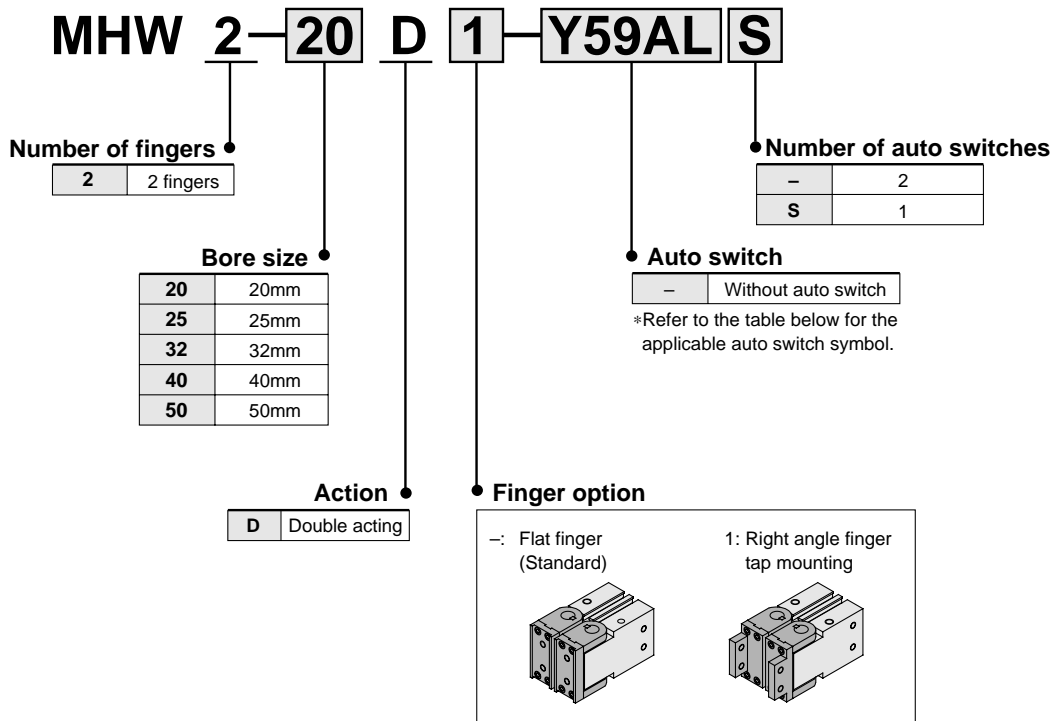


Series MHW2

ø20, ø25, ø32, ø40, ø50



How to Order



Applicable auto switches

Type	Special function	Electrical entry	Indicator	Wiring (Output)	Load voltage		Symbol		Lead wire length (m)*		Applicable load			
					DC	AC	Electrical entry		0.5 (-)	3 (L)				
							Perpendicular	In-line						
Solid state	—	Grommet	With	3 wire (NPN)	24V	5V 12V	Y69A	Y59A	●	●	Relay PLC			
				3 wire (PNP)					12V	Y7PV		Y7P	●	●
				2 wire						Y69B		Y59B	●	●
	Diagnosis (2 color indication)			Water resistance (2 color indication)	3 wire (NPN)	5V 12V	—	Y7NWV	Y7NW	●		●		
					3 wire (PNP)			Y7PWV	Y7PW	●		●		
					2 wire			12V	Y7BWV	Y7BW		●	●	
								—	Y7BA	—		●		

*Lead wire length 0.5m----- (Example) Y59A.
3m-----L (Example) Y59AL.



Note 1) Refer to "Auto Switch Hysteresis" on p.2.8-24 when using the 2 color indication type D-Y7BAL.
Note 2) Refer to "Auto Switch Specifications" on p.2.11-1.

Specifications



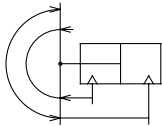
Fluid	Air
Operating pressure	0.15 to 0.7MPa
Ambient and fluid temperature	-10 to 60 °C
Repeatability	±0.2mm
Max. operating frequency	ø20-25: 60c.p.m ø32 to 50: 30c.p.m
Lubrication	Not required
Action	Double acting
Auto switch (Optional) ^{Note)}	Solid state switch (3 wire, 2wire)



Note) Refer to p.2.11-1 for details of auto switch specifications.

Symbol

Double acting



Model

Model	Bore size (mm)	Effective force (Nm) ⁽¹⁾	Opening angle (Both sides)		Weight ⁽²⁾ (g)
			Opening side	Closing side	
MHW2-20D	20	0.30	180°	-5°	300
MHW2-25D	25	0.73		-6°	510
MHW2-32D	32	1.61		-5°	910
MHW2-40D	40	3.70		-5°	2140
MHW2-50D	50	8.27		-4°	5100

Note 1) At the pressure of 0.5MPa

Note 2) Not including auto switch



- Refer to the "How to Select the Applicable Model" on p.2.8-4.
- Refer to p.2.8-4 and 2.8-5 for the details of effective holding force and allowable overhanging distance.

Precaution

Be sure to read before handling.

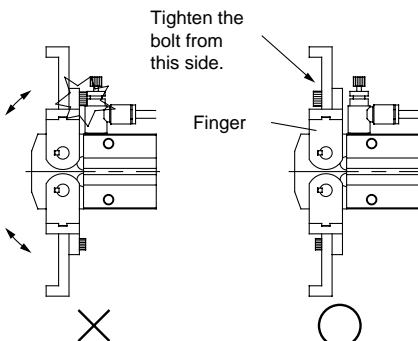
Refer to p.0-20 and 0-21 for Safety Instructions and common precautions on the products mentioned in this catalog, and refer to p.2.0-3 and 2.0-4 for precautions on every series.

Installation

MHW

Warning

When using right angle finger tap mounting type, pay attention the interference of bolt and speed controller.

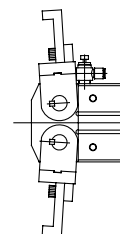


Bolt interferes with speed controller

MHW2-50₀₁

Warning

When using speed controller with One-touch fitting, use AS22 or AS23. If AS32 or AS33 is used, the finger interferes with speed controller as figure shown below. It causes malfunction.



MHZ2

MHZJ2

MHQ

MHL2

MHR

MHK

MHS

MHC2

MHT2

MHY2

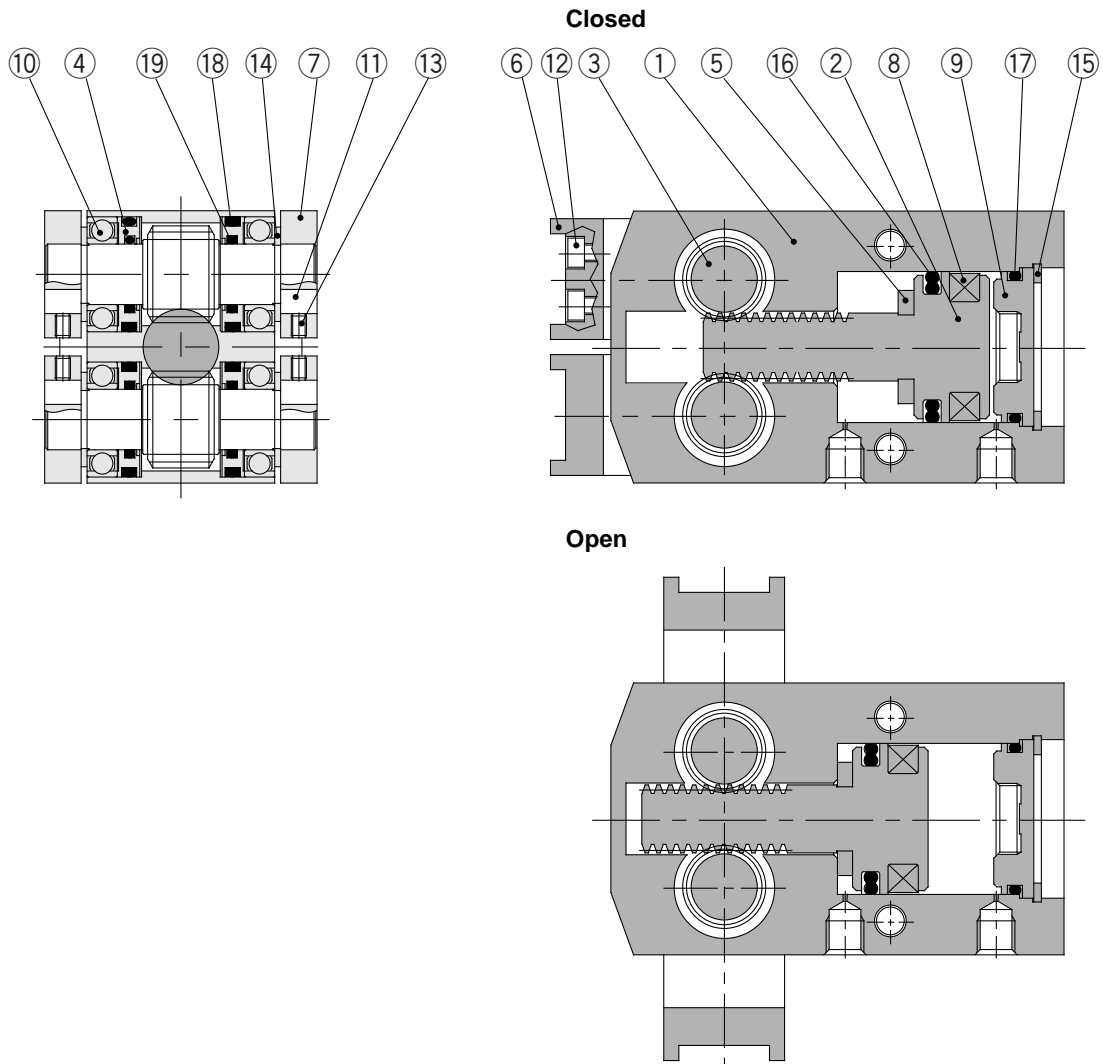
MHW2

MRHQ

Auto switch

Series MHW2

Construction



Component Parts

No.	Description	Material	Note
①	Body	Aluminum alloy	Hard anodized
②	Piston	Stainless steel	Nitriding
③	Pinion gear	Carbon steel	Heat treatment
④	Seal cover	Brass	
⑤	Bumper	Urethane rubber	
⑥	Finger (A)	Carbon steel	
⑦	Finger (B)	Carbon steel	
⑧	Rubber magnet	Synthetic rubber	

Component Parts

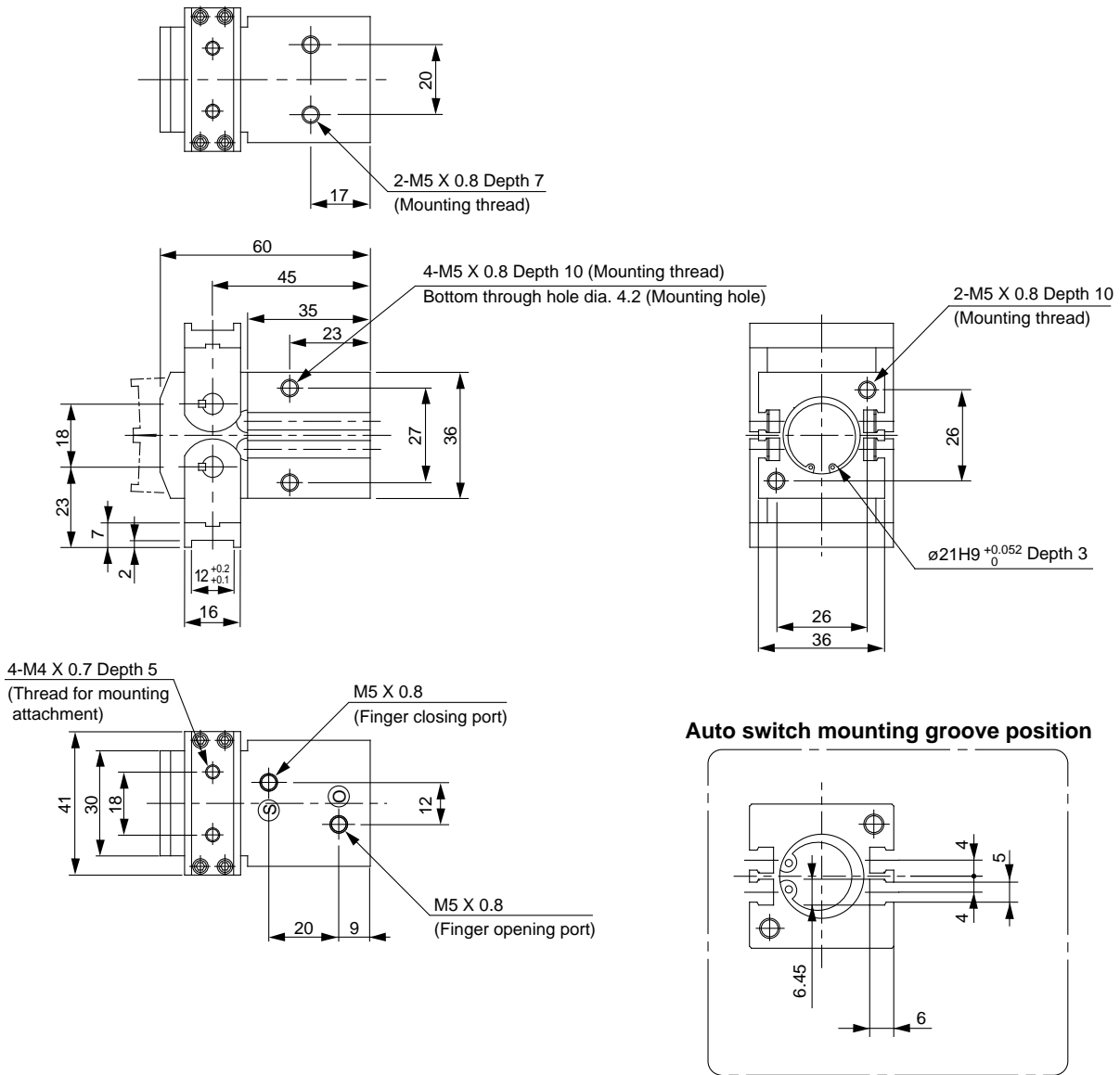
No.	Description	Material	Note
⑨	Cap	ø20, 25: Resin	
		ø32 to 50: Aluminum alloy	Hard anodized
⑩	Ball bearing	Carbon steel	Shield type
⑪	Key	Carbon steel	
⑫	Hexagon socket head screw	Carbon steel	
⑬	Hexagon socket cap screw	Carbon steel	
⑭	C-shape snap ring	Carbon steel	
⑮	C-shape snap ring	Carbon steel	

Replacement Parts: Seal Kits

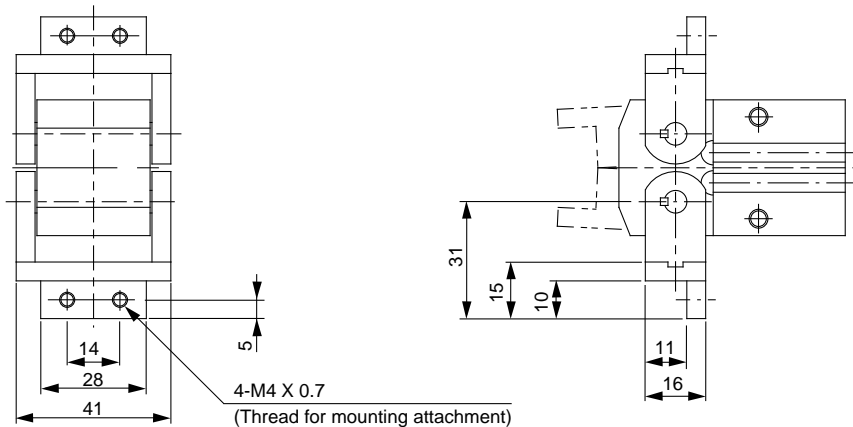
No.	Description	Material	Kit No.				
			MHW2-20D	MHW2-25D	MHW2-32D	MHW2-40D	MHW2-50D
⑬	Seal Kit	NBR	MHW20-PS	MHW25-PS	MHW32-PS	MHW40-PS	MHW50-PS
⑭							
⑮							
⑯							



MHW2-20D
Flat finger (Standard)



MHW2-20D1
Right angle finger



- MHZ2
- MHZJ2
- MHQ
- MHL2
- MHR
- MHK
- MHS

- MHC2
- MHT2
- MHY2
- MHW2**
- MRHQ
- Auto switch

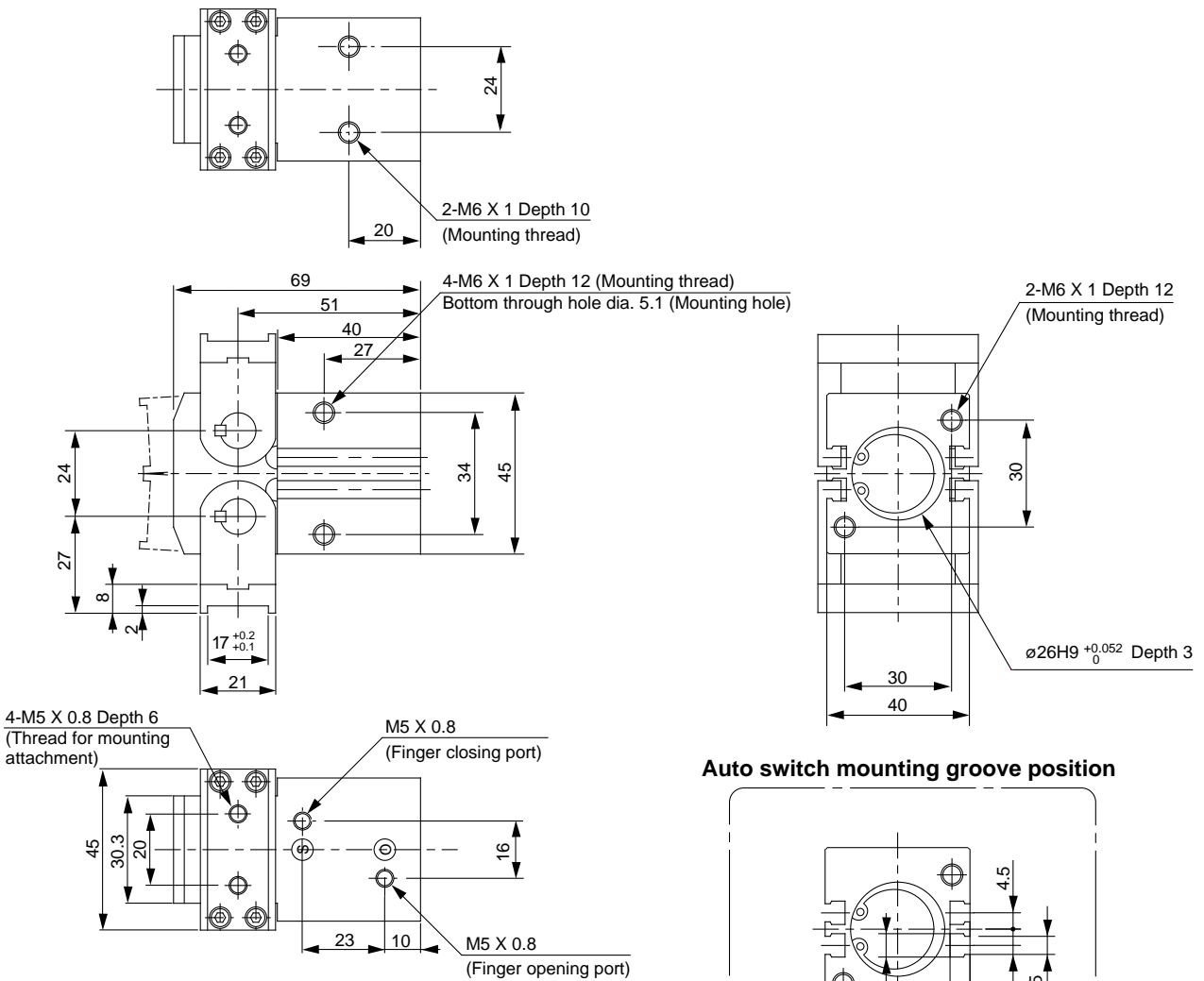
MHW2-20D.....SMHW2, #1
MHW2-20D1.....SMHW2, #6

Series MHW2

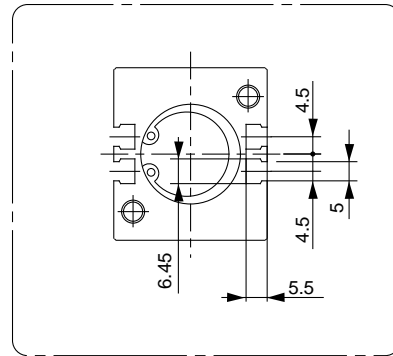


MHW2-25D

Flat finger (Standard)

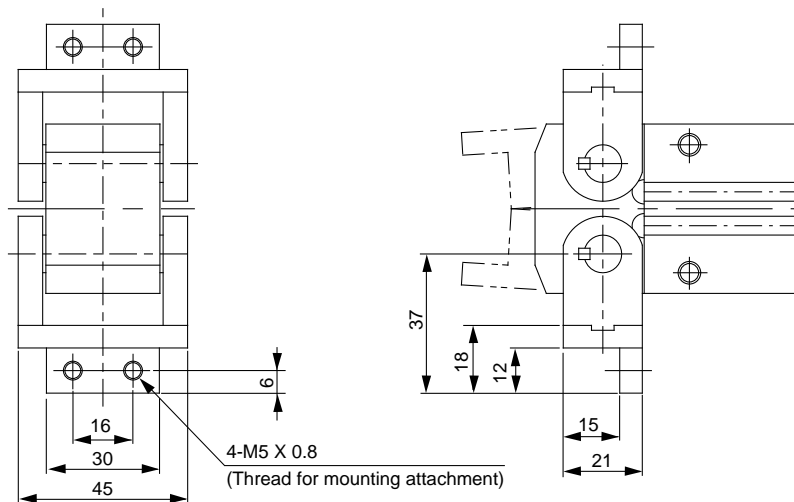


Auto switch mounting groove position



MHW2-25D1

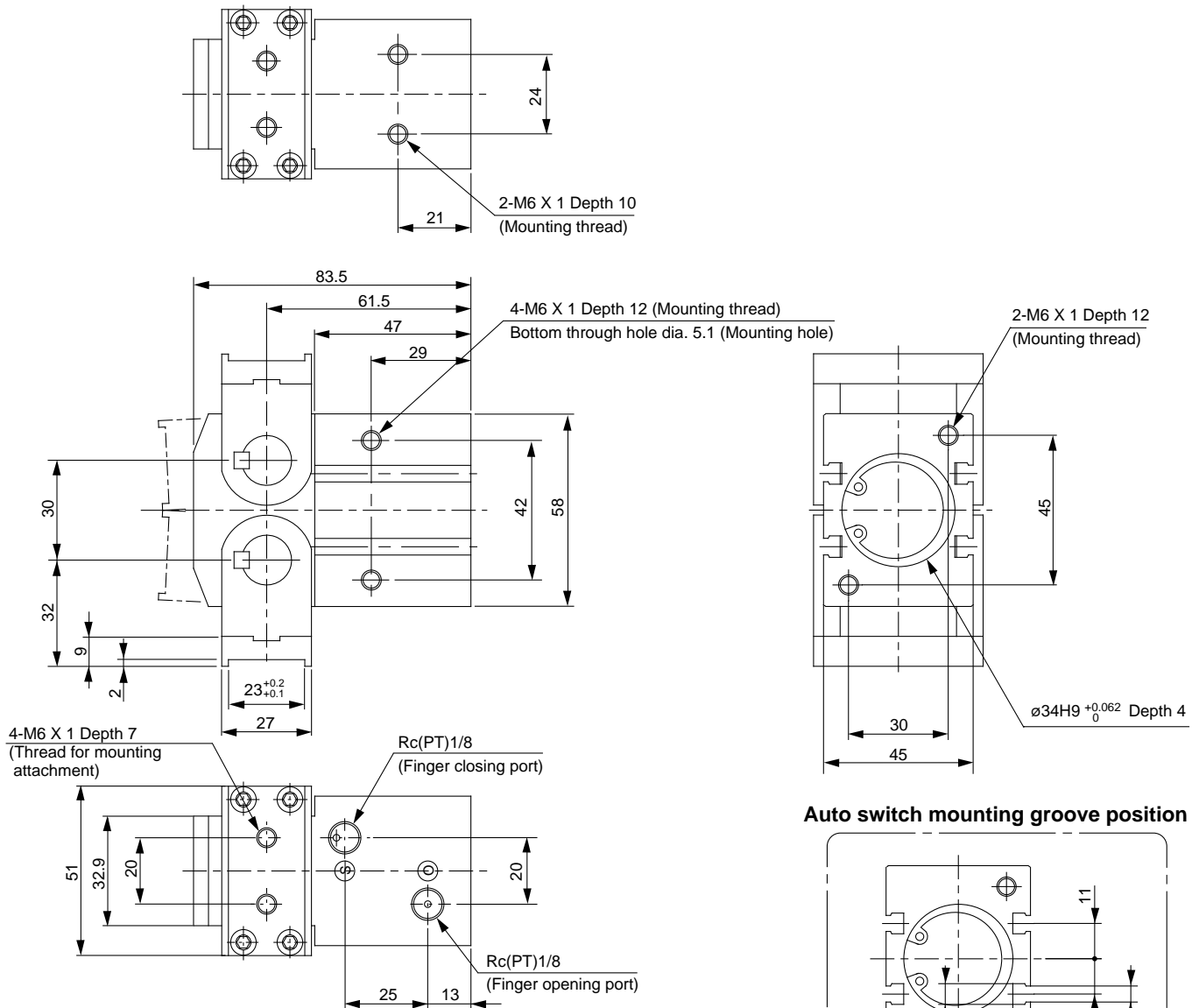
Right angle finger



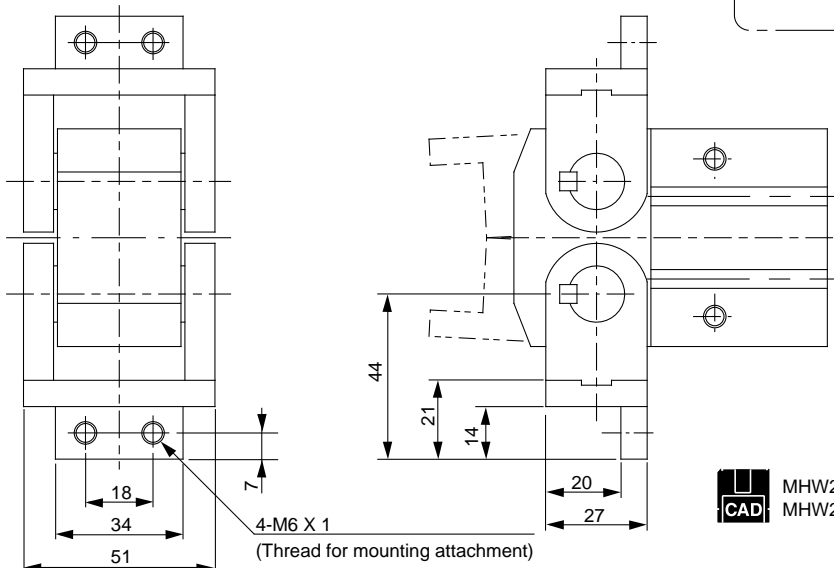
MHW2-25D.....SMHW2, #2
MHW2-25D1.....SMHW2, #6



MHW2-32D
Flat finger (Standard)



MHW2-32D1
Right angle finger



- MHZ2
- MHZJ2
- MHQ
- MHL2
- MHR
- MHK
- MHS
- MHC2
- MHT2
- MHY2
- MHW2**
- MRHQ
- Auto switch

MHW2-32D.....SMHW2, #3
MHW2-32D1.....SMHW2, #6

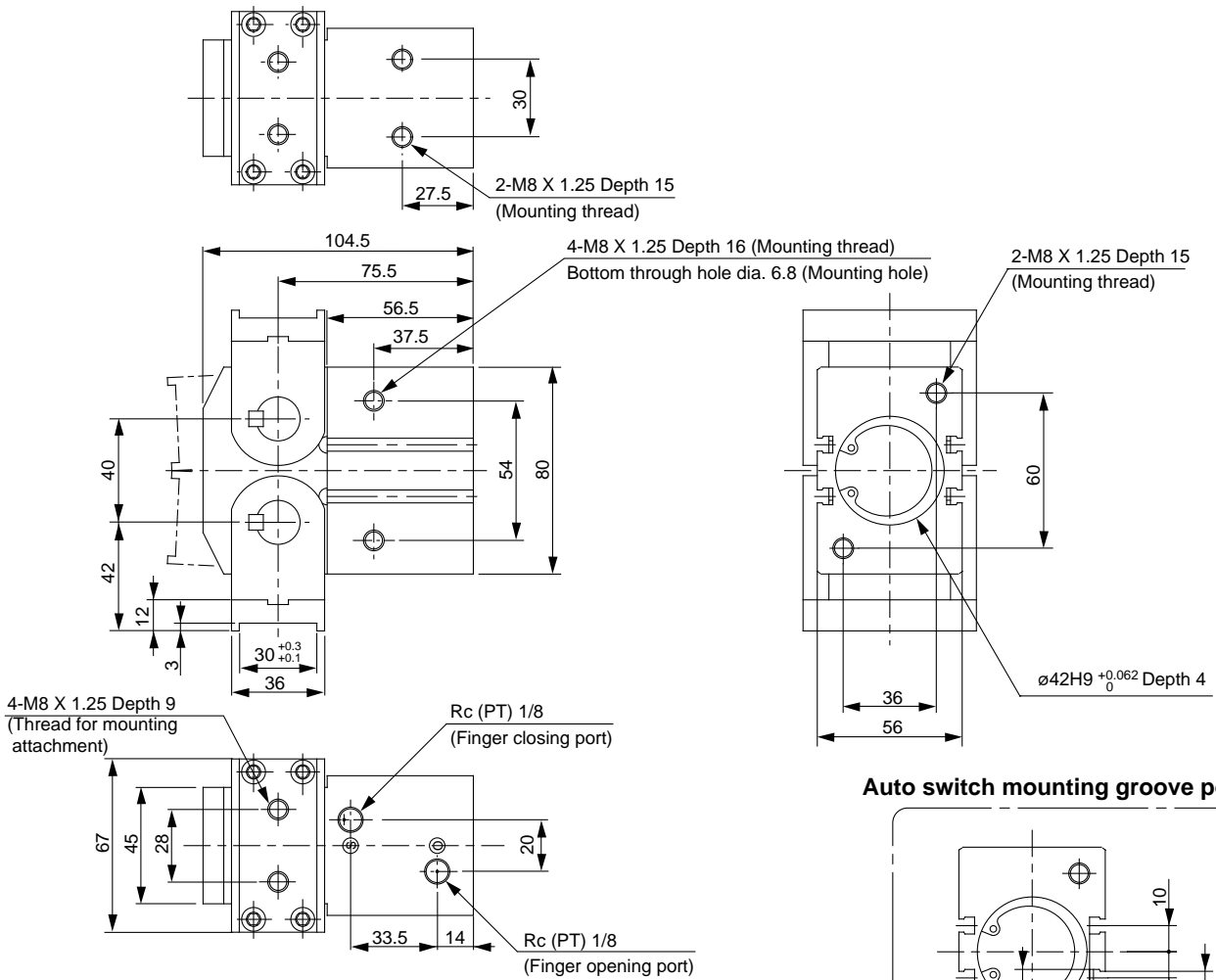
Series MHW2

Dimensions

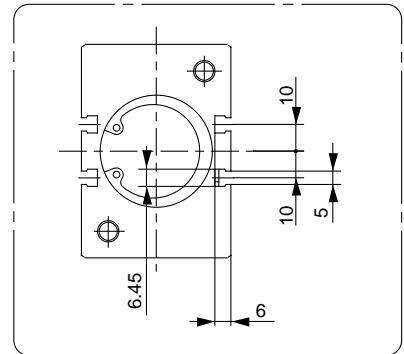


MHW2-40D

Flat finger (Standard)

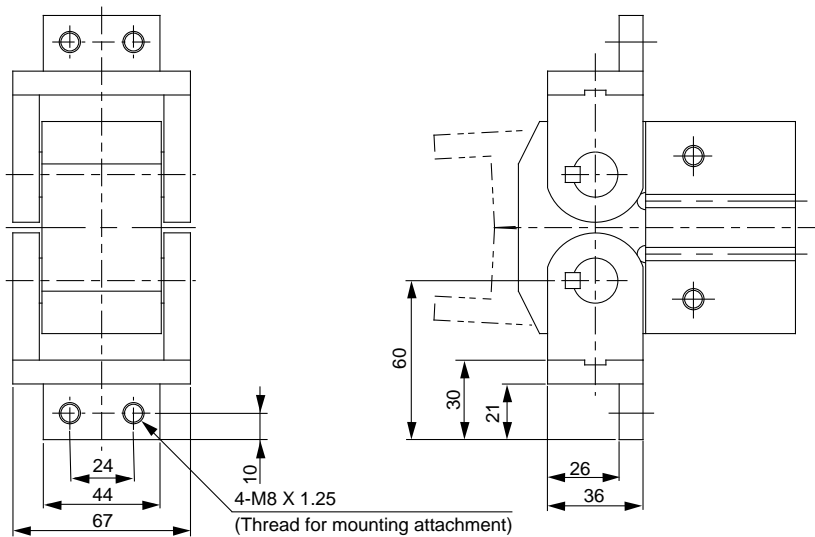


Auto switch mounting groove position



MHW2-40D1

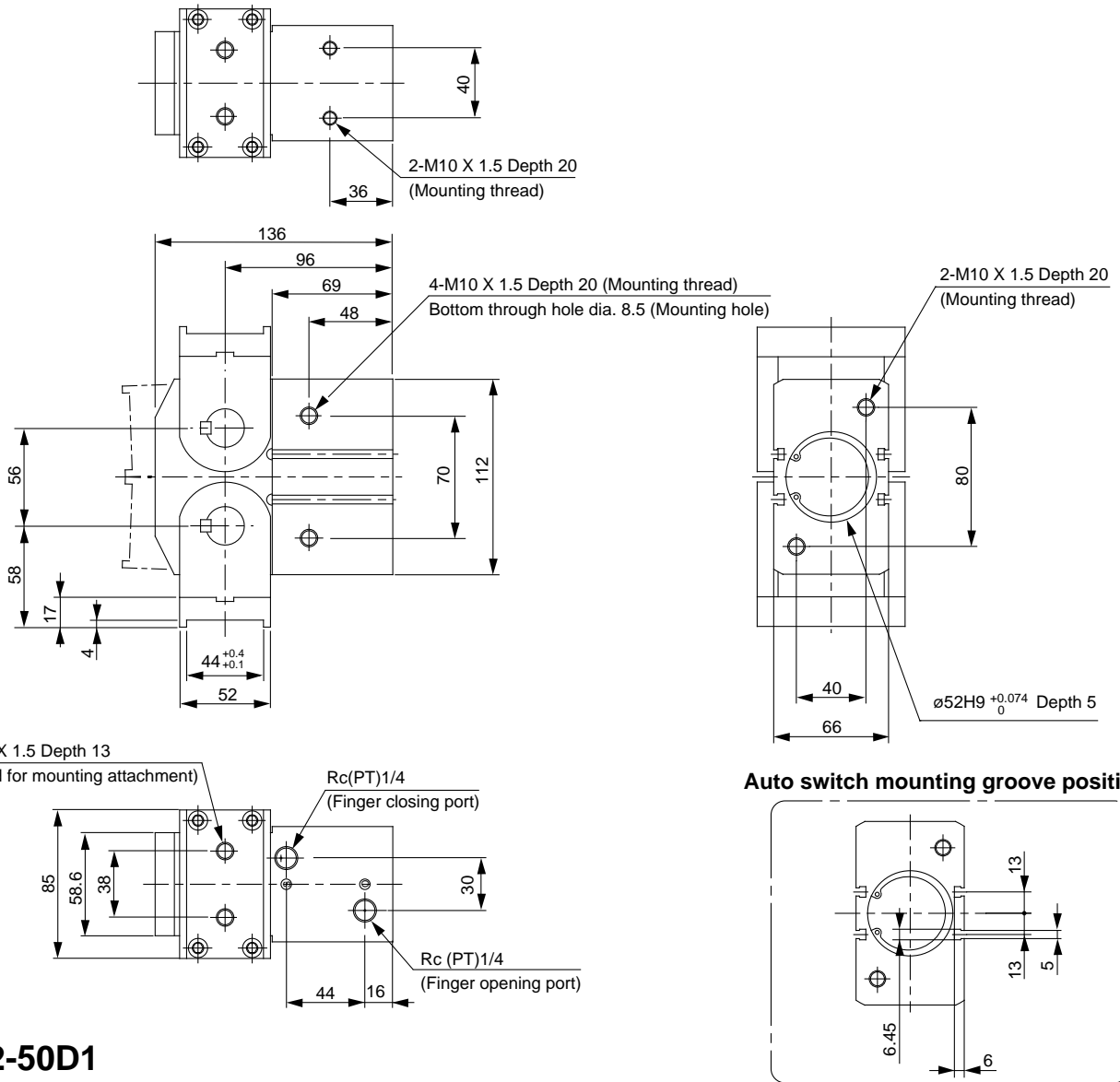
Right angle finger



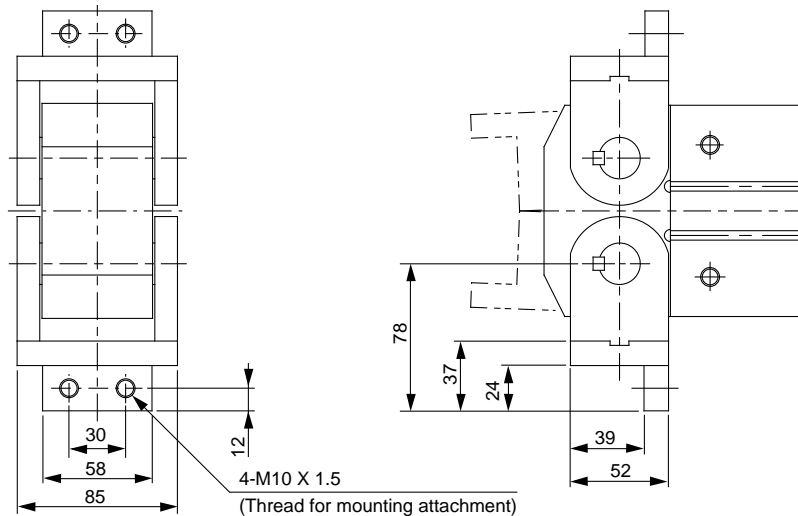
MHW2-40D.....SMHW2, #4
MHW2-40D1.....SMHW2, #6



MHW2-50D
Flat finger (Standard)



MHW2-50D1
Right angle finger



MHZ2

MHZJ2

MHQ

MHL2

MHR

MHK

MHS

MHC2

MHT2

MHY2

MHW2

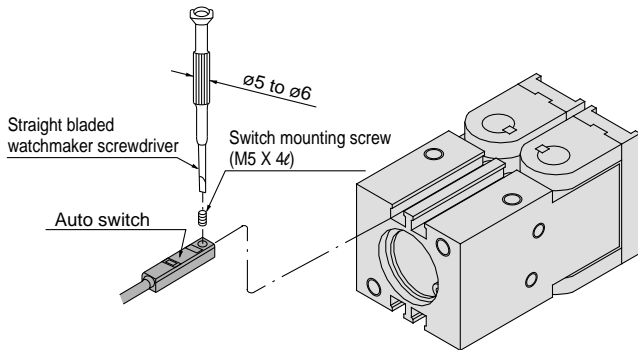
MRHQ

Auto switch

Series MHW2

Setting Method of Auto Switch

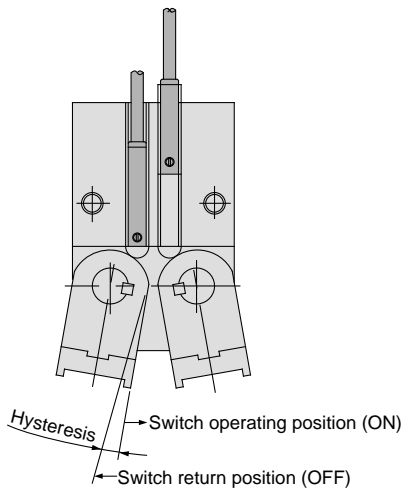
To set the auto switch, insert the auto switch into the installation groove of the gripper from the direction indicated in the following drawing. After establishing the position, tighten the attached switch mounting screw with a straight bladed watchmakers screwdriver.



Note) Use a watchmakers screwdriver with a grip diameter of 5 to 6mm to tighten the auto switch mounting screw. Use a tightening torque of 0.05 to 0.1Nm. As a rough guide, tighten the screw an additional 90° after feeling a tighten resistance.

Auto Switch Hysteresis

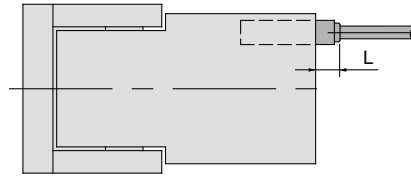
Auto switches have a differential like a micro switch. Please refer to the following table as a guide when setting auto switch positions.



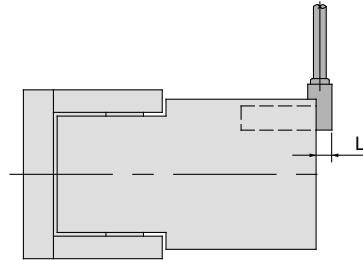
Auto switch model No. Gripper model No.	D-Y ⁵ ₆ 9 ^A _B	D-Y7 ^N _B W (V)		D-Y7BA	
		Red light at ON	Green light at ON	Red light at ON	Green light at ON
MHW2-20D	4°	6°	15°	5°	11°
MHW2-25D	4°	5°	11°	4°	9°
MHW2-32D	2°	4°	9°	3°	7°
MHW2-40D	2°	3°	6°	2°	5°
MHW2-50D	2°	3°	5°	2°	4°

Protrusion of Auto Switch from Body Edge

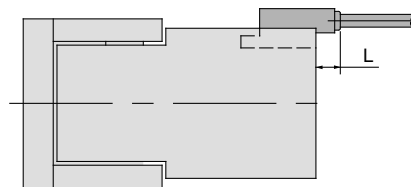
The protrusion of an auto switch from the edge of the body is shown in the table below. Use the table as a guideline for mounting.



When auto switch D-Y59^A_B is used



When auto switch D-Y69^A_B is used



When auto switch D-Y7BAL is used

Auto switch model No.		Protrusion [mm]				Unit:mm
Gripper model No.		In-line			Perpendicular	
		D-Y59 ^A _B	D-Y7 ^N _B W	D-Y7BA	D-Y69 ^A _B	D-Y7 ^N _B WV
MHW2-20D	O	—	—	—	—	—
	S	7	12	12	5	12
MHW2-25D	O	—	—	—	—	—
	S	7	11	10	5	11
MHW2-32D	O	—	—	—	—	—
	S	4	9	8	2	9
MHW2-40D	O	—	—	—	—	—
	S	3	8	7	1	8
MHW2-50D	O	—	—	—	—	—
	S	1	6	5	—	6