

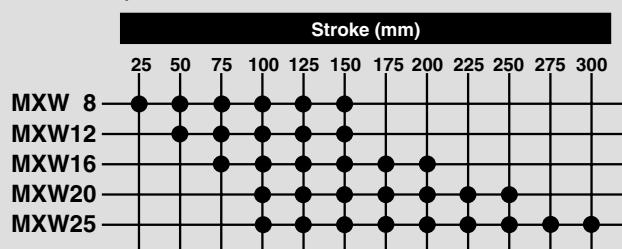
Long Stroke Slide Table. Series *MXW*

ø8, ø12, ø16, ø20, ø25

**Linear guide table provides long stroke.
Table rigidity is constant throughout entire stroke.**

Long stroke(MAX. 300mm)

Linear guide provides long stroke, and it obtains smooth operation without vibration.



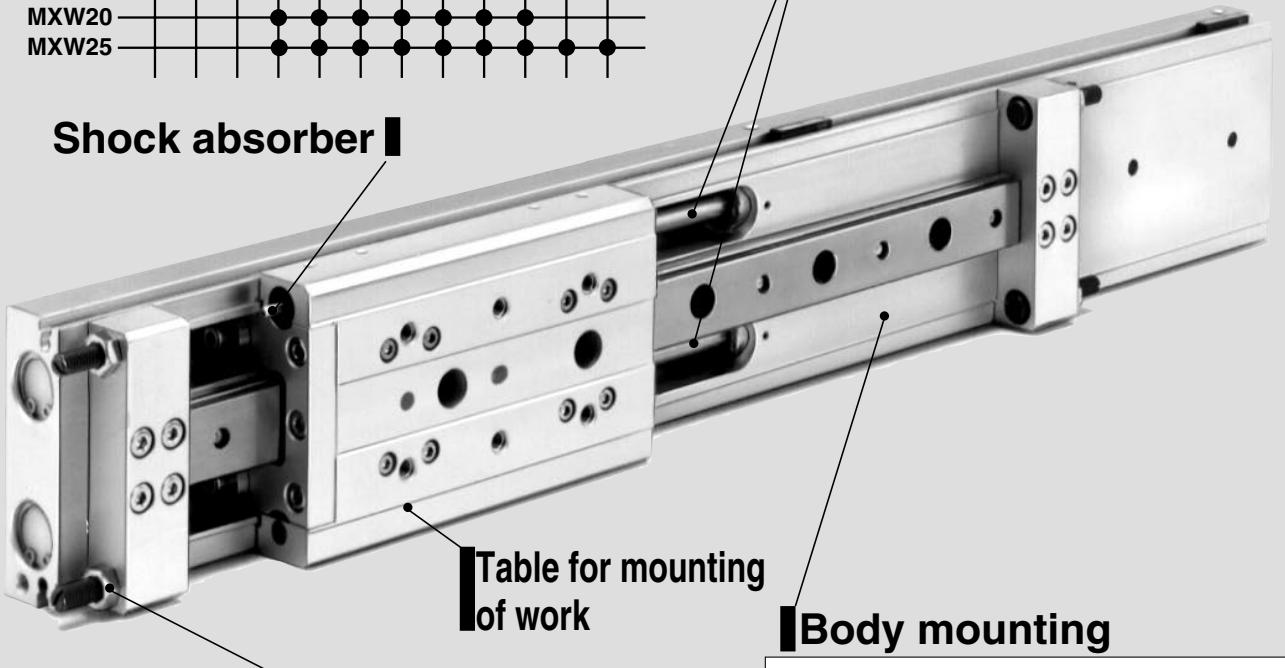
Dual rod construction

• Slim design provides 2 times the force of standard cylinder.

MXW 8: ø8 X 2 MXW20: ø20 X 2

MXW12: ø12 X 2 MXW25: ø25 X 2

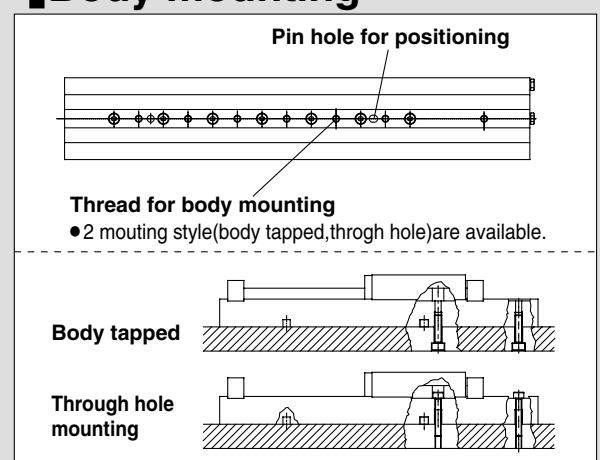
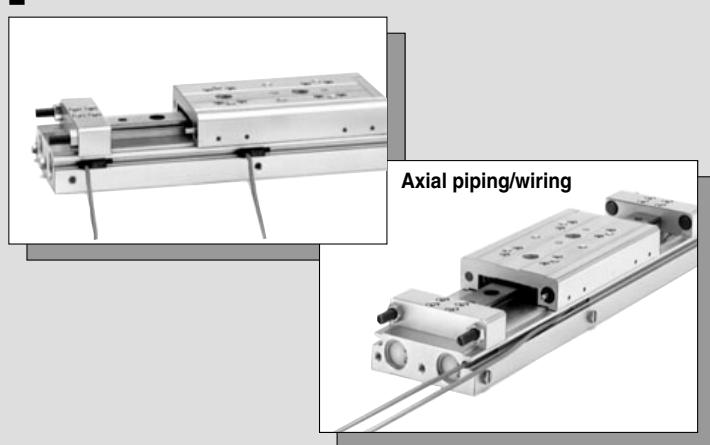
MXW16: ø16 X 2



Stroke adjuster

Piping, Wiring

- Possible to pipe from 2 directions.
- Can pipe and wire switches from the same side.
- Auto switch can be attached to either side of body.



Operation Guide Series MXW

⚠ Precautions

Selection

⚠ Caution

- ① Do not apply a load over the operating limit range.
Select the model from max. allowable load and allowable moment.
Refer to the following selection procedures for details. When actuator is used outside of operating limit, eccentric loads on the guide in excess, will cause vibration on guide, inaccuracy and shorten its life.

- ② If intermediate stops by external stopper are done, avoid ejection.
If ejection occurs, it may cause damage. In case slide table is stopped at intermediate positions by the external stopper then forwarded to the front, after slide table is returned to the back for just a moment to retract the stopper, supply pressure to the opposite port to operate slide table.
- ③ Do not apply excessive force and impact.
This will cause problems and possible failure.

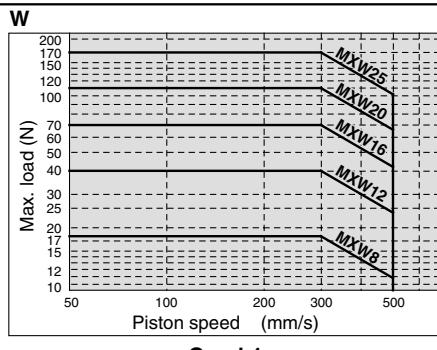
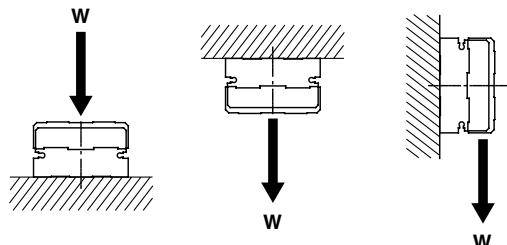
Maximum allowable load and allowable moments are different depending on work mounting orientation, cylinder mounting direction and piston speed. Select correct size MXW according to the operated limit value in the graph applicable to operating conditions.
Not to exceed total ($\sum \alpha n$) < 1

$$\sum \alpha n = \frac{\text{Load (W)}}{\text{Max. load(W max.)}} + \frac{\text{Static moment (M)}}{\text{Allowable static moment(M max.)}} + \frac{\text{Dynamic moment (Me)}}{\text{Allowable dynamic moment (Me max.)}} < 1$$

W max., M max. and Me max. values are according to graph 1,2 and 3 below.

Loads

Max. load (kg)	
Model	W
MXW 8	1.8
MXW12	4
MXW16	7
MXW20	11
MXW25	17



<Graph 1>

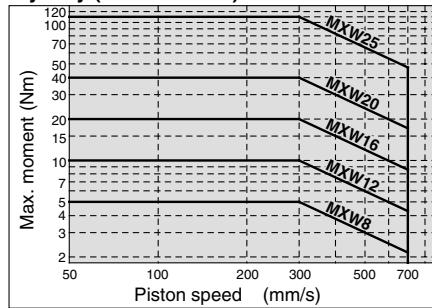
Moments

Allowable moment

(Static moment/Dynamic moment) Nm

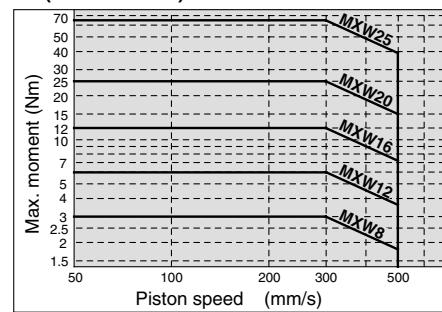
Model	Pitch moment	Yaw moment	Roll moment
	Mp/Mep	My/Mey	Mr
MXW 8	5	5	3
MXW12	10	10	6
MXW16	20	20	12
MXW20	40	40	25
MXW25	110	110	65

Mp/Mep (Pitch moment)
My/Mey (Yaw moment)



<Graph 2 >

Mr (Roll moment)

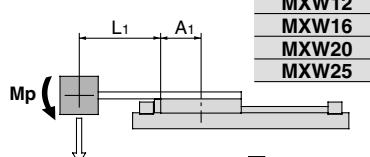


<Graph 3 >

Static moment

Moment due to work load when cylinder is at rest.

Pitch moment $M_p = W(L_1 + A)$



A1: Correction value for moment center distance (mm)

MXW 8	39
MXW12	48
MXW16	58
MXW20	75
MXW25	97

Yaw moment $My = W(L_2 + B)$

B1: Correction value for moment center distance (mm)

MXW 8	23
MXW12	29
MXW16	37
MXW20	49
MXW25	63

A2:

Correction value for moment center distance (mm)

MXW 8	10
MXW12	10
MXW16	14
MXW20	20
MXW25	28

B2:

Correction value for moment center distance (mm)

MXW 8	39
MXW12	48
MXW16	58
MXW20	75
MXW25	97

Roll moment $Mr = W(L_3 + C)$

C1: Correction value for moment center distance (mm)

MXW 8	10
MXW12	10
MXW16	14
MXW20	20
MXW25	28

C2: Correction value for moment center distance (mm)

MXW 8	23
MXW12	29
MXW16	37
MXW20	49
MXW25	63

Dynamic moment

Moment due to impact of load at end of stroke.

$$We = \delta WV$$

$$V = 1.4Va^*$$

We: Collision equivalent load (kg)
 δ : Bumper coefficient
 With urethane bumper(standard)=4/100
 With shock absorber =1/100
 W: Load (kg)
 V: Collision speed (mm/s)
 Va: Average speed (mm / s)

Pitch moment

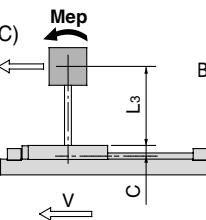
$$Mep = 1/3^* We X 9.8 (L_3 + C)$$

Average load factor*

$$We \leftarrow$$

C: Correction value for moment center distance (mm)

MXW 8	10
MXW12	10
MXW16	14
MXW20	20
MXW25	28

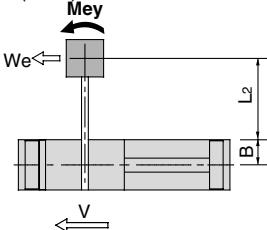


Yaw moment

$$Mey = 1/3^* We X 9.8 (L_2 + B)$$

B: Correction value for moment center distance (mm)

MXW 8	23
MXW12	29
MXW16	37
MXW20	49
MXW25	63



Calculation for Selection

For selection of a proper model, find load factors (α_n) and make sure that their sum total ($\sum \alpha_n$) does not exceed 1(one).

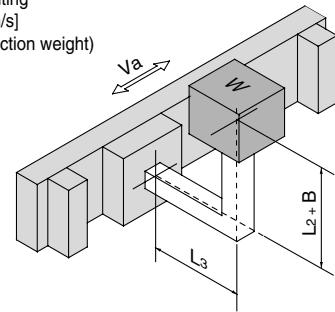
$$\Sigma \alpha_n = \alpha_1 + \alpha_2 + \alpha_3 < 1$$

Item	Load factors α_n	Note
1 Max.load	$\alpha_1 = W/W_{max}$	Examine W. W max. is maximum dynamic moment at Va.
2 Static moment	$\alpha_2 = M/M_{max}$	Examine Mp, My, and Mr. M max. is allowable moment at Va.
3 Dynamic moment	$\alpha_3 = Me/Me_{max}$	Examine Mep and Mey Me max. is allowable moment at V.

V: Collision speed Va: Average speed

<Operating conditions>

Cylinder: MXW16
 Cushion: Standard (Urethane bumper)
 Mounting: Horizontal wall mounting
 Speed (Average): Va=300 [mm/s]
 Load: W=1 [kg] (Except arm section weight)
 L3=50 [mm]
 L2=50 [mm]



Item	Load factors α_n	Note
1 Max.load		$\alpha_1 = W/W_{max}$ $= 1/7$ $= 0.14$ Examine W. W: W max.value is from <Graph 1> at Va=300mm/s
2 Static moment		$Mr = W X 9.8 (L_3 + C)$ $= 1 X 9.8 (0.05 + 0.014)$ $= 0.63 [\text{Nm}]$ $\alpha_2 = Mr/Mr_{max}$ $= 0.63/12$ $= 0.053$ Examine Mr. (Mp, My values do not apply to this example.) Mr: Mr max.value is from <Graph 3> at Va=300mm/s
3 Dynamic moment		$Mey = 1/3 We X 9.8 (L_2 + B)$ $V = 1.4Va$ $We = \delta W V$ $= 4/100 1 1.4 300$ $= 168[\text{Kg}]$ $\therefore Mey = 1/3 168 X 9.8 (0.05 + 0.037)$ $= 4.8 [\text{Nm}]$ $\alpha_3 = Mey/Mey_{max}$ $= 4.8/14.3$ $= 0.34$ Examine Mey. Mey: Calculate We for impact condition $\delta=4/100$ (With urethane bumper) Mey max. value is from <Graph 2> at V=1.4Va=420mm/s
		$Mep = 1/3 We(L_3 + C)$ $= 1/3 16.8 X 9.8 (0.05 + 0.014)$ $= 3.5 [\text{Nm}]$ $\alpha_3 = Mep/Mep_{max}$ $= 3.5/14.3$ $= 0.24$ Examine Mep. Mep: From above formula We=168 Mep max. value is from <Graph 2> at V=1.4Va=420mm/s

$$\Sigma \alpha_n = \alpha_1 + \alpha_2 + \alpha_3 + \alpha_4$$

$$= 0.14 + 0.053 + 0.34 + 0.24$$

$$= 0.773$$

$\Sigma \alpha_n = 0.773 < 1$, Application is approved.

Operation Guide Series MXW

⚠ Precautions

Mounting

⚠ Caution

- ① **Do not apply scratches and dents on mounting side of body and table (guide table).**

The damage will result in a decrease in parallelism, vibration of guide and an increase in moving part resistance.

- ② **Do not scratch or dent forward side of body and table (guide table).**

This causes vibration and increase of moving part resistance.

- ③ **Keep away from objects which are influenced by magnets.**

A magnet is built-in side of guide block for use near and with the auto switch, so do not use near a magnetic disk, magnetic card, magnetic tape. Data will be eliminated.

- ④ **When mounting an air slide table, use appropriate length of screw and do not exceed the maximum tightening torque.**

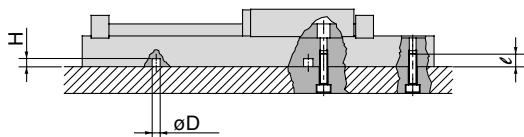
If tightening the screw beyond the designated value, it may cause malfunction. If tightening insufficiently, it may result in position sliding or fall of air slide table.

Long stroke slide table mounting

The air slide table can be mounted from 2 directions.

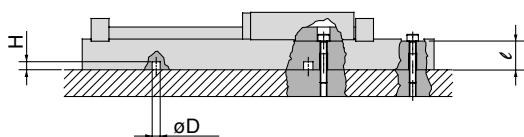
Select the best direction according to application requirement.

1. Body tapped



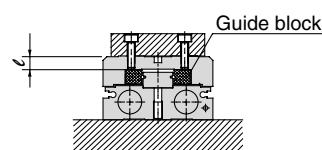
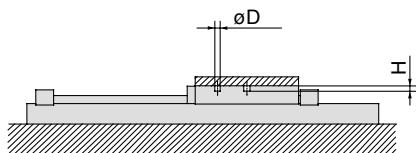
Model	Bolt used	Max. torque Nm	Max. screw-in depth(ε mm)	Location pin hole øD X H (mm)
MXW 8	M4	2.1	8	ø5H9 ^{+0.03} depth4.5
MXW12	M5	4.4	10	ø5H9 ^{+0.03} depth4.5
MXW16	M6	7.4	12	ø6H9 ^{+0.03} depth5.5
MXW20	M6	7.4	12	ø6H9 ^{+0.03} depth5.5
MXW25	M8	18	16	ø8H9 ^{+0.036} depth9

2. Through hole mounting



Model	Bolt used	Max. torque Nm	Depth(ε mm)	Location pin hole øD X H (mm)
MXW 8	M3	1.2	14.8	ø5H9 ^{+0.03} depth4.5
MXW12	M4	2.1	19.2	ø5H9 ^{+0.03} depth4.5
MXW16	M5	4.4	21.5	ø6H9 ^{+0.03} depth5.5
MXW20	M5	4.4	30.5	ø6H9 ^{+0.03} depth5.5
MXW25	M6	7.4	36	ø8H9 ^{+0.036} depth9

Work mounting



⚠ Caution

- ⑤ **To prevent the bolts for securing the workpiece from coming in contact with the guide block, use bolts that are shorter than the maximum screw-in depth by 0.5mm or more.**

If the bolts are too long, they come in contact with the guide block, which could lead to a malfunction.

Model	Bolt used	Max. torque Nm	Max. screw-in depth(ε mm)	Location pin hole øD X H (mm)
MXW 8	M4	2.1	6	ø5H9 ^{+0.03} depth4.5
MXW12	M4	2.1	6	ø5H9 ^{+0.03} depth4.5
MXW16	M5	4.4	9	ø6H9 ^{+0.03} depth5.5
MXW20	M5	4.4	13	ø6H9 ^{+0.03} depth5.5
MXW25	M6	7.4	18.5	ø8H9 ^{+0.036} depth9

- ⑥ **Flatness of mounting surface should be less than 0.02mm.**

Insufficient flatness of workpiece or base to which Air Slide Table is mounted can generate play in guide section or increase of sliding resistance.

⚠ Caution

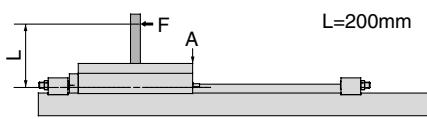
- ① **The positioning hole on the table and the positioning hole at the bottom of the body does not have the same center.**

Use these holes during reinstallation after the table has been removed for the maintenance of an identical product.

Table Deflection

Table deflection by pitch moment

Deflection on A when the load is applied at F.



MXW8, MXW12, MXW16

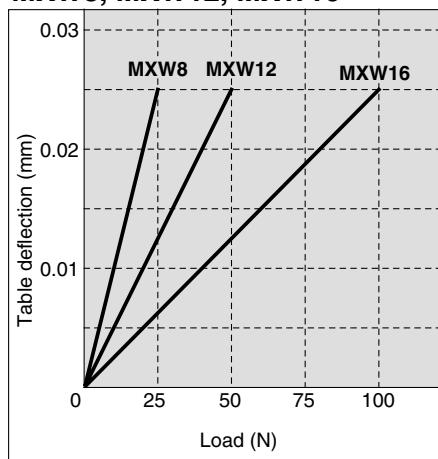
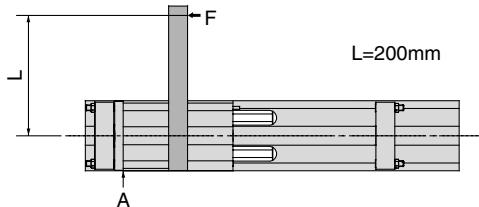


Table deflection by yaw moment

Deflection on A when the load is applied at F.



MXW8, MXW12, MXW16

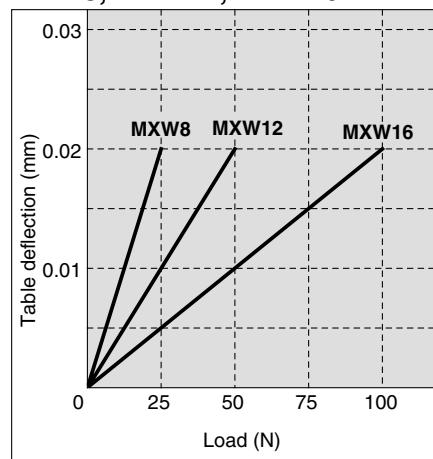
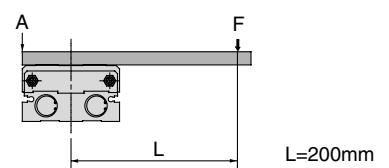
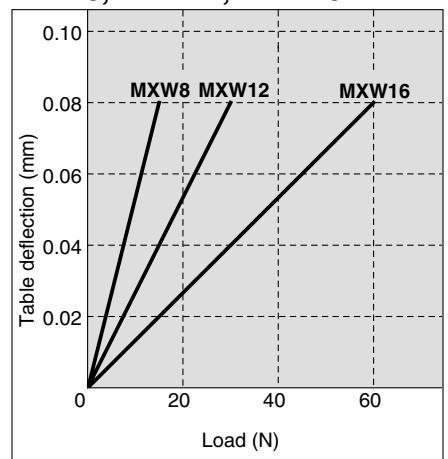


Table deflection by roll moment

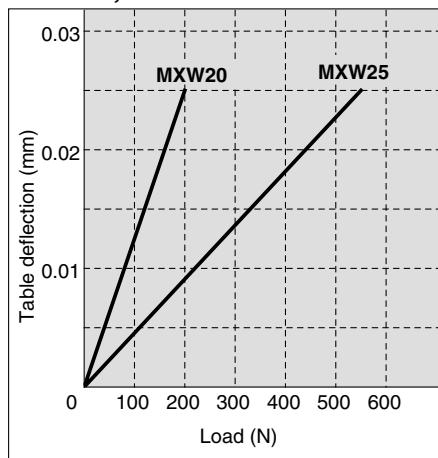
Deflection on A when the load is applied at F.



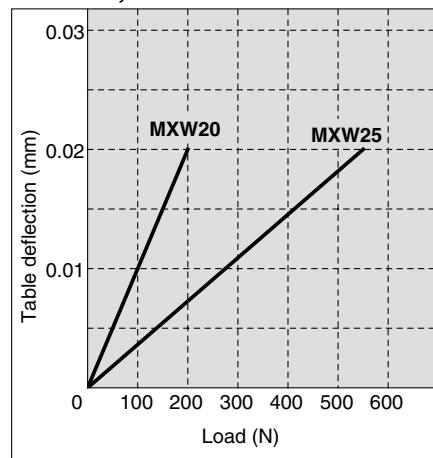
MXW8, MXW12, MXW16



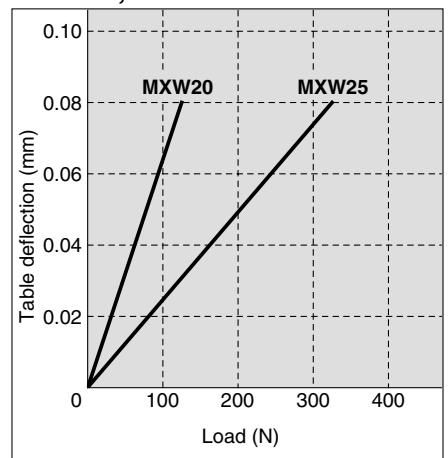
MXW20, MXW25



MXW20, MXW25

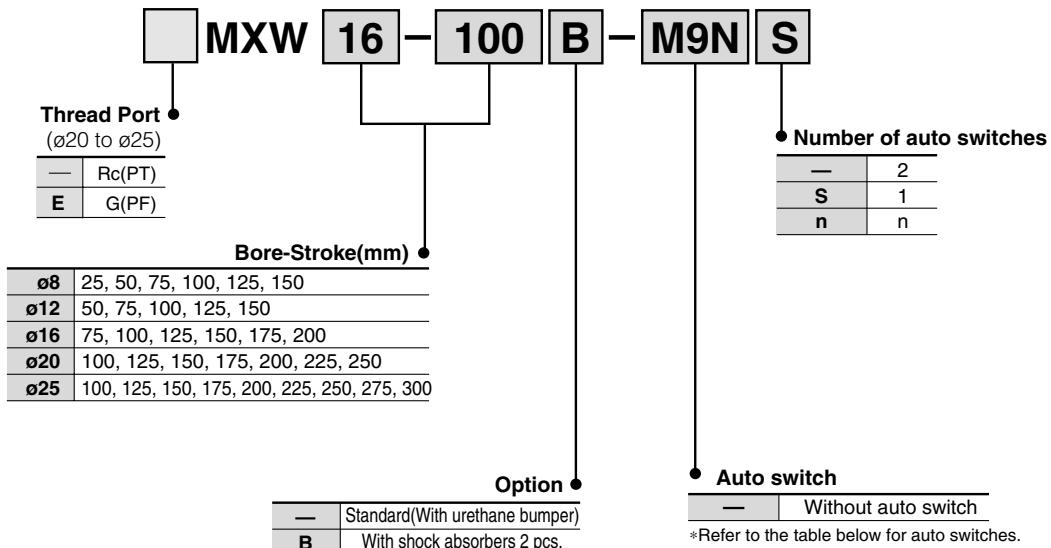


MXW20, MXW25



Long Stroke Slide Table Series ***MXW***

How to Order



Applicable auto switches

Style	Special function	Electrical entry	Indicator	Wiring(output)	Load voltage		Auto switch model		Lead wire (m)*		Applicable load			
					DC	AC	Electrical entry		—	3 (L)				
							Perpendicular	In-line						
Reed switch	—	Grommet	No	2 wire	24V	5V, 12V	≤100V	A90V	A90	●	●	IC	PLC	
			Yes	3 wire(Equiv. to NPN)	—	5V	—	A93V	A93	●	●			
Solid state switch	—	Grommet	Yes	3 wire(NPN)	24V	12V	—	M9NV	M9N	●	●	—	PLC	
				3 wire(PNP)				M9PV	M9P	●	●			
				2 wire				M9BV	M9B	●	●			
				3 wire(NPN)				M9NWV	M9NW	●	●			
				3 wire(PNP)				M9PWV	M9PW	●	●			
				2 wire				M9BWV	M9BW	●	●			
			Diagnosis indication (2 colour)	—	—	—	—	—	—	—	—	—	—	



*Lead wire length 0.5m.....—" (Example) A93
3m.....—"L" A93L

PLC: Programmable Logic Controller

Long Stroke Slide Table Series MXW

Specifications



Model	MXW8	MXW12	MXW16	MXW20	MXW25
Bore size(mm)	ø8 X 2 (ø 11 or its equivalent)	ø12 X 2 (ø 17 or its equivalent)	ø16 X 2 (ø 23 or its equivalent)	ø20 X 2 (ø 28 or its equivalent)	ø25 X 2 (ø 35 or its equivalent)
Port size	M5				1/8
Fluid	Air				
Action	Double acting				
Operating pressure	0.15 to 0.7MPa				
Proof pressure	1.05MPa				
Ambient and fluid temperature	−10 to +60°C				
Operating speed range	50 to 500mm/s				
Cushion	Both ends urethane bumper (standard) Both ends shock absorber (option)				
Lubrication	Non-lube				
Auto switch (Option)	Reed switch Solid state switch (2 wire, 3 wire) 2 colour indication solid state switch (2 wire, 3 wire)				
Stroke tolerance	+1 0 mm				
Stroke adjustment range	One side: 5mm (Both sides: 10mm)				

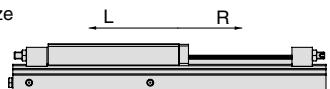
<Direction of operation>

When viewed from size

with lateral ports.

E: Cylinder extend

R: Cylinder retract



Theoretical Force(Unit: N)

Dual rod cylinder produces double the thrust of standard cylinder.

Cylinder I.D. (mm)	Rod dia. (mm)	Operating direction	Piston area (mm ²)	Operating pressure(MPa)						
				0.2	0.3	0.4	0.5	0.6	0.7	
8	4	R	101	20	30	40	51	61	71	
		L	75	15	23	30	38	45	53	
12	6	R	226	45	68	90	113	136	158	
		L	170	34	51	68	85	102	119	
16	8	R	402	80	121	161	201	241	281	
		L	302	60	91	121	151	181	211	
20	10	R	628	126	188	251	314	377	440	
		L	471	94	141	188	236	283	330	
25	12	R	982	196	295	393	491	589	687	
		L	756	151	227	302	378	454	529	

Note)Theoretical force (N)=Pressure(MPa) X Piston area(mm²)

Standard Stroke(mm)/Weight(g)

Model	Standard stroke(mm)											
	25	50	75	100	125	150	175	200	225	250	275	300
MXW 8	550	610	700	790	880	980	—	—	—	—	—	—
MXW12	—	930	1010	1140	1270	1400	—	—	—	—	—	—
MXW16	—	—	1850	1970	2150	2350	2540	2740	—	—	—	—
MXW20	—	—	—	4440	4640	5000	5360	5710	6070	6430	—	—
MXW25	—	—	—	9300	9620	9970	10500	11100	11700	12200	12800	13400

Series MXW

Optional Specification

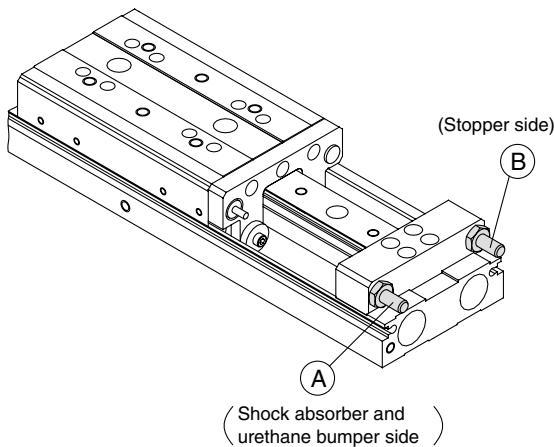
Stroke Adjuster Assembly

Adjuster assembly can be changed in the following manner.

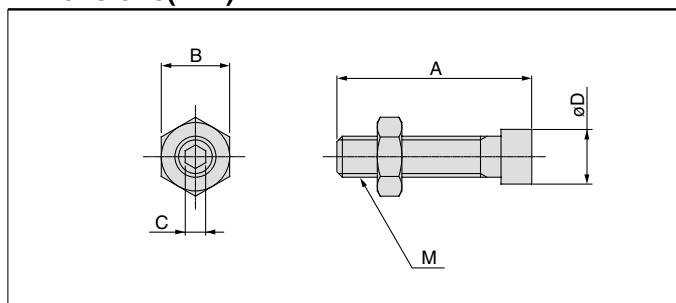
Change of adjuster assembly		Qty needed		Parts Changed
		Standard	Option (-X11)	
Change stroke adjustment range from 5mm to 15mm for one side	W/o shock absorber	—	2	Change(A)
	W/ shock absorber	—	4	Change(A) + (B)
Change to be with shock absorber		2	—	Add(B)
Change to be with shock absorber and stroke adjustment range from 5mm to 15mm		—	4	Change(A) + Add(B)

Note 1) When only one side of stroke is changed, the quantity needed is half of the above.

Note 2) Shock absorber must be ordered separately.



Dimensions(mm)



Applicable size	Model	Adjustment range (mm)	A	B	C	D	M
MXW 8	MXW-A812	5	21	8	2.5	6	M5
	MXW-A812-X11	15	31				
MXW12	MXW-A1212	5	23.5	8	2.5	6	M5
	MXW-A1212-X11	15	33.5				
MXW16	MXW-A1612	5	28.5	10	3	8	M6
	MXW-A1612-X11	15	38.5				
MXW20	MXW-A2012	5	34.5	13	4	10	M8
	MXW-A2012-X11	15	44.5				
MXW25	MXW-A2512	5	40	17	5	14	M10
	MXW-A2512-X11	15	50				

How to Order

MXW - A 16 12 - X11

Applicable bore size

8	ø8
12	ø12
16	ø16
20	ø20
25	ø25

Adjustment range

—	5mm	Standard
X11	15mm	Option

Note 1) The above model number is one adjuster bolt assembly only.

Note 2) The air slide table already assembled with -X11 adjuster bolt assembly is not available.

Precautions

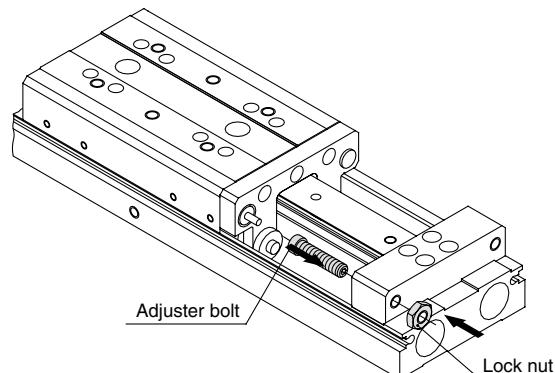
Mounting/Adjusting

Caution

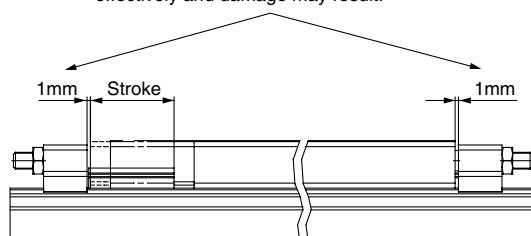
- ① Do not operate below 1mm, because the effectiveness of the shock absorber and urethane damper will not be brought into full play, and could be adversely affected.

Mounting

- Thread in the adjuster bolt from the direction of the arrow.
- Fasten the lock nut from the direction of the arrow.



Avoid use with adjustment less than 1mm.
Shock absorber or urethane bumper may not operate effectively and damage may result.



Long Stroke Slide Table Series MXW

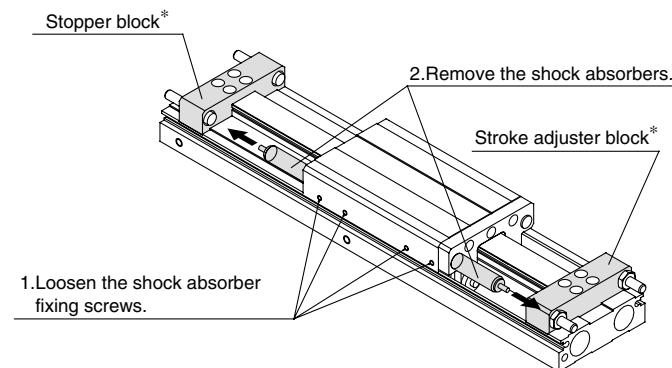
Shock Absorber

Specifications

Shock absorber model	RB0805-X552	RB0806-X552	RB1007-X552	RB1412-X552	RB2015-X552
Suitable slide table	MXW8	MXW12	MXW16	MXW20	MXW25
Max. absorbing energy J	0.98	2.94	5.88	19.6	58.8
Absorbing stroke(mm)	5	6	7	12	15
Max. collision speed(m/sec)			0.05 to 5		
Max. operating freq(cycle/min)	80	80	70	45	25
Max. allowable thrust N	245	245	422	814	1961
Ambient temperature range(°C)			-10 to 80		
Spring force N	Expanded	1.96	1.96	4.22	6.86
	Compressed	3.83	4.22	6.86	15.98
Weight (g)	15	15	25	65	150

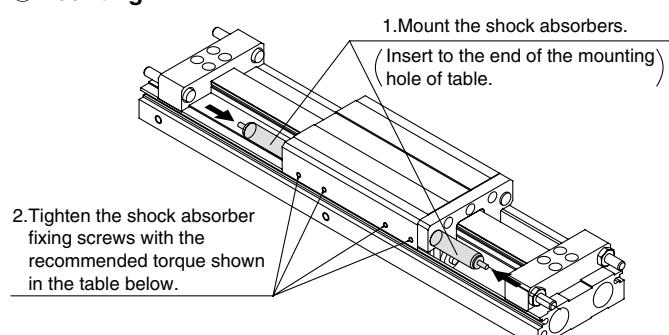
How to Change Shock Absorber

① Removable



*In case of MXW8-25, first take out the adjuster block, and then the shock absorber.
Tighten the mounting bolt with the torque 0.3Nm when assembling the adjuster block.

② Mounting



Torque

Model	Fixing thread size	Torque (Nm)	Width across flats
MXW 8	M3 X 4	0.6	1.5
MXW12	M3 X 4	0.6	1.5
MXW16	M3 X 4	0.6	1.5
MXW20	M4 X 5	0.8	2
MXW25	M5 X 6	1	2.5

⚠ Precautions

Adjusting

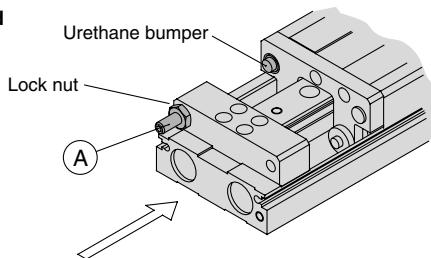
⚠ Caution

- ① Do not operate with the stopper blocks and the stopper bolts on both sides removed.

Doing so could create shocks, which could loosen and cause damage.

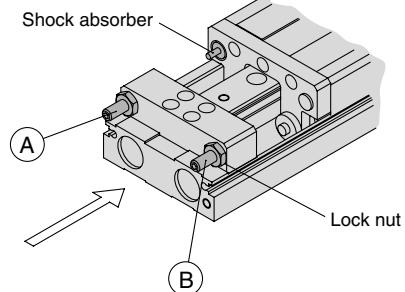
Stroke adjustment

1. Standard



Loosen the adjuster bolt lock nut on side (A), insert a wrench in the direction of the arrow to adjust the stroke, and then tighten the lock nut.

2. With shock absorber(option)



Stroke adjustment

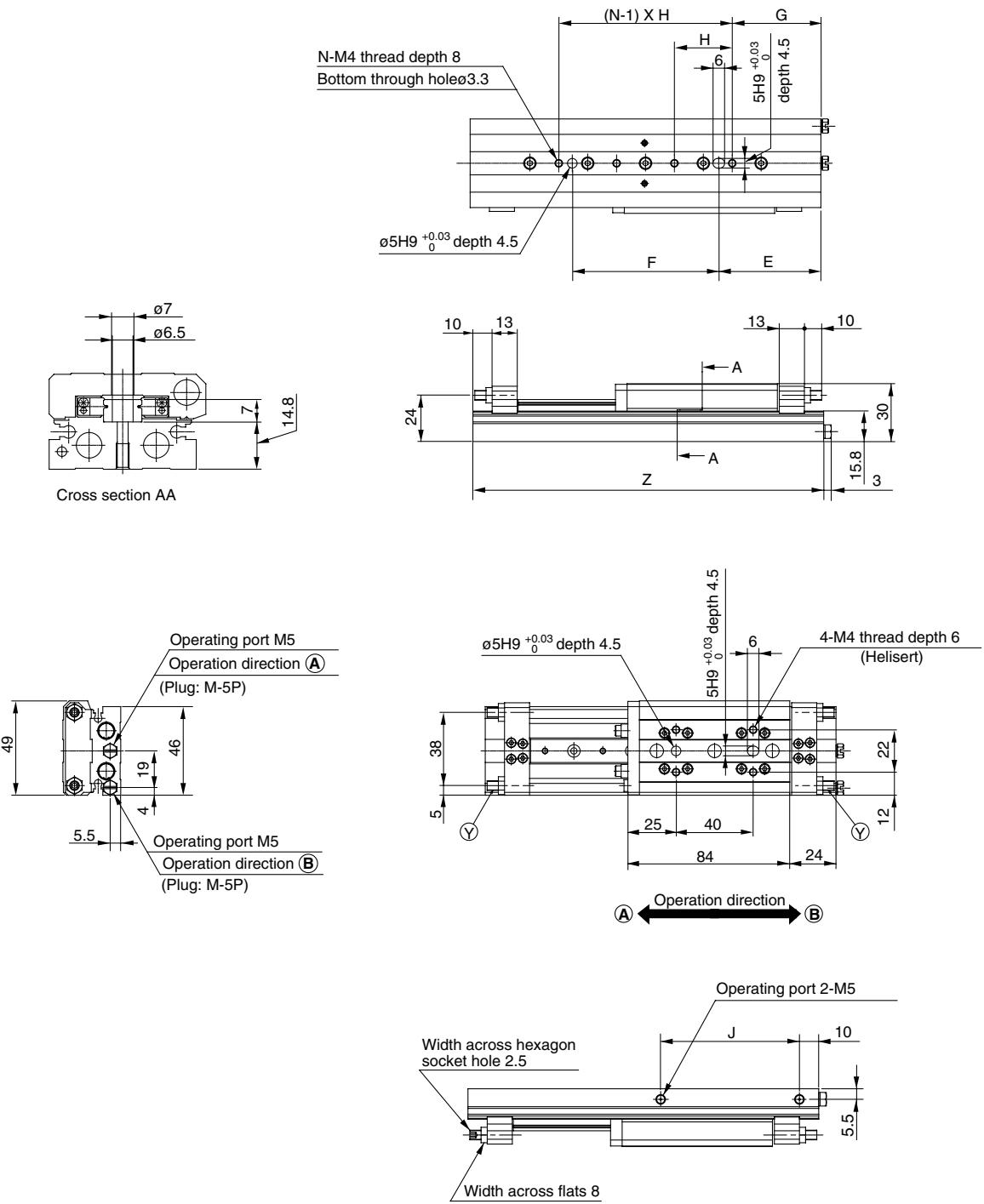
- Loosen the adjuster bolt lock nut on side (B), insert a wrench in the direction of the arrow to adjust the stroke, and then tighten the lock nut.

Absorption stroke adjustment for shock absorber

- Loosen the adjuster bolt lock nut on side (A), insert a wrench in the direction of the arrow to adjust the stroke, and then tighten the lock nut.

Series MXW

MXW 8/Stroke: 25, 50mm

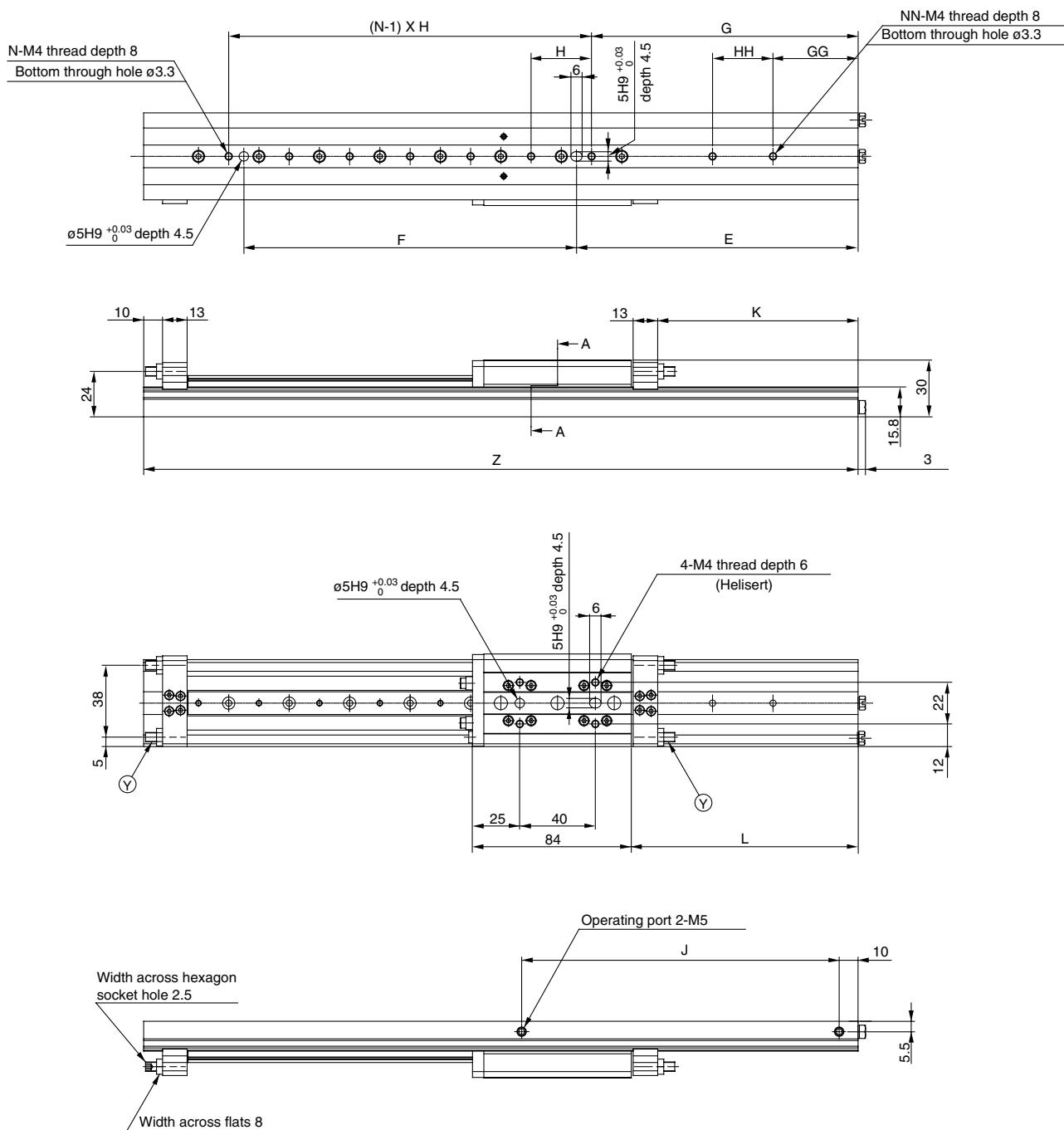


Model	E	F	G	H	J	N	Z
MXW-25	55	48	47	32	64	3	157
MXW-50	53	76	46	30	71	4	182

Note) Adjuster bolt (Y) shown in the section above is attached only on B type (with shock absorber).

Long Stroke Slide Table Series MXW

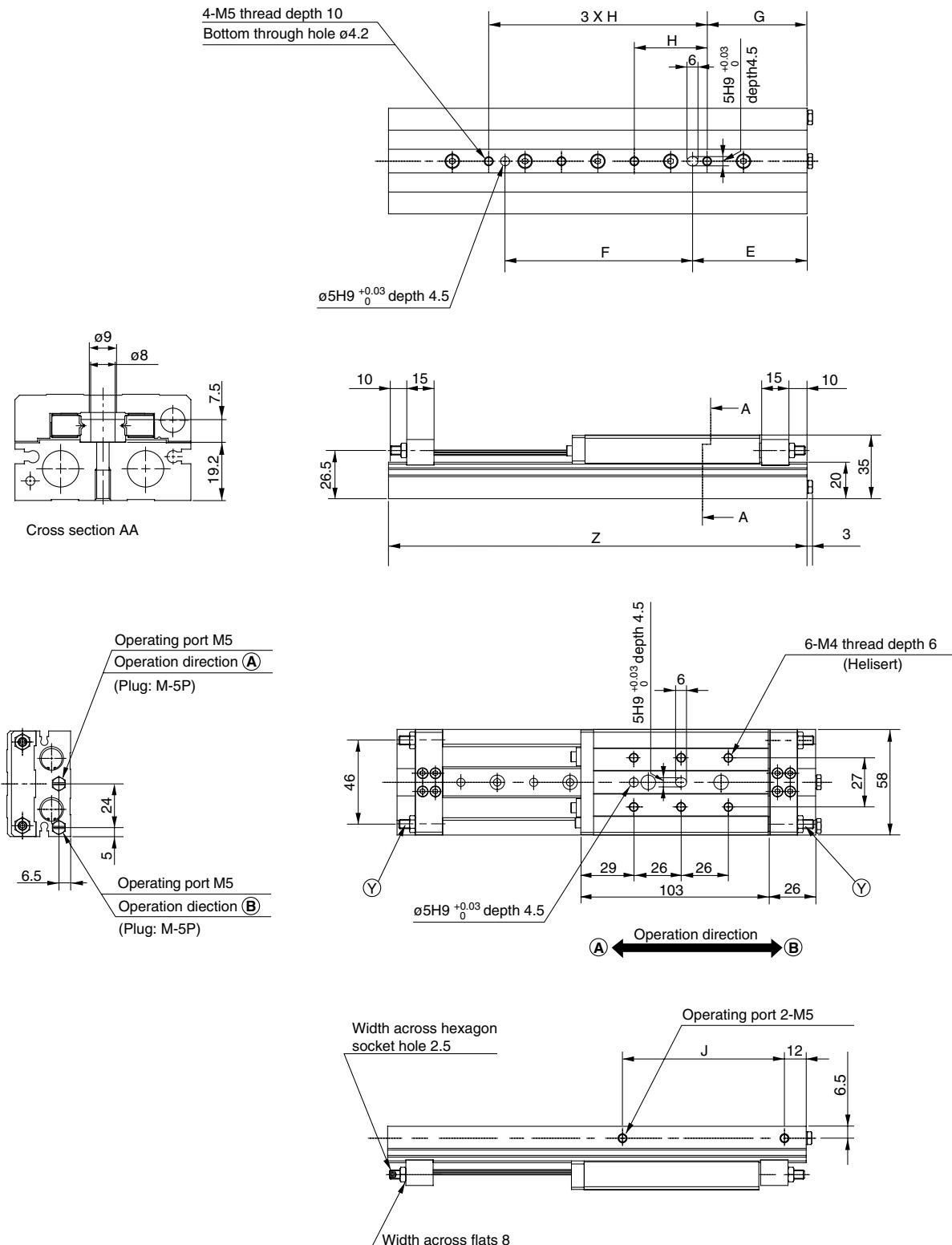
MXW 8/Stroke : 75, 100, 125, 150mm



Model	E	F	G	GG	H	HH	J	K	L	N	NN	Z
MXW8- 75	71	106	64	19	30	—	92	31	45	5	1	228
MXW8-100	106	112	98	34	32	—	115	56	70	5	1	278
MXW8-125	129	144	121	25	32	32	138	81	95	6	2	328
MXW8-150	149	176	141	45	32	32	168	106	120	7	2	378

Series MXW

MXW12/Stroke: 50, 75mm

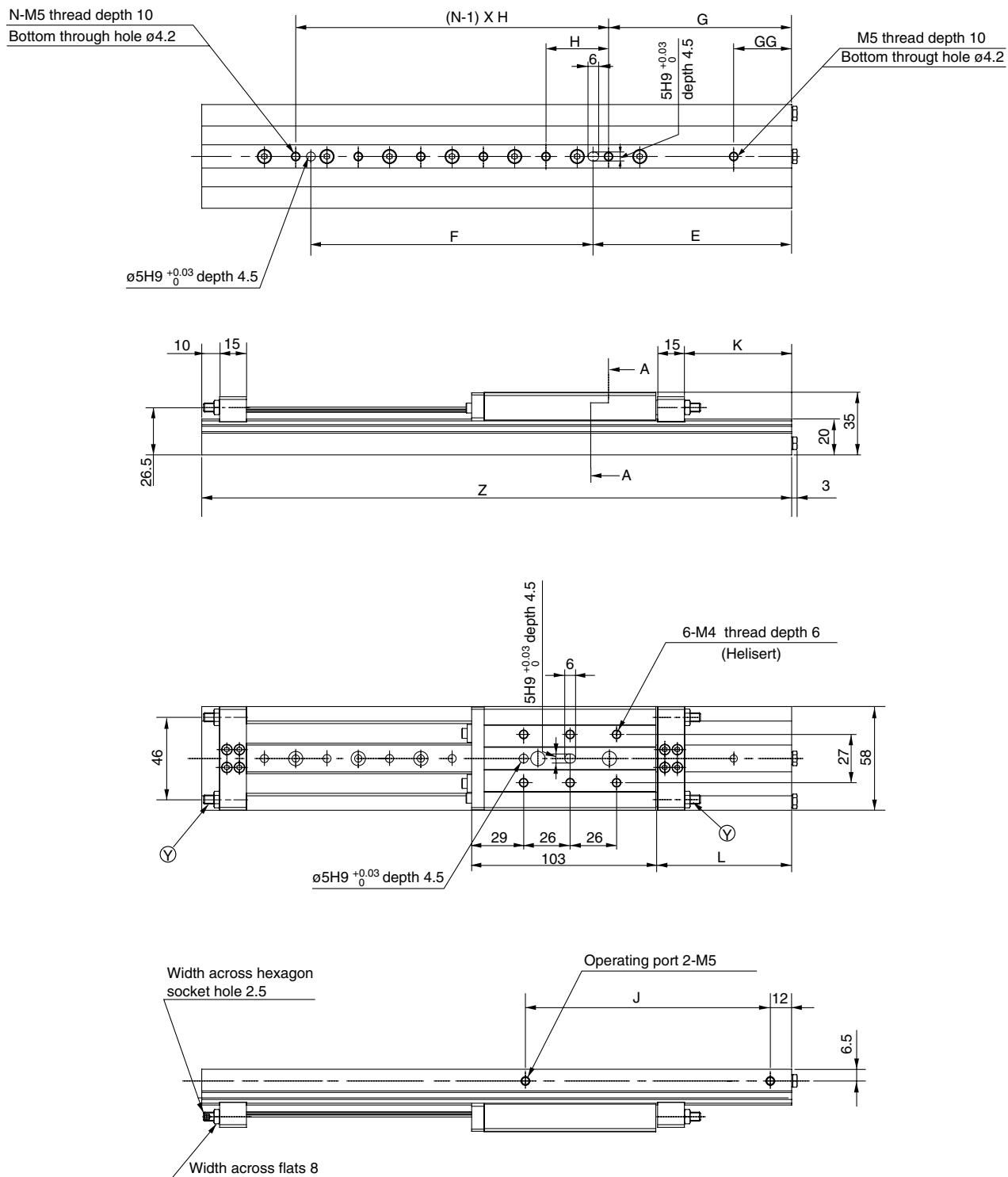


Model	E	F	G	H	J	Z
MXW12-50	58	88	50	35	84	205
MXW12-75	63	103	55	40	89	230

Note) Adjuster bolt (Y) shown the section above is attached only on B type (with shock absorber).

Long Stroke Slide Table Series MXW

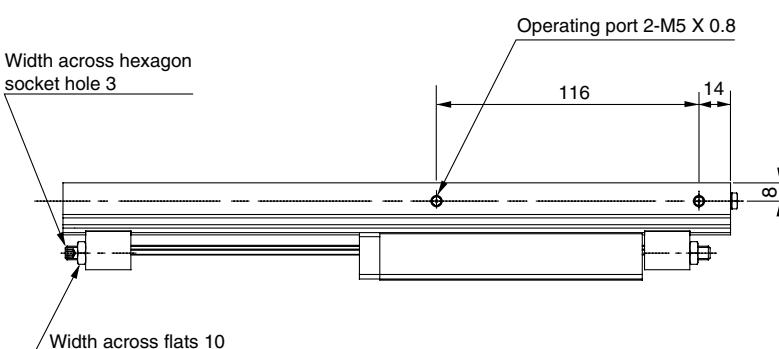
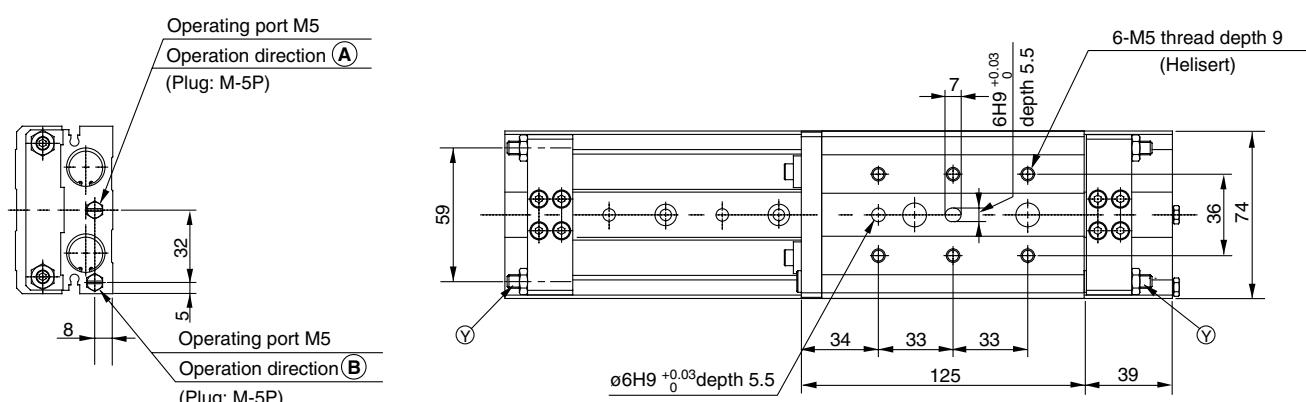
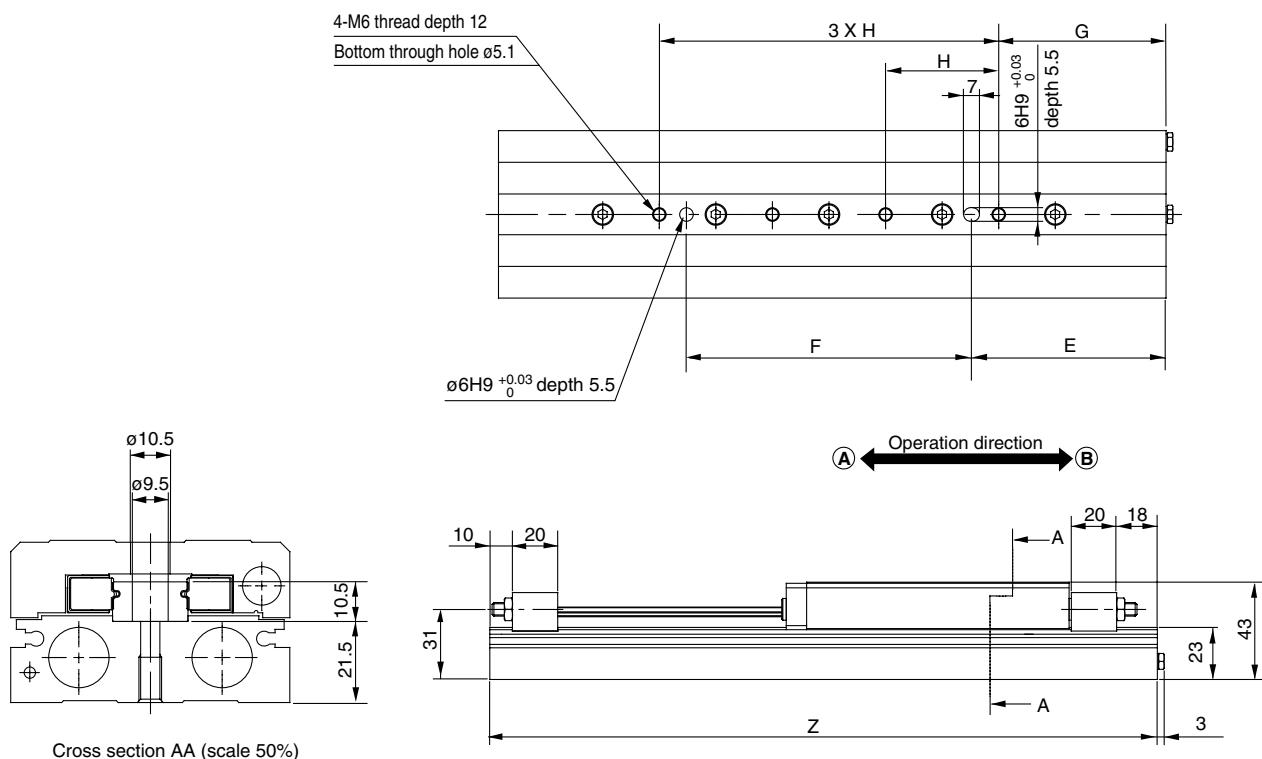
MXW 12/Stroke: 100, 125, 150mm



Model	E	F	G	GG	H	J	K	L	N	Z
MXW12-100	91	123	82.5	30	35	114	35	51	5	280
MXW12-125	111	158	102.5	32.5	35	137	60	76	6	330
MXW12-150	136	182	127.5	47.5	40	164	85	101	6	380

Series MXW

MXW 16/Stroke: 75, 100mm

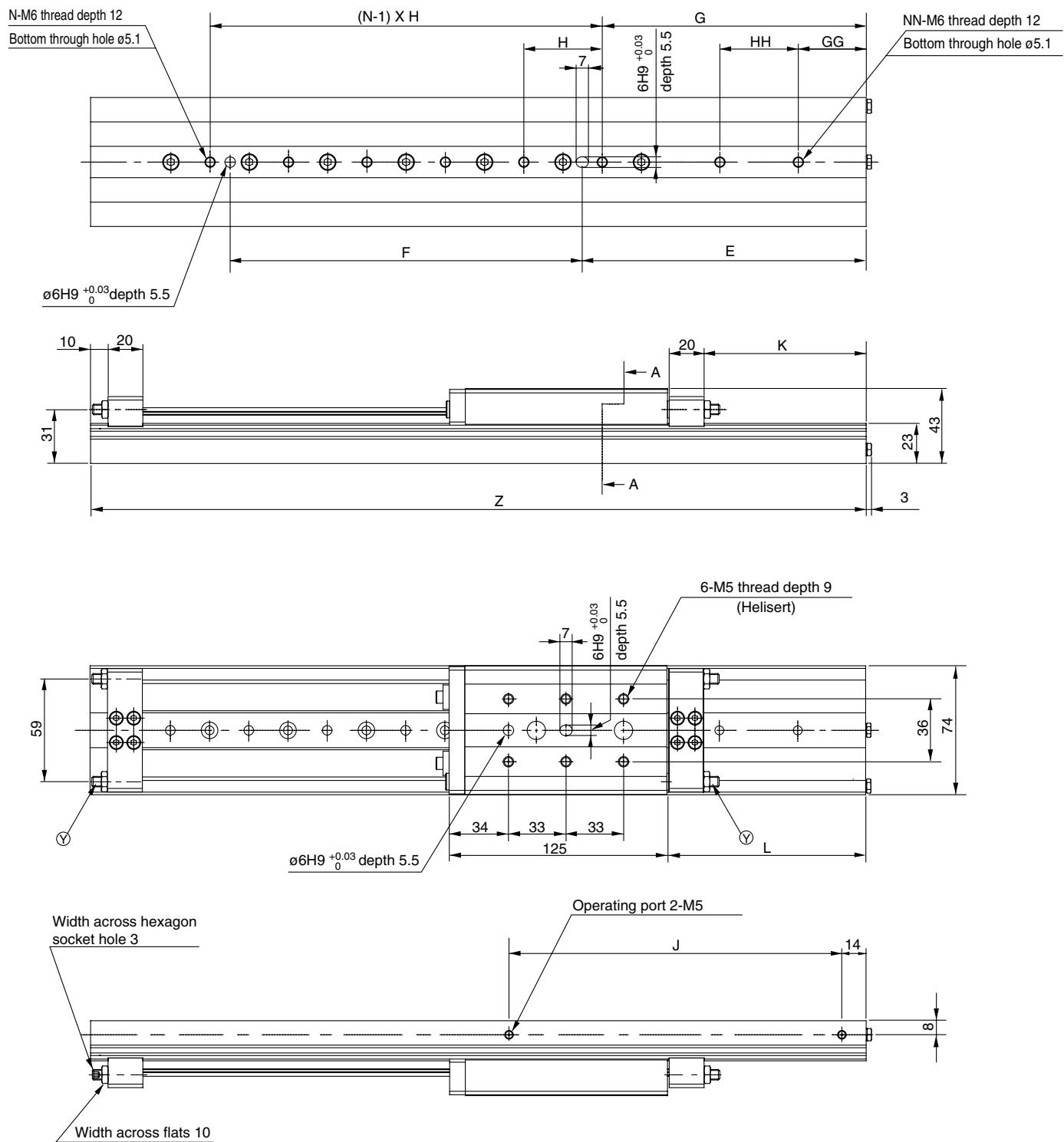


Model	E	F	G	H	Z
MXW16- 75	83	112	71.5	45	270
MXW16-100	86	126	74	50	295

Note) Adjuster bolt (Y) shown in the section above is attached only on B type (with shock absorber).

Long Stroke Slide Table Series MXW

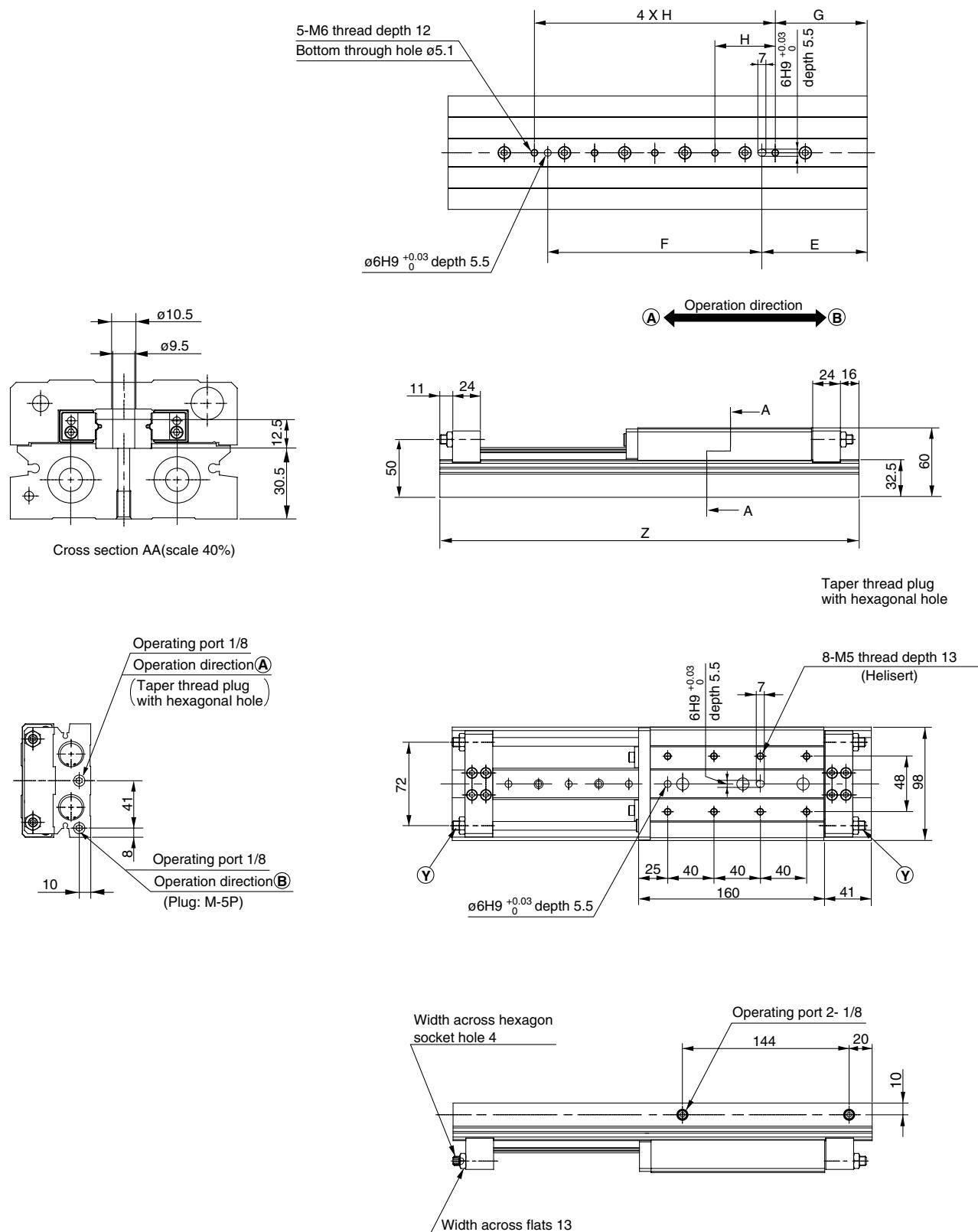
MXW16/Stroke: 125, 150, 175, 200mm



Model	E	F	G	GG	H	HH	J	K	L	N	NN	Z
MXW16-125	110	157	99	31.5	45	—	141	43	64	5	1	345
MXW16-150	136	176	124	24	50	—	166	68	89	5	1	395
MXW16-175	163	202	151.5	39	45	45	191	93	114	6	2	445
MXW16-200	186	226	174	24	50	50	216	118	139	6	2	495

Series MXW

MXW 20/Stroke: 100, 125mm

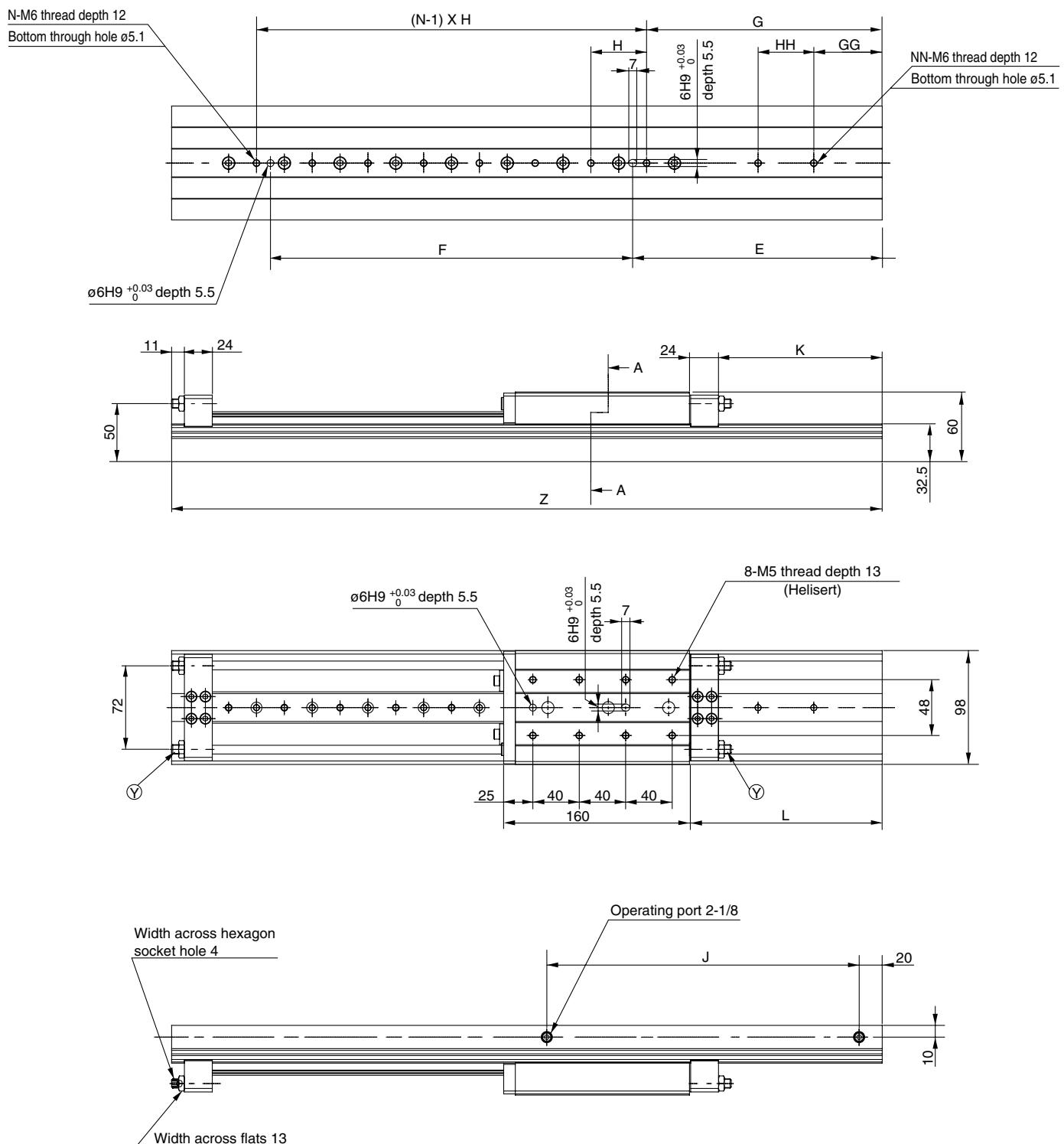


Mdel	E	F	G	H	Z
MXW20-100	87	168	75	48	337
MXW20-125	91	185	79.5	52	362

Note) Adjuster bolt (Y) shown in the section above is attached only on B type (with shock absorber).

Long Stroke Slide Table Series MXW

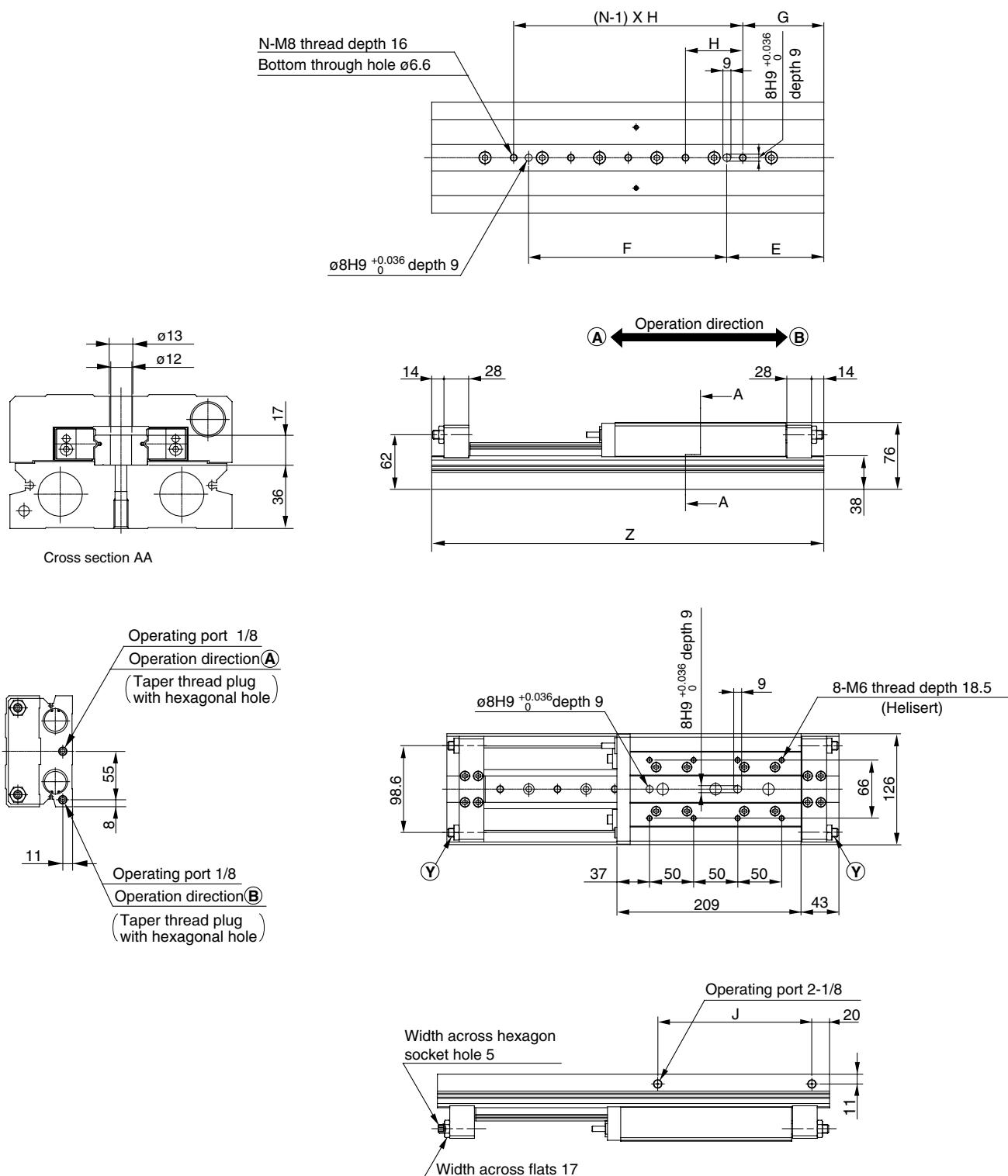
MXW 20/Stroke: 150, 175, 200, 225, 250mm



Model	E	F	G	GG	H	HH	J	K	L	N	NN	Z
MXW20-150	113	216	101	29	48	—	169	41	66	6	1	412
MXW20-175	140	237	128.5	50.5	52	—	194	66	91	6	1	462
MXW20-200	164	264	152	56	48	—	219	91	116	7	1	512
MXW20-225	189	288	177.5	73.5	52	—	244	116	141	7	1	562
MXW20-250	215	312	203	59	48	48	269	141	166	8	2	612

Series MXW

MXW 25/Stroke: 100, 125, 150mm

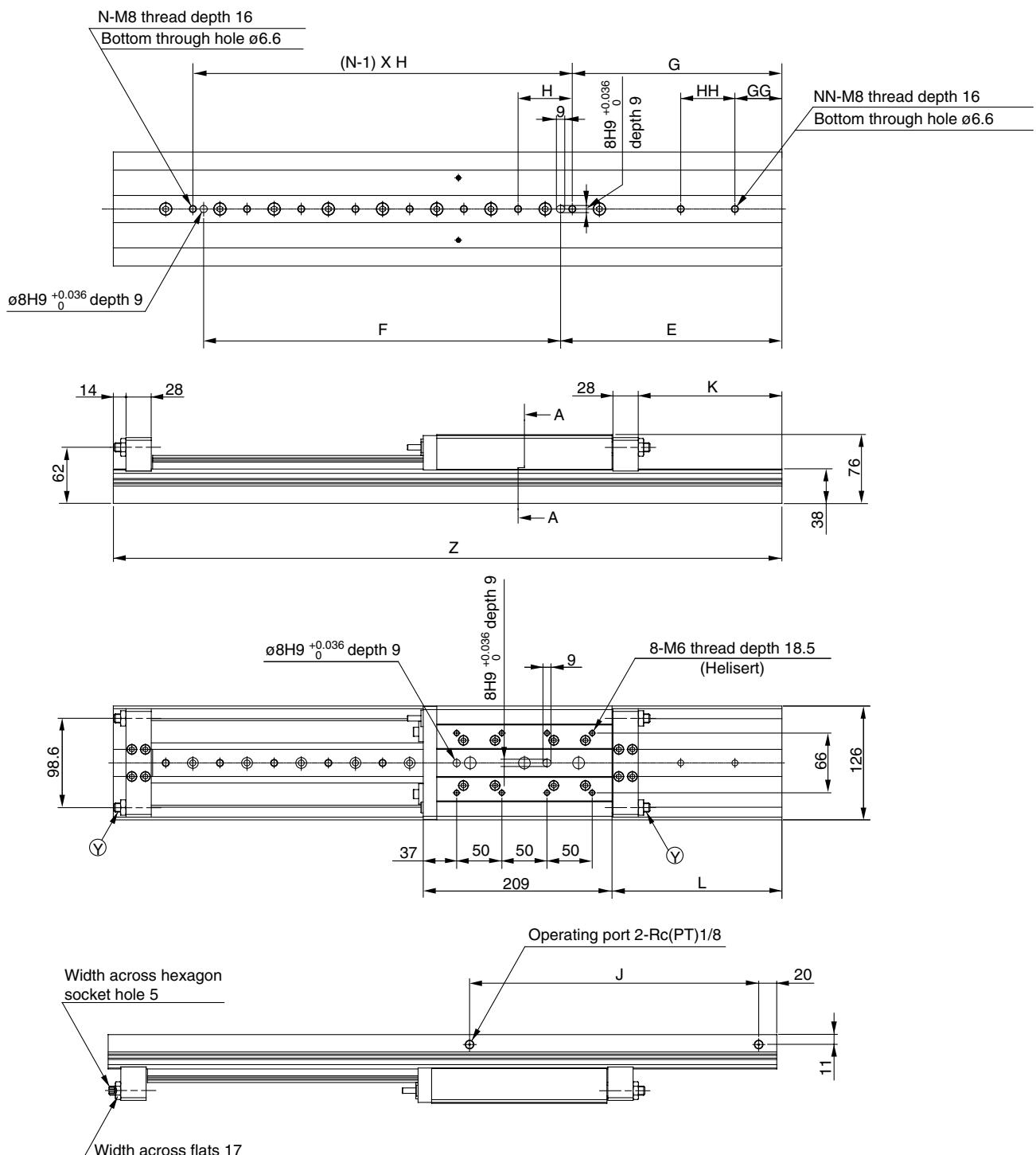


Model	E	F	G	H	J	N	Z
MXW25-100	115	165	100	65	165	4	395
MXW25-125	105	210	90	60	180	5	420
MXW25-150	110	225	92	65	180	5	445

Note) Adjuster bolt (Y) shown in the section above is attached only on B type (with shock absorber).

Long Stroke Slide Table Series MXW

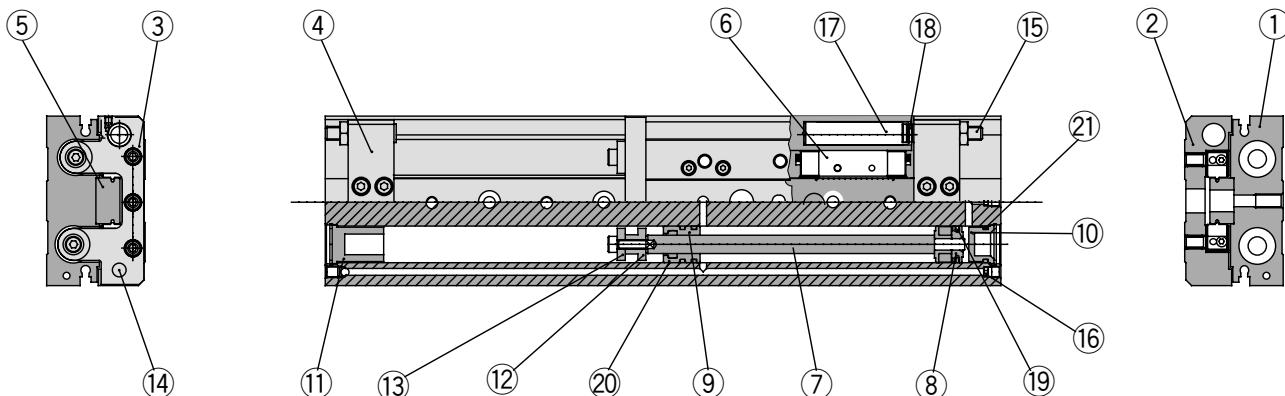
MXW 25/Stroke: 175, 200, 225, 250, 275, 300mm



Model	E	F	G	GG	H	HH	J	K	L	N	NN	Z
MXW25-175	120	270	105	—	60	—	195	34	63	6	—	490
MXW25-200	155	275	142	—	60	—	225	59	88	6	—	540
MXW25-225	175	305	165	55	55	—	245	84	113	7	1	590
MXW25-250	200	335	187	67	60	—	275	109	138	7	1	640
MXW25-275	225	360	210	80	65	—	300	134	163	7	1	690
MXW25-300	245	395	232	52	60	60	320	159	188	8	2	740

Series MXW

Construction



Component Parts

No.	Description	Material	Note
①	Body	Aluminum alloy	Hard anodized
②	Table	Aluminum alloy	Hard anodized
③	End plate	Aluminum alloy	Hard anodized
④	Stroke adjuster block	Aluminum alloy	Hard anodized
⑤	Rail	High carbon chrom bearing steel	Heat treatment
⑥	Guide block	High carbon chrom bearing steel	Heat treatment
⑦	Rod	Stainless steel	
⑧	Piston Assembly	—	With magnet
⑨	Rod cover	Aluminum alloy	
⑩	Head cap	Resin	
⑪	End cap	Resin	
⑫	Floating bushing A	Stainless steel	
⑬	Floating bushing B	Stainless steel	
⑭	Stopper	Stainless steel	Heat treatment
⑮	Stroke adjuster bolt	Carbon steel	Electroless nickel plated, Heat treatment
⑯	Orifice	Brass	Electroless nickel plated
⑰	Absorber shaft	Aluminum alloy	Chromated
⑱	Adjust bumper	Polyurethane	
⑲	Piston seal	NBR	
⑳	Rod seal	NBR	
㉑	O ring	NBR	

Replacement Parts: Seal kits

Bore size	Kit No.	Contents
8	MXW8-PS	
12	MXW12-PS	
16	MXW16-PS	Set of above ⑲, ⑳ and ㉑
20	MXW20-PS	
25	MXW25-PS	

*The seal kit includes ⑲ piston seal, ⑳ rod seal and ㉑ O ring.

Order a seal set according to applicable bore size.

Long Stroke Slide Table Series MXW

Auto Switch/Suitable Mounting Position at Stroke End Detection

Reed Switch: D-A90 (V), D-A93 (V), D-A96 (V)

Model	Stroke(mm)											Switch operation range
	25	50	75	100	125	150	175	200	225	250	275	
MXW 8	A	52.5	31.5	27.5	27.5	27.5	—	—	—	—	—	—
	B	79.5	100.5	125.5	150.5	175.5	200.5	—	—	—	—	—
	W	32.5	11.5	7.5	7.5	7.5	7.5	—	—	—	—	—
	V	99.5	120.5	145.5	170.5	195.5	220.5	—	—	—	—	—
MXW12	A	—	51	31	31	31	31	—	—	—	—	—
	B	—	104	124	149	174	199	—	—	—	—	—
	W	—	31	11	11	11	11	—	—	—	—	—
	V	—	124	144	169	194	219	—	—	—	—	—
MXW16	A	—	—	59.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	—
	B	—	—	135.5	160.5	185.5	210.5	235.5	260.5	—	—	—
	W	—	—	39.5	14.5	14.5	14.5	14.5	14.5	—	—	—
	V	—	—	155.5	180.5	205.5	230.5	225.5	280.5	—	—	—
MXW20	A	—	—	—	68.5	43.5	43.5	43.5	43.5	43.5	43.5	—
	B	—	—	—	168.5	193.5	218.5	243.5	268.5	293.5	318.5	—
	W	—	—	—	48.5	23.5	23.5	23.5	23.5	23.5	23.5	—
	V	—	—	—	188.5	213.5	238.5	263.5	288.5	313.5	338.5	—
MXW25	A	—	—	—	86.5	74.5	44.5	44.5	44.5	44.5	44.5	44.5
	B	—	—	—	208.5	220.5	250.5	270.5	295.5	320.5	345.5	370.5
	W	—	—	—	66.5	54.5	24.5	24.5	24.5	24.5	24.5	24.5
	V	—	—	—	228.5	240.5	270.5	290.5	315.5	340.5	365.5	390.5

Solid State Switch: D-M9B (V), D-M9N (V), D-M9P (V)

Model	Stroke (mm)											Switch operation range
	25	50	75	100	125	150	175	200	225	250	275	
MXW 8	A	48.5	27.5	23.5	23.5	23.5	23.5	—	—	—	—	—
	B	83.5	104.5	129.5	154.5	179.5	204.5	—	—	—	—	—
	W	36.5	15.5	11.5	11.5	11.5	11.5	—	—	—	—	—
	V	95.5	116.5	141.5	166.5	191.5	216.5	—	—	—	—	—
MXW12	A	—	47	27	27	27	27	—	—	—	—	—
	B	—	108	128	153	178	203	—	—	—	—	—
	W	—	35	15	15	15	15	—	—	—	—	—
	V	—	120	140	165	190	215	—	—	—	—	—
MXW16	A	—	—	55.5	30.5	30.5	30.5	30.5	30.5	—	—	—
	B	—	—	140	165	190	215	240	265	—	—	—
	W	—	—	43.5	18.5	18.5	18.5	18.5	18.5	—	—	—
	V	—	—	152	177	202	227	252	277	—	—	—
MXW20	A	—	—	—	64.5	39.5	39.5	39.5	39.5	39.5	39.5	—
	B	—	—	—	172.5	197.5	222.5	247.5	272.5	297.5	322.5	—
	W	—	—	—	52.5	27.5	27.5	27.5	27.5	27.5	27.5	—
	V	—	—	—	184.5	209.5	234.5	259.5	284.5	309.5	334.5	—
MXW25	A	—	—	—	82.5	70.5	40.5	40.5	40.5	40.5	40.5	40.5
	B	—	—	—	212.5	224.5	254.5	274.5	299.5	324.5	349.5	374.5
	W	—	—	—	70.5	58.5	28.5	28.5	28.5	28.5	28.5	28.5
	V	—	—	—	224.5	236.5	266.5	286.5	311.5	336.5	361.5	386.5

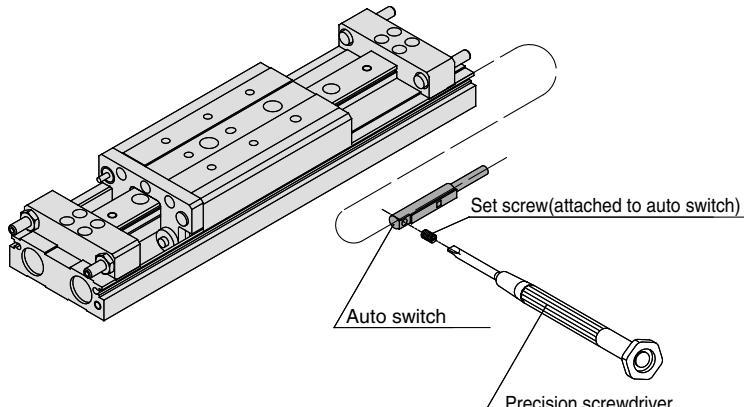
() Values for D-M9BV, M9NV, M9PV

Series MXW

Auto Switch/Suitable Mounting Position at Stroke End Detection

2 Colour Indication Solid State Switch: D-M9BW(V), D-M9NW(V), D-M9PW(V)													
Model	Stroke(mm)												Switch operation range
	25	50	75	100	125	150	175	200	225	250	275	300	
MXW 8	A	49.5	28.5	24.5	24.5	24.5	—	—	—	—	—	—	4
	B	82.5	103.5	128.5	153.5	178.5	203.5	—	—	—	—	—	
	W	35.5	14.5	10.5	10.5	10.5	—	—	—	—	—	—	
	V	96.5	117.5	142.5	167.5	192.5	217.5	—	—	—	—	—	
MXW12	A	—	48	28	28	28	28	—	—	—	—	—	4
	B	—	107	127	152	177	202	—	—	—	—	—	
	W	—	34	14	14	14	14	—	—	—	—	—	
	V	—	121	141	166	191	216	—	—	—	—	—	
MXW16	A	—	—	56.5	31.5	31.5	31.5	31.5	31.5	31.5	—	—	5.5
	B	—	—	138.5	163.5	188.5	213.5	238.5	263.5	—	—	—	
	W	—	—	42.5	17.5	17.5	17.5	17.5	17.5	—	—	—	
	V	—	—	152.5	177.5	202.5	227.5	252.5	277.5	—	—	—	
MXW20	A	—	—	—	65.5	40.5	40.5	40.5	40.5	40.5	40.5	—	7
	B	—	—	—	171.5	196.5	221.5	246.5	271.5	296.5	321.5	—	
	W	—	—	—	51.5	26.5	26.5	26.5	26.5	26.5	26.5	—	
	V	—	—	—	185.5	210.5	235.5	260.5	285.5	310.5	335.5	—	
MXW25	A	—	—	—	83.5	71.5	41.5	41.5	41.5	41.5	41.5	41.5	7
	B	—	—	—	211.5	223.5	253.5	273.5	298.5	323.5	348.5	373.5	
	W	—	—	—	69.5	57.5	27.5	27.5	27.5	27.5	27.5	27.5	
	V	—	—	—	225.5	237.5	267.5	287.5	312.5	337.5	362.5	387.5	

Auto Switch Mounting

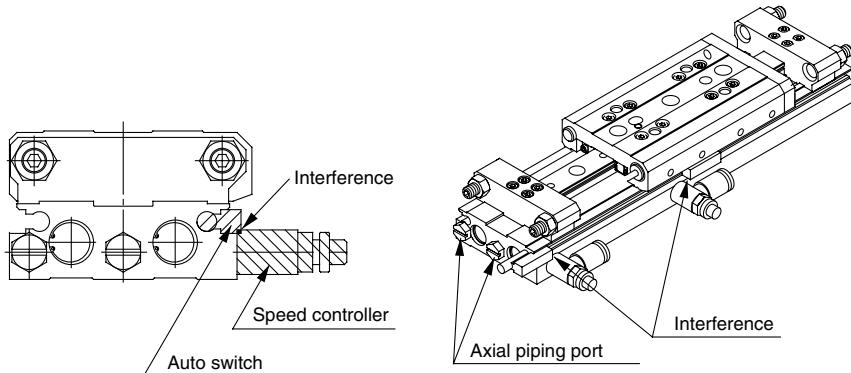


- Use the screwdriver with grip diameter 5 to 6 mm when set screw (attached to auto switch) is tightened.
- Tightening torque should be around 0.05 to 0.1N·m.

⚠ Precautions

⚠ Caution

Mounting Auto Switch/MXW8 only



When an auto switch is installed on the port side of MXW8, some switches could interfere with the speed controller or a fitting.

Therefore, use one of the methods described below for installing the auto switch.

1. Use the port for piping in the axial direction.
2. Install the auto switch on the opposite side of the port.
3. Use a pipe fitting with 7mm width across flats or ø8 external diameter or less.

●M-5J AS1201F-M5-04

(Extension fittings) + (Speed controller with One-touch fittings, Elbow style)

●KJL04-M5 AS1001F-04

(One-touch fitting) + (Speed controller with One-touch fittings, In-line style)

Table for Auto Switch Interference with Speed Controller and Fittings

Auto switch	Electrical entry	Wiring	Model No.
Solid state auto switch D-M9 type	Perpendicular	3 wire	D-M9NV D-M9PV
		2 wire	D-M9BV
2 colour solid state auto switch D-M9□W type	In-line	3 wire	D-M9NW D-M9PW
		2 wire	D-M9BW
	Perpendicular	3 wire	D-M9NWV D-M9PWV
		2 wire	D-M9BWV

