

180° Angular Style Air Gripper Rack & Pinion Style

Series *MHW2*

Size: 20, 25, 32, 40, 50

How to Order

MHW 2-20 D 1-Y7BW S

Number of fingers

2	2 fingers
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Bore size

20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm

Action

D	Double acting
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Number of auto switches

Nil	2 pcs.
S	1 pc.

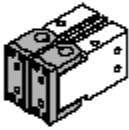
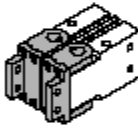
Auto switch

Nil	Without auto switch
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* For the applicable auto switch model, refer to the table below.

Finger option

Nil: Flat type fingers (Standard) 1: Right angle type fingers tapped mounting

Applicable Auto Switch/Refer to page 12-13-1 for further information on auto switches.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model		Lead wire length (m)*			Flexible lead wire	Pre-wire connector	Applicable load
					DC	AC	Electrical entry		0.5 (Nil)	3 (L)	5 (Z)			
							Perpendicular	In-line						
Solid state switch	Diagnosis (2-color indication)	Grommet	Yes	3-wire (NPN)	5 V 12 V		Y69A	Y59A	●	●	○	Standard	○	IC circuit
				3-wire (PNP)			Y7PV	Y7P	●	●	○		○	IC circuit
				2-wire	12 V		Y69B	Y59B	●	●	○		○	—
				3-wire (NPN)	5 V 12 V		Y7NWV	Y7NW	●	●	○		○	IC circuit
				3-wire (PNP)		Y7PWV	Y7PW	●	●	○	○		IC circuit	
				2-wire	12 V		Y7BWV	Y7BW	●	●	○		○	—

* Lead wire length symbols: 0.5 m Nil (Example) Y59A

3 m L (Example) Y59AL

5 m Z (Example) Y59AZ

* Auto switches marked with a "O" symbol are produced upon receipt of order.

Note) Take note of hysteresis with 2-color indication type switches.

Refer to "Auto Switch Hysteresis" on page 12-10-24 when using the 2-color indication type D-Y7BAL.



Refer to page 12-13-25 for auto switch specifications.

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Specifications

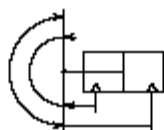


Fluid	Air
Operating pressure	0.15 to 0.7 MPa
Ambient and fluid temperature	-10 to 60°C
Repeatability	±0.2 mm
Max. operating frequency	ø20, 25: 60 c.p.m. ø32 to 50: 30 c.p.m.
Lubrication	Not required
Action	Double acting
Auto switch (Option) ^{Note)}	Solid state switch (3-wire, 2-wire)



Note) Refer to page 12-13-1 for further information on auto switches.

JIS Symbol
Double acting



Model

Model	Bore size (mm)	Effective ⁽¹⁾ gripping force (N·m)	Opening angle (Both sides)		Weight ⁽²⁾ (g)
			Opening	Closing	
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 0.5 MPa

Note 2) Except auto switch



- Refer to "How to Select the Applicable Model" on page 12-10-4.
- Refer to pages 12-10-4 to 12-10-5 for the details on effective holding force and allowable overhanging distance.

⚠ Precautions

Be sure to read before handling.

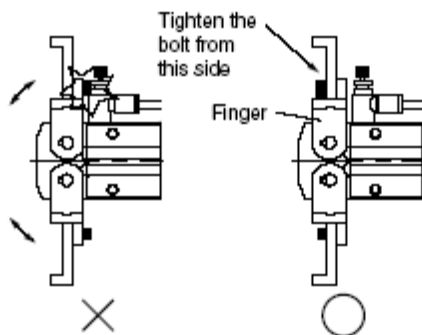
Refer to pages 12-15-3 to 12-15-4 for Safety Instructions and Common Precautions on the products mentioned in this catalog, and refer to pages 12-1-4 to 12-1-6 for Precautions on every series.

Mounting

MHW

⚠ Warning

When using right angle finger tap mounting type, monitor the interference of the bolt with the speed controller.



Bolt interferes with speed controller

MHZ

MHF

MHL

MHR

MHK

MHS

MHC

MHT

MHY

MHW

MRHQ

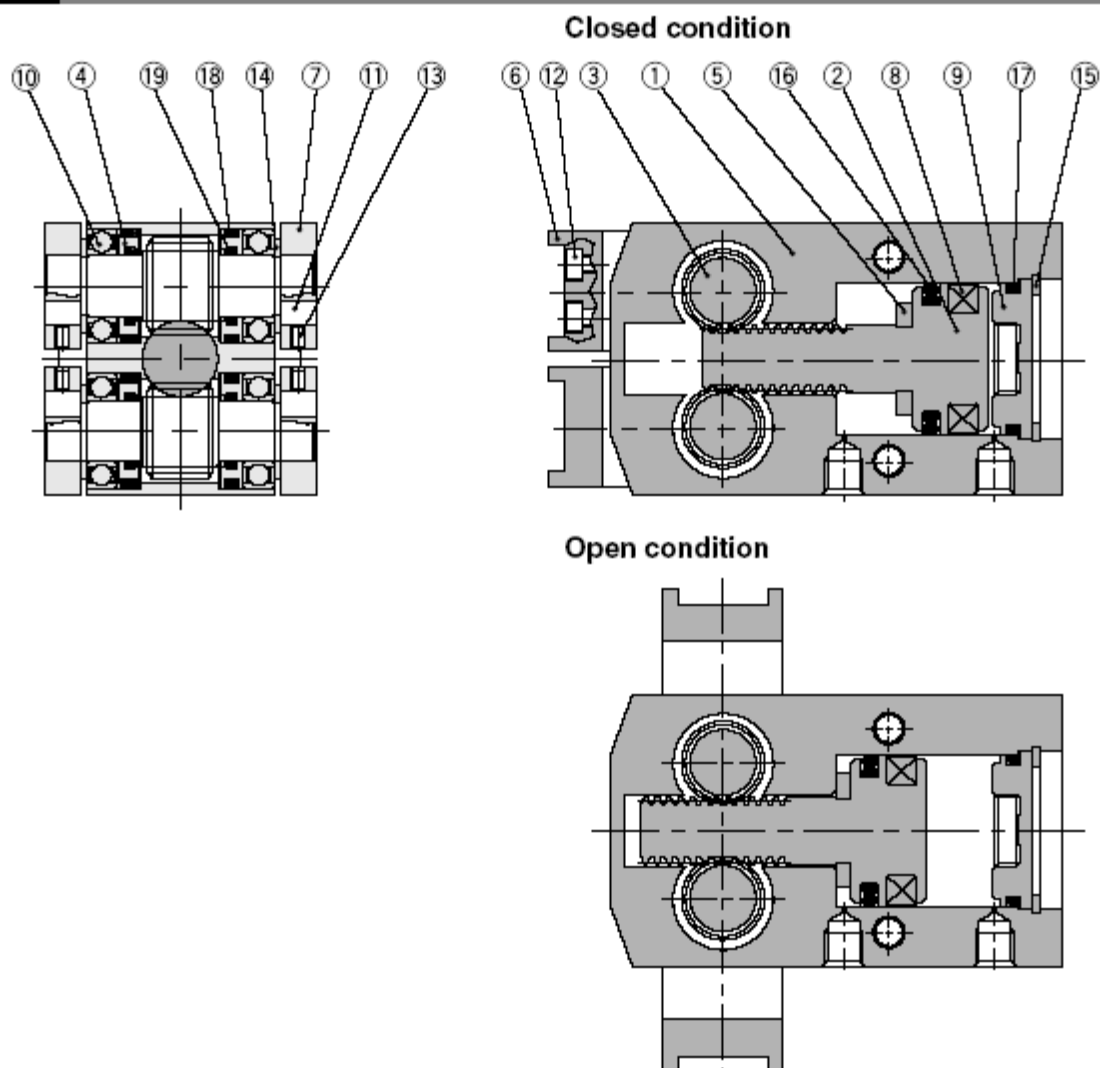
Misc.

D-

20-

Series MHW2

Construction



Component Parts

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

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 bolt	Carbon steel	
⑬	Hexagon socket cap screw	Carbon steel	
⑭	Type C snap ring	Carbon steel	
⑮	Type C snap ring	Carbon steel	

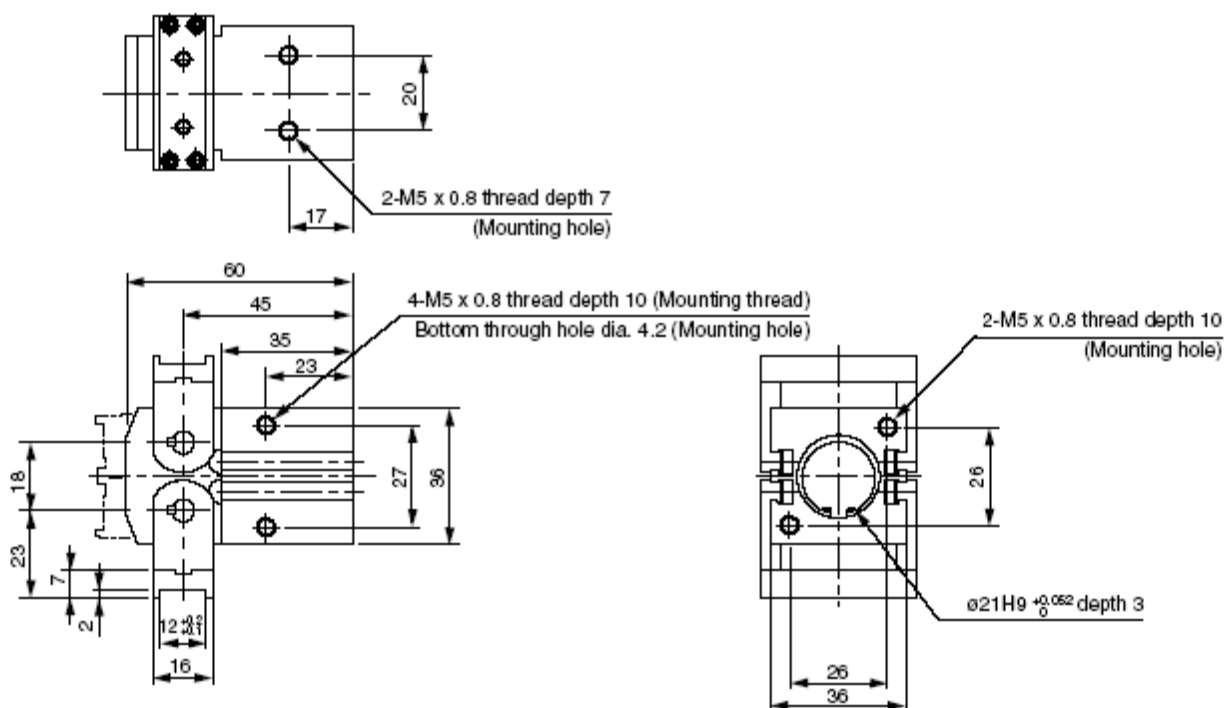
Replacement Parts

Description	MHW2-20D	MHW2-25	MHW2-32	MHW2-40	MHW2-50	Main parts
Seal kit	MHW20-PS	MHW25-PS	MHW32-PS	MHW32-PS	MHW50-PS	⑬⑭⑮
Piston assembly	MHW-A2001	MHW-A2501	MHW-A3201	MHW-A4001	MHW-A5001	②⑧⑤
Finger assembly	MHW2-□□	MHW-A2002	MHW-A2502	MHW-A3202	MHW-A4002	⑥⑦⑩⑫③
	MHW2-□□1	MHW-A2002-1	MHW-A2502-1	MHW-A3202-1	MHW-A4002-1	

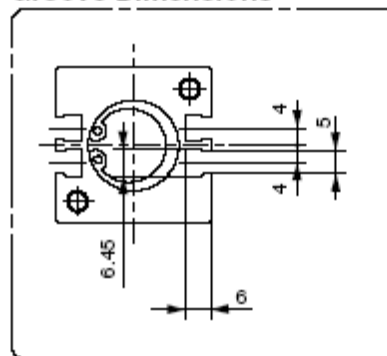
* MHW-3 Order 1 piece finger assembly per one unit.

Dimensions

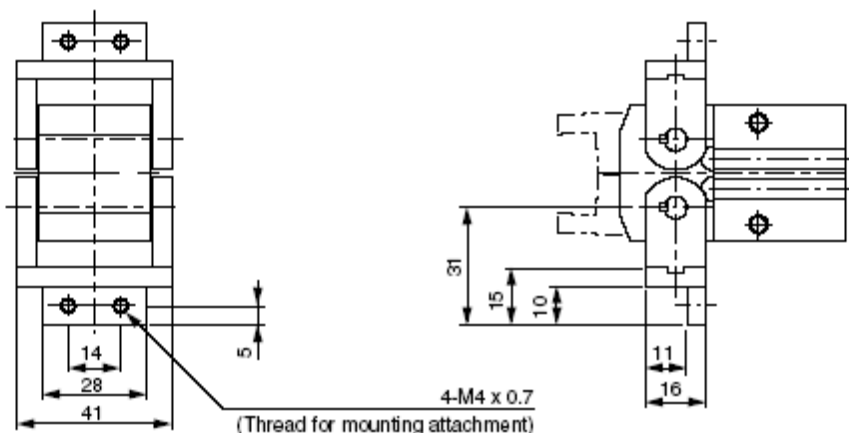
MHW2-20D
 Flat finger type (Standard)



Auto Switch Mounting Groove Dimensions



MHW2-20D1
 Right angle finger type



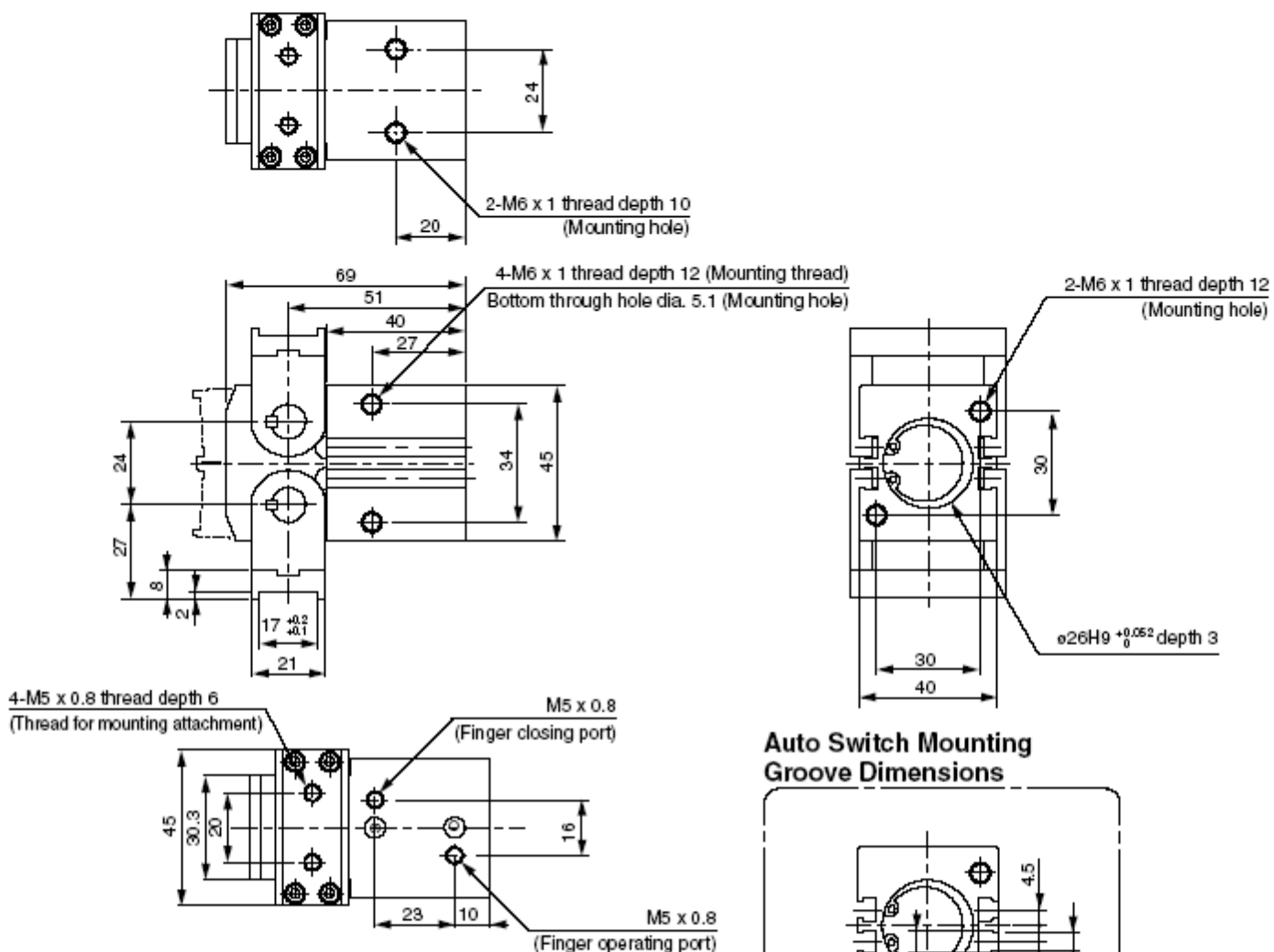
- MHZ
- MHF
- MHL
- MHR
- MHK
- MHS
- MHC
- MHT
- MHY
- MHW**
- MRHQ
- Misc.
- D-
- 20-

Series MHW2

Dimensions

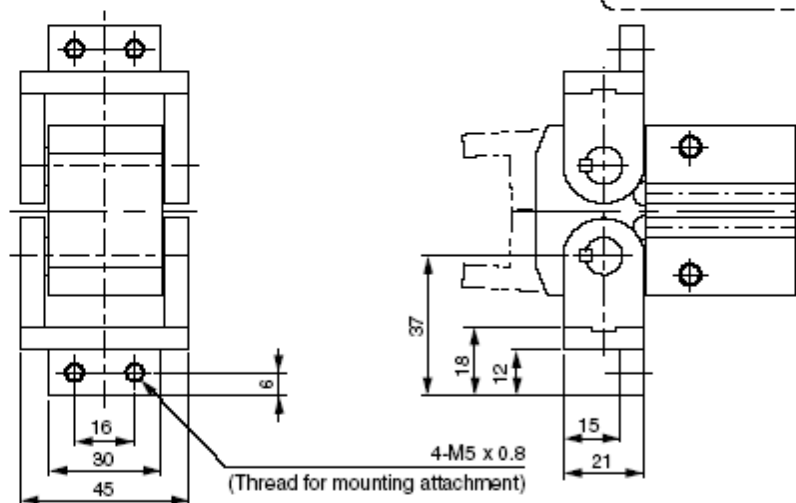
MHW2-25D

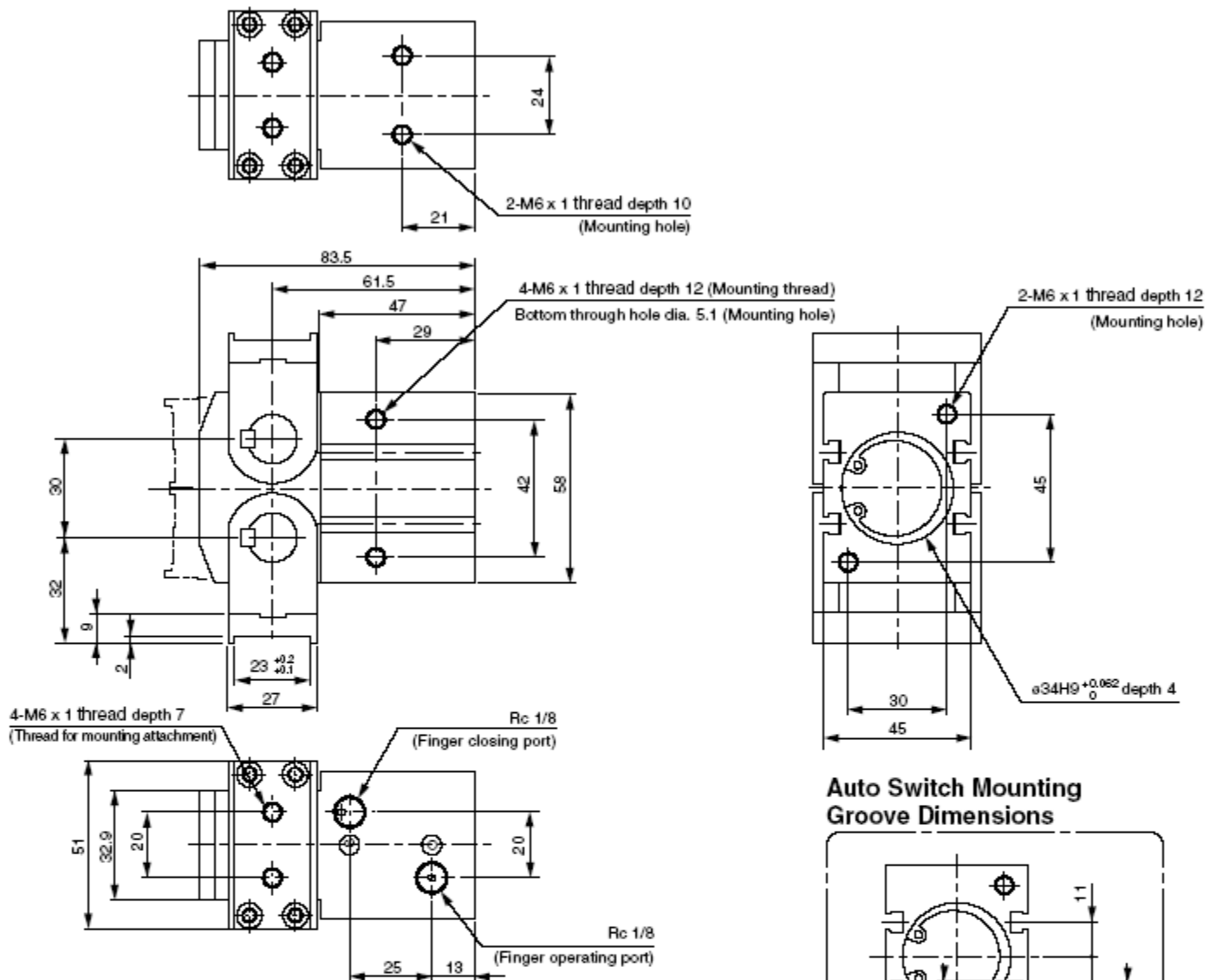
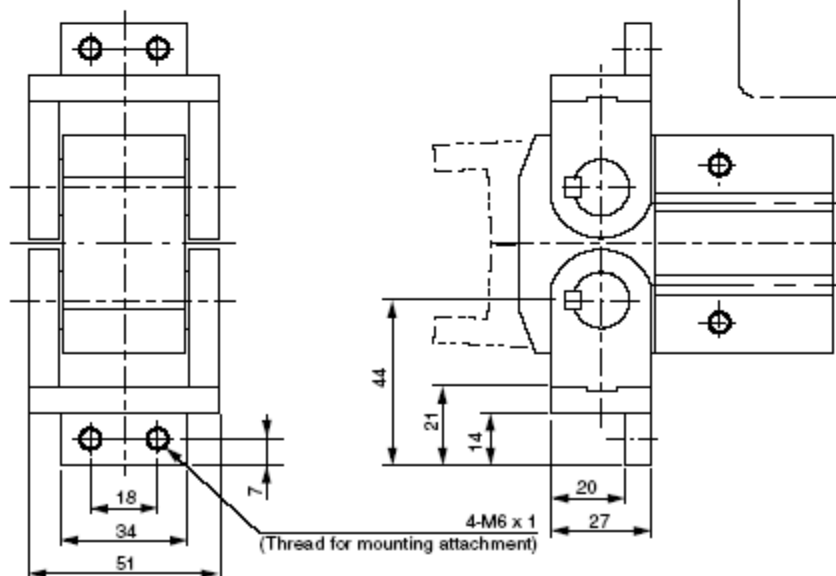
Flat finger type (Standard)



MHW2-25D1

Right angle finger type



MHW2-32D
Flat finger type (Standard)**MHW2-32D1**
Right angle finger type

MHZ

MHF

MHL

MHR

MHK

MHS

MHC

MHT

MHY

MHW

MRHQ

Misc.

D-

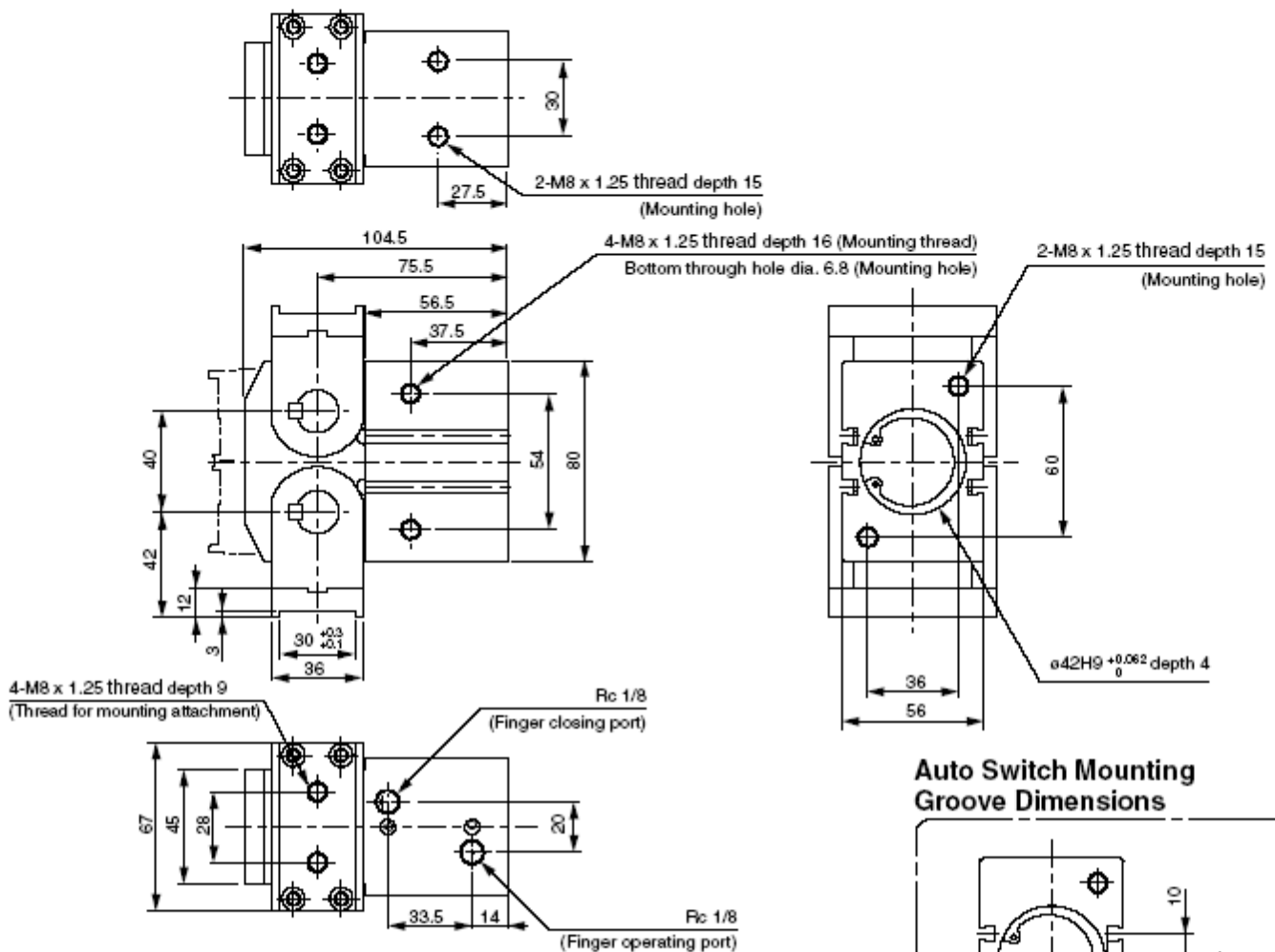
20-

Series MHW2

Dimensions

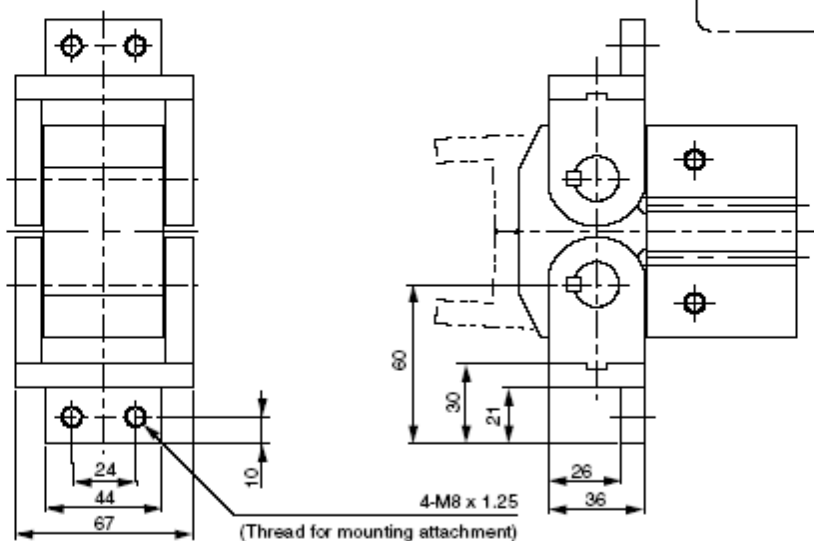
MHW2-40D

Flat finger type (Standard)

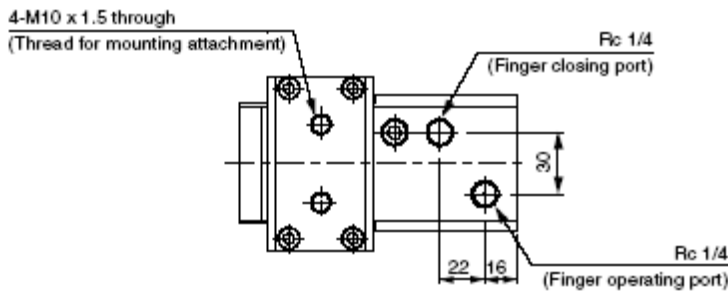
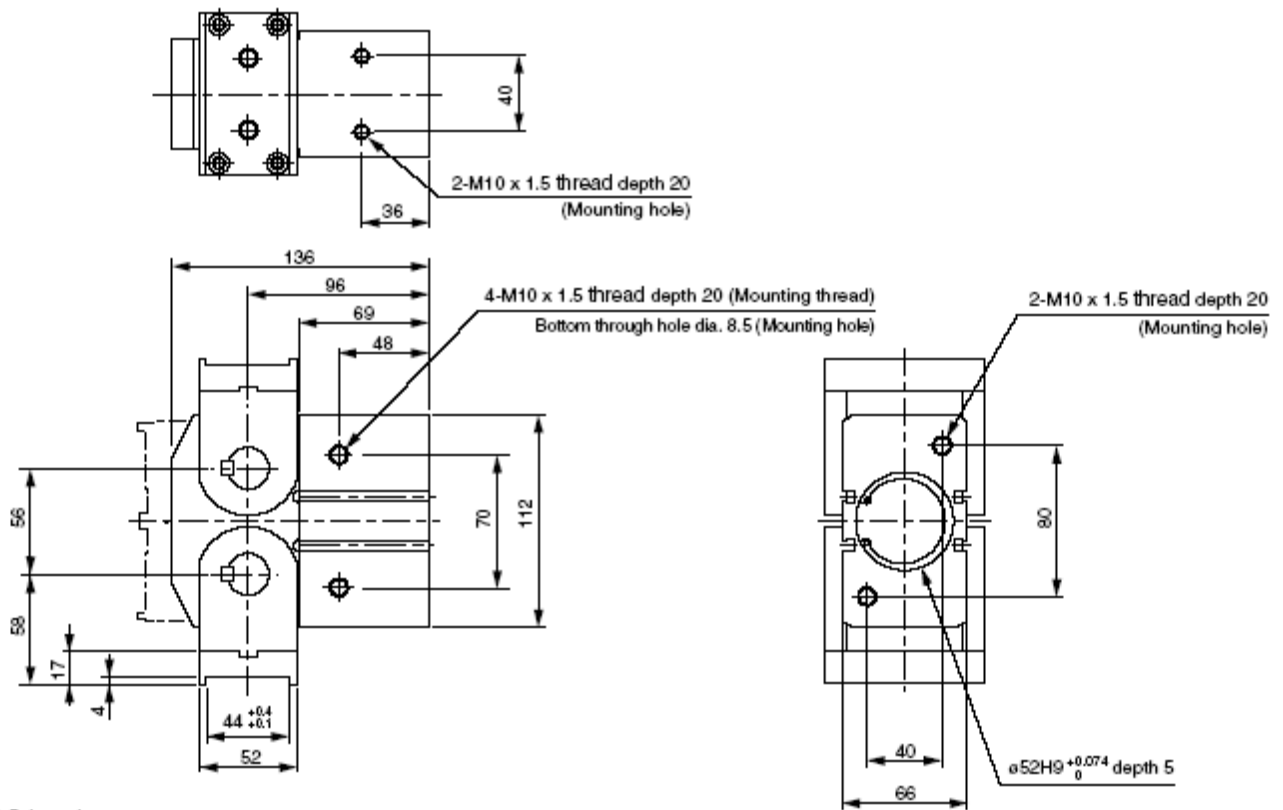


MHW2-40D1

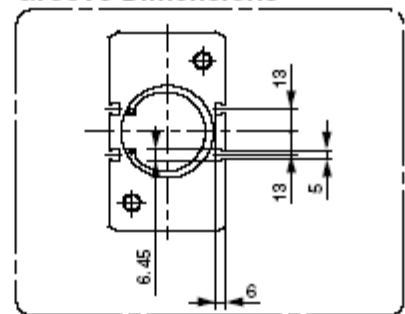
Right angle finger type



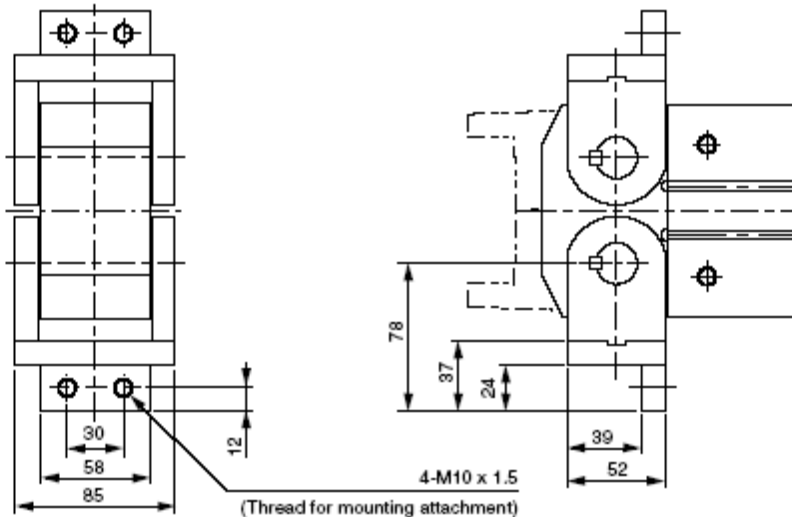
MHW2-50D
 Flat finger type (Standard)



Auto Switch Mounting Groove Dimensions



MHW2-50D1
 Right angle finger type



MHZ
MHF
MHL
MHR
MHK
MHS
MHC
MHT
MHY
MHW
MRHQ
Misc.
D-
20-