

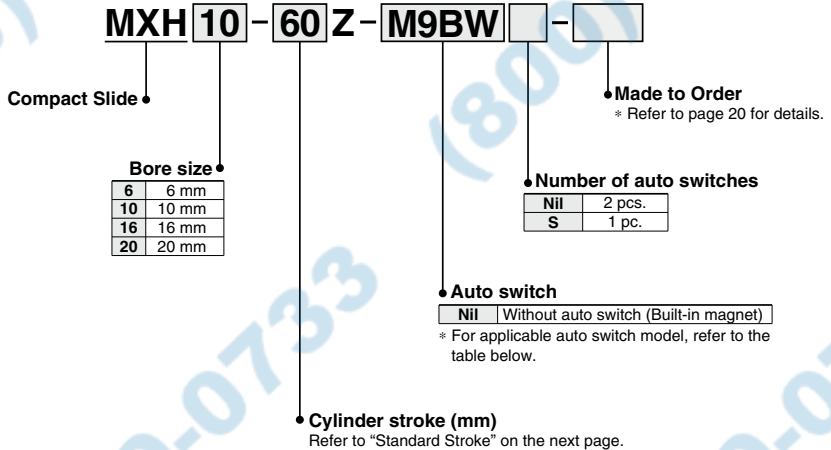
Compact Slide

MXH Series

Ø6, Ø10, Ø16, Ø20

RoHS

How to Order



- MXH
- MXS
- MXQ□
- MXQ
- MXF
- MXW
- MXJ
- MXP
- MXY
- MTS

Applicable Auto Switches

Refer to pages 1119 to 1245 for further information on auto switches.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model		Lead wire length (m)			Pre-wired connector	Applicable load		
					DC	AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)			5 (Z)	
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	24 V	—	M9NV	M9N	●	●	○	○	IC circuit	Relay, PLC	
				3-wire (PNP)			M9PV	M9P	●	●	○	○			
				2-wire			M9BV	M9B	●	●	○	○			
	3-wire (NPN)			M9NWV			M9NW	●	●	○	○	IC circuit			
	2-wire			M9BVV			M9BV	●	●	○	○				
	Water resistant (2-color indicator)			3-wire (NPN)			M9NAV*1	M9NA*1	○	○	●	○			IC circuit
3-wire (PNP)	M9PAV*1	M9PA*1	○	○	●	○									
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	24 V	12 V	A96V	A96	●	—	●	—	IC circuit	—	
				2-wire			100 V	A93V*2	A93	●	●	●	—	—	Relay, PLC
							100 V or less	A90V	A90	●	—	●	—	—	IC circuit

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

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

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

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

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

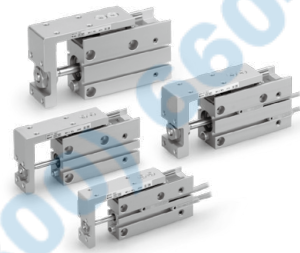
* Refer to page 28 for applicable auto switches other than listed above.

* For details about auto switches with pre-wired connector, refer to pages 1192 and 1193.

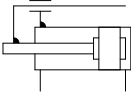
* Auto switches are shipped together, (but not assembled).

- D-□
- X□

Specifications



Symbol
Rubber bumper



Bore size (mm)	6	10	16	20
Fluid	Air			
Action	Double acting			
Piping port size	M5 x 0.8			
Minimum operating pressure	0.15 MPa	0.06 MPa	0.05 MPa	
Maximum operating pressure	0.7 MPa			
Proof pressure	1.05 MPa			
Ambient and fluid temperature	Without auto switch: -10 to 70°C With auto switch: -10 to 60°C (No freezing)			
Piston speed	50 to 500 mm/s			
Allowable kinetic energy (J)	0.0125	0.025	0.05	0.1
Lubrication	Non-lube			
Cushion	Rubber bumper on both ends			
Stroke length tolerance	+1.0 0			
Auto switch (Option)	Solid state auto switch D-M9□, M9□W Reed auto switch D-A9□			

Standard Stroke

Bore size (mm)	Standard stroke (mm)
6, 10, 16, 20	5, 10, 15, 20, 25, 30, 40, 50, 60

Note) Intermediate strokes are available with "Made to Order" model (-XC19).
(For details, refer to page 1346.)



Made to Order

(Refer to pages 1247 to 1440 for details.)

Symbol	Specifications
-XC79	Machining tapped hole, drilled hole and pin hole additionally
-XB13	Low speed cylinder (5 to 50 mm/s)
-XC3	Special port location
-XC19	Intermediate stroke (Spacer type)
-XC22	Fluororubber seal

Theoretical Output

Bore size (mm)	Rod size (mm)	Operating direction	Piston area (mm ²)	Operating pressure (MPa)		
				0.3	0.5	0.7
6	3	OUT	28	8	14	19
		IN	21	6	10	14
10	4	OUT	78	23	39	55
		IN	66	19	33	46
16	6	OUT	201	60	101	141
		IN	172	51	86	121
20	8	OUT	314	94	157	220
		IN	264	79	132	185

Weight

Model	Stroke (mm)								
	5	10	15	20	25	30	40	50	60
MXH6	61	66	75	80	88	93	107	120	134
MXH10	104	112	125	133	146	153	174	195	216
MXH16	194	204	222	232	250	260	288	316	343
MXH20	352	369	400	417	448	466	514	562	610