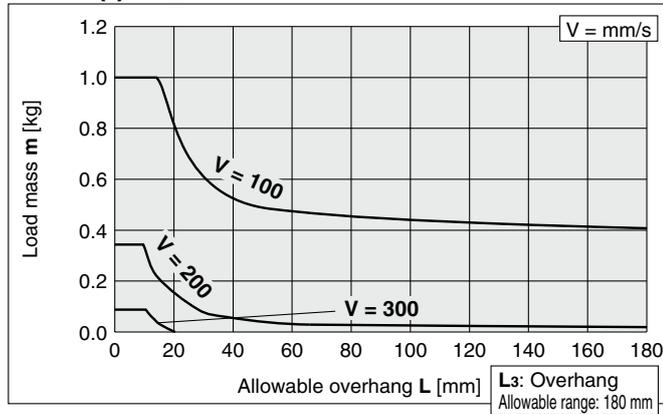
MXQ8(Δ)-10, 20, 30Z□



MXQ8(Δ)-40Z□



MXQ8(Δ)-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 Series

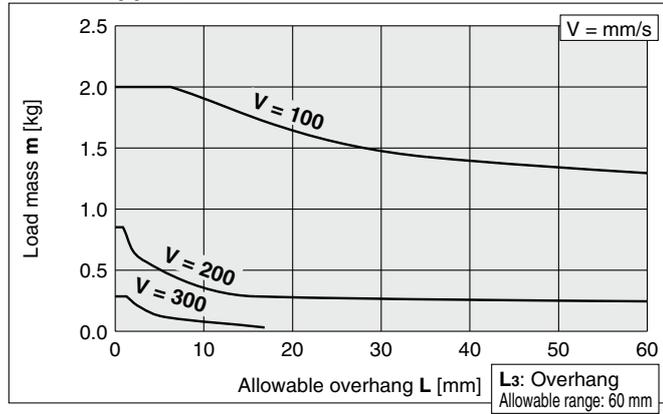
MXQ 12^A-□Z□, MXQ 12-□Z□ (interchangeable type) Height

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

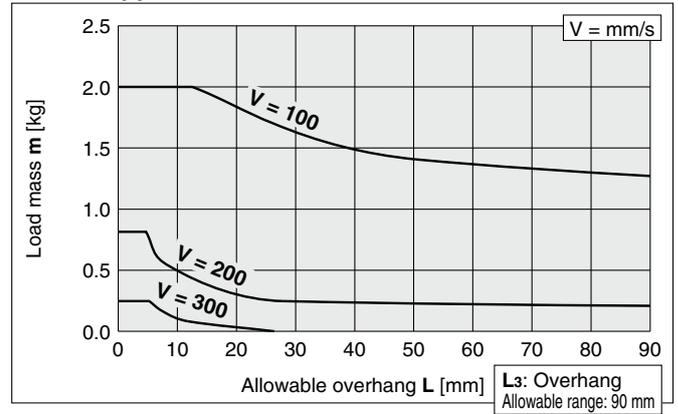
For Transfer/
Metal Stopper with Bumper

Determine the overhang. (Refer to page 158 for details.)
L1, L2: Check from the cross point of the load mass and driving speed.
L3: Can be used within the "Allowable overhang range"
in the selection graph if the load mass and driving
speed values are within the allowable range

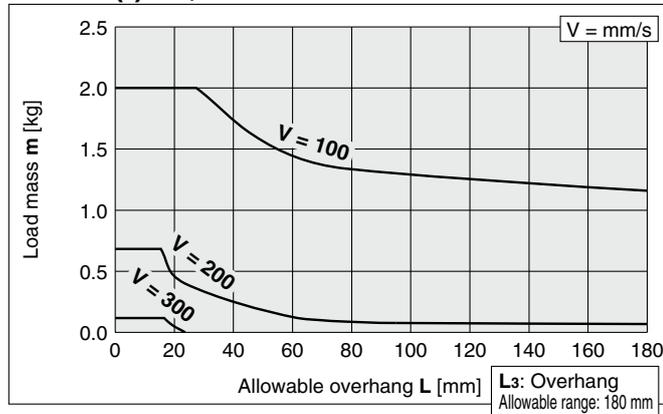
MXQ12(Δ)-10, 20, 30Z□



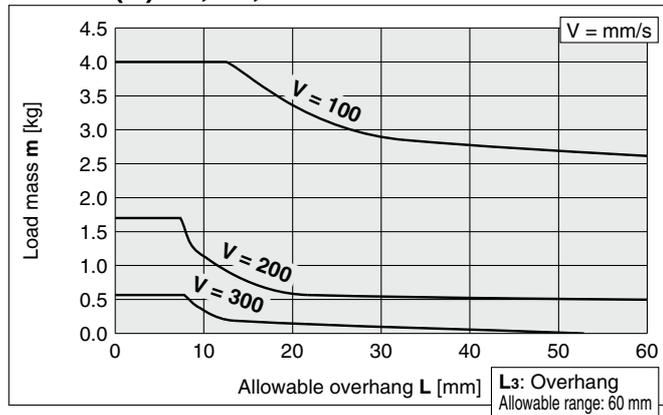
MXQ12(Δ)-40, 50Z□



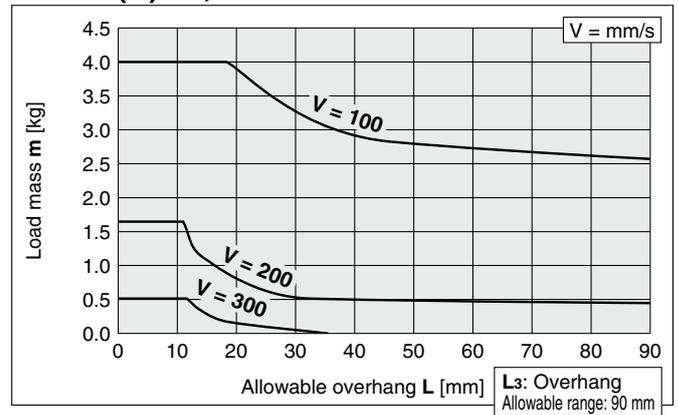
MXQ12(Δ)-75, 100Z□



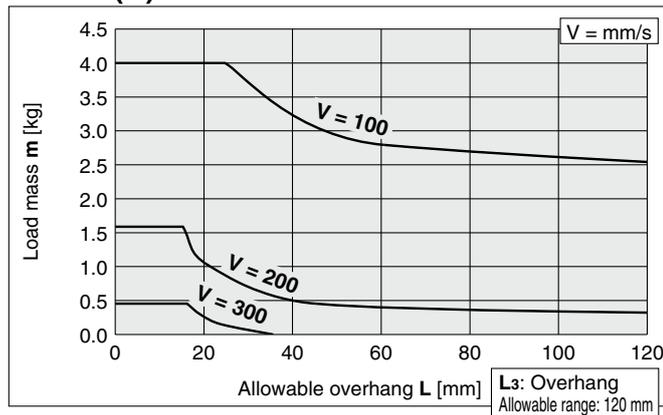
MXQ16(A)-10, 20, 30Z□



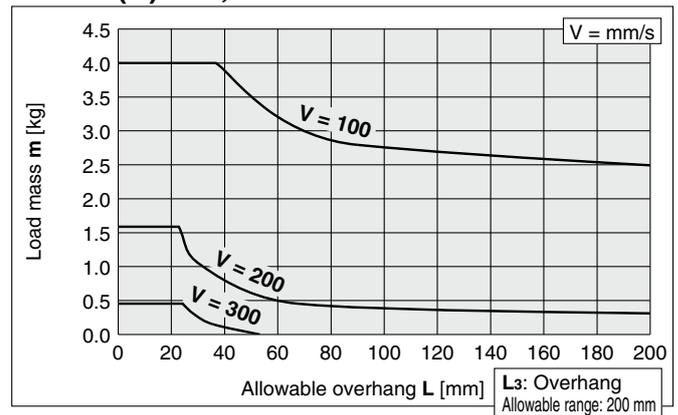
MXQ16(A)-40, 50Z□



MXQ16(A)-75Z□



MXQ16(A)-100, 125Z□

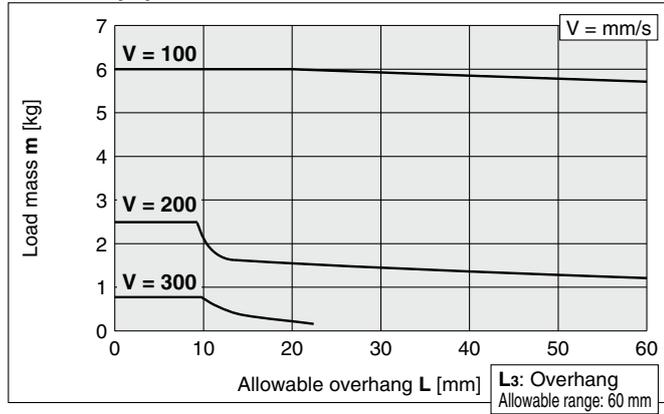


MXQ 20A-□Z□, MXQ 20-□Z□ (Height interchangeable type)
 MXQ 25A-□Z□, MXQ 25-□Z□ (Height interchangeable type)

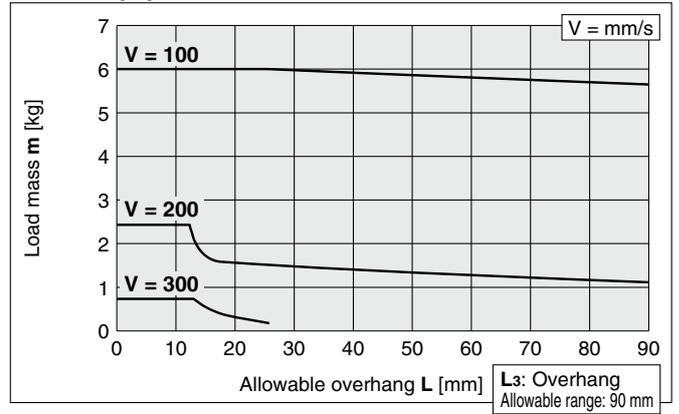
For Transfer/
 Metal Stopper with Bumper

Determine the overhang. (Refer to page 158 for details.)
 L1, L2: Check from the cross point of the load mass and driving speed.
 L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

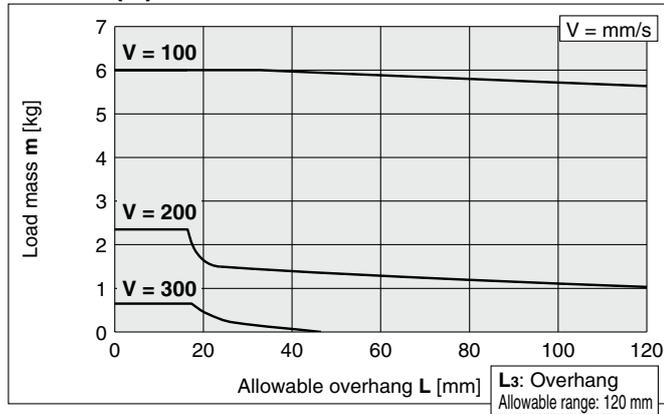
MXQ20(A)-10, 20, 30, 40Z□



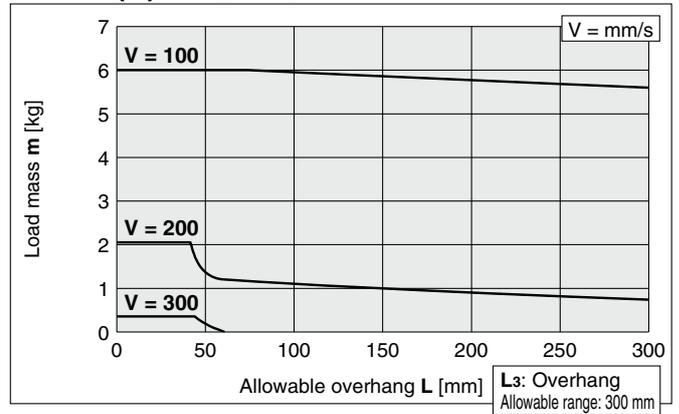
MXQ20(A)-50Z□



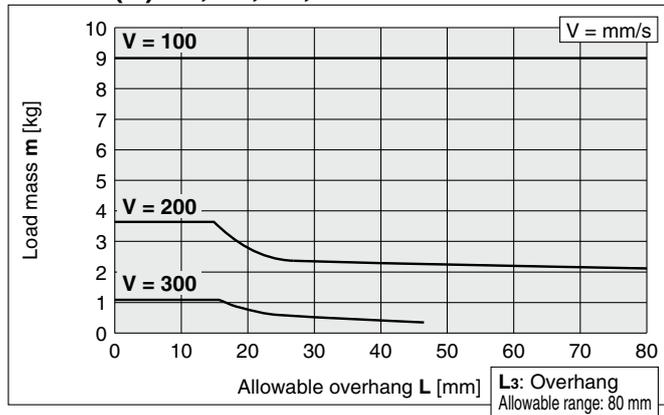
MXQ20(A)-75Z□



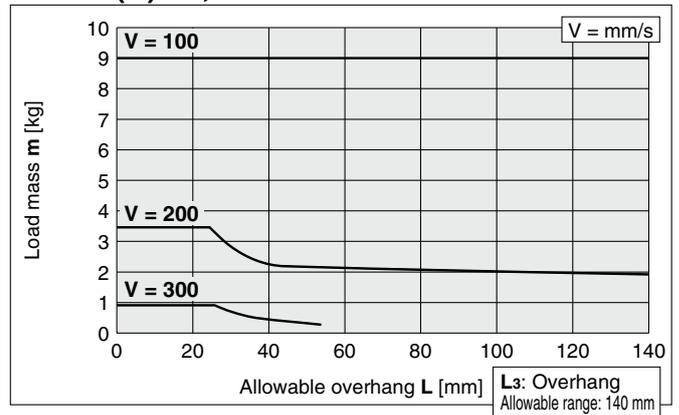
MXQ20(A)-100, 125, 150Z□



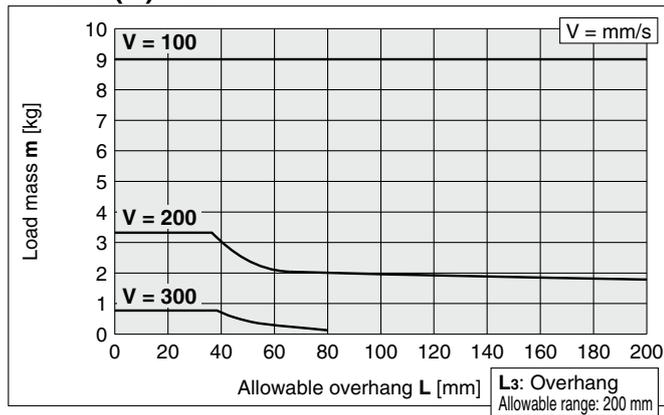
MXQ25(A)-10, 20, 30, 40Z□



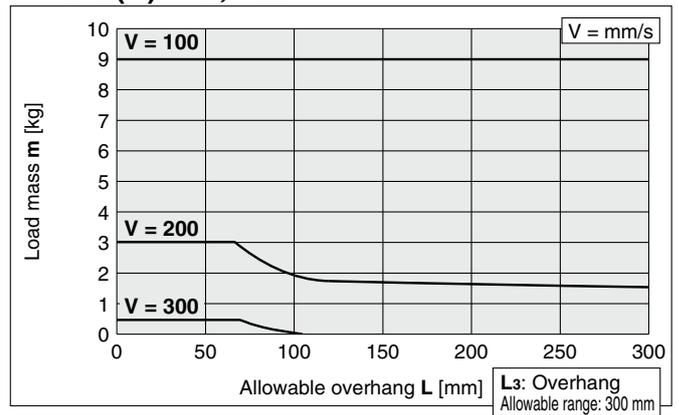
MXQ25(A)-50, 75Z□



MXQ25(A)-100Z□



MXQ25(A)-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

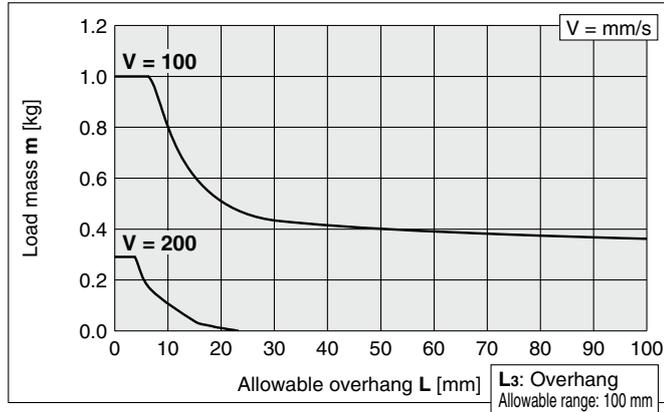
Made to Order

Model Selection

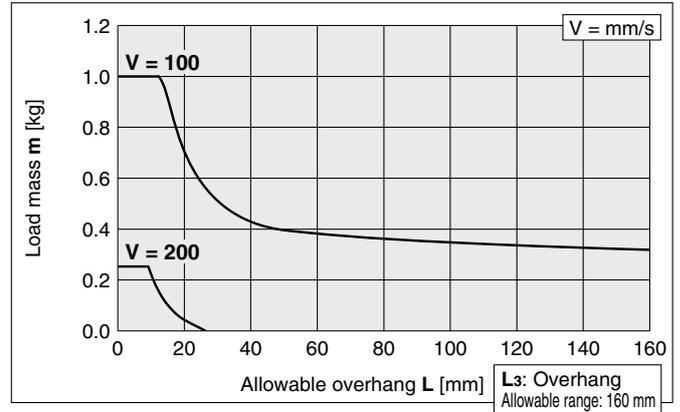
Determine the overhang. (Refer to page 158 for details.)
 L1, L2: Check from the cross point of the load mass and driving speed.
 L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

MXQ 8B-□Z□, MXQ 12B-□Z□ / For Transfer/ Metal Stopper with Bumper

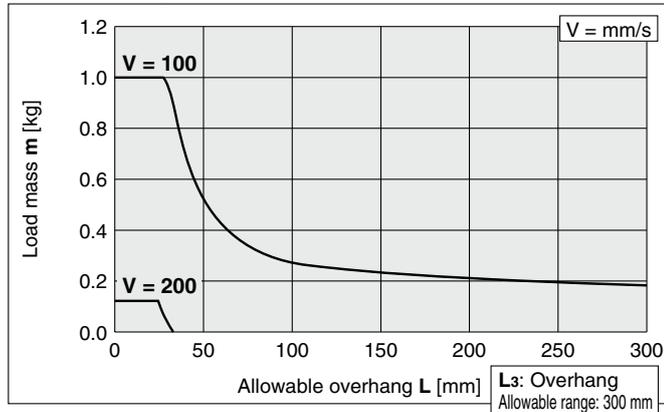
MXQ8B-10, 20, 30Z□



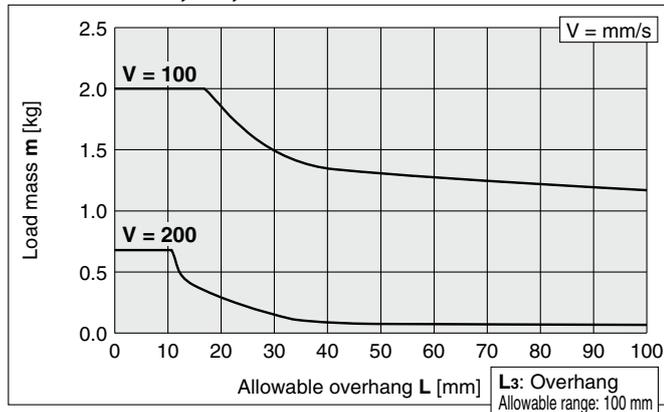
MXQ8B-40, 50Z□



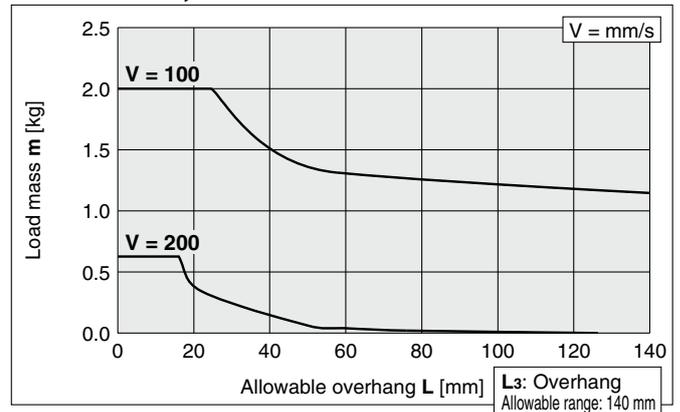
MXQ8B-75, 100Z□



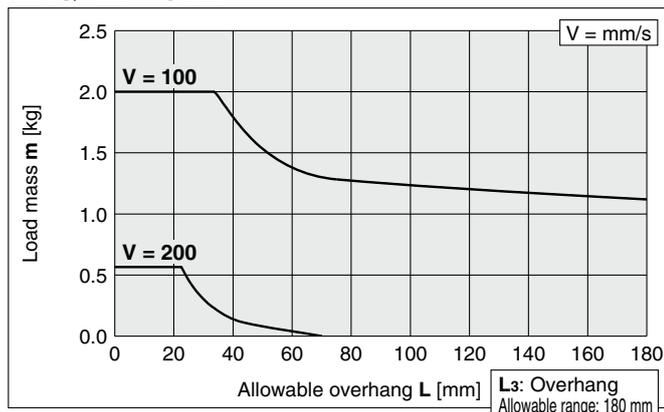
MXQ12B-10, 20, 30Z□



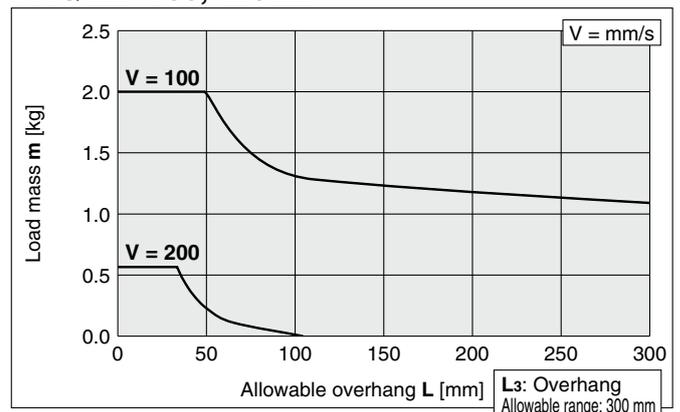
MXQ12B-40, 50Z□



MXQ12B-75Z□



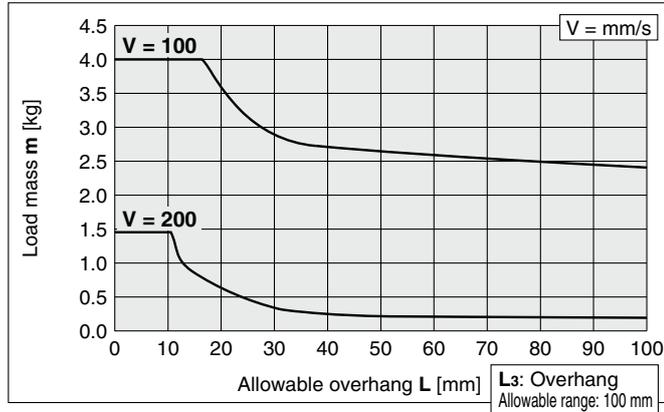
MXQ12B-100, 125Z□



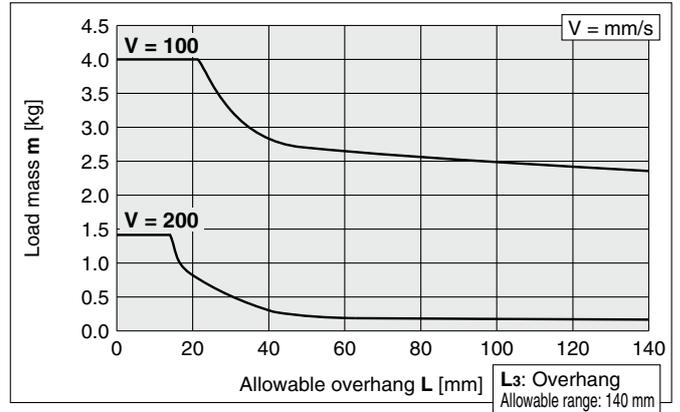
Determine the overhang. (Refer to page 158 for details.)
 L1, L2: Check from the cross point of the load mass and driving speed.
 L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

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

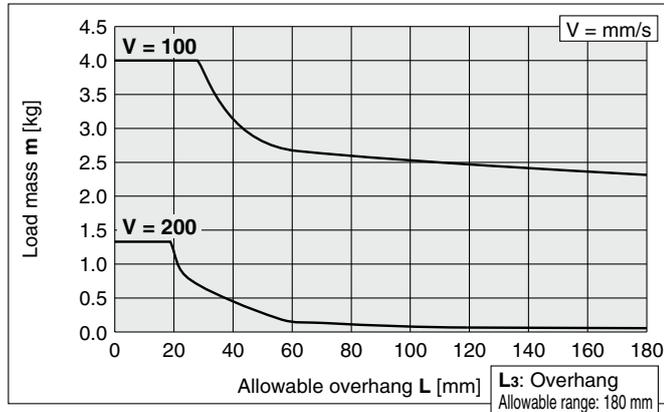
MXQ16B-10, 20, 30, 40Z□



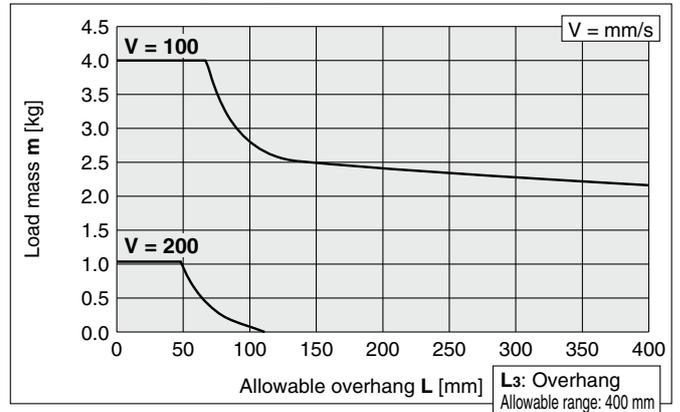
MXQ16B-50Z□



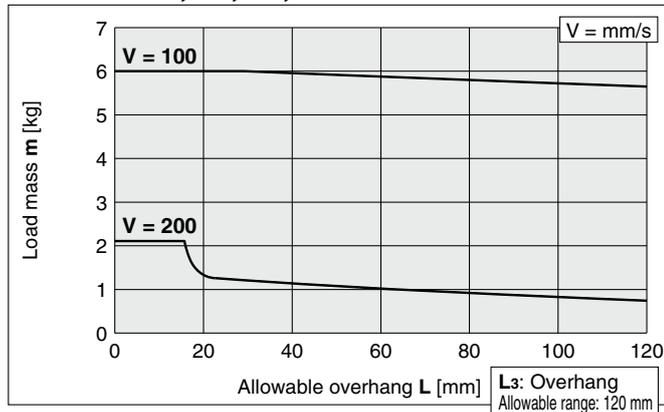
MXQ16B-75Z□



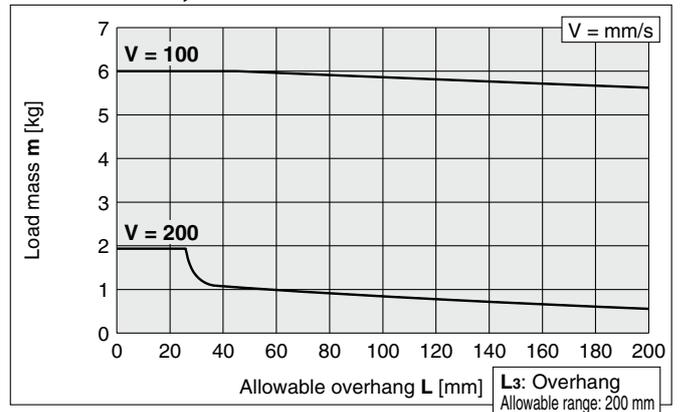
MXQ16B-100, 125, 150Z□



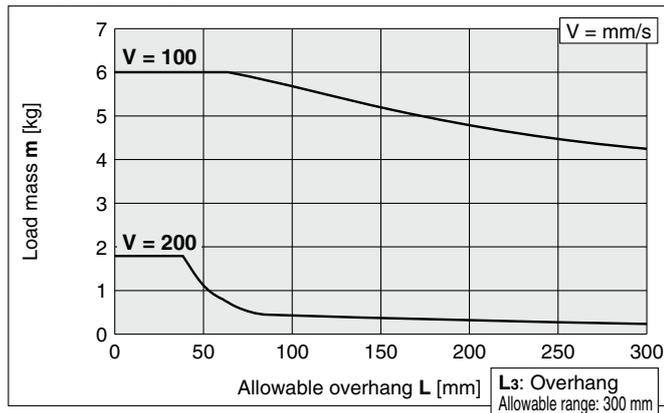
MXQ20B-10, 20, 30, 40Z□



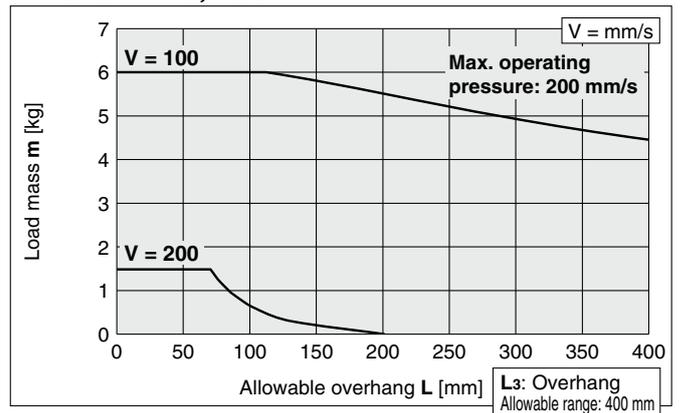
MXQ20B-50, 75Z□



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

MXQ Series

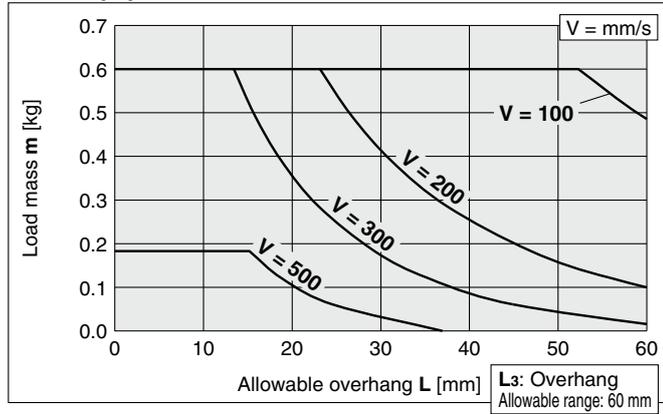
MXQ 6A-□Z□, MXQ 6-□Z□ (Height interchangeable type)

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

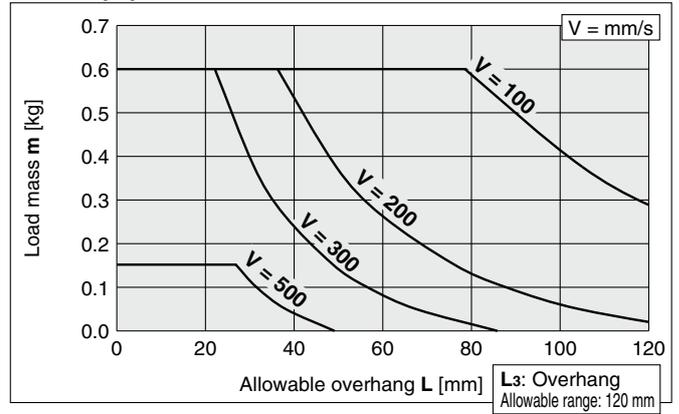
For Transfer/
Rubber Stopper

Determine the overhang. (Refer to page 158 for details.)
L₁, L₂: Check from the cross point of the load mass and driving speed.
L₃: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

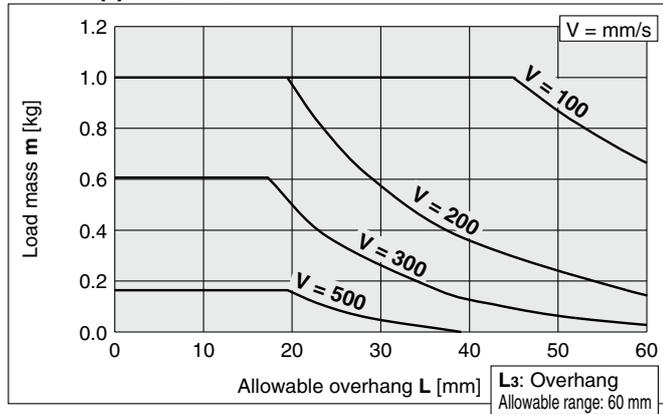
MXQ6(A)-10, 20Z□



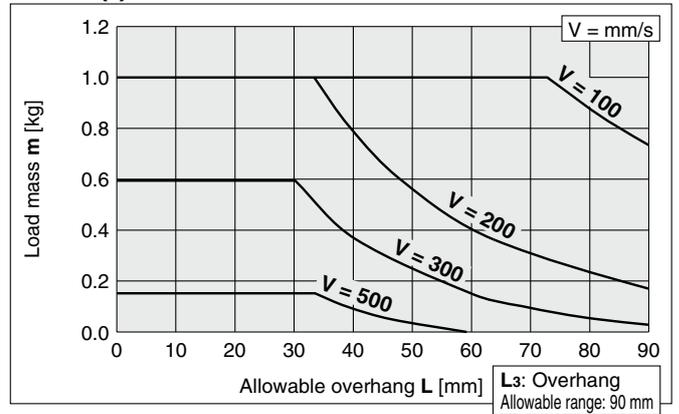
MXQ6(A)-30, 40, 50Z□



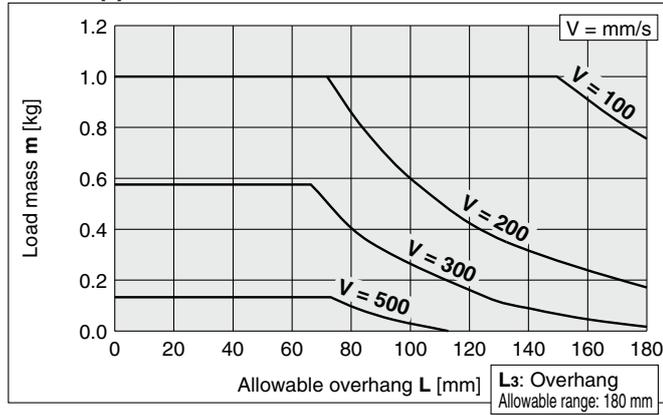
MXQ8(ε)-10, 20, 30Z□



MXQ8(ε)-40Z□



MXQ8(ε)-50, 75Z□

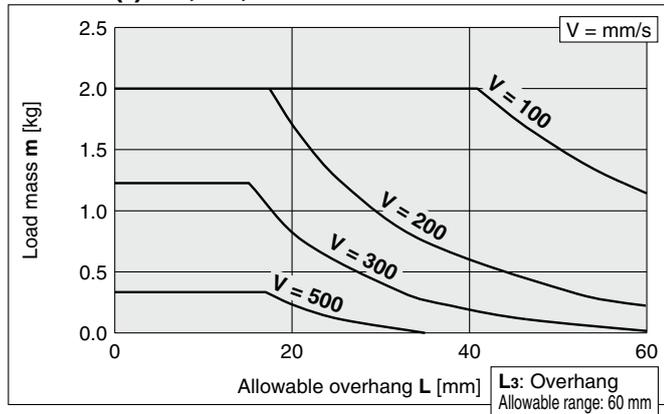


MXQ 12^A_C-□Z□, MXQ 12-□Z□ (interchangeable type) Height
 MXQ 16A-□Z□, MXQ 16-□Z□ (interchangeable type) Height

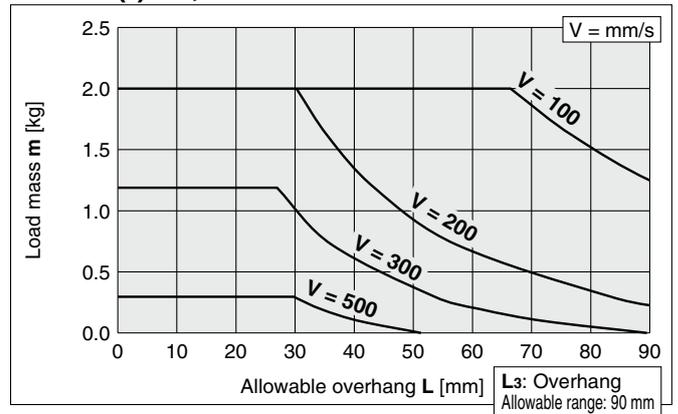
For Transfer/
Rubber Stopper

Determine the overhang. (Refer to page 158 for details.)
 L1, L2: Check from the cross point of the load mass and driving speed.
 L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

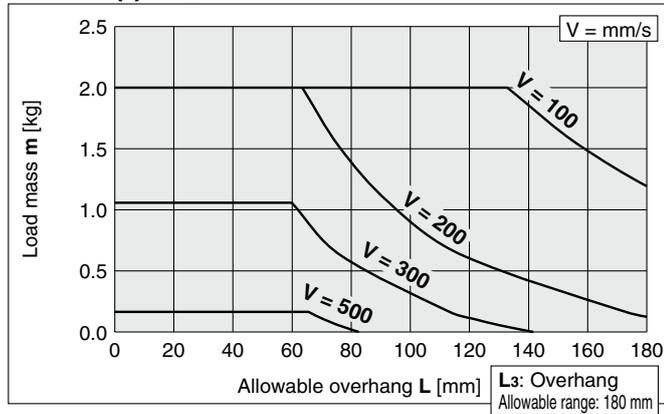
MXQ12(Δ)-10, 20, 30Z□



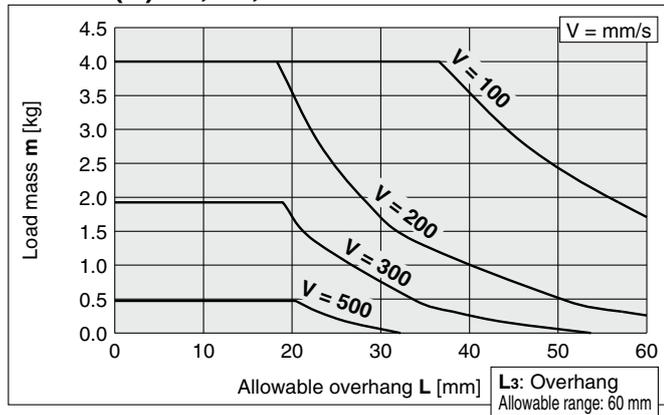
MXQ12(Δ)-40, 50Z□



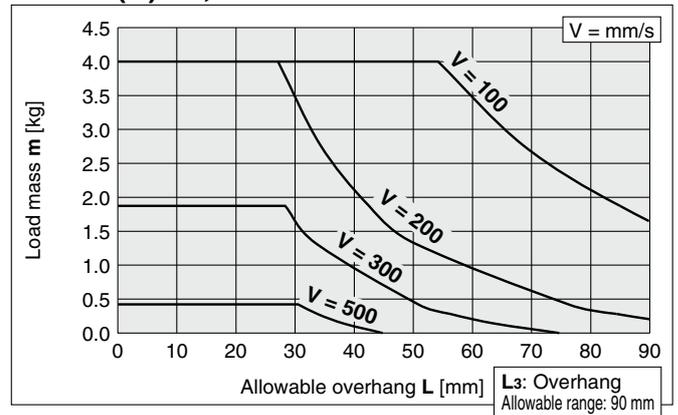
MXQ12(Δ)-75, 100Z□



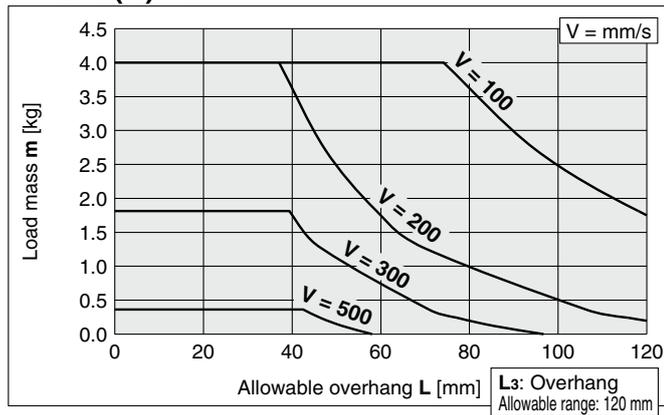
MXQ16(A)-10, 20, 30Z□



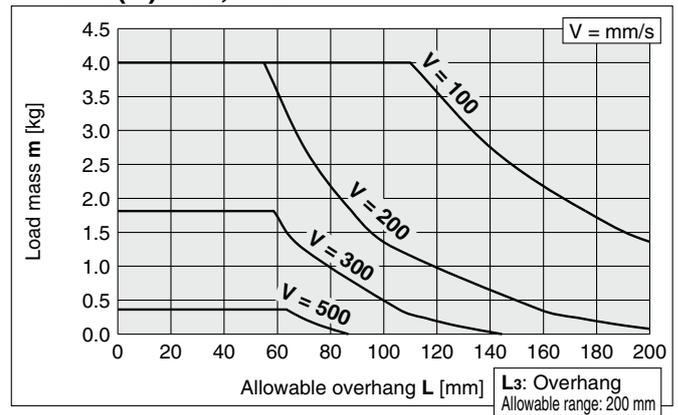
MXQ16(A)-40, 50Z□



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

MXQ Series

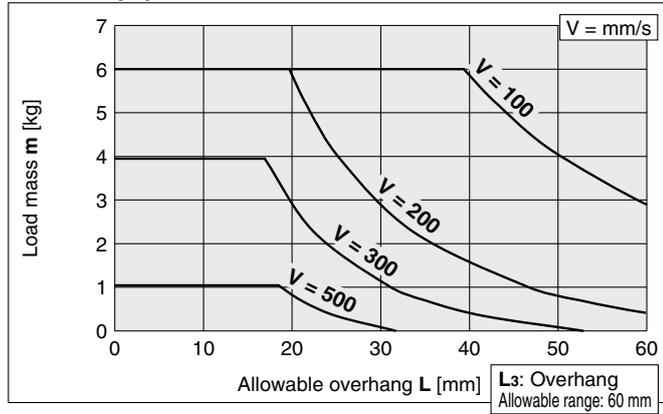
MXQ 20A-□Z□, MXQ 20-□Z□ (Height interchangeable type)

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

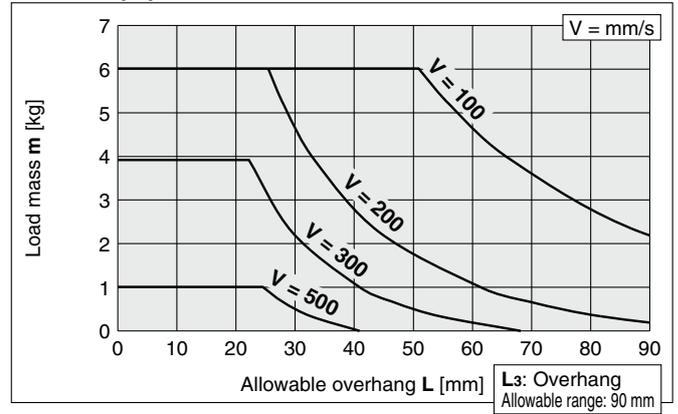
For Transfer/
Rubber Stopper

Determine the overhang. (Refer to page 158 for details.)
L1, L2: Check from the cross point of the load mass and driving speed.
L3: Can be used within the "Allowable overhang range"
in the selection graph if the load mass and driving
speed values are within the allowable range

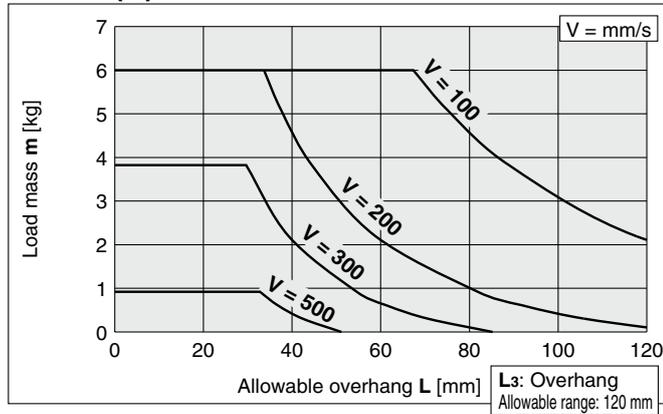
MXQ20(A)-10, 20, 30, 40Z□



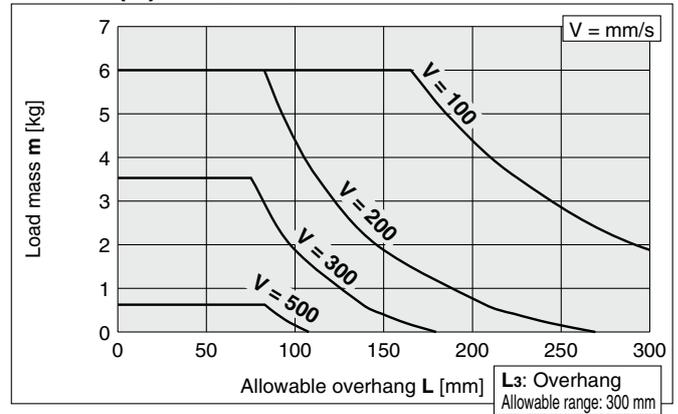
MXQ20(A)-50Z□



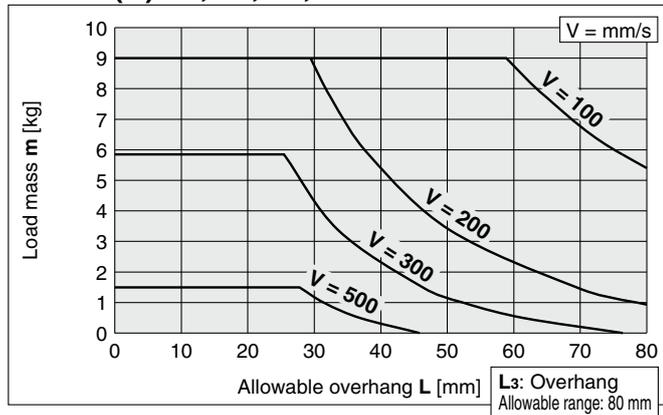
MXQ20(A)-75Z□



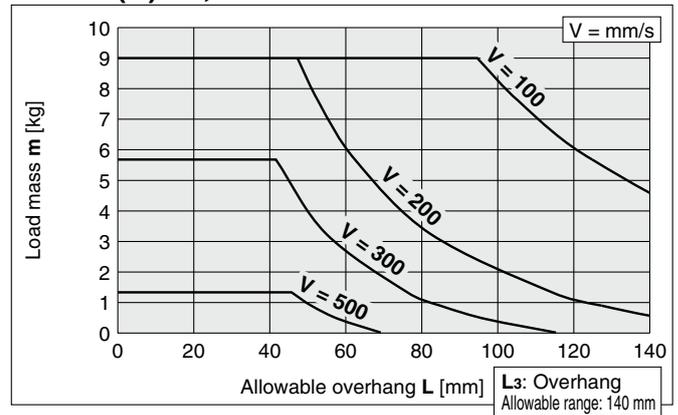
MXQ20(A)-100, 125, 150Z□



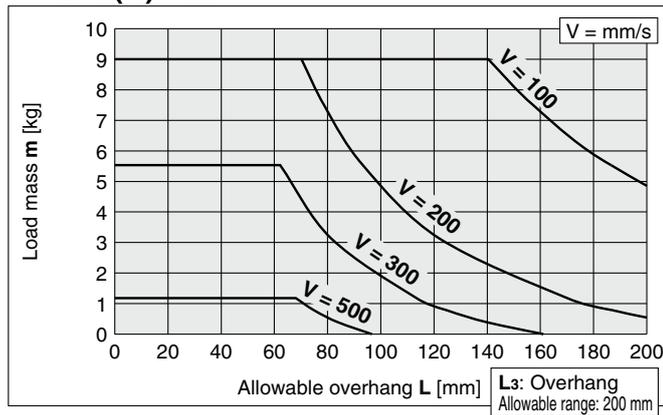
MXQ25(A)-10, 20, 30, 40Z□



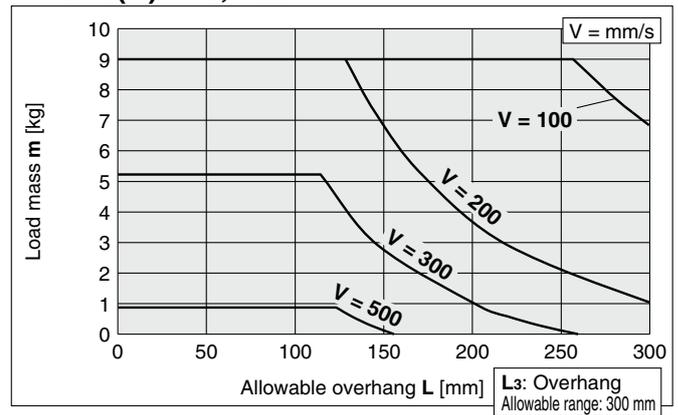
MXQ25(A)-50, 75Z□



MXQ25(A)-100Z□



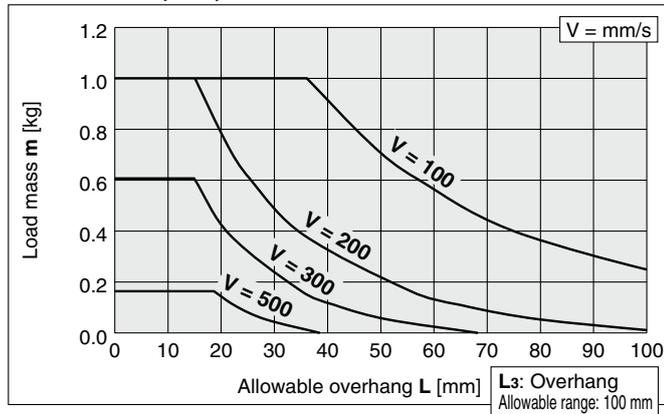
MXQ25(A)-125, 150Z□



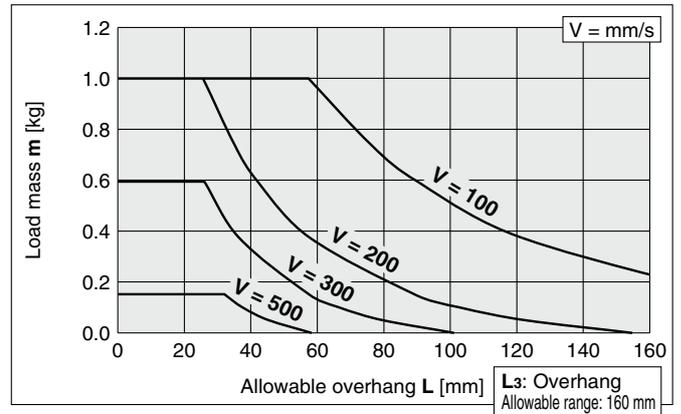
Determine the overhang. (Refer to page 158 for details.)
 L₁, L₂: Check from the cross point of the load mass and driving speed.
 L₃: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

MXQ 6B-□Z□/For Transfer/Rubber Stopper

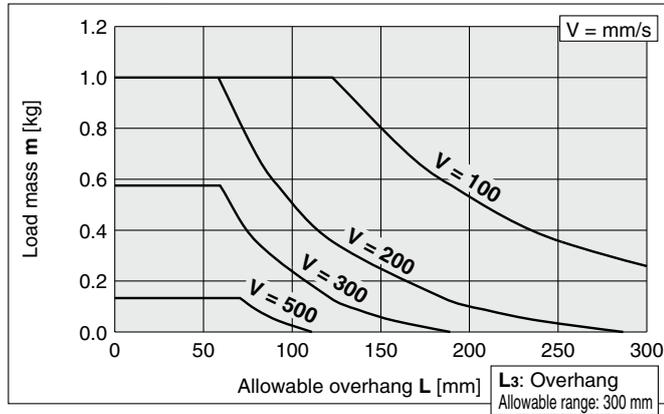
MXQ6B-10, 20, 30Z□



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

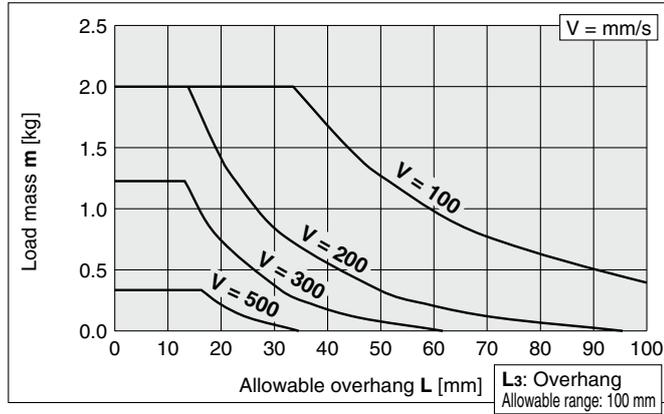
Model Selection

MXQ Series

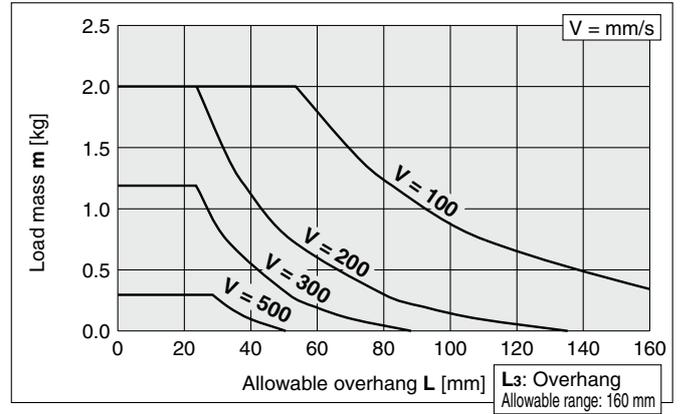
Determine the overhang. (Refer to page 158 for details.)
 L₁, L₂: Check from the cross point of the load mass and driving speed.
 L₃: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

MXQ 8B-□Z□, MXQ 12B-□Z□ / For Transfer/ Rubber Stopper

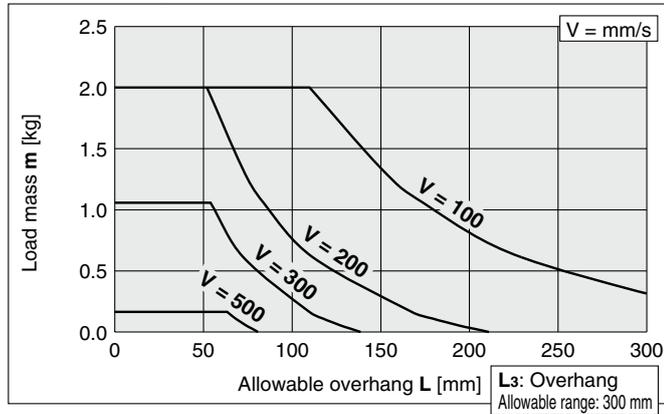
MXQ8B-10, 20, 30Z□



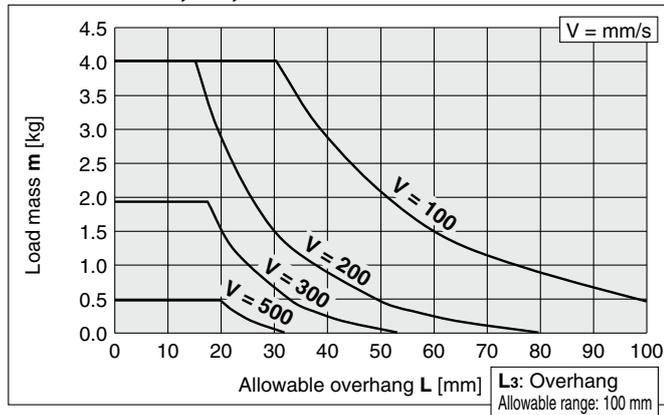
MXQ8B-40, 50Z□



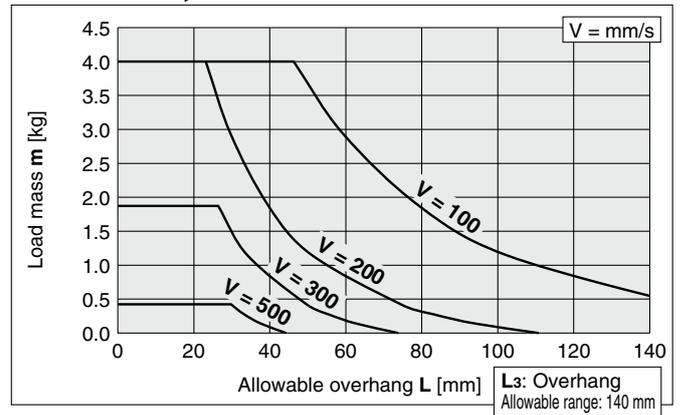
MXQ8B-75, 100Z□



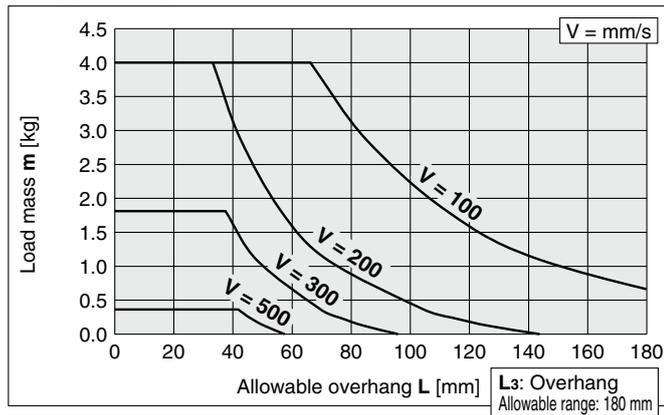
MXQ12B-10, 20, 30Z□



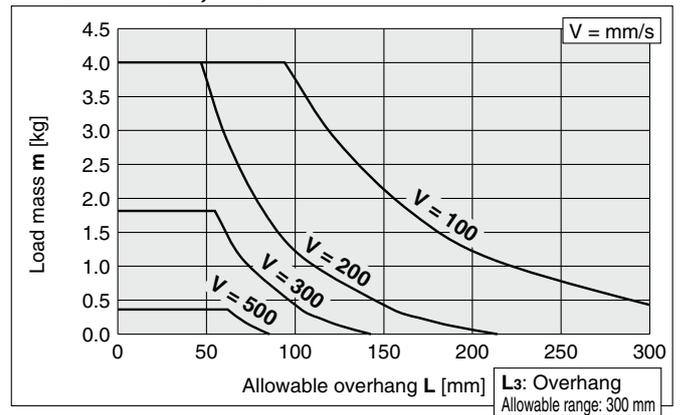
MXQ12B-40, 50Z□



MXQ12B-75Z□



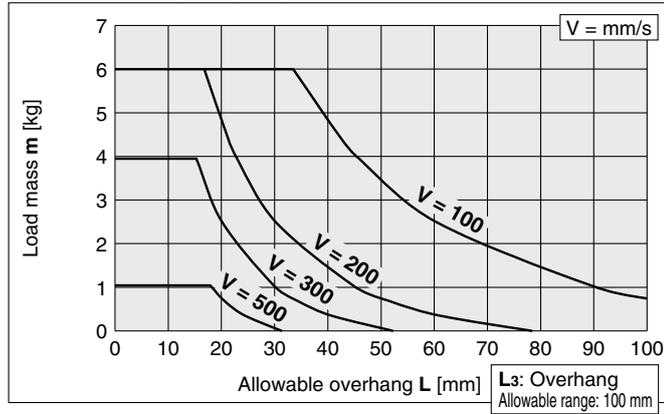
MXQ12B-100, 125Z□



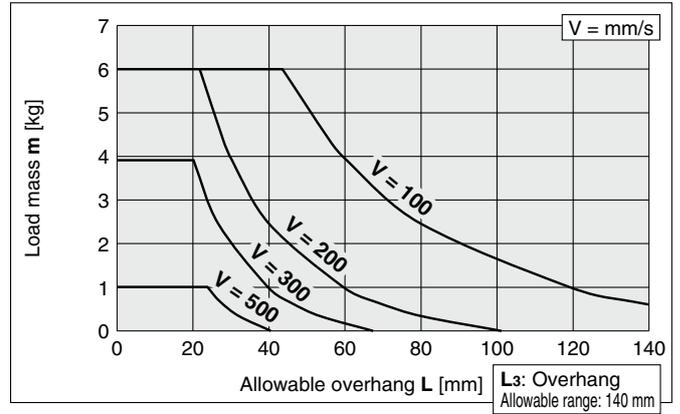
Determine the overhang. (Refer to page 158 for details.)
 L1, L2: Check from the cross point of the load mass and driving speed.
 L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

MXQ 16B-□Z□, MXQ 20B-□Z□ / For Transfer/ Rubber Stopper

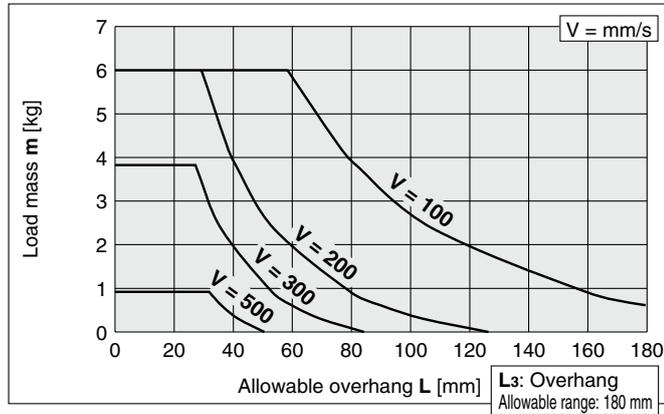
MXQ16B-10, 20, 30, 40Z□



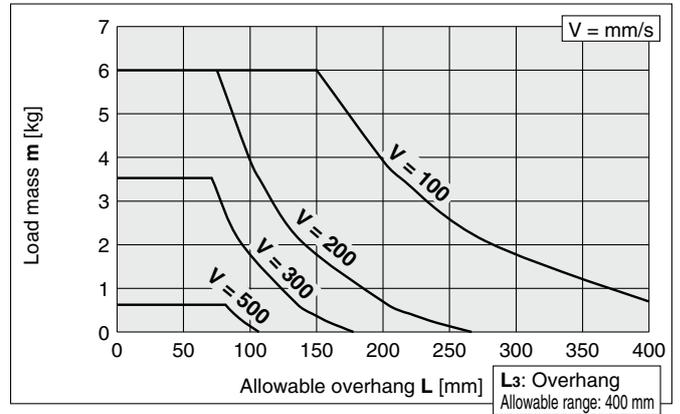
MXQ16B-50Z□



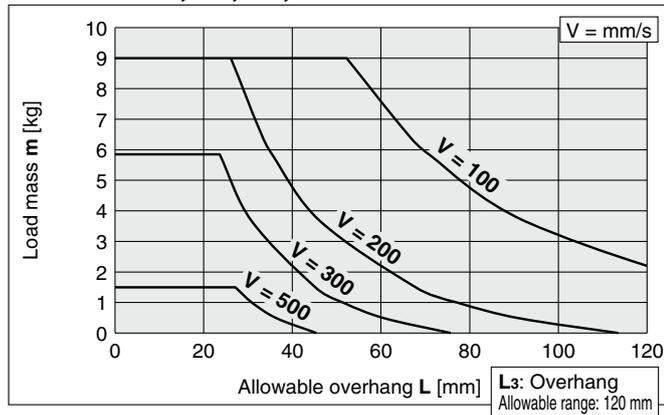
MXQ16B-75Z□



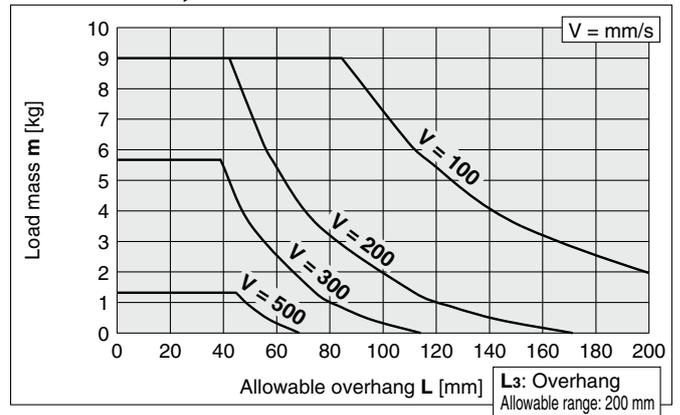
MXQ16B-100, 125, 150Z□



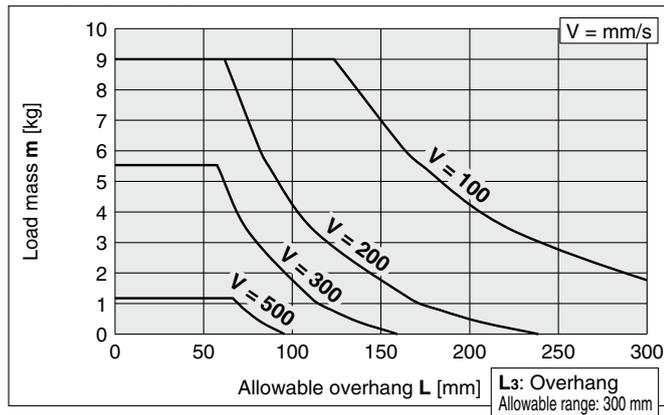
MXQ20B-10, 20, 30, 40Z□



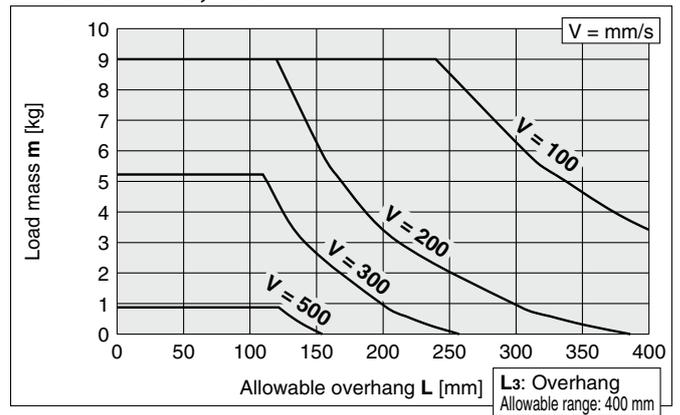
MXQ20B-50, 75Z□



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

MXQ Series

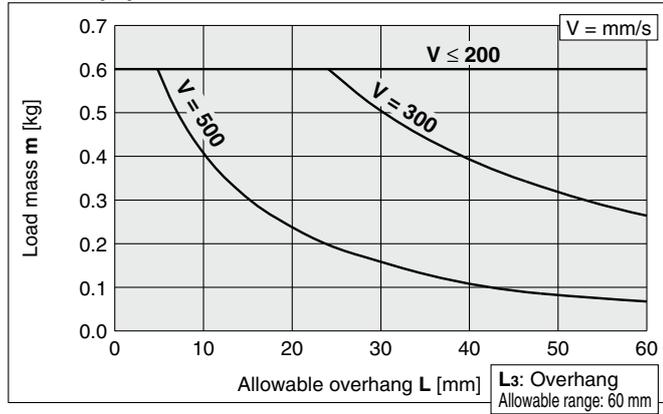
MXQ 6A-□Z□, MXQ 6-□Z□ (Height interchangeable type)

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

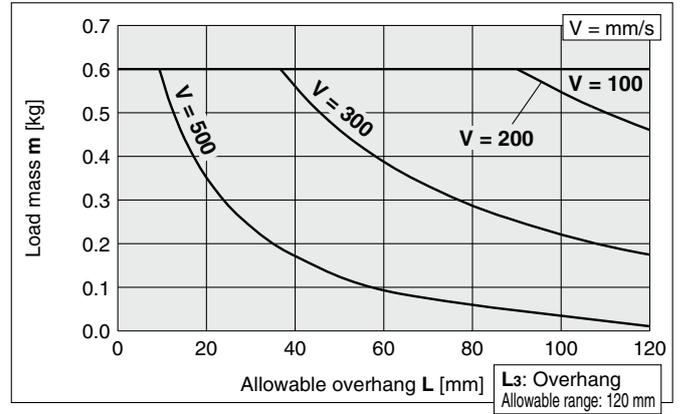
For Transfer/
Shock Absorber/RJ

Determine the overhang. (Refer to page 158 for details.)
L₁, L₂: Check from the cross point of the load mass and driving speed.
L₃: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

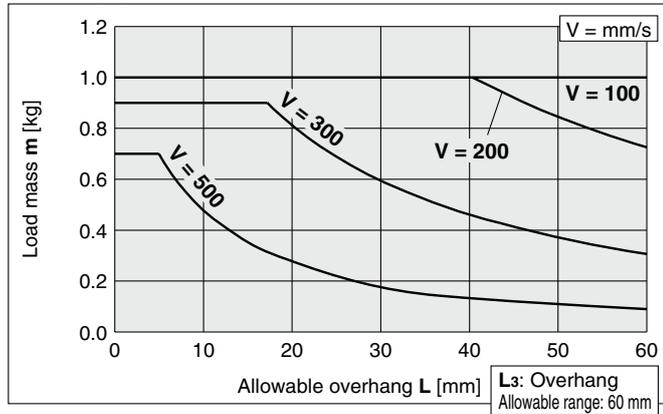
MXQ6(A)-10, 20Z□



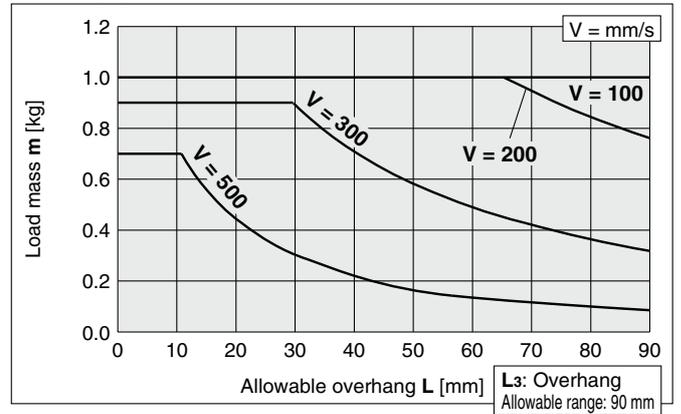
MXQ6(A)-30, 40, 50Z□



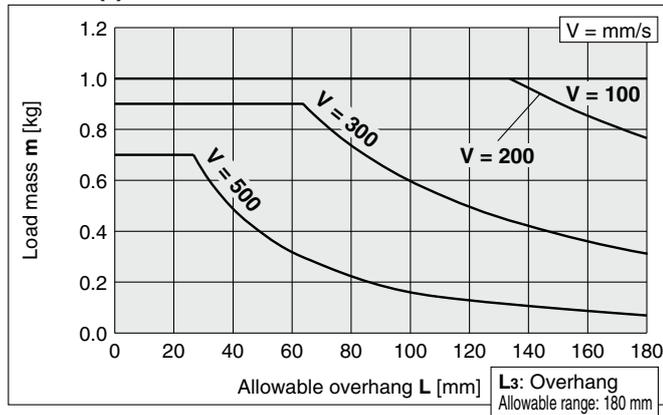
MXQ8(Δ)-10, 20, 30Z□



MXQ8(Δ)-40Z□



MXQ8(Δ)-50, 75Z□

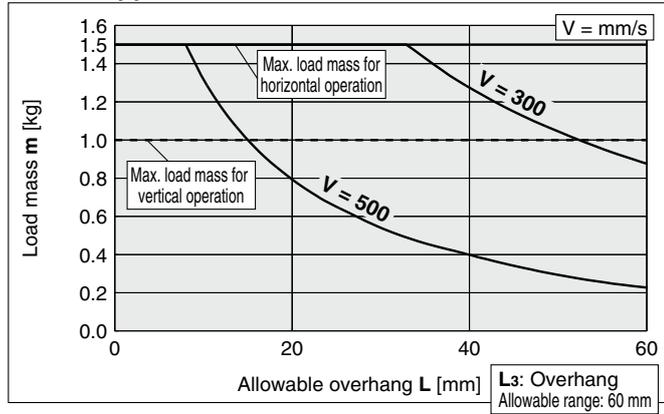


MXQ 12^A-□Z□, MXQ 12-□Z□ (interchangeable type) Height
 MXQ 16A-□Z□, MXQ 16-□Z□ (interchangeable type) Height

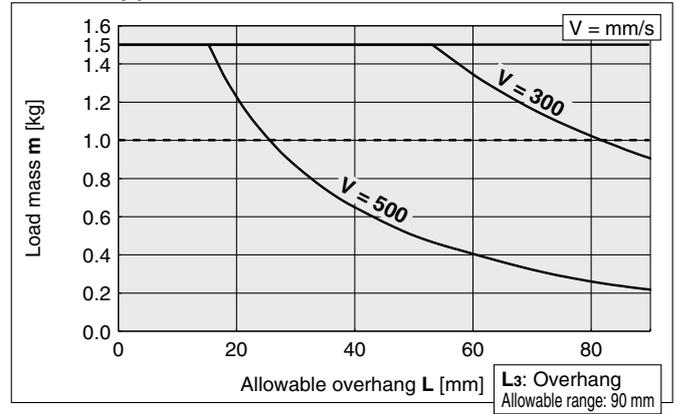
For Transfer/
Shock Absorber/RJ

Determine the overhang. (Refer to page 158 for details.)
 L1, L2: Check from the cross point of the load mass and driving speed.
 L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

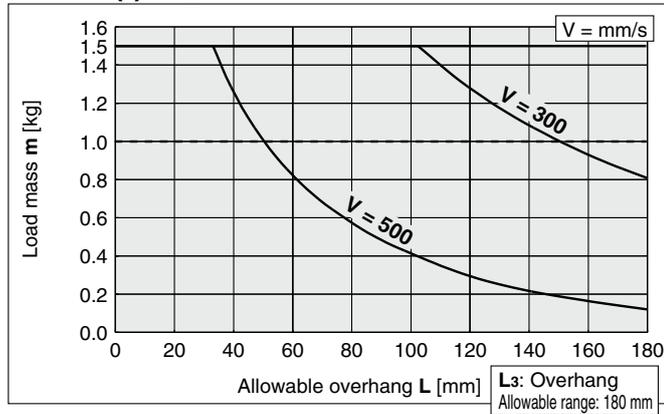
MXQ12(Δ)-10, 20, 30Z□



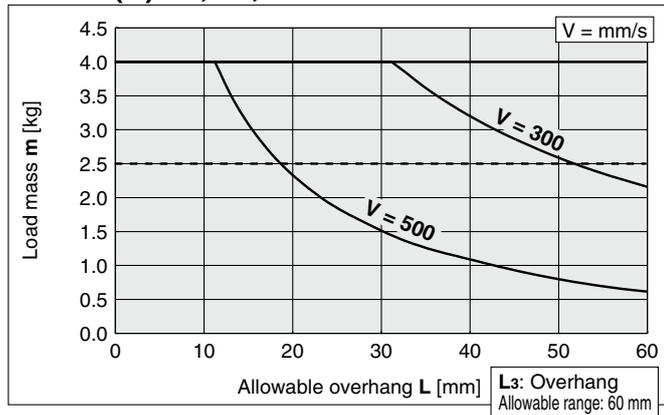
MXQ12(Δ)-40, 50Z□



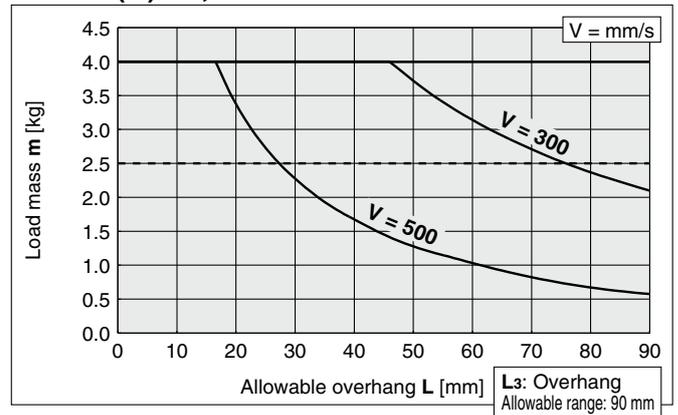
MXQ12(Δ)-75, 100Z□



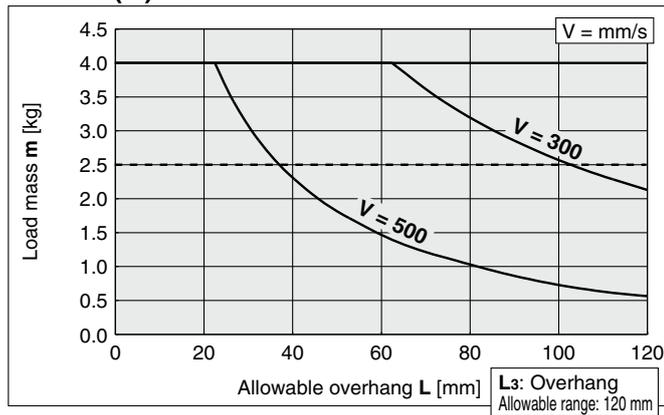
MXQ16(A)-10, 20, 30Z□



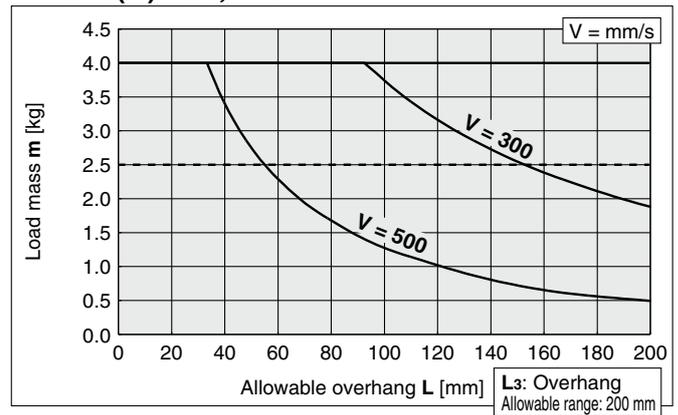
MXQ16(A)-40, 50Z□



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

MXQ Series

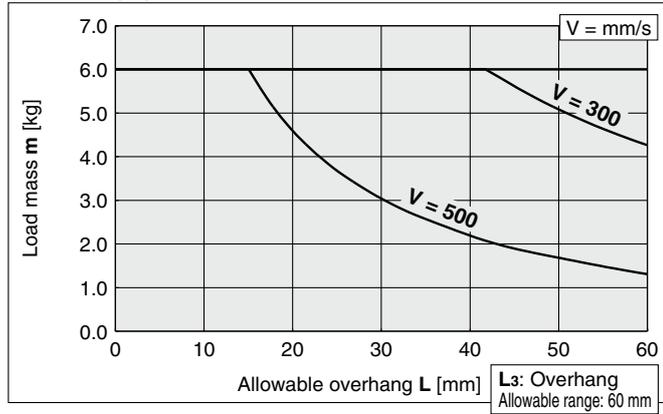
MXQ 20A-□Z□, MXQ 20-□Z□ (Height interchangeable type)

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

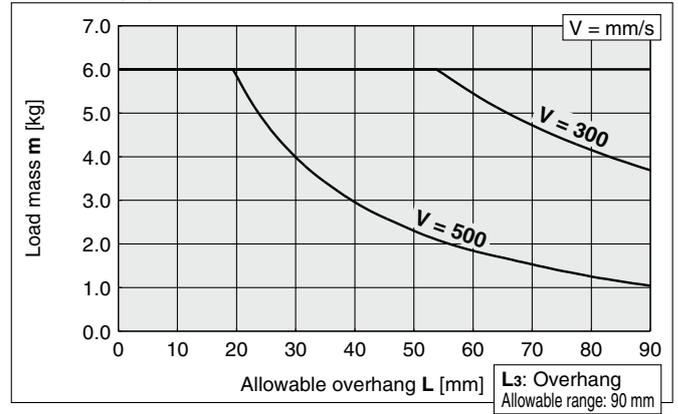
For Transfer/
Shock Absorber/RJ

Determine the overhang. (Refer to page 158 for details.)
L1, L2: Check from the cross point of the load mass and driving speed.
L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

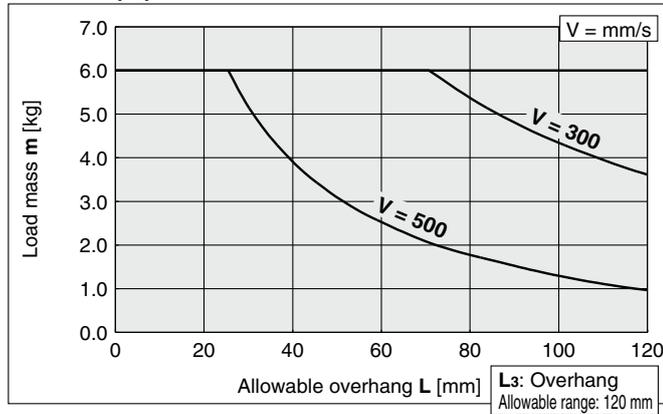
MXQ20(A)-10, 20, 30, 40Z□



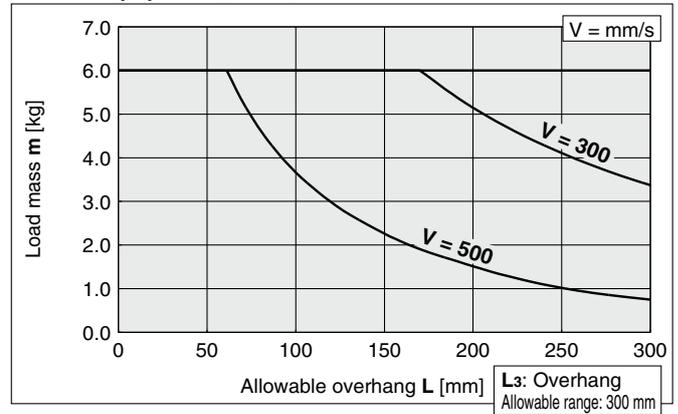
MXQ20(A)-50Z□



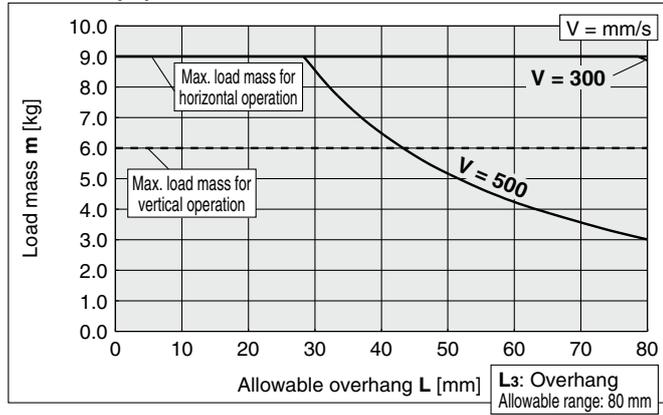
MXQ20(A)-75Z□



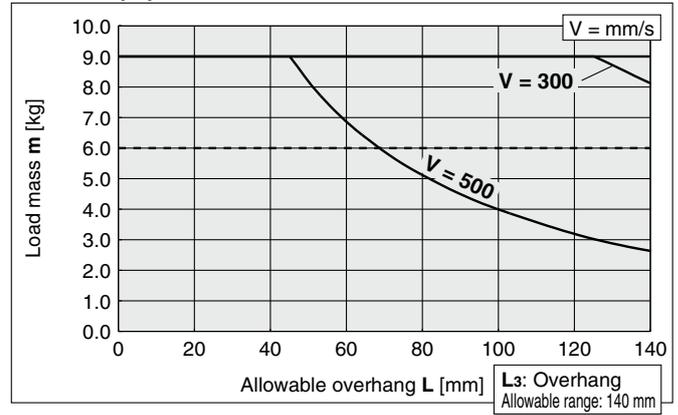
MXQ20(A)-100, 125, 150Z□



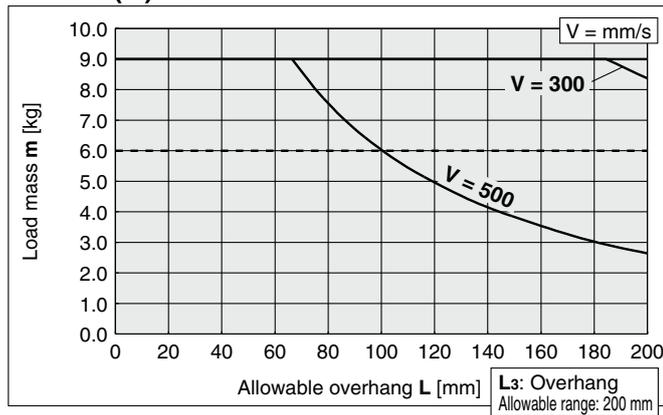
MXQ25(A)-10, 20, 30, 40Z□



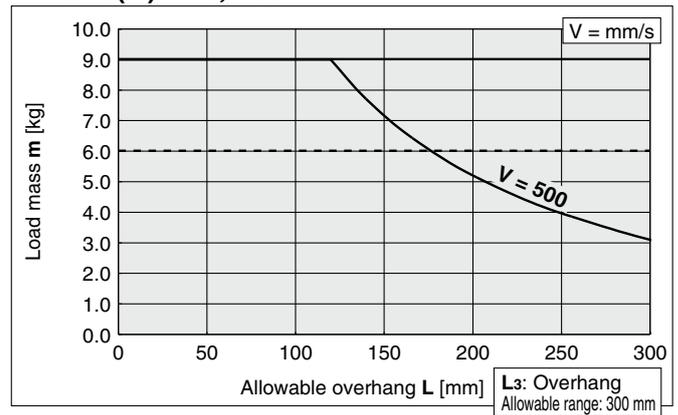
MXQ25(A)-50, 75Z□



MXQ25(A)-100Z□



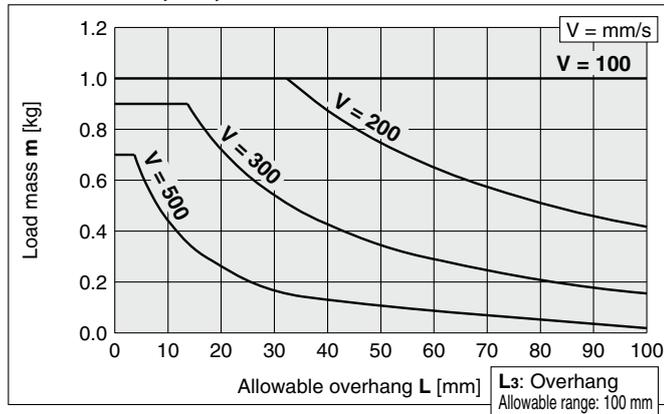
MXQ25(A)-125, 150Z□



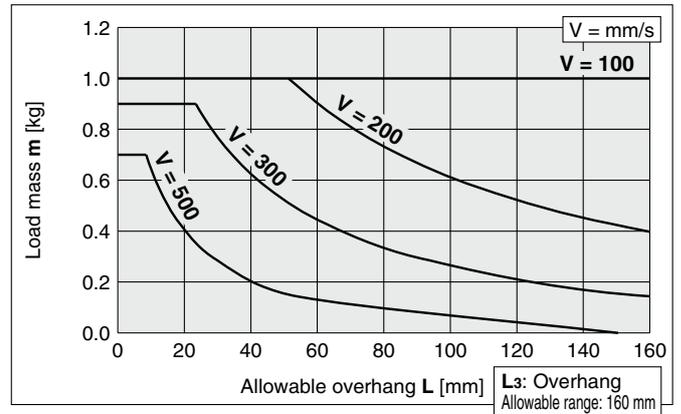
Determine the overhang. (Refer to page 158 for details.)
 L₁, L₂: Check from the cross point of the load mass and driving speed.
 L₃: Can be used within the "Allowable overhang range"
 in the selection graph if the load mass and driving
 speed values are within the allowable range

MXQ 6B-□Z□/For Transfer/Shock Absorber/RJ

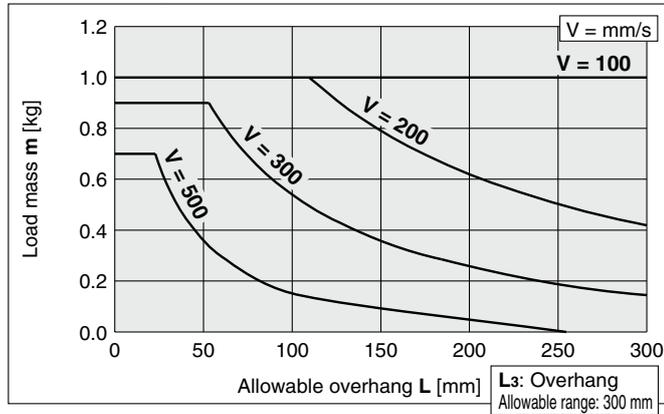
MXQ6B-10, 20, 30Z□



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

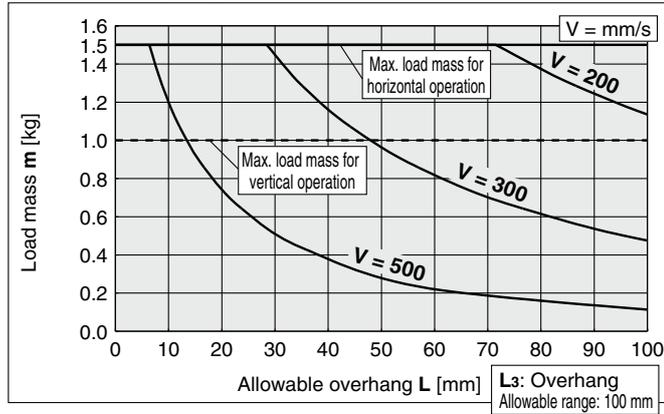
Model Selection

MXQ Series

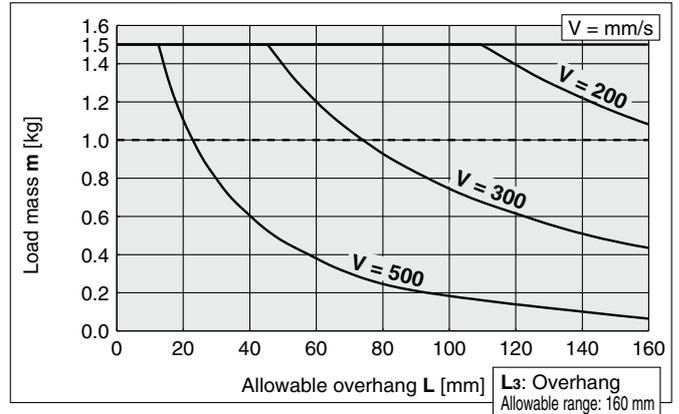
Determine the overhang. (Refer to page 158 for details.)
 L1, L2: Check from the cross point of the load mass and driving speed.
 L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

MXQ 8B-□Z□, MXQ 12B-□Z□ / For Transfer/ Shock Absorber/RJ

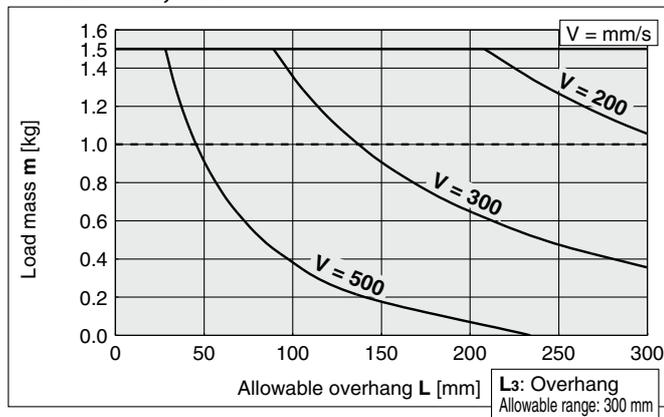
MXQ8B-10, 20, 30Z□



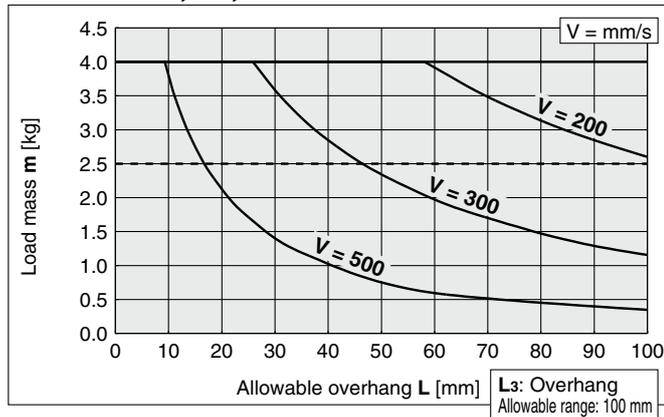
MXQ8B-40, 50Z□



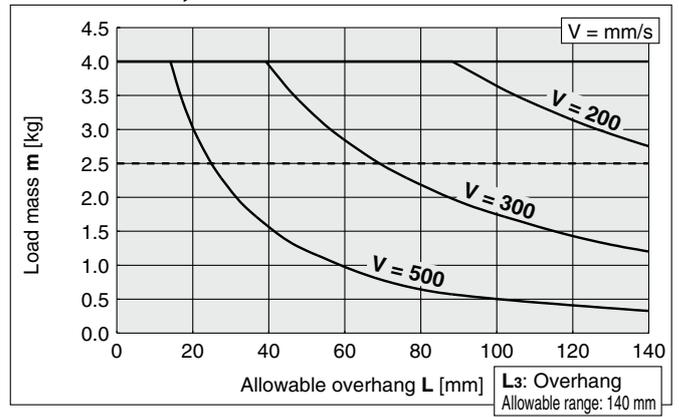
MXQ8B-75, 100Z□



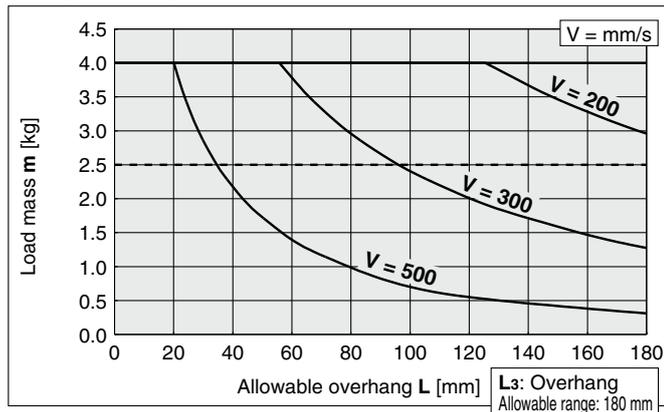
MXQ12B-10, 20, 30Z□



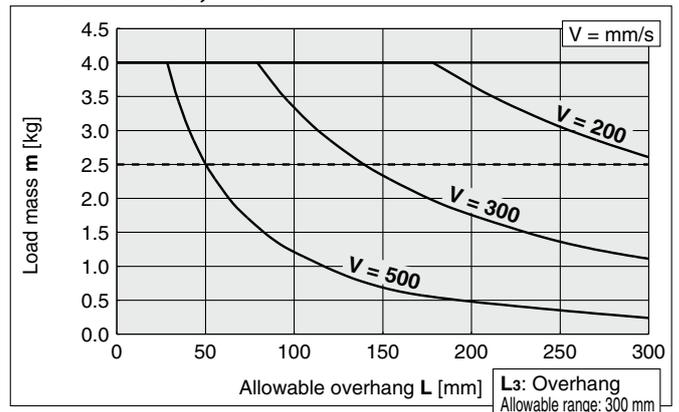
MXQ12B-40, 50Z□



MXQ12B-75Z□



MXQ12B-100, 125Z□

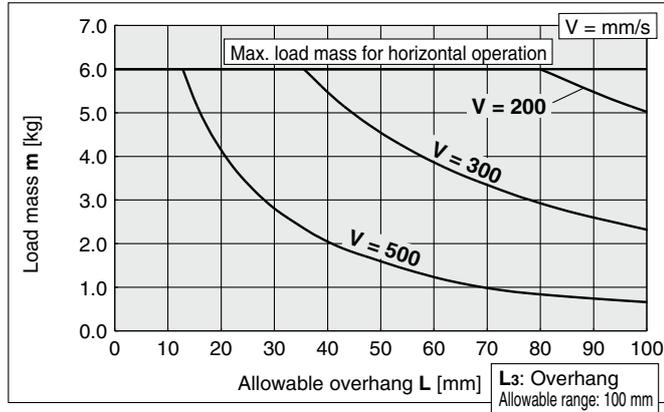


Determine the overhang. (Refer to page 158 for details.)
 L1, L2: Check from the cross point of the load mass and driving speed.
 L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

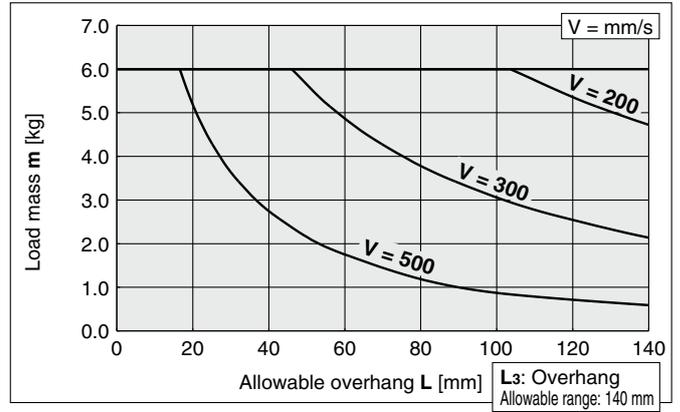
MXQ 16B-□Z□, MXQ 20B-□Z□

For Transfer/
Shock Absorber/RJ

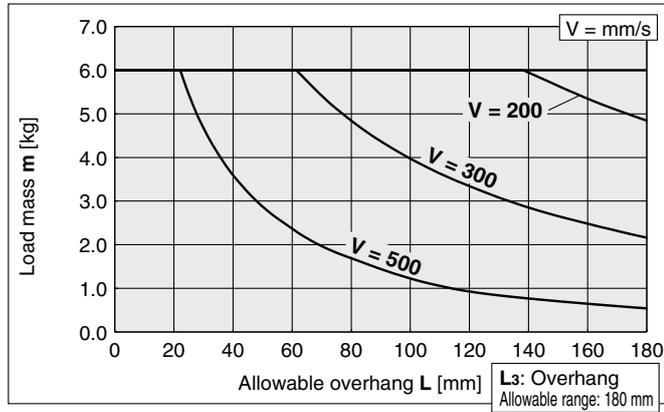
MXQ16B-10, 20, 30, 40Z□



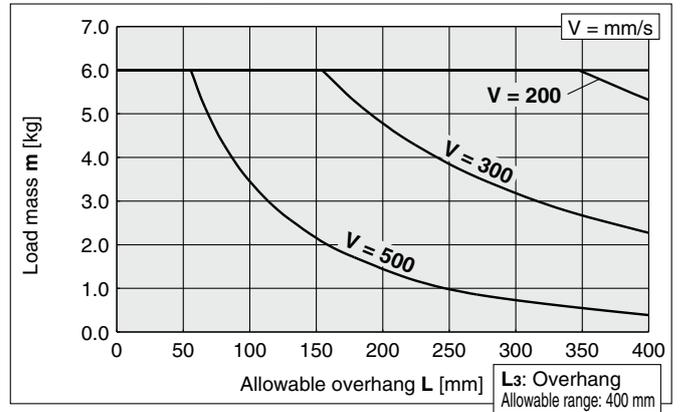
MXQ16B-50Z□



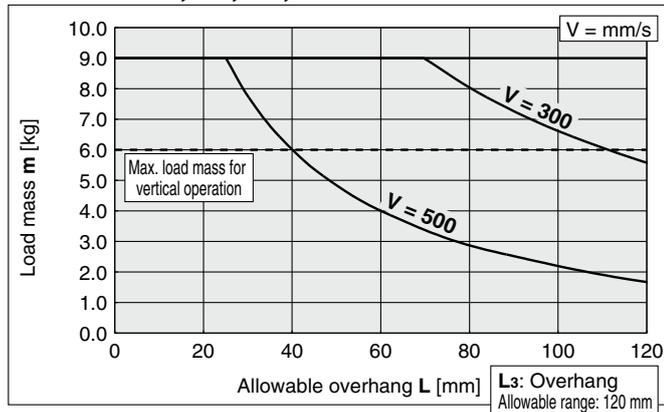
MXQ16B-75Z□



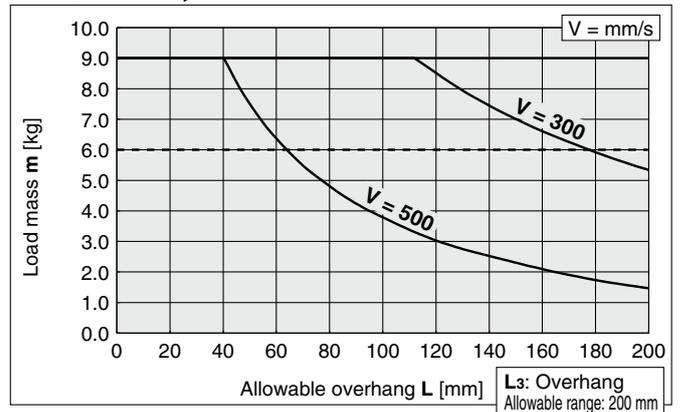
MXQ16B-100, 125, 150Z□



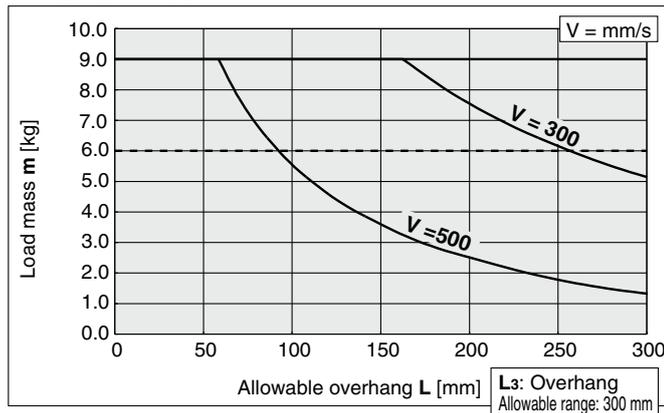
MXQ20B-10, 20, 30, 40Z□



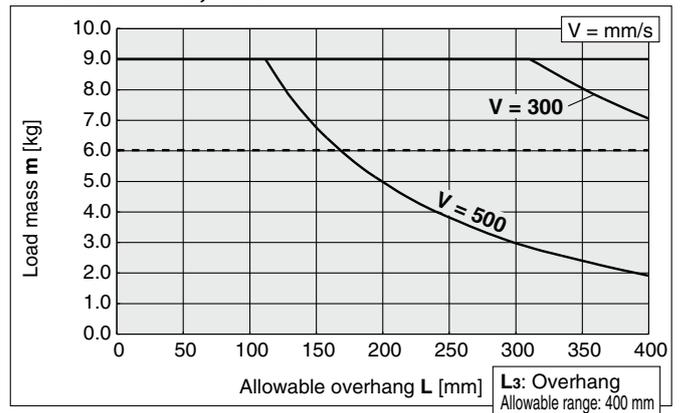
MXQ20B-50, 75Z□



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

MXQ Series

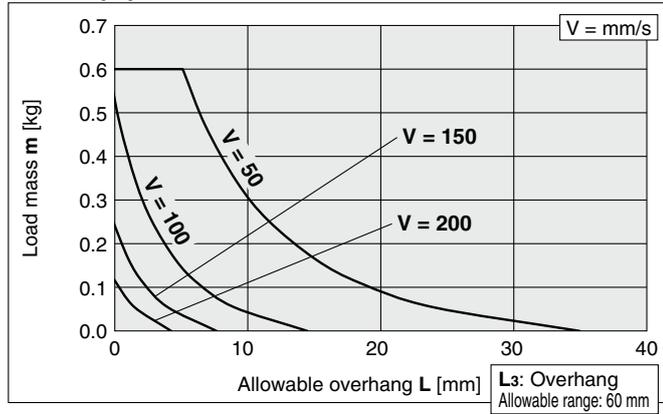
MXQ 6A-□Z□, MXQ 6-□Z□ (Height interchangeable type)

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

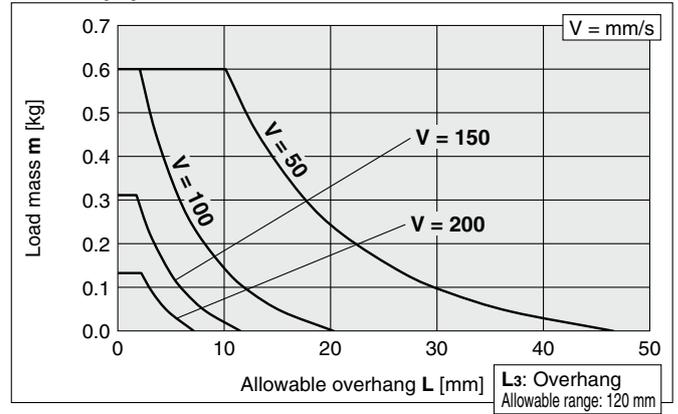
For Transfer/
Metal Stopper

Determine the overhang. (Refer to page 158 for details.)
L1, L2: Check from the cross point of the load mass and driving speed.
L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

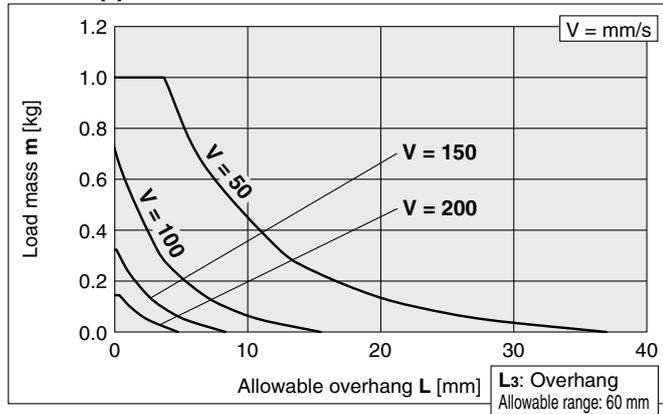
MXQ6(A)-10, 20Z□



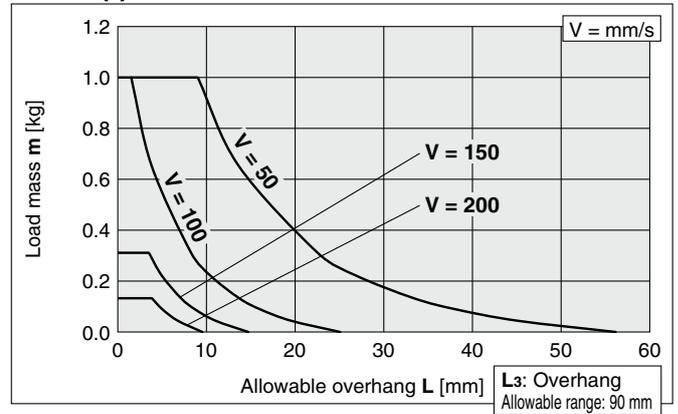
MXQ6(A)-30, 40, 50Z□



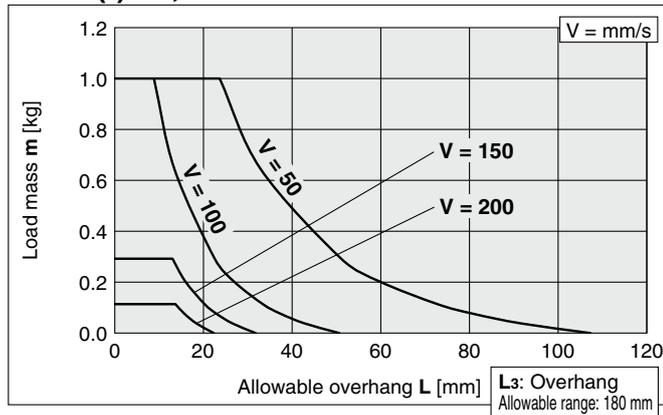
MXQ8(ε)-10, 20, 30Z□



MXQ8(ε)-40Z□



MXQ8(ε)-50, 75Z□

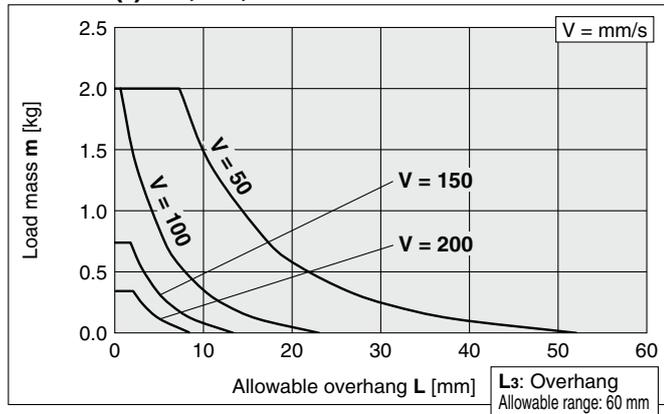


MXQ 12^A-□Z□, MXQ 12-□Z□ (interchangeable type) Height
 MXQ 16A-□Z□, MXQ 16-□Z□ (interchangeable type) Height

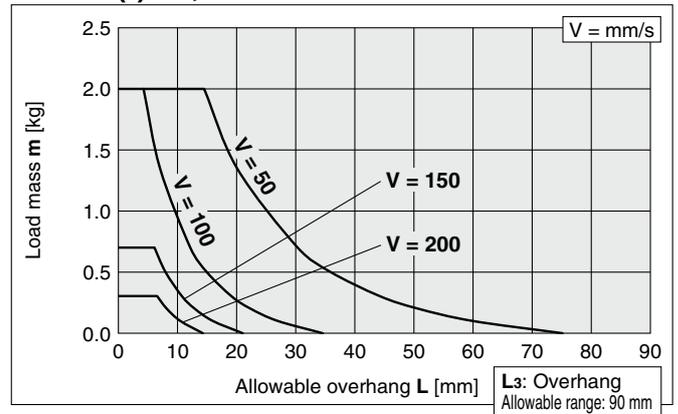
For Transfer/
Metal Stopper

Determine the overhang. (Refer to page 158 for details.)
 L1, L2: Check from the cross point of the load mass and driving speed.
 L3: Can be used within the "Allowable overhang range"
 in the selection graph if the load mass and driving
 speed values are within the allowable range

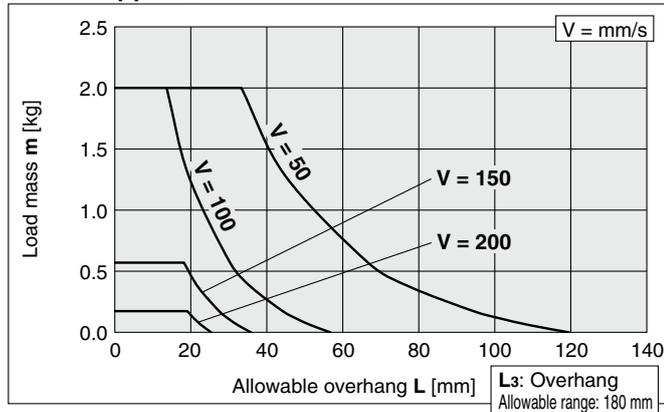
MXQ12(Δ)-10, 20, 30Z□



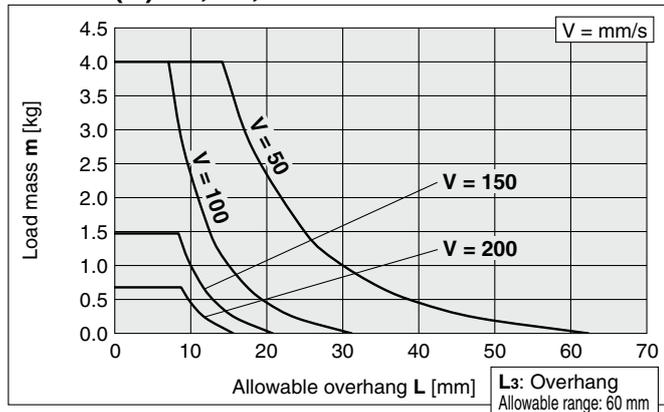
MXQ12(Δ)-40, 50Z□



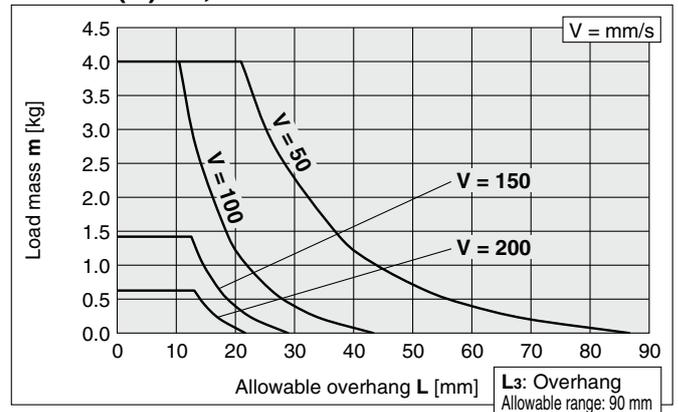
MXQ12(Δ)-75, 100Z□



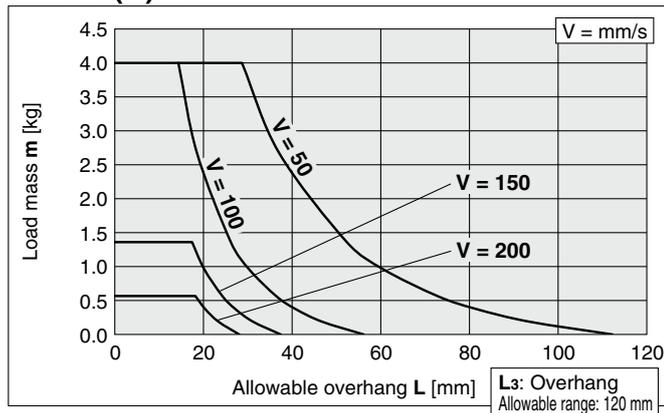
MXQ16(A)-10, 20, 30Z□



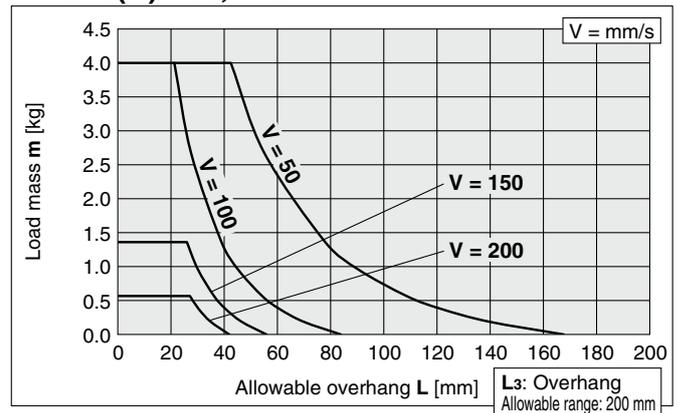
MXQ16(A)-40, 50Z□



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

MXQ Series

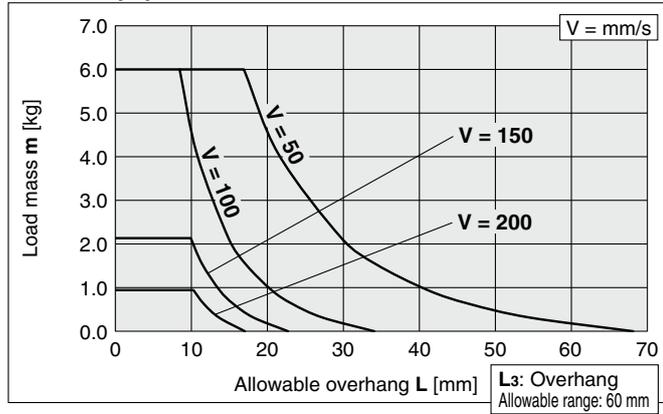
MXQ 20A-□Z□, MXQ 20-□Z□ (interchangeable type) Height

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

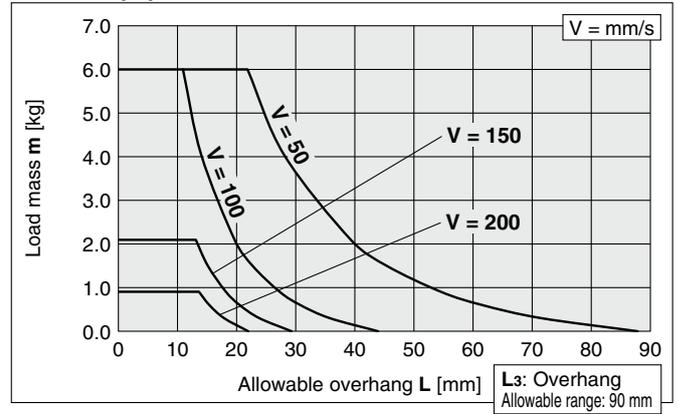
For Transfer/
Metal Stopper

Determine the overhang. (Refer to page 158 for details.)
L1, L2: Check from the cross point of the load mass and driving speed.
L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

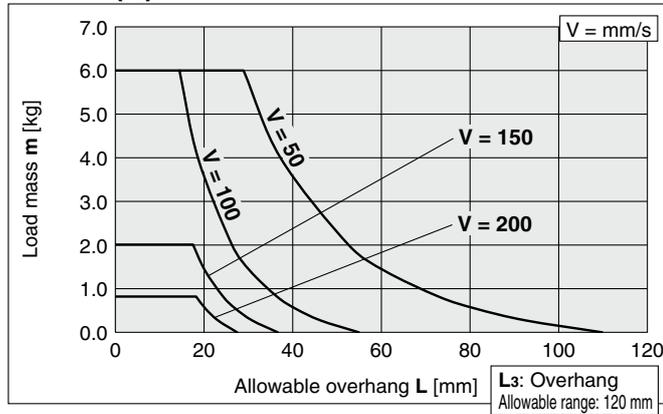
MXQ20(A)-10, 20, 30, 40Z□



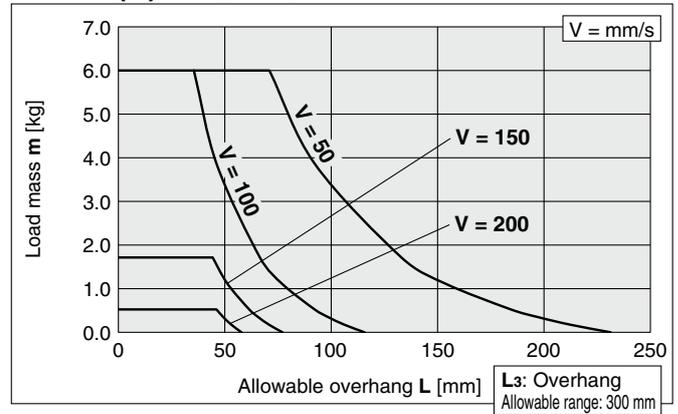
MXQ20(A)-50Z□



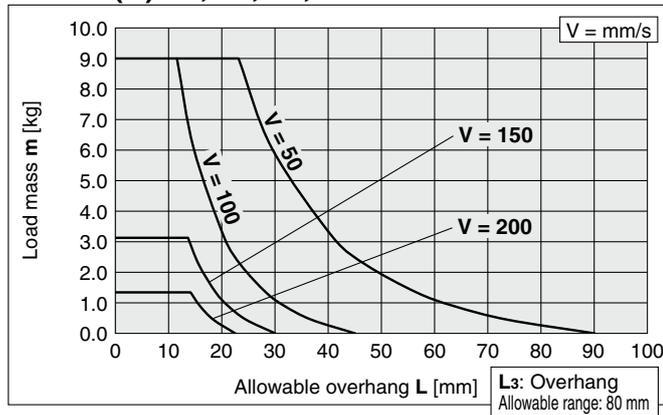
MXQ20(A)-75Z□



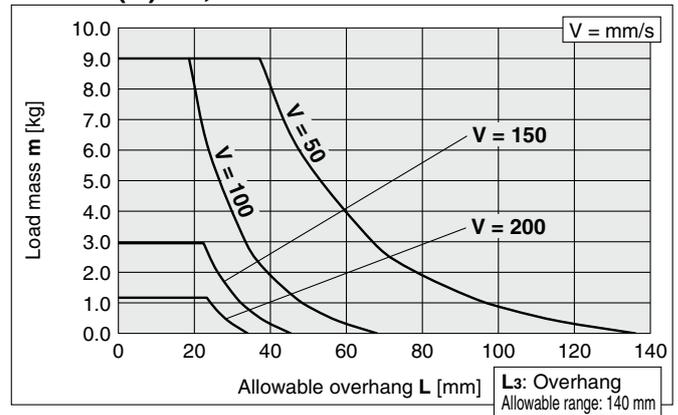
MXQ20(A)-100, 125, 150Z□



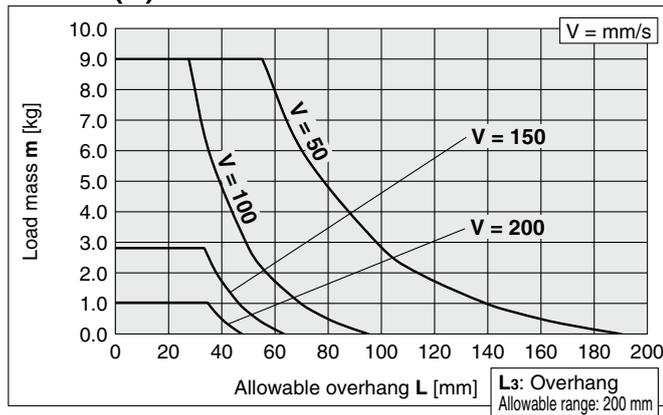
MXQ25(A)-10, 20, 30, 40Z□



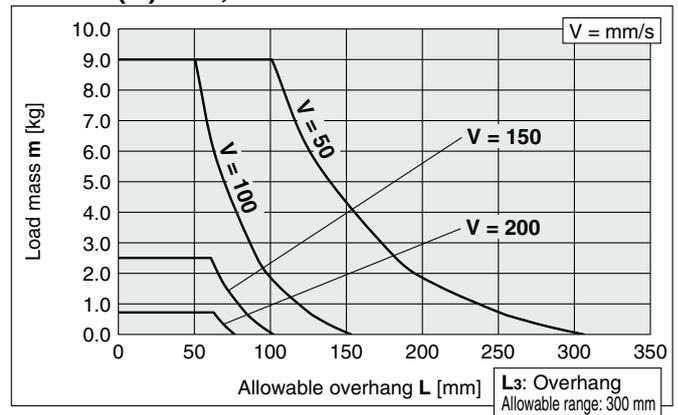
MXQ25(A)-50, 75Z□



MXQ25(A)-100Z□



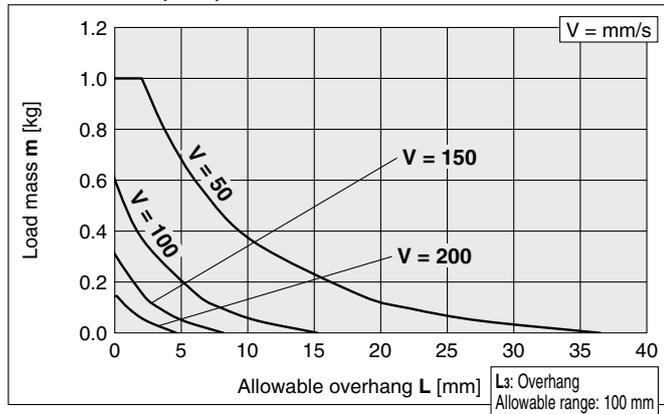
MXQ25(A)-125, 150Z□



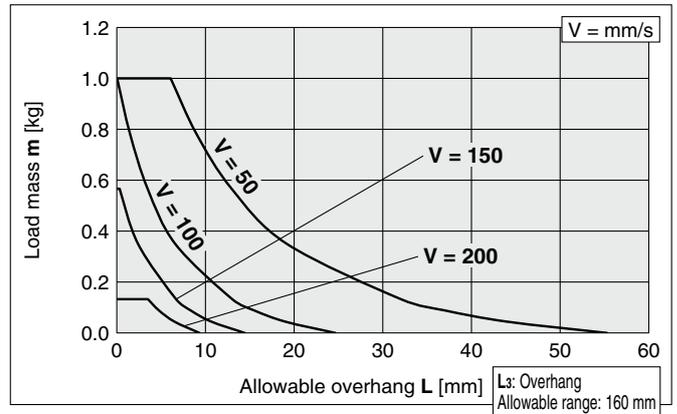
Determine the overhang. (Refer to page 158 for details.)
 L₁, L₂: Check from the cross point of the load mass and driving speed.
 L₃: Can be used within the "Allowable overhang range"
 in the selection graph if the load mass and driving
 speed values are within the allowable range

MXQ 6B-□Z□/For Transfer/Metal Stopper

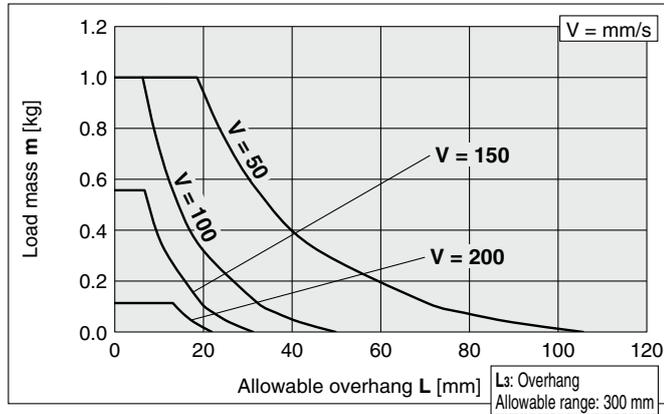
MXQ6B-10, 20, 30Z□



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

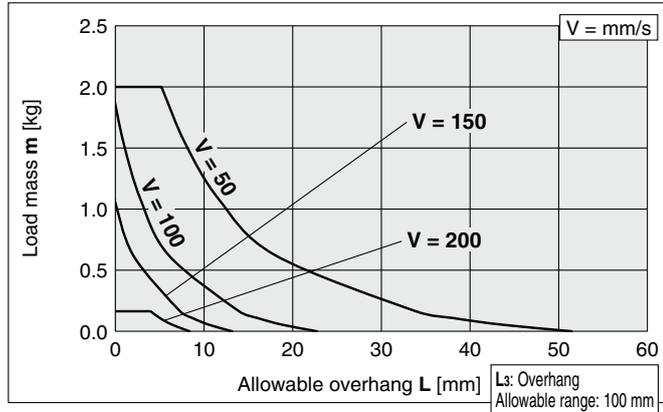
Model Selection

MXQ Series

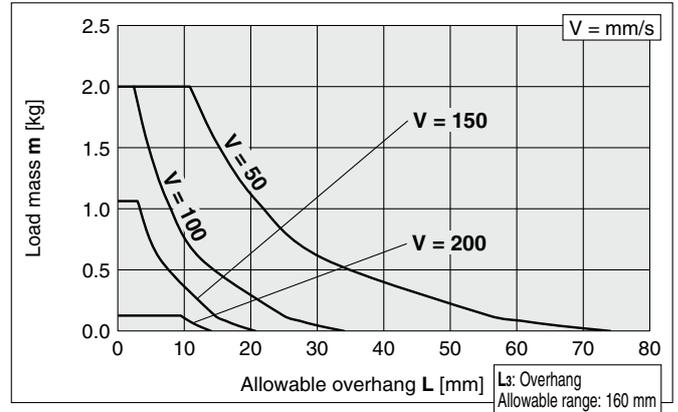
Determine the overhang. (Refer to page 158 for details.)
 L1, L2: Check from the cross point of the load mass and driving speed.
 L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

MXQ 8B-□Z□, MXQ 12B-□Z□ / For Transfer/ Metal Stopper

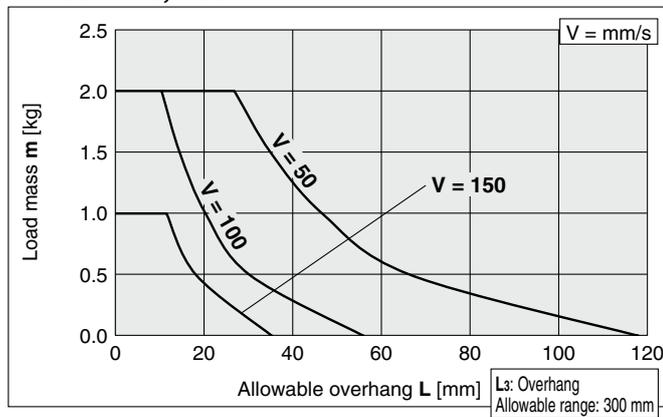
MXQ8B-10, 20, 30Z□



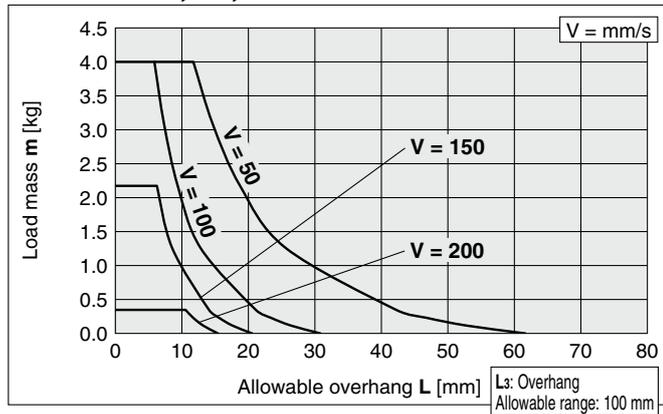
MXQ8B-40, 50Z□



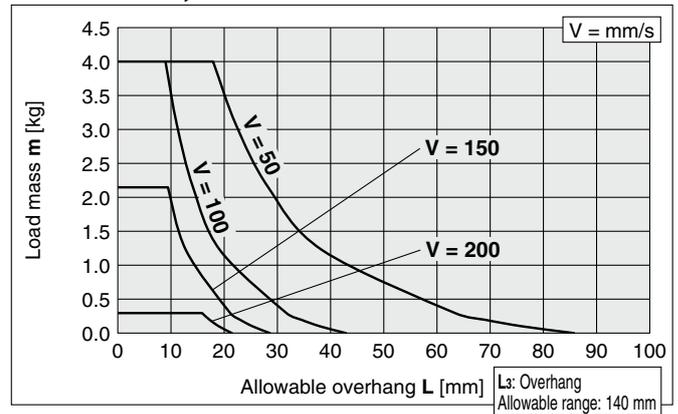
MXQ8B-75, 100Z□



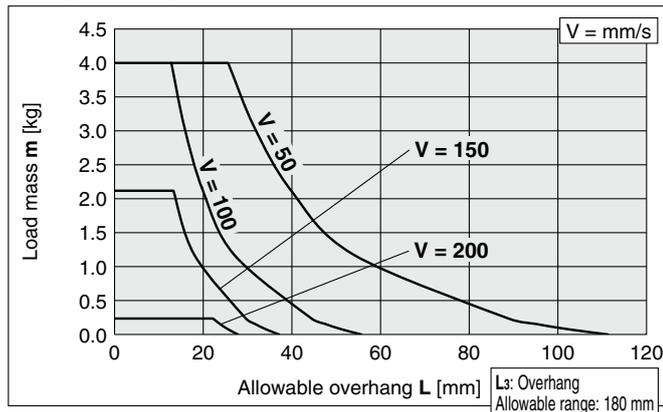
MXQ12B-10, 20, 30Z□



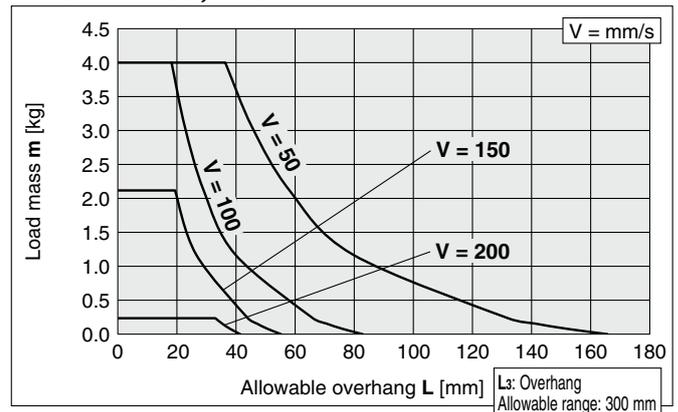
MXQ12B-40, 50Z□



MXQ12B-75Z□



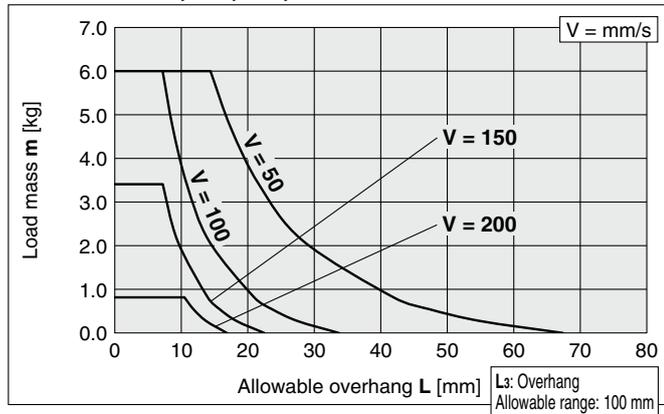
MXQ12B-100, 125Z□



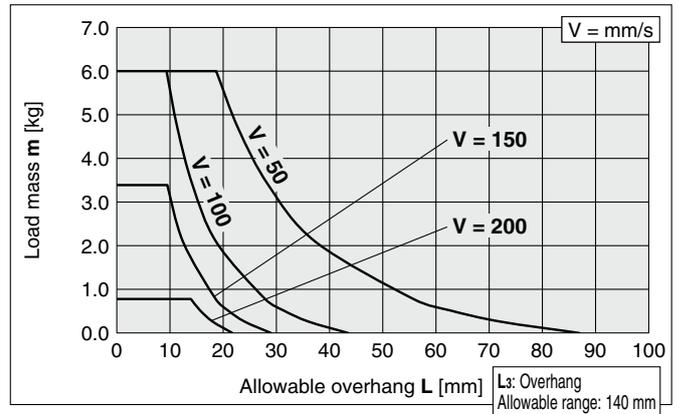
Determine the overhang. (Refer to page 158 for details.)
 L1, L2: Check from the cross point of the load mass and driving speed.
 L3: Can be used within the "Allowable overhang range"
 in the selection graph if the load mass and driving
 speed values are within the allowable range

MXQ 16B-□Z□, MXQ 20B-□Z□ / For Transfer/
 Metal Stopper

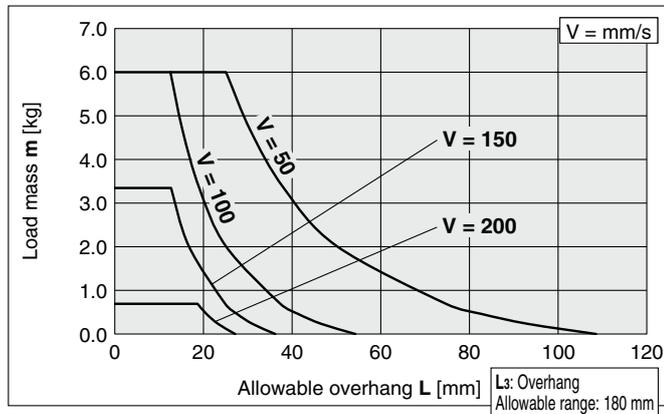
MXQ16B-10, 20, 30, 40Z□



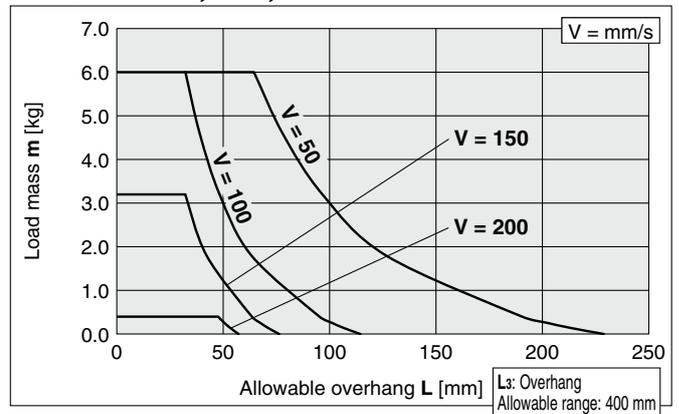
MXQ16B-50Z□



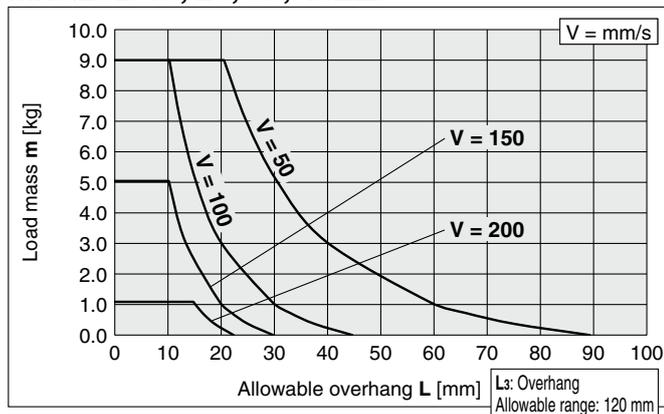
MXQ16B-75Z□



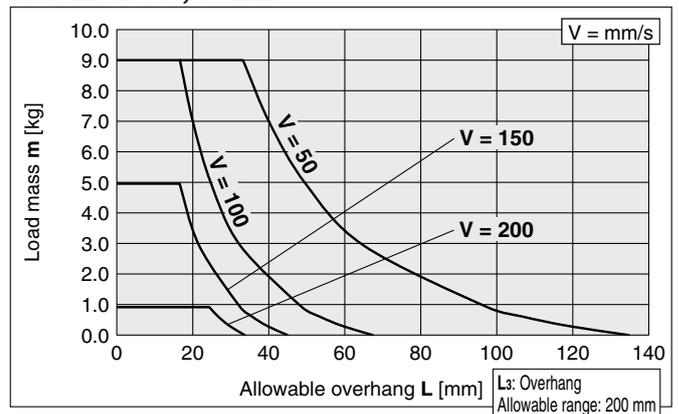
MXQ16B-100, 125, 150Z□



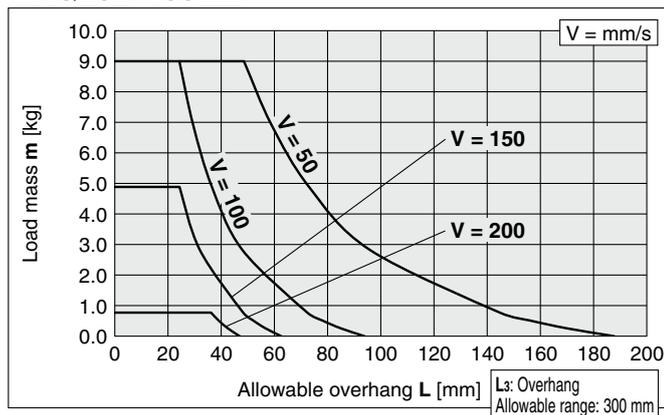
MXQ20B-10, 20, 30, 40Z□



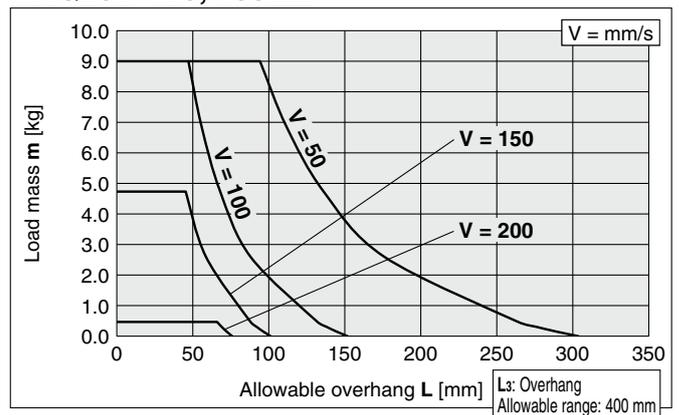
MXQ20B-50, 75Z□



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

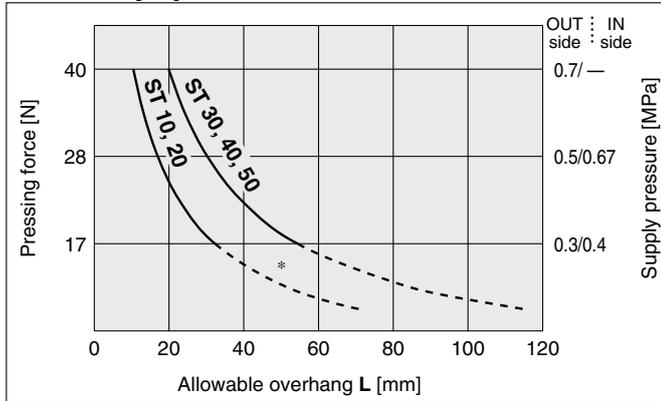
Made to Order

Model Selection

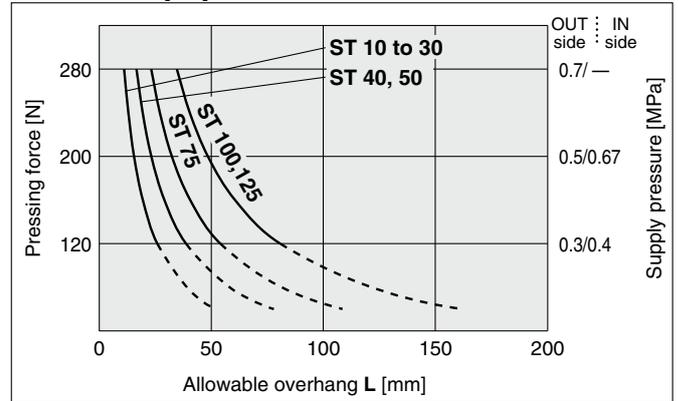
Determine the overhang. (Refer to page 159 for details.)
 L₁, L₂: Check from the cross point of the pressing force and driving speed.

Double-ported Type, Single Side-ported Type, Height Interchangeable Type/For Pressing

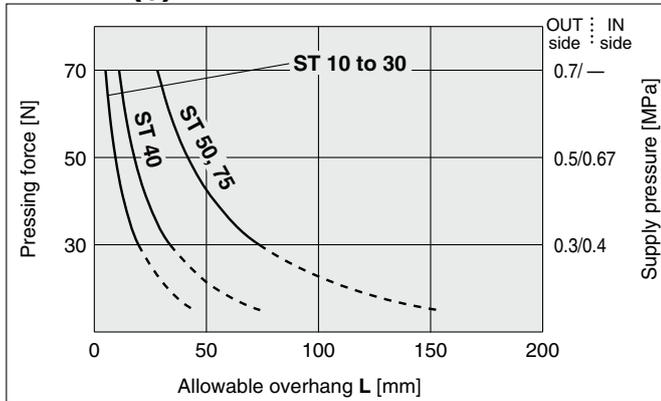
MXQ6(A)-□Z



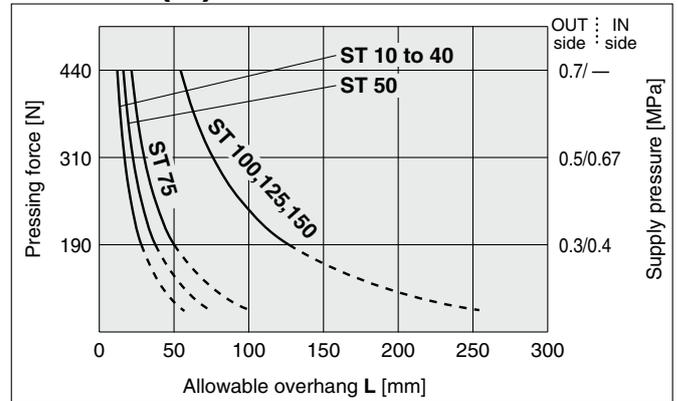
MXQ16(A)-□Z



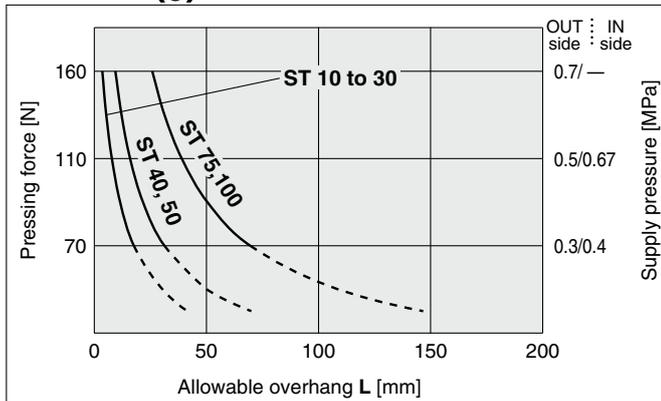
MXQ8(A)-□Z



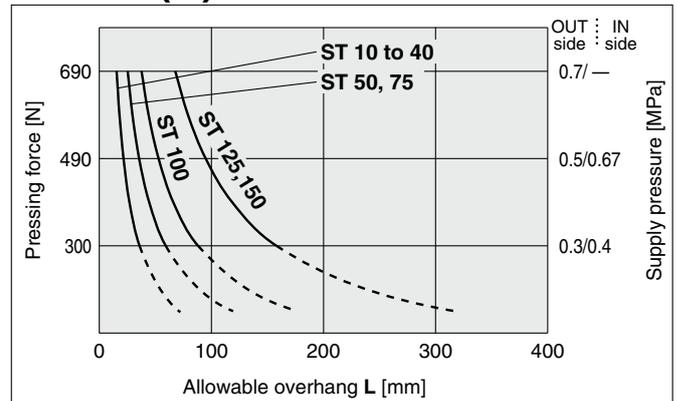
MXQ20(A)-□Z



MXQ12(A)-□Z



MXQ25(A)-□Z

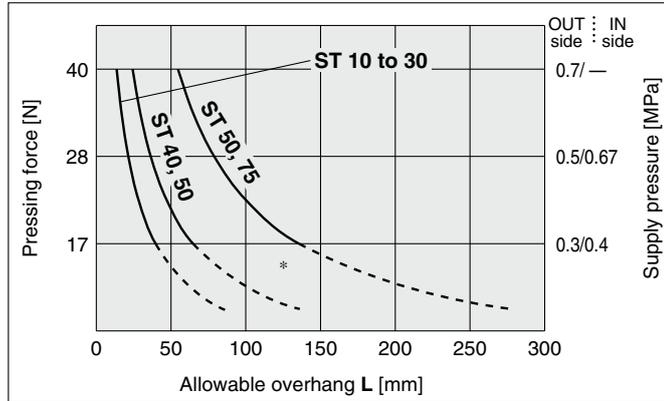


* Pressing forces that fall in the dotted line portion of the graphs are reference values as pressing forces may vary.
 * ST = Stroke

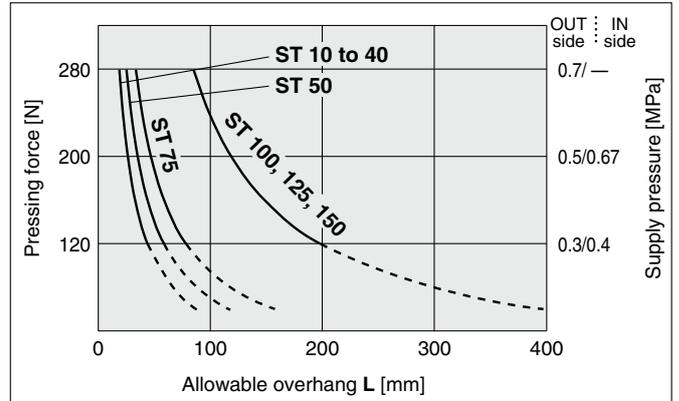
Determine the overhang. (Refer to page 159 for details.)
L₁, L₂: Check from the cross point of the pressing force and driving speed.

Low Thrust with High Rigidity Type/For Pressing

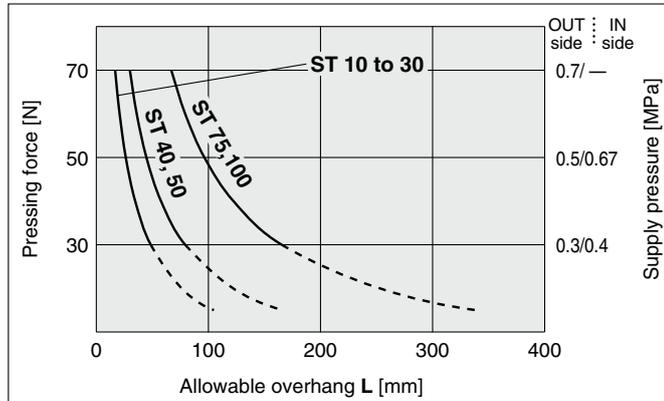
MXQ6B-□Z



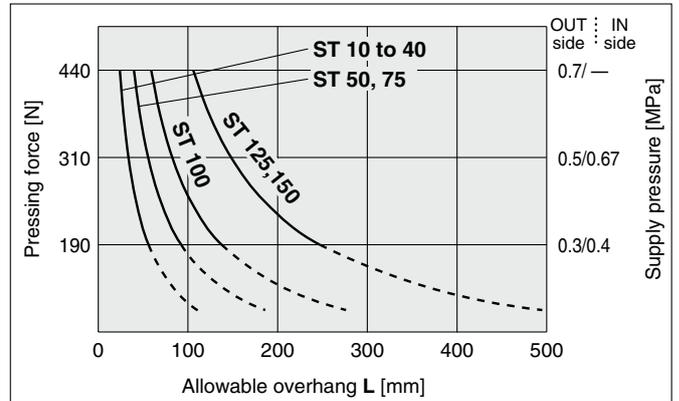
MXQ16B-□Z



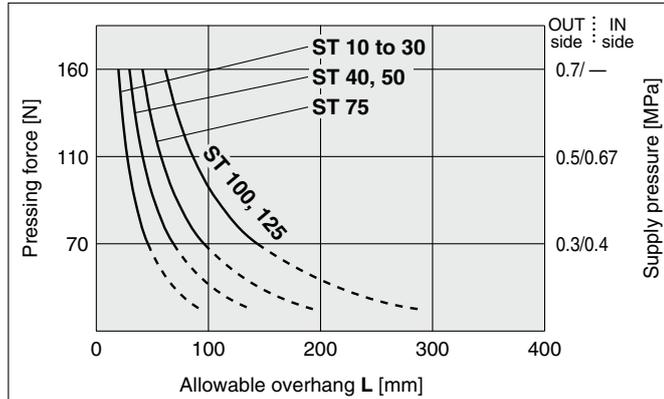
MXQ8B-□Z



MXQ20B-□Z



MXQ12B-□Z



* Pressing forces that fall in the dotted line portion of the graphs are reference values as pressing force may vary.
* 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

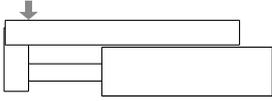
Made to Order

Model Selection

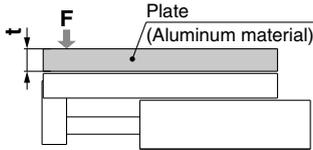
Table Deflection (Reference Values)

Table displacement due to pitch moment load

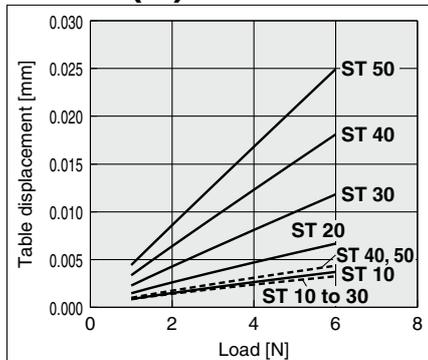
Displacement when a load is applied to the part indicated by the arrow for the entire stroke of the air slide table



The dotted line shown in the graph below shows the displacement of the portion indicated by the arrow when the plate is mounted by the customer.

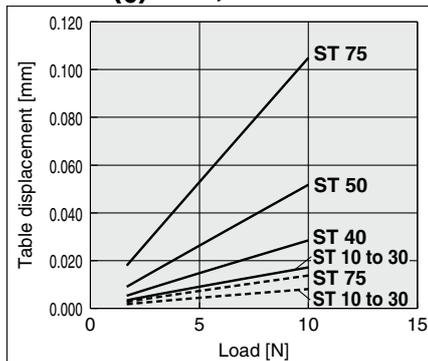


MXQ6(A)-□Z



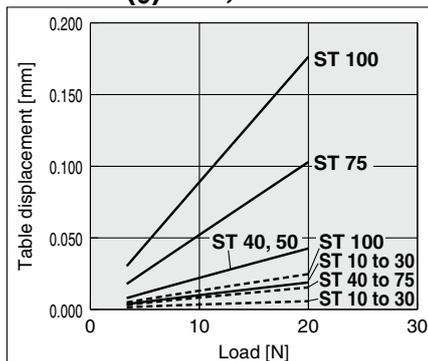
(Plate size: t = 8)

MXQ8(A)-□Z, MXQ6B-□Z



(Plate size: t = 8)

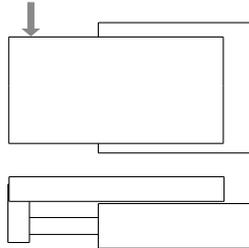
MXQ12(A)-□Z, MXQ8B-□Z



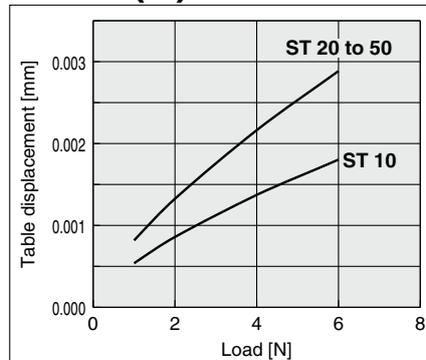
(Plate size: t = 10)

Table displacement due to yaw moment load

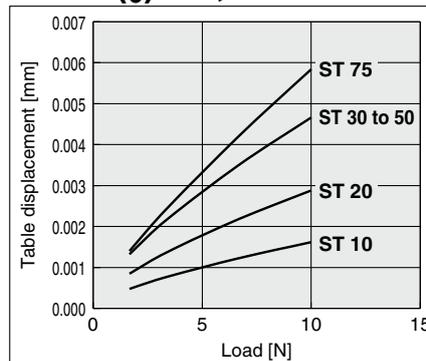
Displacement when a load is applied to the part indicated by the arrow for the entire stroke of the air slide table



MXQ6(A)-□Z



MXQ8(A)-□Z, MXQ6B-□Z



MXQ12(A)-□Z, MXQ8B-□Z

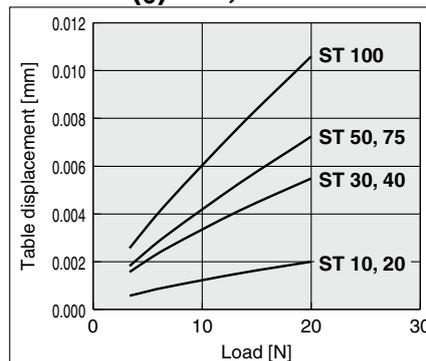
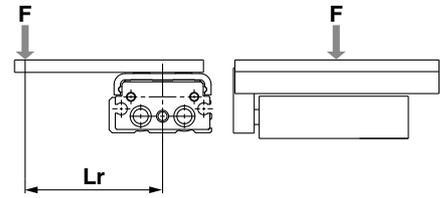


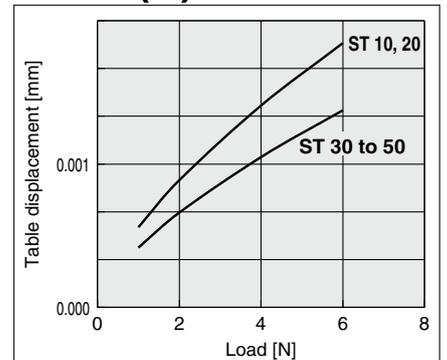
Table displacement due to roll moment load

Displacement of part F when a load is applied to part F with the air slide table retracted



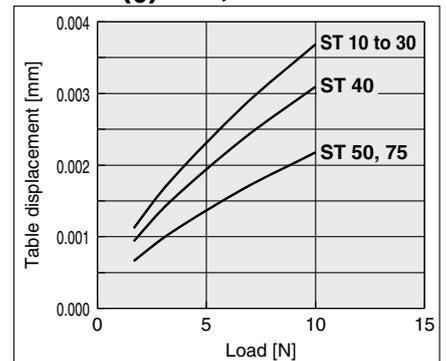
MXQ6(A)-□Z

Lr = 40 mm



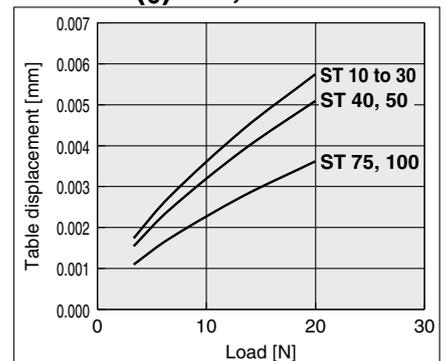
MXQ8(A)-□Z, MXQ6B-□Z

Lr = 70 mm



MXQ12(A)-□Z, MXQ8B-□Z

Lr = 90 mm

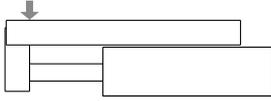


* ST = Stroke

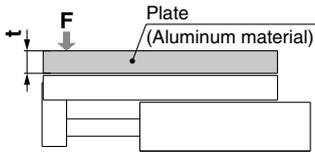
Table Deflection (Reference Values)

Table displacement due to pitch moment load

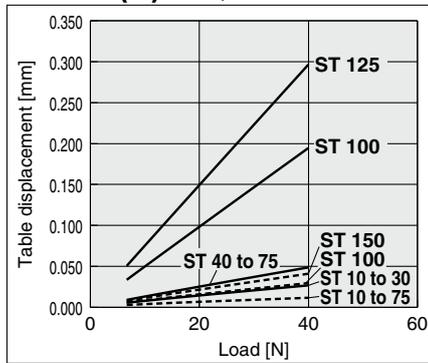
Displacement when a load is applied to the part indicated by the arrow for the entire stroke of the air slide table



The dotted line shown in the graph below shows the displacement of the portion indicated by the arrow when the plate is mounted by the customer.

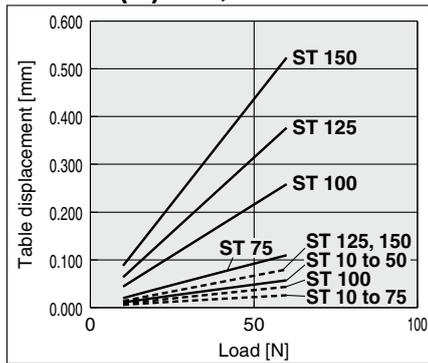


MXQ16(A)-□Z, MXQ12B-□Z



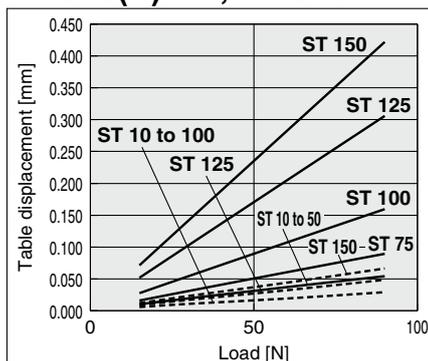
(Plate size: t = 12)

MXQ20(A)-□Z, MXQ16B-□Z



(Plate size: t = 12)

MXQ25(A)-□Z, MXQ20B-□Z

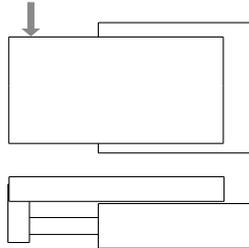


(Plate size: t = 15)

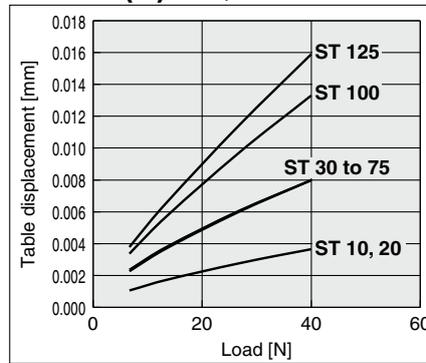
* ST = Stroke

Table displacement due to yaw moment load

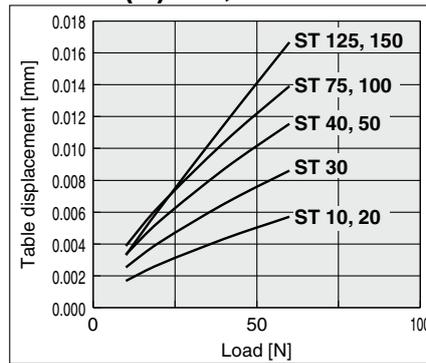
Displacement when a load is applied to the part indicated by the arrow for the entire stroke of the air slide table



MXQ16(A)-□Z, MXQ12B-□Z



MXQ20(A)-□Z, MXQ16B-□Z



MXQ25(A)-□Z, MXQ20B-□Z

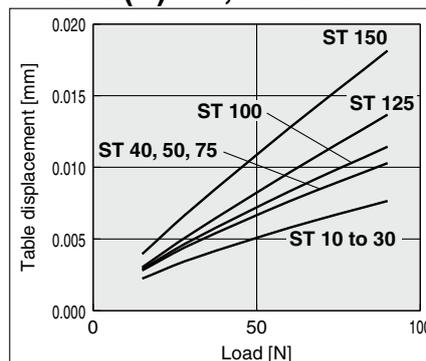
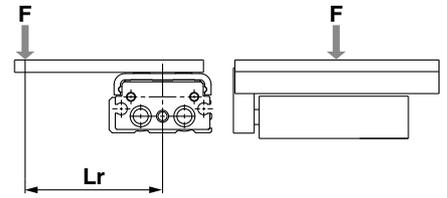
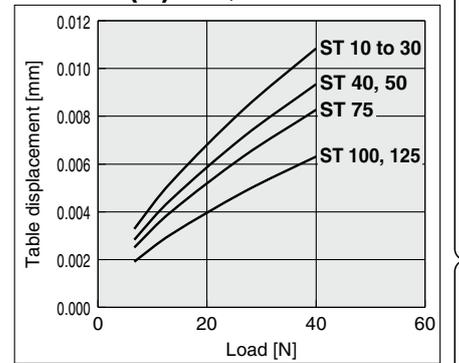


Table displacement due to roll moment load

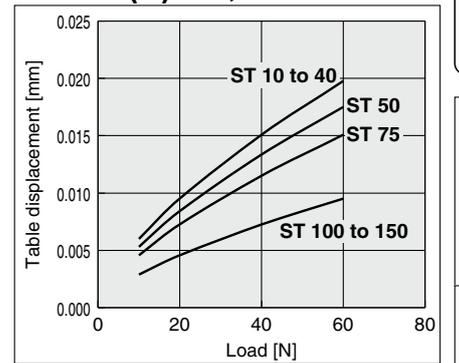
Displacement of part F when a load is applied to part F with the air slide table retracted



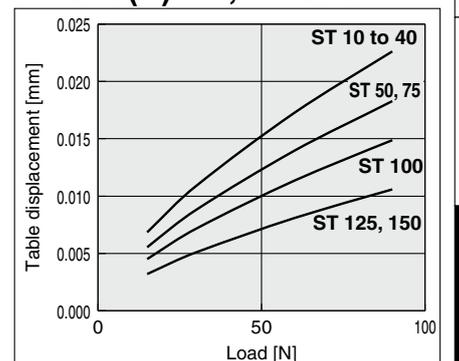
MXQ16(A)-□Z, MXQ12B-□Z



MXQ20(A)-□Z, MXQ16B-□Z



MXQ25(A)-□Z, MXQ20B-□Z



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