

Parallel Style Air Gripper With Dust Cover

Model variations with excellent dust proof and drip proof dust cover are expanded.

MHZL2 Long stroke type
MHZL2 series
∅ 10, ∅ 16 and ∅ 20 with
dust cover are newly
released.



Silicone rubber



Chloroprene rubber



Fluororubber

With Dust Cover Variations

★: New model

Series	Bore size [mm]			
	10	16	20	25
(New) Long stroke type with dust cover MHZL2-X6110 	★	★	★	—

MHZJ2 ∅ 32 and ∅ 40 added
to the MHZJ2 series
with dust cover.



Chloroprene rubber



Fluororubber

★: New model ●: Existing model

Series	Bore size [mm]						
	6	10	16	20	25	32	40
With dust cover Series MHZJ 	●	●	●	●	●		
(New) With dust cover MHZJ2-X6100 						★	★

* For details about dust cover types and option combinations, refer to How to Order.

Three types of dust cover materials are available.

(Chloroprene rubber, Fluororubber, Silicone rubber)

MHZL2-X6110/MHZJ2-X6100



12-EU599-UK

Parallel Style Air Gripper Long Stroke Type/With Dust Cover **MHZL2-X6110**

How to Order

MHZL2-16D-M9BW-X6110

Number of fingers
2 2 fingers

Bore size
10 10 mm
16 16 mm
20 20 mm

Action
D Double acting

Dust cover type
— Chloroprene rubber (CR)
F Fluororubber (FKM)
S Silicone rubber (Si)

Auto switch
— Without auto switch (Built-in magnet)

With dust cover

Number of auto switches
— 2 pcs.
S 1 pc.
n n pc.

Special specifications

Symbol	Dust cover type		
	—: Chloroprene rubber (CR)	F: Fluororubber (FKM)	S: Silicone rubber (Si)
— Basic type	○	○	○
A Heat resistance	—	○	○
B Fluororubber seal	—	○	—

* For the applicable auto switch model, refer to the table below.
* When using the heat resistance or fluororubber seal types, refer to "Precautions" shown below.

Applicable Auto Switches

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model		Lead wire length [m]*				Applicable model	Pre-wired connector	Applicable load		
					DC	AC	Perpendicular	In-line	0.5 (—)	1 (M)	3 (L)	5 (Z)				ø 10	ø 16
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	24 V	—	M9NV	M9N	●	●	●	○	●	●	●	○	IC circuit
				3-wire (PNP)			M9PV	M9P	●	●	●	○	●	●	●	○	
				2-wire			M9BV	M9B	●	●	●	○	●	●	●	○	
				3-wire (NPN)			M9NWV	M9NW	●	●	●	○	●	●	●	○	
				3-wire (PNP)			M9PWV	M9PW	●	●	●	○	●	●	●	○	
				2-wire			M9B WV	M9B W	●	●	●	○	●	●	●	○	
	Diagnostic indication (2-colour indication)	Grommet	Yes	3-wire (NPN)	24 V	—	M9NAV	M9NA	○	○	●	○	●	●	●	○	IC circuit
				3-wire (PNP)			M9PAV	M9PA	○	○	●	○	●	●	●	○	
				2-wire			M9BAV	M9BA	○	○	●	○	●	●	●	○	
				2-wire			M9BAV	M9BA	○	○	●	○	●	●	●	○	

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

* Solid state auto switches marked with a "○" are produced upon receipt of order.
* For 2-colour indication type, use caution on hysteresis. For details, refer to the standard type auto switch hysteresis.

Specifications

Type	Basic type	Heat resistance	Fluororubber seal
Fluid	Air		
Operating pressure Double acting	ø 10: 0.2 to 0.7 MPa, ø 16, ø 20: 0.1 to 0.7 MPa		
Ambient and fluid temperature	-10 to 60 °C	-10 to 100 °C	-10 to 60 °C
Repeatability	±0.01 mm		
Max. operating frequency	120 c.p.m		
Lubrication	Not required		
Action	Double acting		
Auto switch (Option)	Solid state auto switch (3-wire/2-wire)		

Model

Action	Model	Bore size [mm]	Gripping force ^{Note 1)}		Opening/ Closing stroke (Both sides) [mm]	^{Note 2)} Weight [g]
			External	Internal		
Double acting	MHZL2-10D-X6110	10	11	17	8	85
	MHZL2-16D-X6110	16	34	45	12	150
	MHZL2-20D-X6110	20	42	66	18	385

Note 1) Values based on pressure of 0.5 MPa, gripping point L = 20 mm, at centre of stroke.

Note 2) Values excluding weight of auto switch.

⚠ Precautions

For heat resistance

⚠ Warning

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

⚠ Caution

Note 1) Magnet is built-in, but when using an auto switch, the acceptable temperature range becomes -10 to 60 °C.
Note 2) For the dust cover option part number, only fluororubber (F) or silicone rubber (S) can be selected.
Note 3) For lubrication, specialised grease GR-F is recommended.

For fluororubber seal

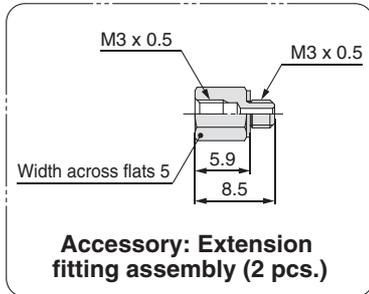
⚠ Caution

Note 1) Consult with SMC, since the type of chemical and the operating temperature may not allow the use of this product.
Note 2) Since the standard-type magnet is built-in, consult with SMC for the product's adaptability to the operating environment.
Note 3) The dust cover material is also fluororubber. Thus, enter (F) for the fluororubber dust cover in the part number.

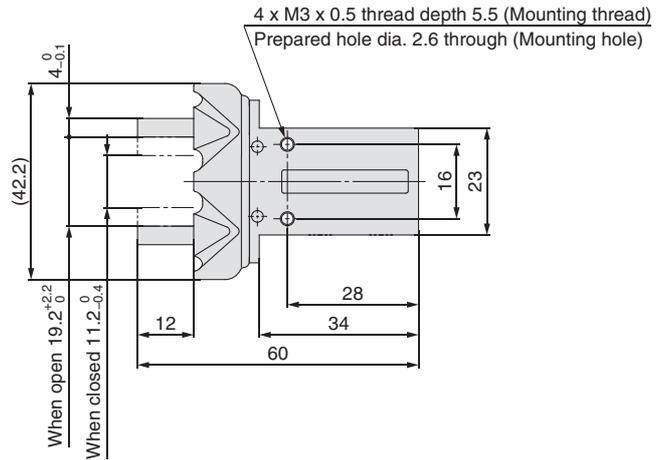
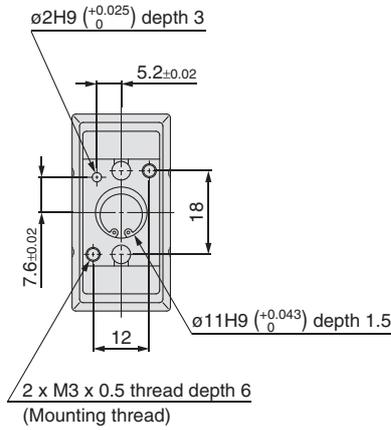
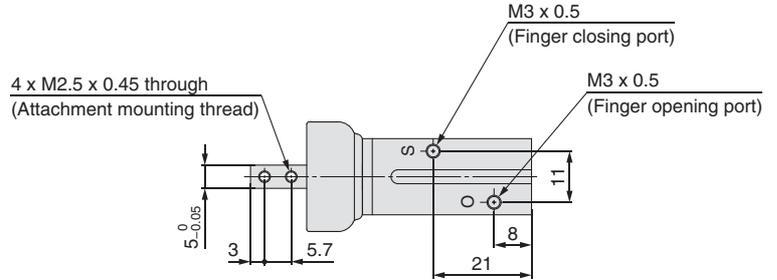


Dimensions

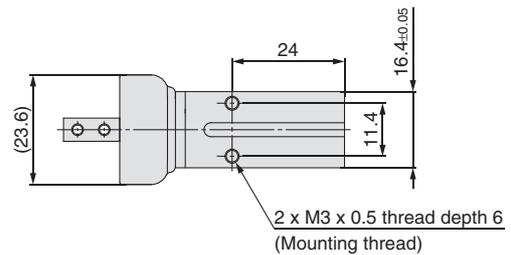
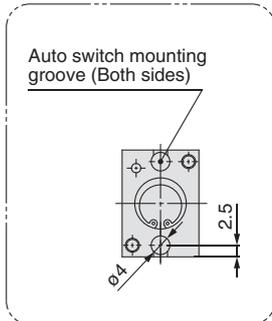
MHZL2-10D□-X6110
 Basic type/Double acting



* When using the perpendicular type (D-M9□V) switch, use an extension fitting since the switch interferes with the One-touch fitting.



Auto Switch Mounting Groove Dimensions



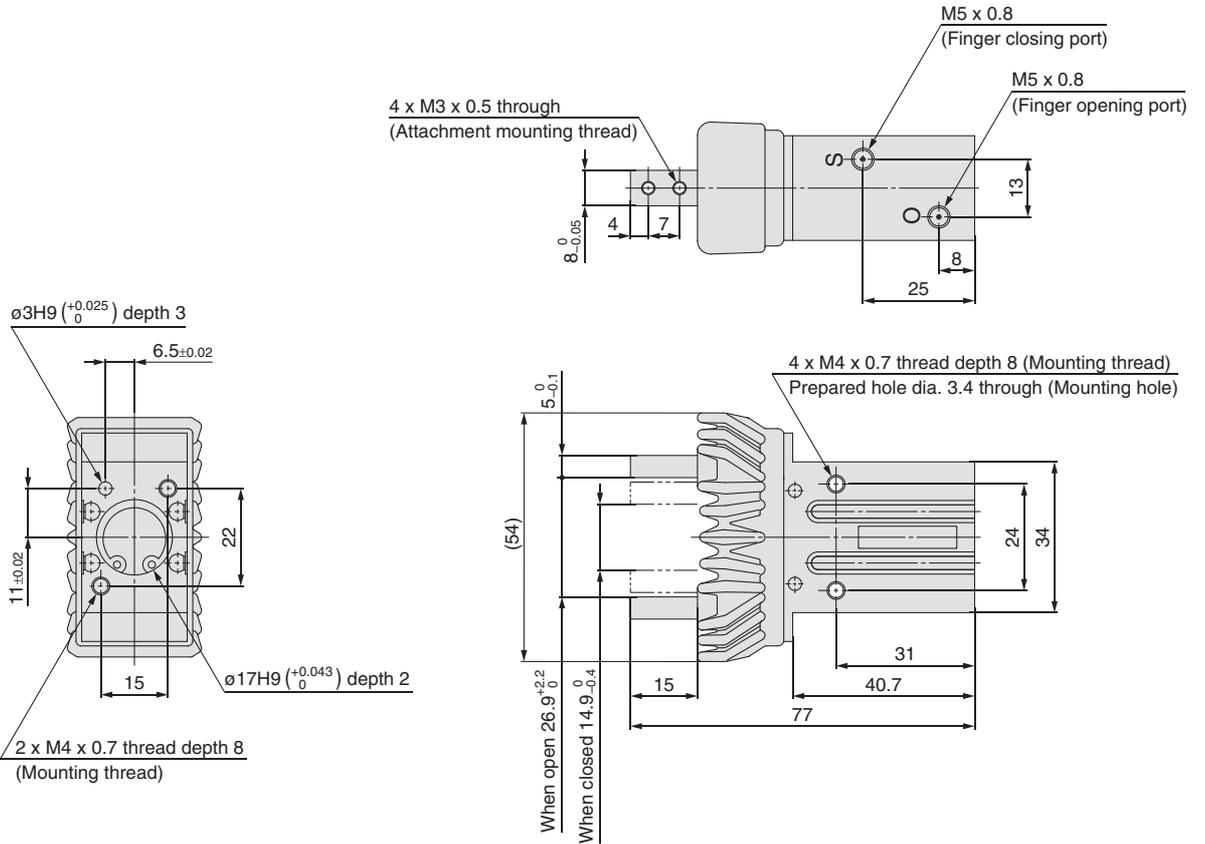
* The dimensions of the heat resistance or fluororubber seal types are the same as those shown above.

MHZL2-X6110

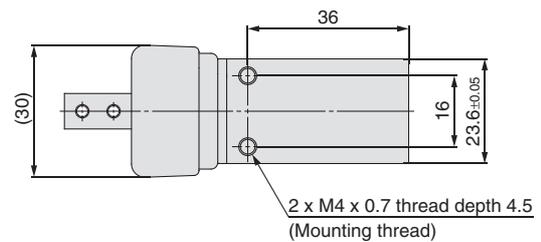
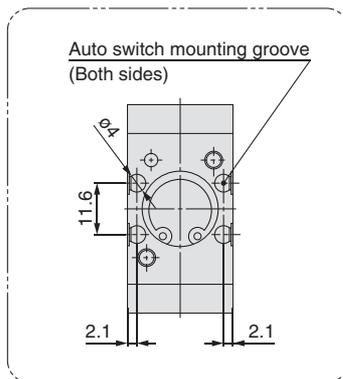
Dimensions

MHZL2-16D□-X6110

Basic type/Double acting



Auto Switch Mounting Groove Dimensions



* The dimensions of the heat resistance or fluororubber seal types are the same as those shown above.

Parallel Style Air Gripper With Dust Cover

MHZJ2-X6100

How to Order

MHZJ2-32D-M9BW-X6100

Number of fingers
2 2 fingers

Bore size
32 32 mm
40 40 mm

Action
D Double acting

Dust cover type
— Chloroprene rubber (CR)
F Fluororubber (FKM)
S Silicone rubber (Si)

Auto switch
— Without auto switch (Built-in magnet)

With dust cover

Number of auto switches
— 2 pcs.
S 1 pc.
n n pc.

Special specifications

Symbol	Dust cover type		
	—: Chloroprene rubber (CR)	F: Fluororubber (FKM)	S: Silicone rubber (Si)
— Basic type	○	○	○
A Heat resistance	—	○	○
B Fluororubber seal	—	○	—

* When using the heat resistance or fluororubber seal types, refer to "Precautions" shown below.

Applicable Auto Switches

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model		Lead wire length [m]*				Applicable model		Pre-wired connector	Applicable load
					DC	AC	Perpendicular	In-line	0.5 (—)	1 (M)	3 (L)	5 (Z)	ø 32	ø 40		
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	●	●	●	○	●	●	○	IC circuit
				3-wire (PNP)			M9PV	M9P	●	●	●	○	●	●	○	
				2-wire	M9BV	M9B	●	●	●	○	●	●	○	—		
				3-wire (NPN)	M9NWV	M9NW	●	●	●	○	●	●	○			
	Diagnostic indication (2-colour indication)			24 V	—	3-wire (PNP)	M9PWV	M9PW	●	●	●	○	●	●	○	IC circuit
						2-wire	M9B WV	M9B W	●	●	●	○	●	●	○	
	Water resistant (2-colour indication)			5 V, 12 V	—	3-wire (NPN)	M9NAV	M9NA	○	○	●	○	●	●	○	IC circuit
						3-wire (PNP)	M9PAV	M9PA	○	○	●	○	●	●	○	
						2-wire	M9BAV	M9BA	○	○	●	○	●	●	○	
						2-wire	M9BAV	M9BA	○	○	●	○	●	●	○	

- * Lead wire length symbols 0.5 m.....— (Example) M9NW
1 m.....M (Example) M9NWM
3 m.....L (Example) M9NWL
5 m.....Z (Example) M9NWX
- * Solid state auto switches marked with a "○" are produced upon receipt of order.
* For 2-colour indication type, use caution on hysteresis. For details, refer to the standard type auto switch hysteresis.

Specifications

Type	Basic type	Heat resistance	Fluororubber seal
Fluid	Air		
Operating pressure Double acting	0.1 to 0.7 MPa		
Ambient and fluid temperature	-10 to 60 °C	-10 to 100 °C	-10 to 60 °C
Repeatability	±0.01 mm		
Max. operating frequency	60 c.p.m		
Lubrication	Not required		
Action	Double acting		

Model

Action	Model	Bore size [mm]	Gripping force ^{Note 1)}		Opening/ Closing stroke (Both sides) [mm]	^{Note 2)} Weight [g]
			External	Internal		
Double acting	MHZJ2-32D-X6100□	32	158	193	22	760
	MHZJ2-40D-X6100□	40	254	318	30	1325

Note 1) Values based on pressure of 0.5 MPa, gripping point L = 20 mm, at centre of stroke.

Note 2) Values excluding weight of auto switch.

⚠ Precautions

For heat resistance

⚠ Warning

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

⚠ Caution

- Note 1) Magnet is built-in, but when using an auto switch, the acceptable temperature range becomes -10 to 60 °C.
Note 2) For the dust cover option part number, only fluororubber (F) or silicone rubber (S) can be selected.
Note 3) For lubrication, specialised grease GR-F is recommended.

For fluororubber seal

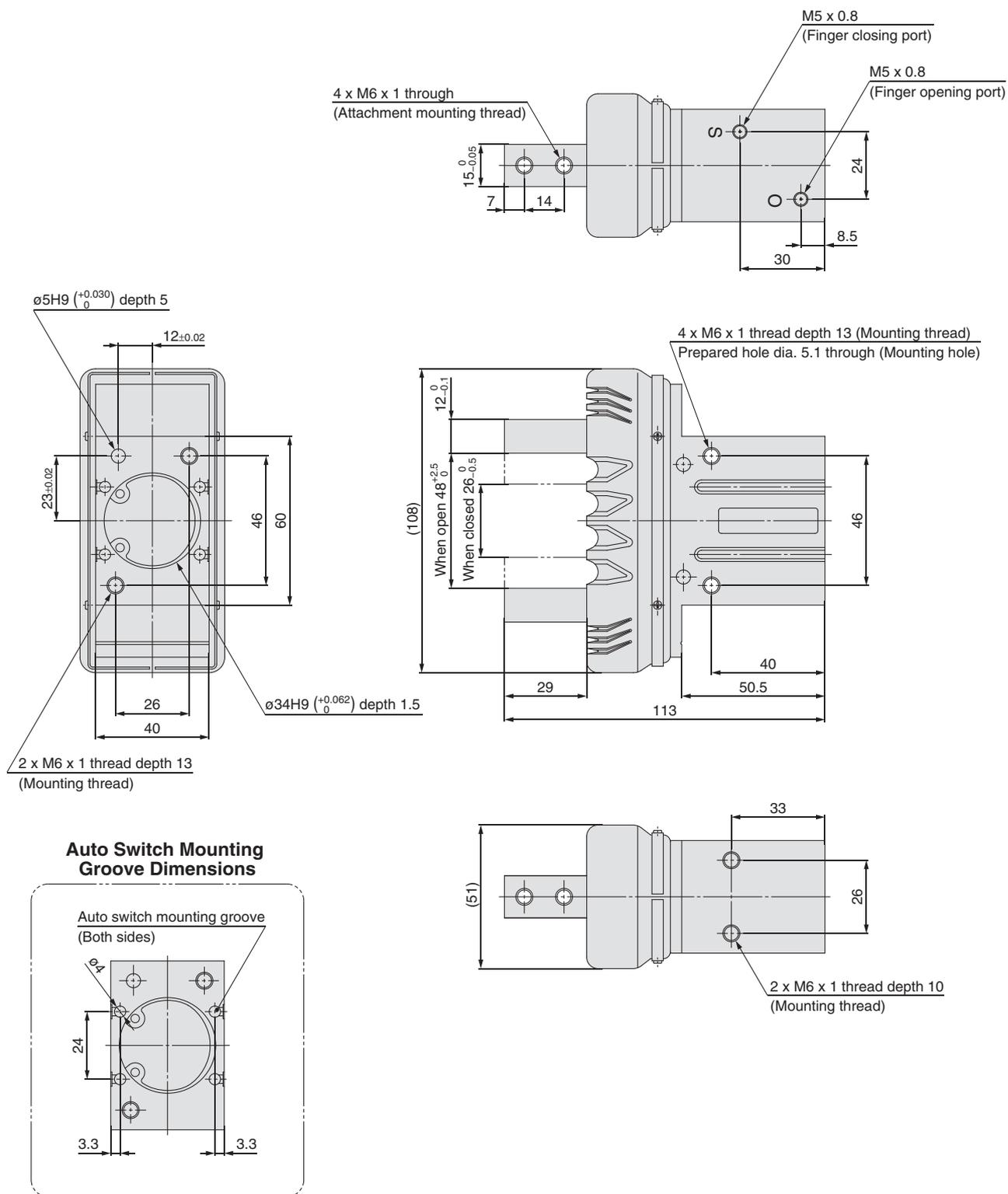
⚠ Caution

- Note 1) Consult with SMC, since the type of chemical and the operating temperature may not allow the use of this product.
Note 2) Since the standard-type magnet is built-in, consult with SMC for the product's adaptability to the operating environment.
Note 3) The dust cover material is also fluororubber. Thus, enter (F) for the fluororubber dust cover in the part number.



Dimensions

MHZJ2-32D□-X6100
Basic type/Double acting

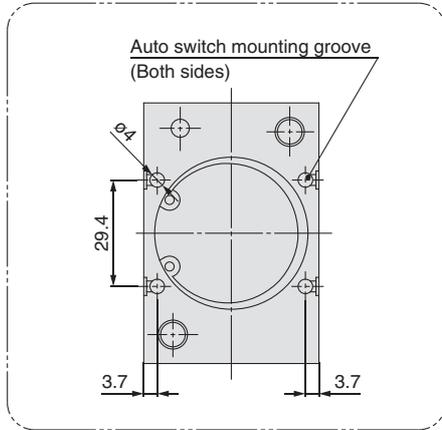


* The dimensions of the heat resistance or fluororubber seal types are the same as those shown above.

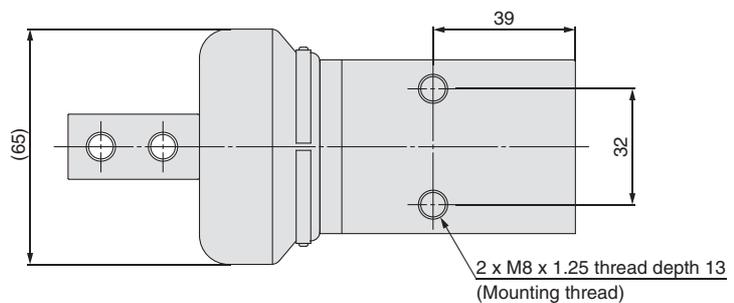
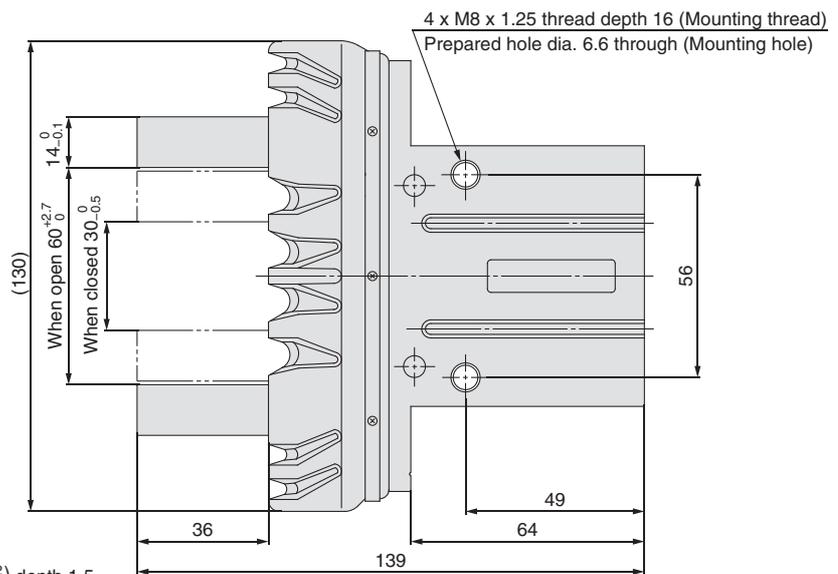
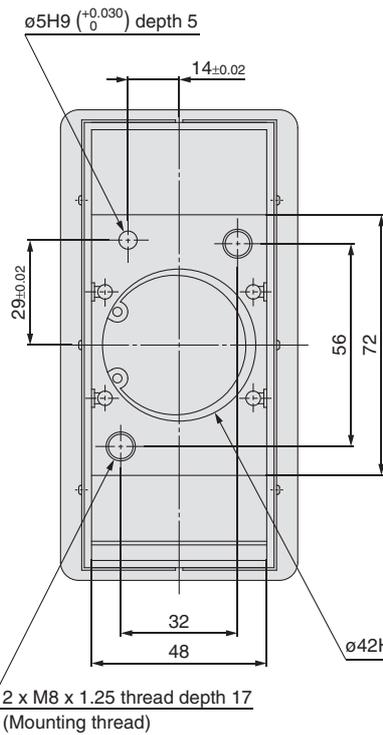
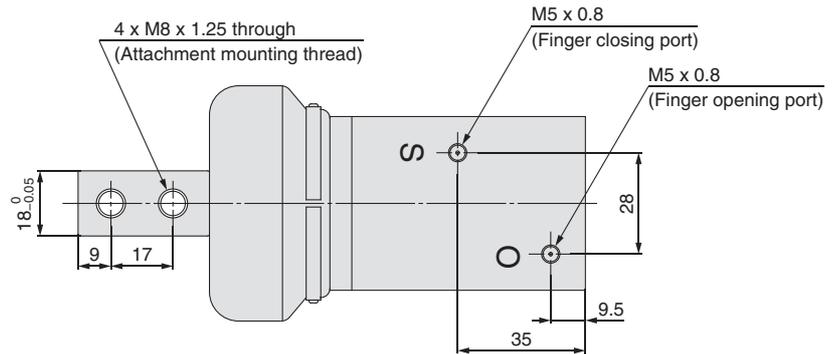
MHZJ2-X6100

Dimensions

MHZJ2-40D□-X6100
Basic type/Double acting



Auto Switch Mounting Groove Dimensions



* The dimensions of the heat resistance or fluororubber seal types are the same as those shown above.

SMC Corporation

SMC CORPORATION
Akihabara UDX 15F, 4-14-1, Sotokanda, Chiyoda-ku, Tokyo 101-0021, JAPAN
Phone: 03-5207-8249 FAX: 03-5298-5362
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European Marketing Centre (EMC)

Zuazobidea 14, 01015 Vitoria
Tel: +34 945-184 100 Fax: +34 945-184 124
URL <http://www.smc.eu>