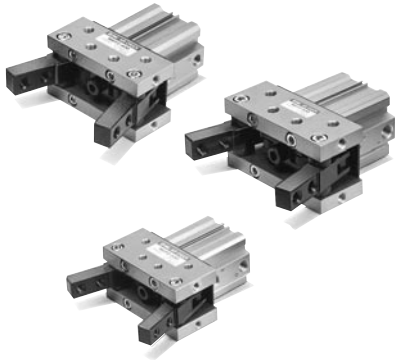


Toggle Style Air Gripper

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

MHT2-32 D-A73 S

Toggle style air gripper

Number of fingers
2 | 2 fingers

Cylinder bore

32	32 mm
40	40 mm
50	50 mm
63	63 mm

Applicable auto switch

—	Without auto switch (built-in magnet)
S	1
n	n

*See Table below for the details of auto switch specifications.

Action

D	Double acting
---	---------------

Thread Port

—	Rc (PT)
E	G (PF)

Auto Switch Specifications / Refer to p.6-15 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)	5m (Z)	None (N)															
Reed switch	—	Grommet	Yes	3-wire (NPN equi.)	—	5V	—	—	A76H	A96V	A96	●	●	—	—	IC circuit													
												24V	12V	100V	A72		A72H	—	—	●	●	—	—						
															A73		A73H	—	—	●	●	●	●	—	—				
												Connector	No	2-wire	24V		5V, 12V	100V or less	—	—	A80	A80H	A90V	A90	●	●	—	—	IC circuit
																									12V	—	—	—	
												Diag. indicator (2 colour)	Grommet	Yes	No		2-wire	24V	5V, 12V	24V or less	—	A80C	—	—	—	●	●	●	●
—	—	—	—	—	—	—	—	—	—	—	—																		
Solid state switch	—	Grommet	Yes	3-wire (NPN)	—	5V, 12V	—	—	F7NV	F79	—	—	●	●	○	—	IC circuit												
													3-wire (PNP)	24V	12V	—		—	—	—	—	M9NV	M9N	—	—	—	—	—	
																													2-wire
													Connector	No	2-wire	24V		5V, 12V	—	—	—	—	—	—	—	—	—	—	
																													Diagnosis indicator (2 colour)
													Water tight (2 colour)	Grommet	Yes	3-wire (PNP)		24V	5V, 12V	—	—	—	—	—	—	—	—	—	
																													Diag. output (2 colour)
													Latch style with diagnosis output (2 colour)	Grommet	Yes	4-wire (NPN)		24V	5V, 12V	—	—	—	—	—	—	—	—	—	
																													—
													—	Grommet	Yes	3-wire (PNP)		24V	5V, 12V	—	—	—	—	—	—	—	—	—	
																													—
													—	Grommet	Yes	4-wire (NPN)		24V	5V, 12V	—	—	—	—	—	—	—	—	—	
—	Grommet	Yes	3-wire (NPN)	24V	5V, 12V	—	—	—	—	—	—	—					—												—
													—	Grommet	Yes	3-wire (PNP)		24V	5V, 12V	—	—	—	—	—	—	—	—	—	
—	Grommet	Yes	2-wire	24V	5V, 12V	—	—	—	—	—	—	—					—												—
													—	Grommet	Yes	4-wire (NPN)		24V	5V, 12V	—	—	—	—	—	—	—	—	—	
—	Grommet	Yes	3-wire (NPN)	24V	5V, 12V	—	—	—	—	—	—	—					—												—
													—	Grommet	Yes	3-wire (PNP)		24V	5V, 12V	—	—	—	—	—	—	—	—	—	
—	Grommet	Yes	2-wire	24V	5V, 12V	—	—	—	—	—	—	—					—												—
													—	Grommet	Yes	4-wire (NPN)		24V	5V, 12V	—	—	—	—	—	—	—	—	—	
—	Grommet	Yes	3-wire (NPN)	24V	5V, 12V	—	—	—	—	—	—	—					—												—
													—	Grommet	Yes	3-wire (PNP)		24V	5V, 12V	—	—	—	—	—	—	—	—	—	
—	Grommet	Yes	2-wire	24V	5V, 12V	—	—	—	—	—	—	—					—												—
													—	Grommet	Yes	4-wire (NPN)		24V	5V, 12V	—	—	—	—	—	—	—	—	—	

- * 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 M9BA 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 x10ϕ) 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

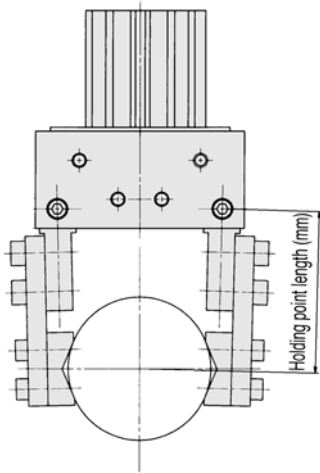
Model	MHT2-32D	MHT2-40D	MHT2-50D	MHT2-63D
Bore size (mm)	32	40	50	63
Action	Double acting			
Fluid	Air			
Operating pressure	0.1 to 0.6MPa			
Ambient and fluid temperature	5 to 60°C			
Lubrication	Non-lube			
Finger opening angle (total)	-3° to 28°	-3° to 27°	-2° to 23°	-2° to 23°
Weight	0.80 kg	1.09 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

Series MHT2

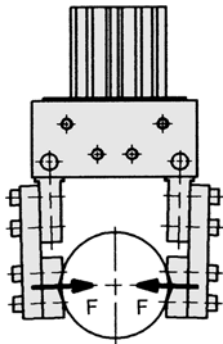
Effective Holding Force

- 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

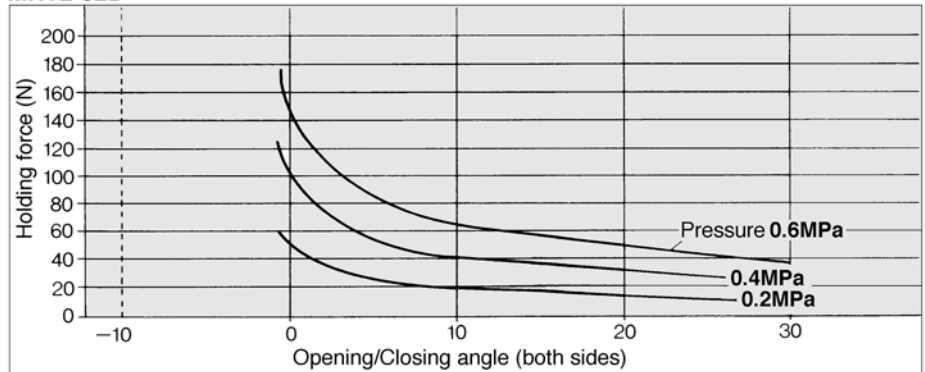
⚠ Warning

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.

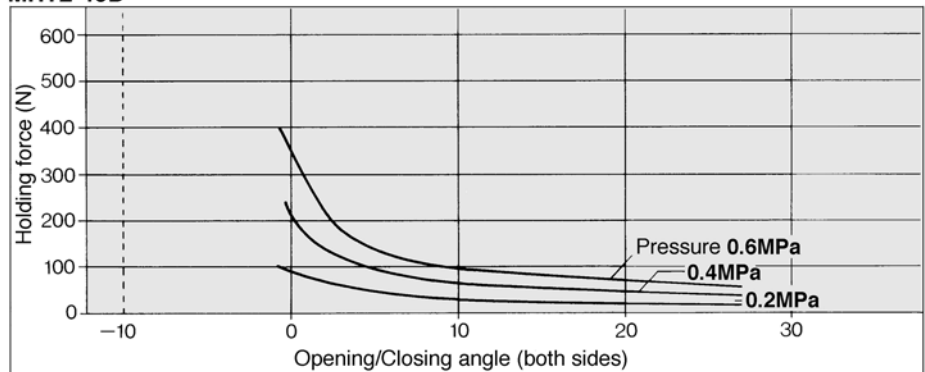
MHT2-32D

L=100 mm



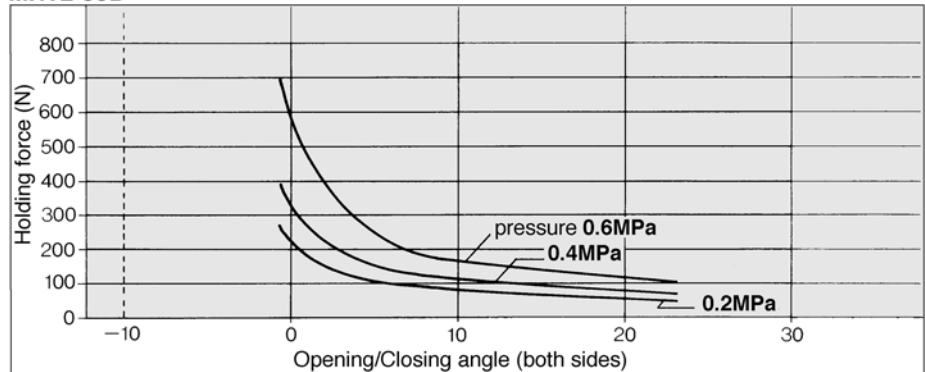
MHT2-40D

L=120 mm



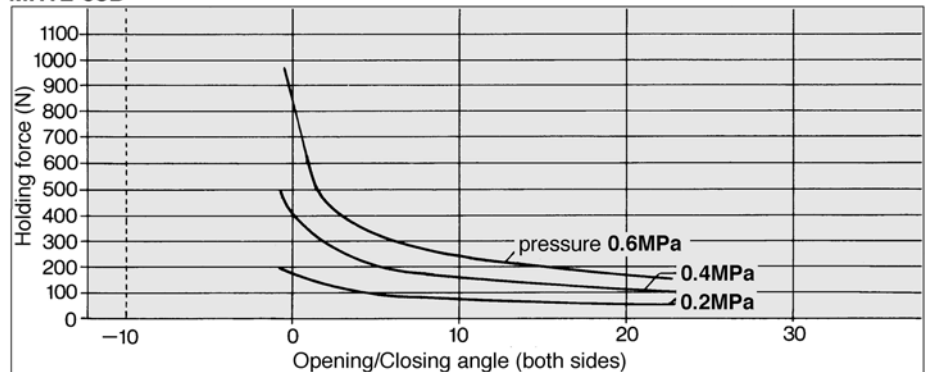
MHT2-50D

L=150 mm



MHT2-63D

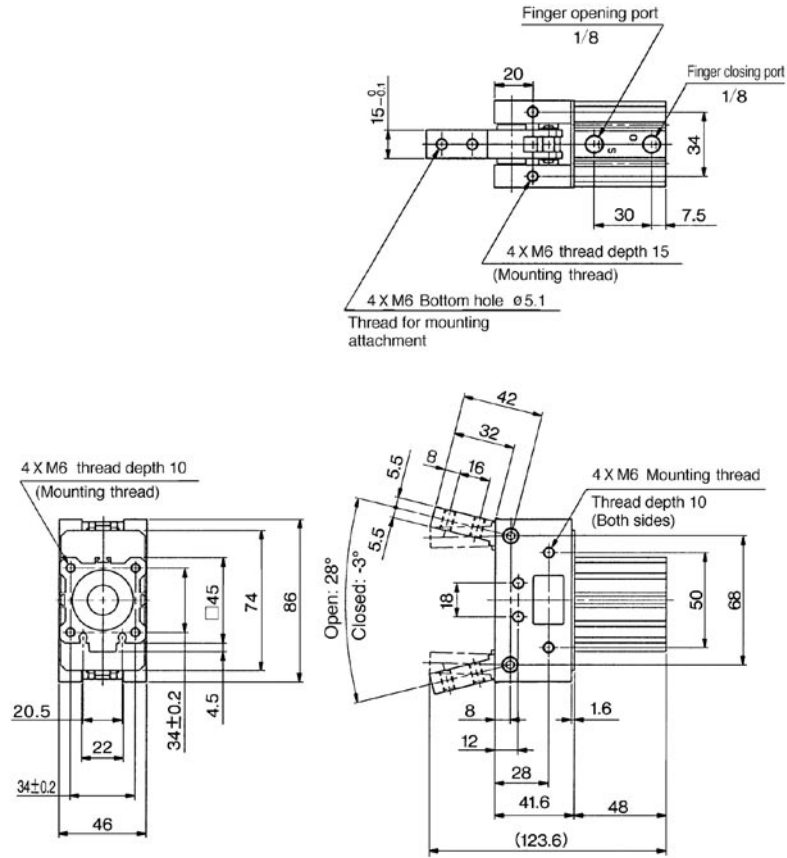
L=180 mm



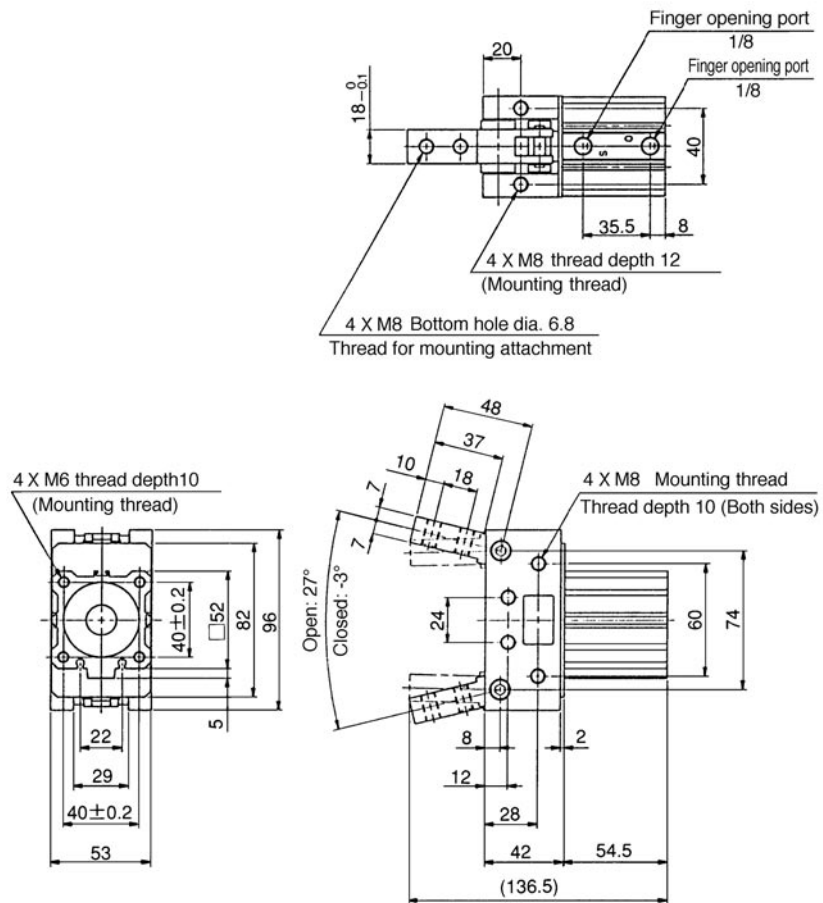


MHT2-32D

Dimensions



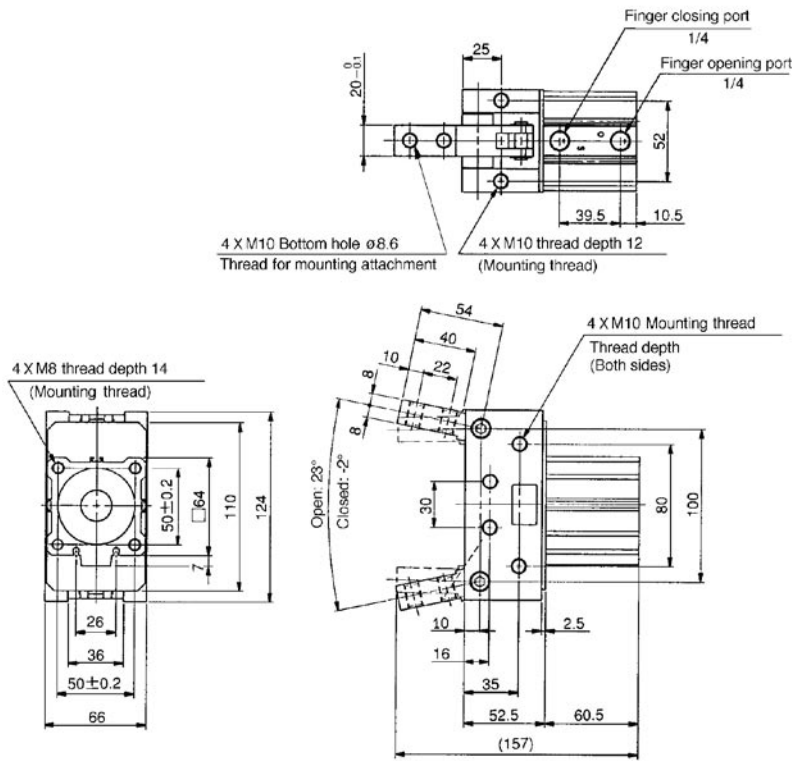
MHT2-40D



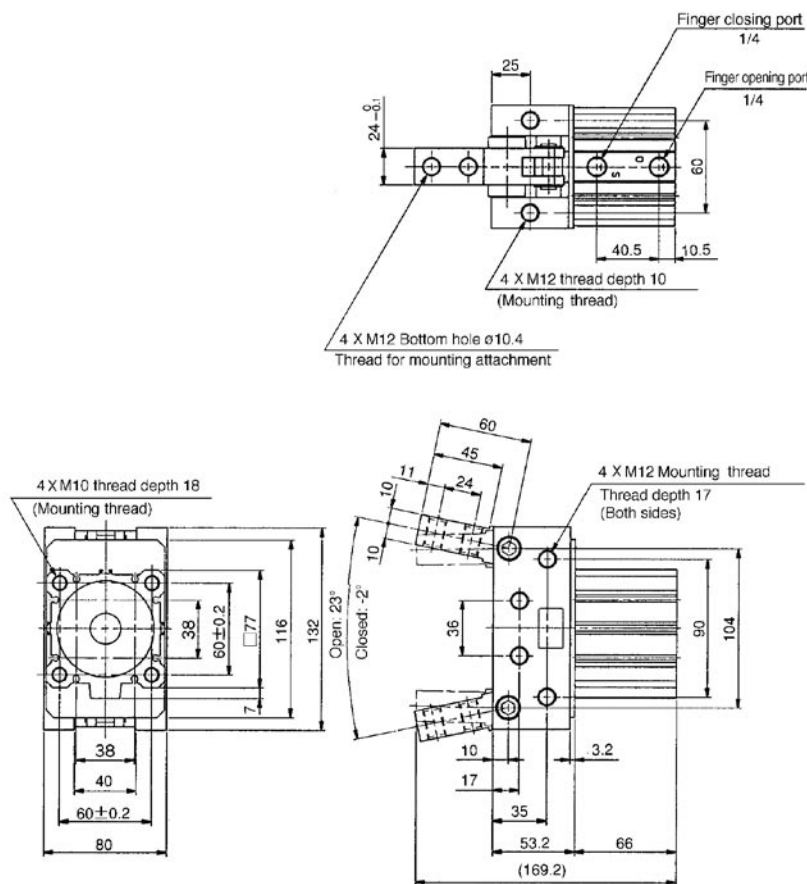
Series MHT2

Dimensions

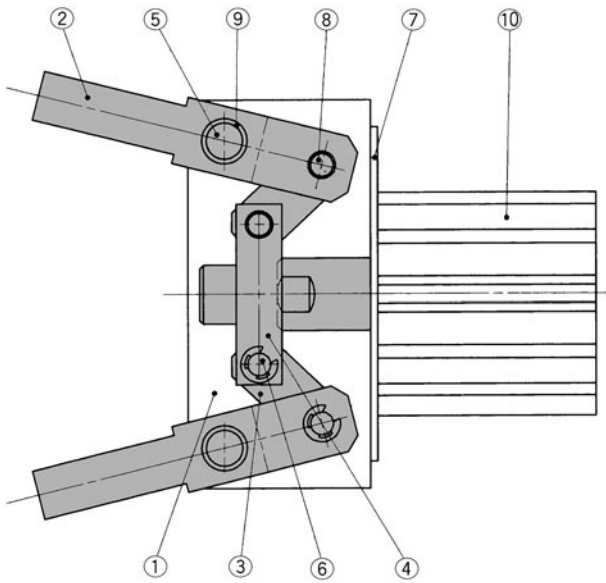
MHT2-50D



MHT2-63D



Construction

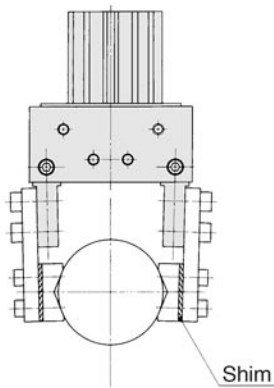


Component Parts

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

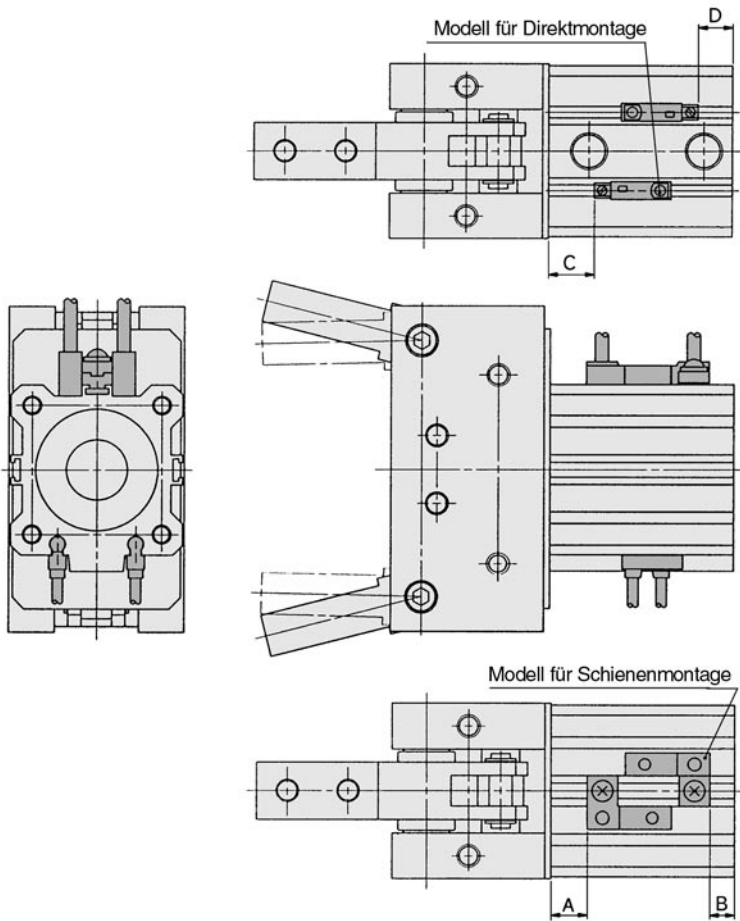
Attachment Design

Use shims for fine adjustment of the attachment.



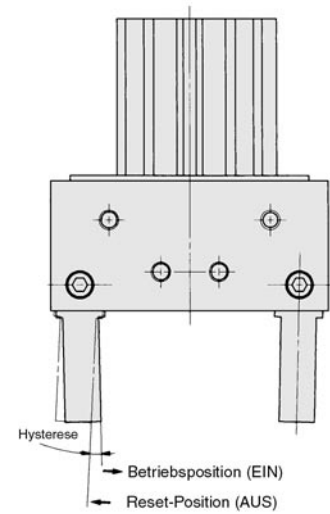
Series MHT2

Auto Switch Installation



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

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-M9□ D-M9□V		D-M9BA D-M9□W D-M9□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