

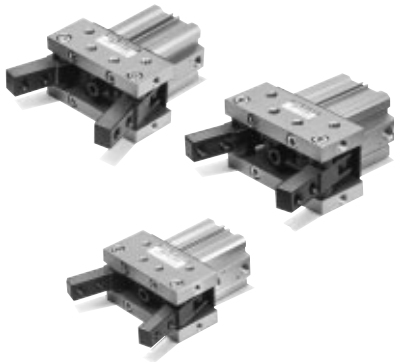
Toggle Style Air Gripper

Series MHT2

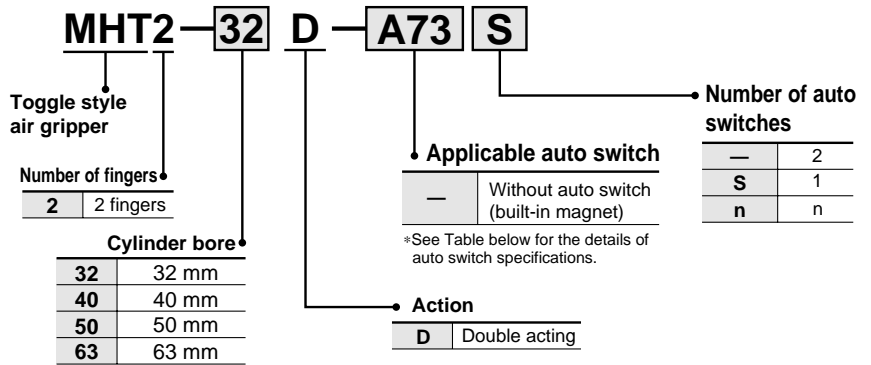


ø32, ø40, ø50, ø63

- Ideal for holding heavy work.
- The toggle mechanism holds work even when pressure drops.
- Auto switch is attachable.



How to Order



Auto Switch Specifications

Refer to p.2.11-1 for further information of auto switch.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Rain mounting		Direct mounting		Lead wire length (m) ^{*)}				Applicable load		
					AC	DC	Perpendicular	In-line	Perpendicular	In-line	0.5 (—)	3 (L)	0.5 (Z)	None (N)			
Reed switch	—	Grommet	Yes	3-wire (NPN equi.)	24V	5V	—	—	A76H	A96V	A96	●	●	—	—	Relay, PLC	
						—	200V	A72	A72H	—	—	●	●	—	—		
						12V	100V	A73	A73H	—	—	●	●	—	—		
						5V, 12V	100V or less	A80	A80H	A90V	A90	●	●	—	—		
						12V	—	A73C	—	—	—	●	●	—	—		
						5V, 12V	24V or less	A80C	—	—	—	●	●	—	—		
Solid state switch	—	Grommet	Yes	3-wire (NPN)	24V	5V, 12V	—	—	F7NV	F79	—	—	●	●	○	Relay, PLC	
						12V	—	—	F9NV	F9N	—	—	●	●	○		
						5V, 12V	—	—	F7PV	F7P	—	—	●	●	○		
						12V	—	—	F9PV	F9P	—	—	●	●	○		
						5V, 12V	—	—	F7BV	J79	—	—	●	●	○		
						12V	—	—	F9BV	F9B	—	—	●	●	○		
						5V, 12V	—	—	J79C	—	—	—	●	●	○		
						12V	—	—	F7NVV	F9NVV	F9NVV	—	—	●	●		○
						5V, 12V	—	—	F79W	—	—	—	—	●	●		○
						12V	—	—	F7PW	—	—	—	—	●	●		○
						5V, 12V	—	—	F9PWV	F9PW	—	—	—	●	●		○
						12V	—	—	F7BWV	F9BWV	F9BW	—	—	●	●		○
5V, 12V	—	—	F7BA*	F9BA*	—	—	—	●	●	○							
12V	—	—	F79F	—	—	—	—	●	●	○							
—	—	—	F7LF	—	—	—	—	●	●	○							

* Lead wire length 0.5m..... — (Example) A80C 3m..... L (Example) A80CL 5m..... Z (Example) A80CZN (Example) A80CN

* Solid state switch with mark "○" is made to order.

* D-F7□WV, Z(5m) is not available.

* F7BA and F9BA is applicable to oil-proof auto switch (-X5).

Switch Mounting Bracket Parts No.

Bore size (mm)	Bracket No.	Notes	Applicable switch
32, 40, 50, 63	BQ-2	<ul style="list-style-type: none"> Switch mounting screw (M3x0.5 x10ℓ) Switch spacer Switch mounting nut 	Reed switch D-A7, A8 D-A73C, A80C D-A7□H, A80H D-A79W Solid state switch D-F7□, J79 D-F7□V D-J79C D-F7□W, J79W D-F7□WV D-F7BAL D-F7□F

Model/Specifications

Model	MHT2-32D	MHT2-40D	MHT2-50D	MHT2-63D
Bore size (mm)	32	40	50	63
Action	Double acting			
Fluid	Air			
Operating pressure	0.1 to 0.6MPa			
Ambient and fluid temperature	5 to 60°C			
Lubrication	Non-lube			
Finger opening angle (total)	-3° to 28°	-3° to 27°	-2° to 23°	-2° to 23°
Weight	0.80 kg	1.09 kg	1.93kg	2.8 kg
Holding moment (Effective value) Nm ^{Note)}	12.4	36.0	63.0	106

Note) At pressure 0.5 MPa

MHT2

MHTJ2

MHQ

MHL2

MHR

MHK

MHS

MHC2

MHT2

MHY2

MHW2

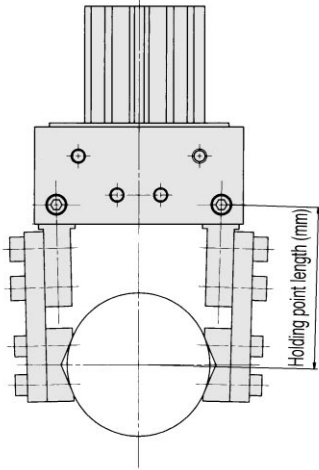
MRHQ

Auto switch

Series MHT2

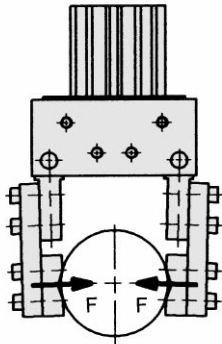
Effective Holding Force

- Work holding point should be within the range indicated in the graph.



● Indication of effective holding force

The holding force shown in the tables represents the holding force of one finger when all fingers and attachment are in contact with the work. F = one finger thrust.



⚠️ Precaution

Be sure to read before handling. Refer to p.0-20 and 0-21 for Safety Instructions and common precautions on the product mentioned in this catalog, and refer to p.2.0-3 to 2.0-4 for precautions of every series.

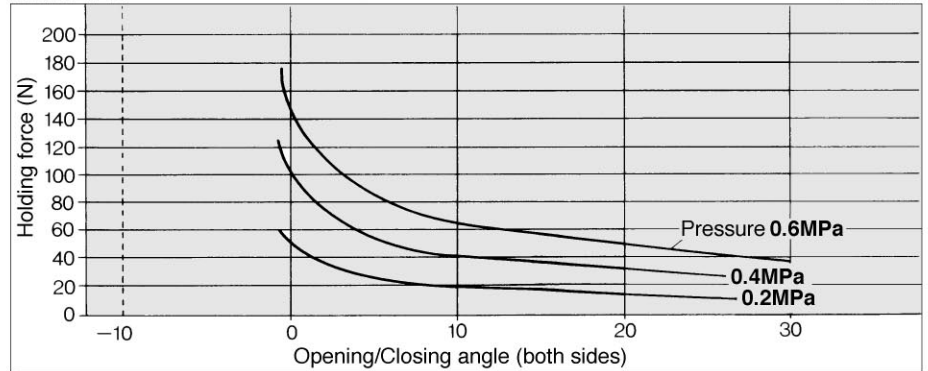
⚠️ Warning

Maintenance

If a workpiece is to be held by using the toggle, make sure to periodically check that the workpiece has not shifted during the acceleration of the movement. If the workpiece is not held in a stable manner, it could shift or drop and create a dangerous situation. If the workpiece is not held in a stable manner, use shims on the attachment to adjust the hold. To verify the gripping condition or to make any adjustments, make sure to do so in an area where the air gripper or the workpiece will not fall.

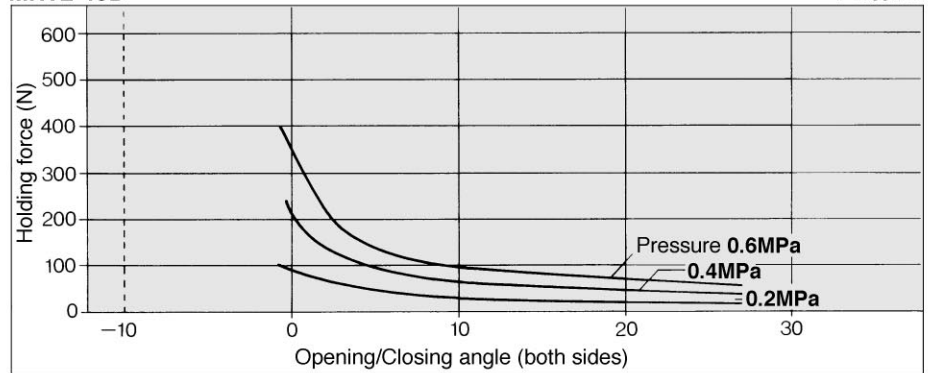
MHT2-32D

L = 180mm



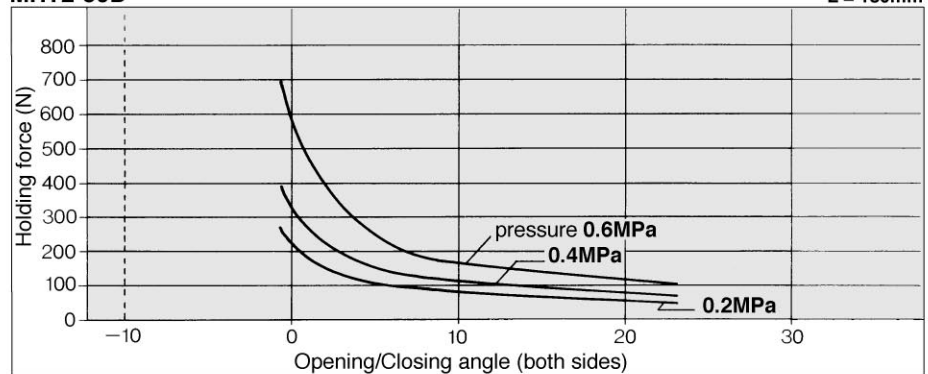
MHT2-40D

L = 180mm



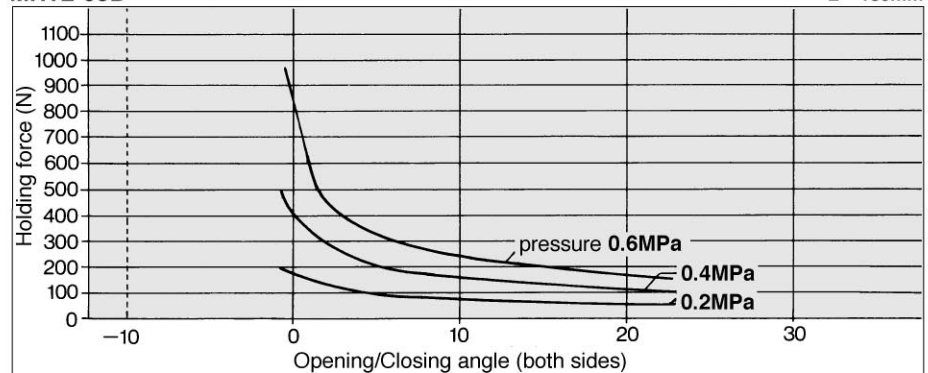
MHT2-50D

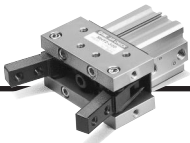
L = 180mm



MHT2-63D

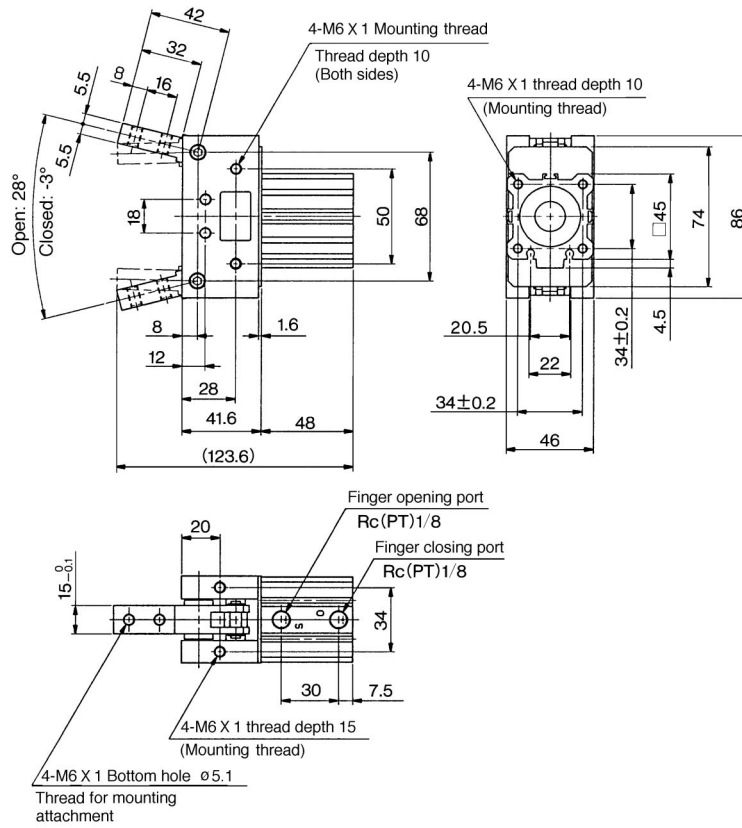
L = 180mm



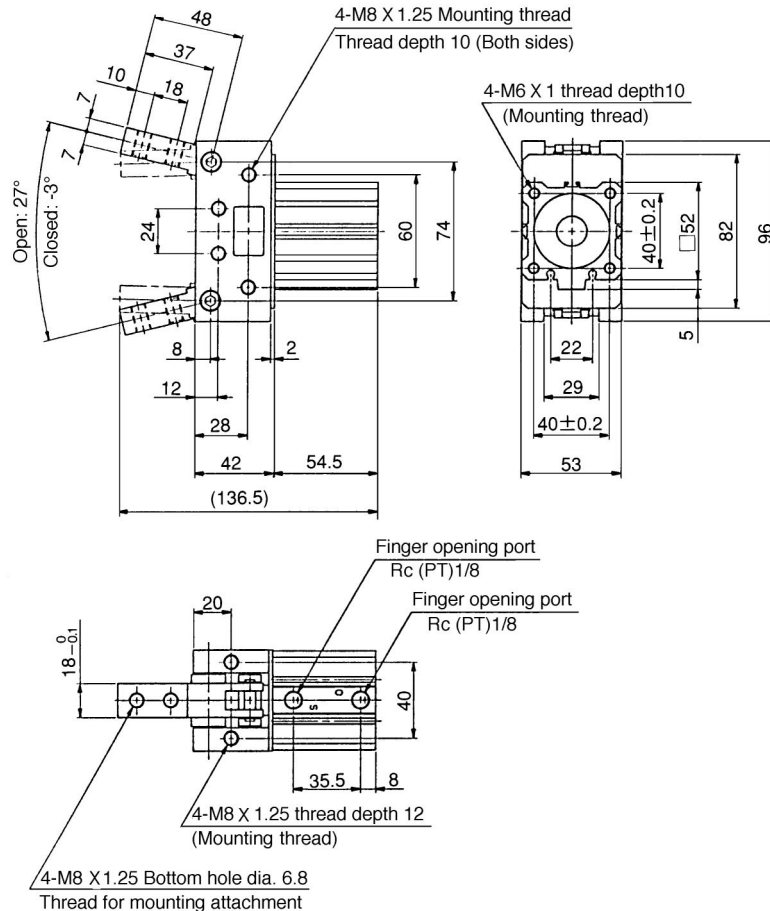


MHT2-32D

Dimensions



MHT2-40D



MHZ2

MHZJ2

MHQ

MHL2

MHR

MHK

MHS

MHC2

MHT2

MHY2

MHW2

MRHQ

Auto switch



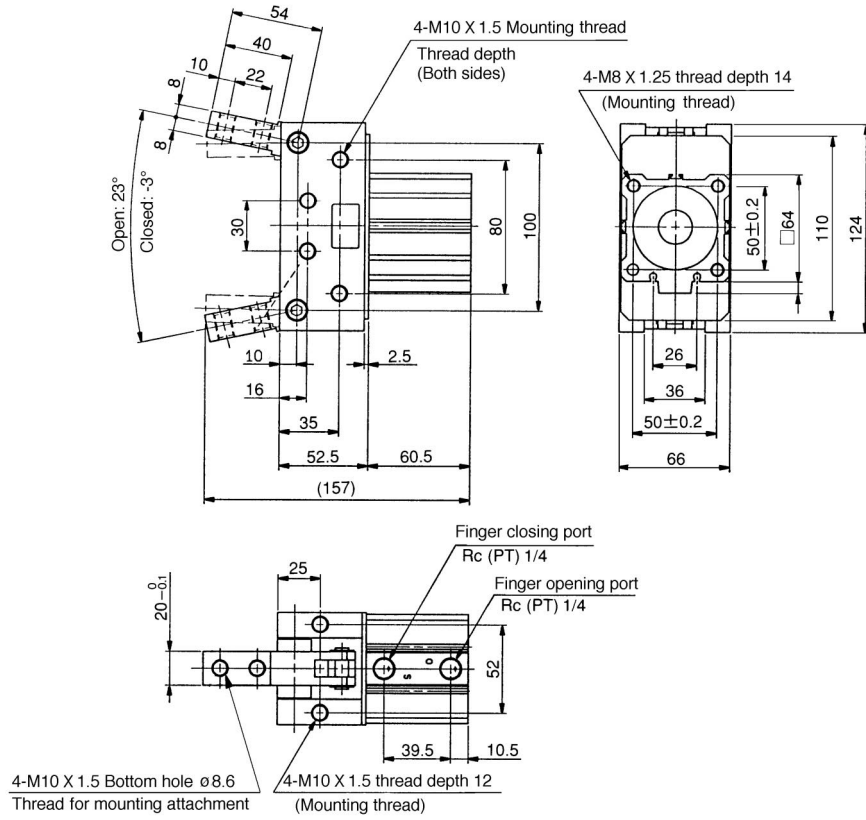
MHT2-32D.....SMHT2, #1 (#1 + #5)
 MHT2-40D.....SMHT2, #2 (#2 + #5)

Series MHT2

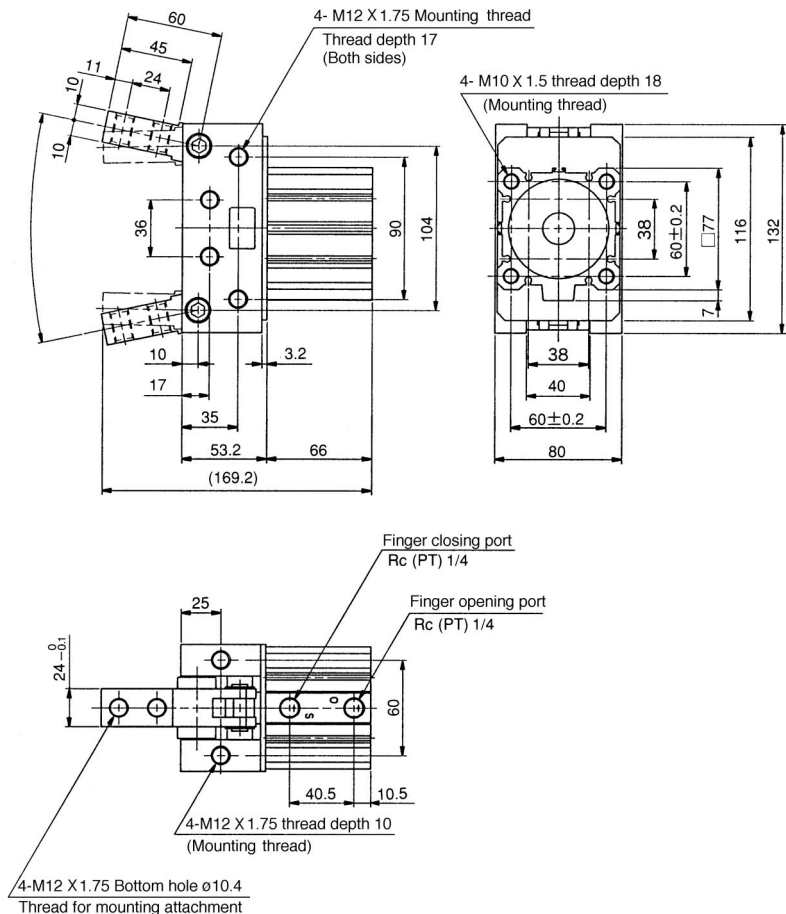
Dimensions



MHT2-50D

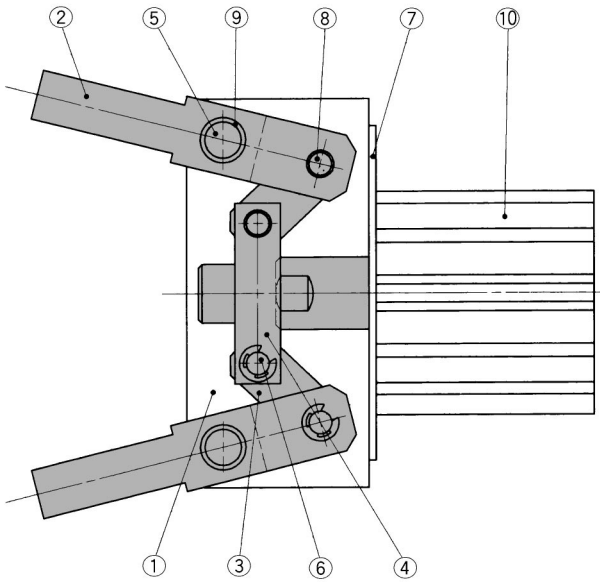


MHT2-63D



MHT2-50D SMHT2, #3 (#3 + #5)
MHT2-63D SMHT2, #4 (#4 + #5)

Construction

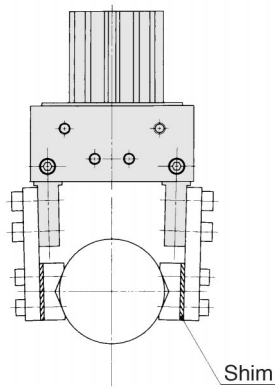


Component Parts

No.	Description	Material	Note
①	Side plate	Aluminium alloy	Anodized
②	Finger	Carbon steel	Black zinc chromated
③	Lever	Carbon steel	Black zinc chromated
④	Joint	Carbon steel	Black zinc chromated
⑤	Shaft	Stainless steel	
⑥	Joint pin	Stainless steel	
⑦	Cylinder plate	Soft steel	Black zinc chromated
⑧	Lever pin	Stainless steel	
⑨	Bearing		Steel lined oil imfilled acetal resin bearing
⑩	Cylinder		Compact cylinder

Attachment Design

Use shims for fine adjustment of the attachment.



MHZ2

MHZJ2

MHQ

MHL2

MHR

MHK

MHS

MHC2

MHT2

MHY2

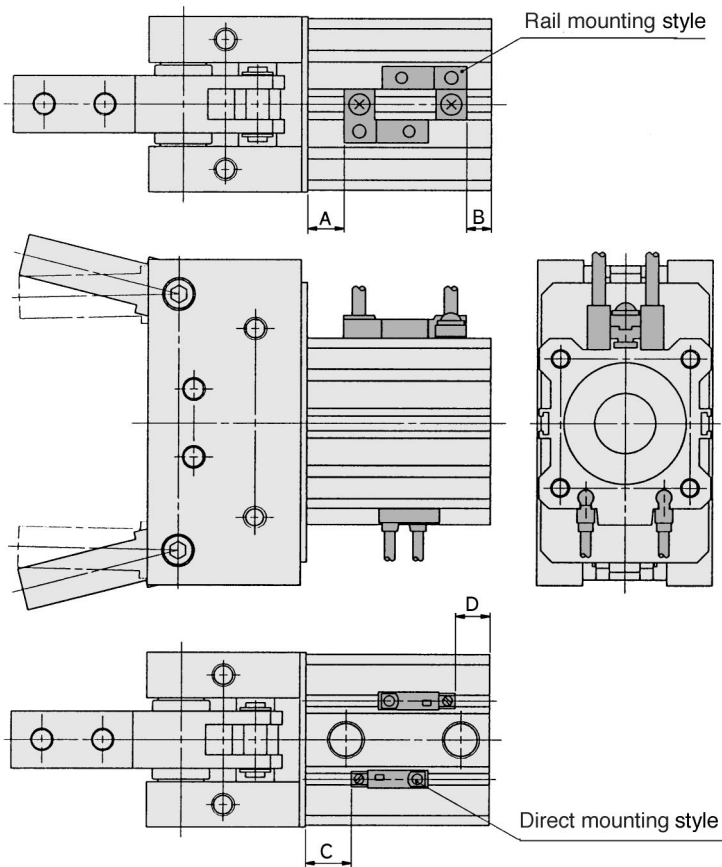
MHW2

MRHQ

Auto
switch

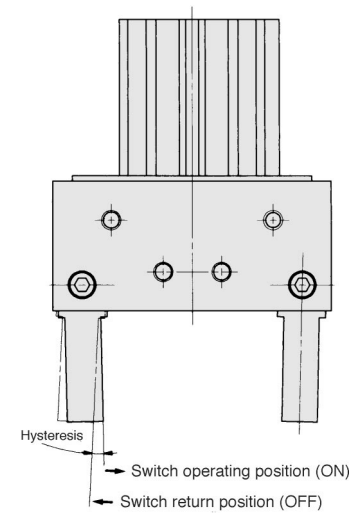
Series MHT2

Auto Switch Installation



D-A7, D-A8: Rail mounting type are shown above.
D-F□9V: Direct mounting type

Auto Switch Hysteresis



Model	Hysteresis (Max.) angle
MHT2-32D	3
MHT2-40D	3
MHT2-50D	3
MHT2-63D	3

Bore size (mm)	Rail mounting										Direct mounting					
	D-A7□/A80		D-A7□H/A80H D-A73C/A80C D-F7□/J79 D-F7□V/J79C		D-A79W		D-F7BA D-F7□W D-F7□F D-J79W		D-F7□WV		D-A9□ D-A9□V		D-F9□ D-F9□V		D-F9BA D-F9□W D-F9□WV	
	A	B	A	B	A	B	A	B	A	B	C	D	C	D	C	D
32	9	6	9.5	6.5	6.5	3.5	13.5	10.5	10	7	8	5	12	9	11	8
40	13	8.5	13.5	9	10.5	6	17.5	13	14	9.5	12	7.5	16	11.5	15	10.5
50	11	11.5	11.5	12	8.5	9	15.5	16	12	12.5	10	10.5	14	14.5	13	13.5
63	13.5	14.5	14	15	11	12	18	19	14.5	15.5	12.5	13.5	16.5	17.5	15.5	16.5