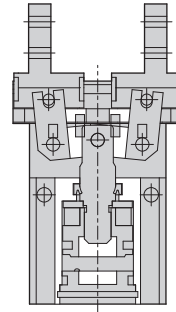
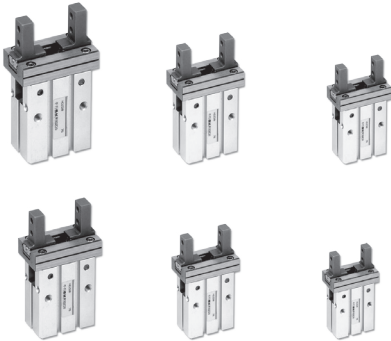


HDZ series - PARALLEL GRIPPER

Operation specification and Ordering expression



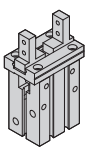
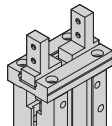
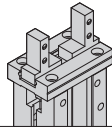
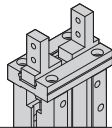
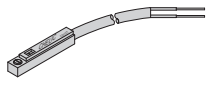
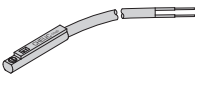
Internal structure



Specification

Item	Model	HDZ-10	HDZ-16	HDZ-20	HDZ-25	HDZ-32	HDZ-40
Bore size		Ø10	Ø16	Ø20	Ø25	Ø32	Ø40
Fluid		Air					
Type of operation		Double acting					
Pressure range	kgf/cm²(kpa)	2~7(200~700)	1 ~ 7 (100 ~ 700)				
Range of service temperature	℃	0 ~ 60°					
Max. operation frequency	min	180				60	
Lever open/close accuracy		± 0.01 mm				± 0.02 mm	
Lever open/close stroke		4	6	10	14	30	22
Lubrication		Without lubricator					

How to order

HDZ	16		ST	2
Model	Bore size	Type of operation	Sensor switch	
 HDZ series : Standard double acting Parallel Gripper	10 - Ø 10 mm 16 - Ø 16 mm 20 - Ø 20 mm 25 - Ø 25 mm 32 - Ø 32 mm 40 - Ø 40 mm	 None : Standard  [B] : Side tapped mounting  [C] : Through-holes in opening / closing direction	 CS-15T	 CS-9D
None : Without sensor [ST] : Sensor code(CS-15T) [SD] : Sensor code(CS-9D) [SB] : Sensor code(CS-15B) [SB] : Sensor code(CS-9B) [SG] : Sensor code(CS-5G) [SH] : Sensor code(CS-9H) [SGN] : Sensor code(CS-5GN) [SDN] : Sensor code(CS-9DN) [SGP] : Sensor code(CS-5GP) [SDP] : Sensor code(CS-9DP) [2] : Number of sensor [SG] : Sensor code(CS-8G) 1 = 1 PCS [SGN] : Sensor code(CS-8GN) 2 = 2 PCS [SGP] : Sensor code(CS-8GP) ※ CS-9H use for voltage AC / DC 5 ~ 240V [2] : Number of sensor 1 = 1 PCS 2 = 2 PCS				
HDZ Ø10 only suitable for 15T(B) sensor switch				

HDS
Angular
Gripper

HDM
180° Angular
Gripper

HDP
Parallel
Gripper

HDK
Parallel
Gripper

HDF
Parallel
Gripper

HDZ
Parallel
Gripper

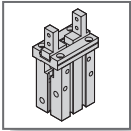
HDZL
Parallel
Gripper

HDW
Parallel
Gripper

HDL
Gripper

HDT
Gripper

HDR
Three
Finger
Gripper

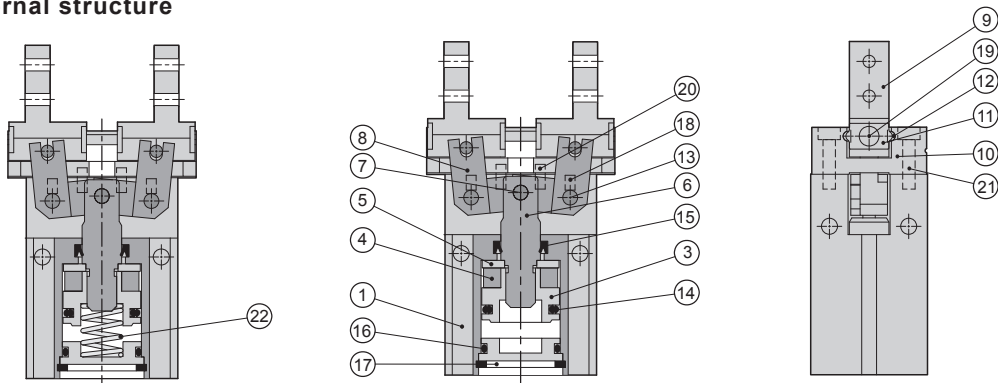


HDZ series - PARALLEL GRIPPER

Components and Material list



Internal structure



● HRZ single acting normally open

Components and Material list

No.	Item	Material	No.	Item	Material
01	Body	Aluminum alloy	12	Ball	Bearing steel
02	End cover	Aluminum alloy	13	Action lever pin	Bearing steel
03	Piston	Copper	14	Piston packing	NBR
04	Magnet	Rubber magnet	15	Rod packing	NBR
05	Magnet holder	Copper	16	End cover o-ring	NBR
06	Piston rod	Stainless steel	17	Snap ring	Alloy steel
07	Rod pin	Bearing steel	18	Screw	Alloy steel
08	Action lever	Stainless steel (SUS440)	19	Screw	Alloy steel
09	Claw	Stainless steel (SUS440)	20	Pin	Bearing steel
10	Claw base	Stainless steel (SUS440)	21	Mounting screw	Alloy steel
11	Ball stopper	Stainless steel	22	Spring	Stainless steel

Packing and O-Ring

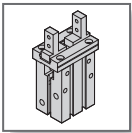
Item	End cover O-Ring	Piston packing	Rod packing
Bore size mm \ Number	1	1	1
HDZ - 10	Ø 10 X Ø 1	COP - 10	DYR - 6
HDZ - 16	Ø 13.2 X Ø 1.5	COP - 16	DYR - 8K
HDZ - 20	Ø 17.5 X Ø 1.5	COP - 20	DYR - 10
HDZ - 25	Ø 22.5 X Ø 1.5	COP - 25	DYR - 12
HDZ - 32	Ø 28.5 X Ø 2	COP - 32	DYR - 16
HDZ - 40	Ø 38.5 X Ø 2	COP - 40	DYR - 20

Type

Operating type	Model	Bore size mm	Gripping force N		Close stroke mm	Weight kg
			Outer gripping force	Inner gripping force		
Double acting	HDZ - 10	10	11	17	4	0.06
	HDZ - 16	16	34	45	6	0.14
	HDZ - 20	20	42	66	10	0.27
	HDZ - 25	25	65	104	14	0.49
	HDZ - 32	32	158	193	22	0.81
	HDZ - 40	40	254	318	30	1.37



Note1 : L : Gripping point length = 20 mm • P : Pressure = 5 Kg/cm²

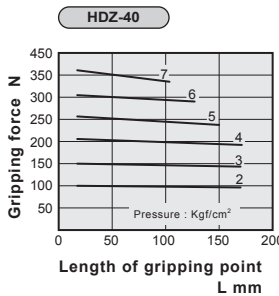
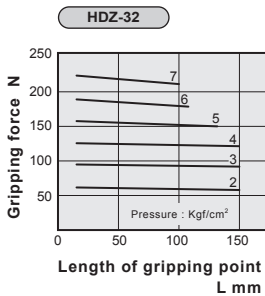
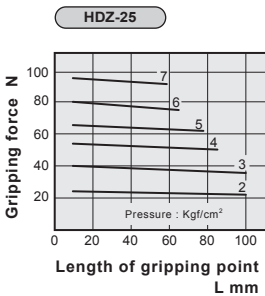
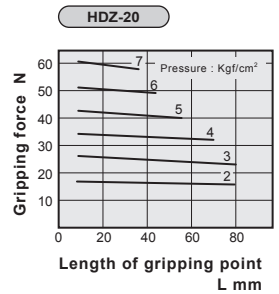
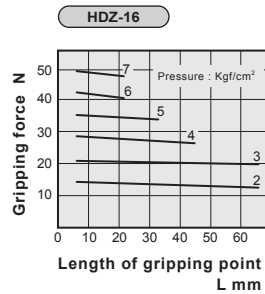
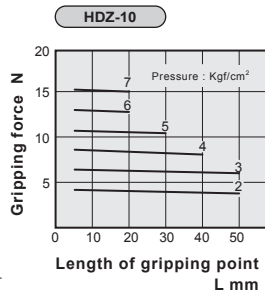
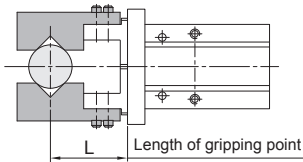


HDZ series - PARALLEL GRIPPER

Gripping force characteristic



Outer gripping force characteristic



HDS
Angular
Gripper

HDM
180° Angular
Gripper

HDP
Parallel
Gripper

HDK
Parallel
Gripper

HDF
Parallel
Gripper

HDZ
Parallel
Gripper

HDZL
Parallel
Gripper

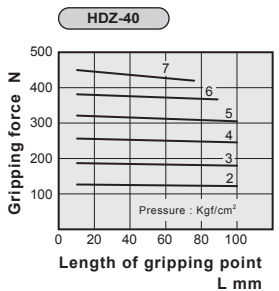
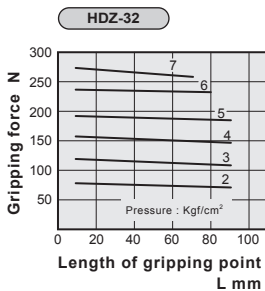
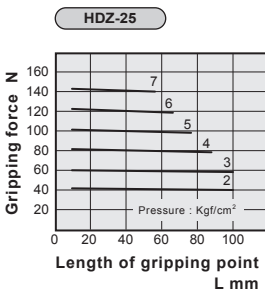
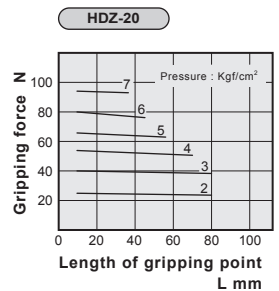
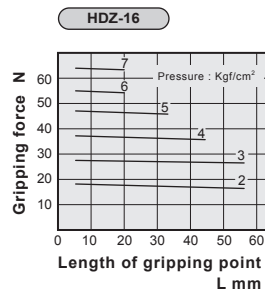
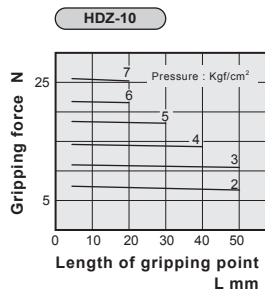
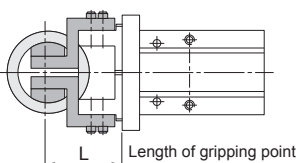
HDW
Parallel
Gripper

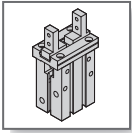
HDL
Gripper

HDT
Gripper

HDR
Three
Finger
Gripper

Inner gripping force characteristic





HDZ series - PARALLEL GRIPPER

Operating type, Data, and Mounting type



Operating type and Data

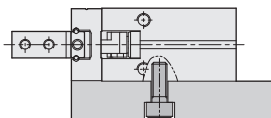
Operating type	Model	Bore size (mm)	The smallest operating pressure (Mpa)	Thread port (mm)	Effective gripping force	
						Kgf(N)
Double acting	HDZ - 10	10	0.22	4-M2.5x0.45P	Open	1.7 (17)
					Close	1.1 (11)
	HDZ - 16	16	0.1	4-M3x0.5P	Open	4.5 (45)
					Close	3.4 (34)
	HDZ - 20	20	0.1	4-M4x0.7P	Open	6.7 (66)
					Close	4.2 (42)
	HDZ - 25	25	0.1	4-M5x0.8P	Open	10.6(104)
					Close	6.6 (65)
	HDZ - 32	32	0.1	4-M6x1.0P	Open	19.6 (193)
					Close	16.1 (158)
	HDZ - 40	40	0.1	4-M8x1.25	Open	32.4 (318)
					Close	25.9 (254)
Normally open	HRZ - 10	10	0.36	4-M2.5x0.45P	Close	0.7 (7.1)
	HRZ - 16	16	0.3	4-M3x0.5P	Close	2.7 (27)
	HRZ - 20	20	0.2	4-M4x0.7P	Close	3.3 (33)
	HRZ - 25	25	0.2	4-M5x0.8P	Close	4.5 (45)
	HRZ - 32	32	0.2	4-M6x1.0P	Close	13.3 (131)
	HRZ - 40	40	0.1	4-M8x1.25P	Close	22.1(217)



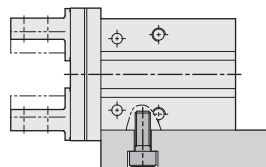
Note : the gripping force is the force of open and close gripper which is in the length of gripping point is 30mm and acting pressure is 0.5Mpa

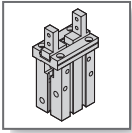
Mounting type

1. Use the thread in the bottom



2. Use the thread in the side of body





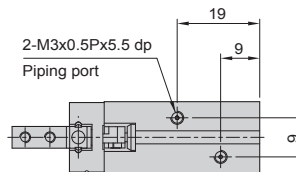
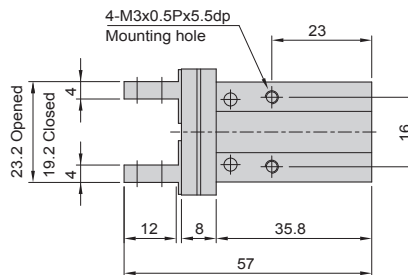
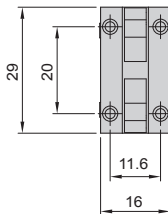
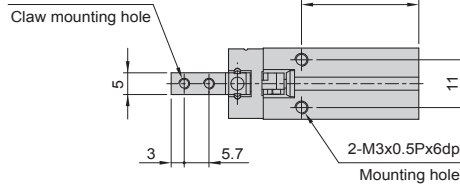
HDZ series - PARALLEL GRIPPER

External dimension

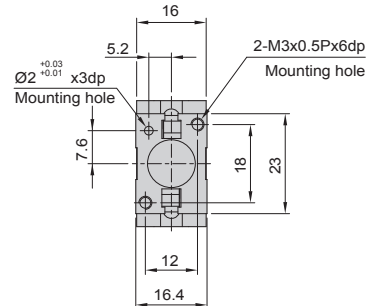


HDZ - 10 (Double acting) HRZ - 10 (Single acting)

4-M2.5x0.45P
Thru-hole
Claw mounting hole



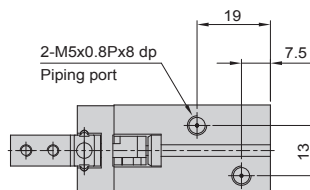
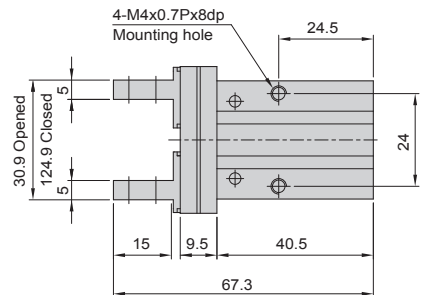
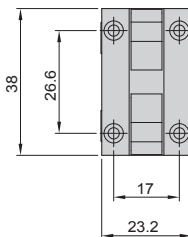
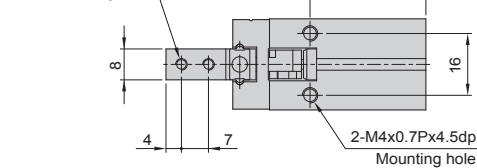
HDZ 10 MST



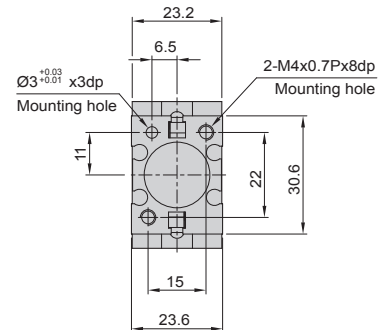
HDZ Ø10 only suitable
for 15T(B) sensor switch

HDZ - 16 (Double acting) HRZ - 16 (Single acting)

4-M3x0.5P
Thru-hole
Claw mounting hole



HDZ 16 MST



HDS
Angular
Gripper

HDM
180° Angular
Gripper

HDZ
Parallel
Gripper

HDK
Parallel
Gripper

HDF
Parallel
Gripper

HDZ
Parallel
Gripper

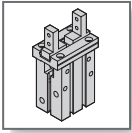
HDZL
Parallel
Gripper

HDW
Parallel
Gripper

HDL
Gripper

HDT
Gripper

HDR
Three
Finger
Gripper



HDZ series - PARALLEL GRIPPER

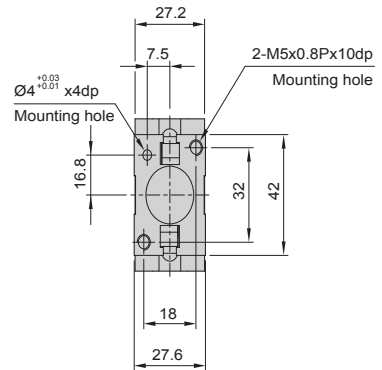
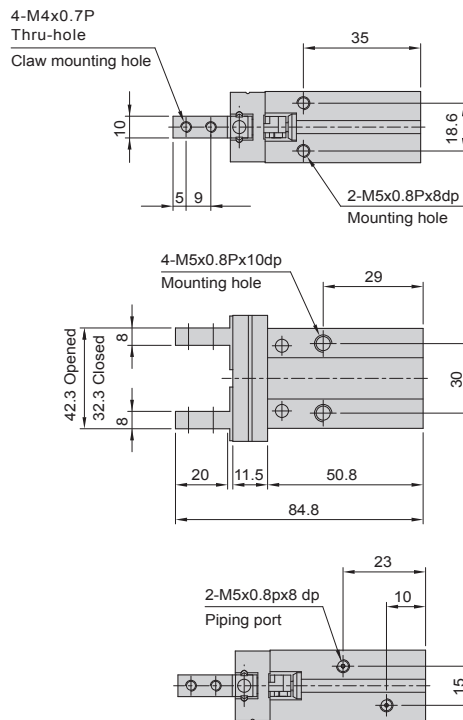
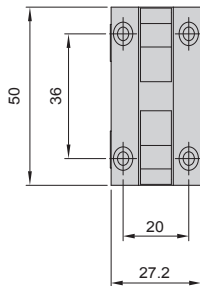
External dimension



HDZ - 20 (Double acting) HRZ - 20 (Single acting)



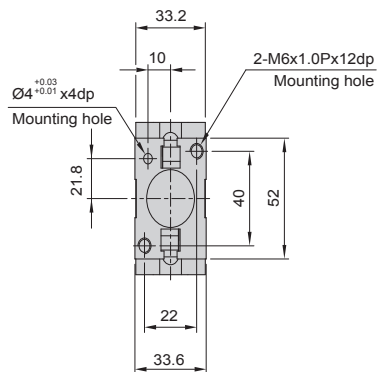
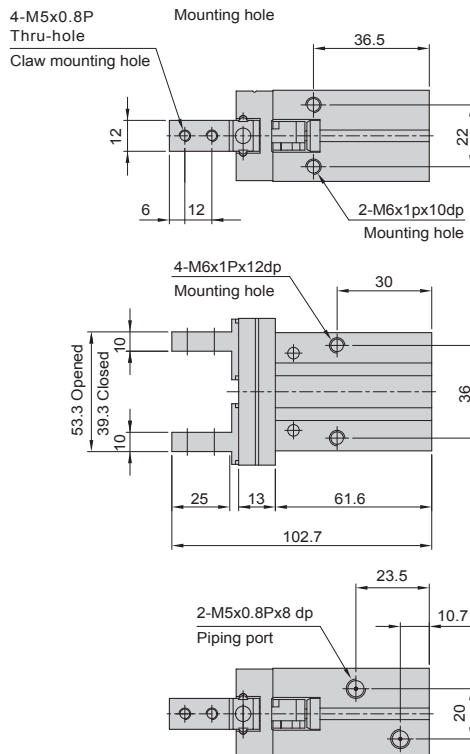
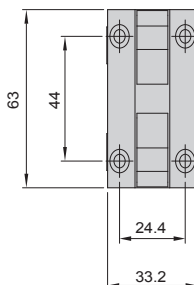
HDZ 20 MST

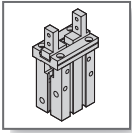


HDZ - 25 (Double acting) HRZ - 25 (Single acting)



HDZ 25 MST





HDZ series - PARALLEL GRIPPER

External dimension



HDZ - 32

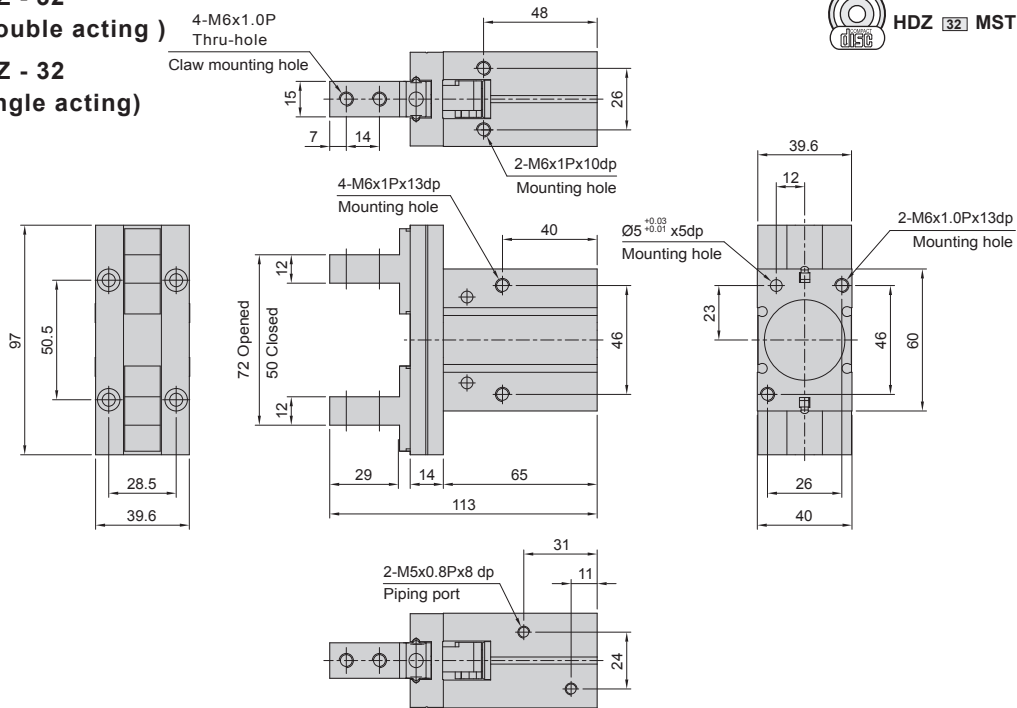
(Double acting)

HRZ - 32

(Single acting)



HDZ 32 MST



HDZ - 40

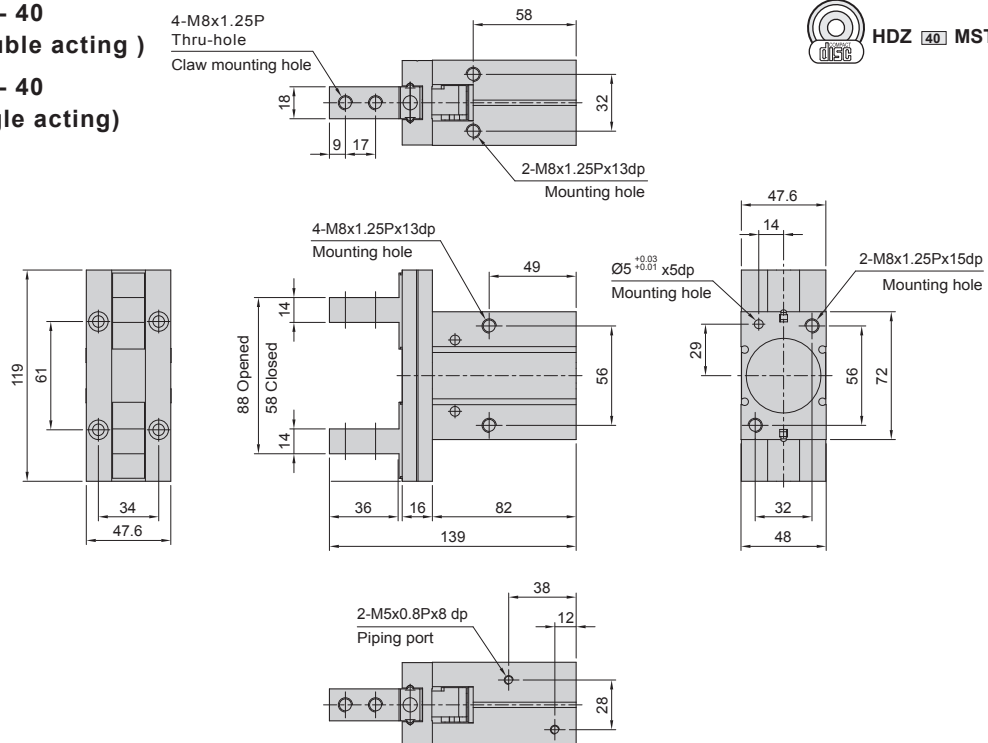
(Double acting)

HRZ - 40

(Single acting)



HDZ 40 MST



HDS
Angular
Gripper

HDM
180° Angular
Gripper

HDP
Parallel
Gripper

HDK
Parallel
Gripper

HDF
Parallel
Gripper

HDZ
Parallel
Gripper

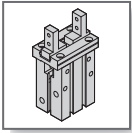
HDZL
Parallel
Gripper

HDW
Parallel
Gripper

HDL
Gripper

HDT
Gripper

HDR
Three
Finger
Gripper

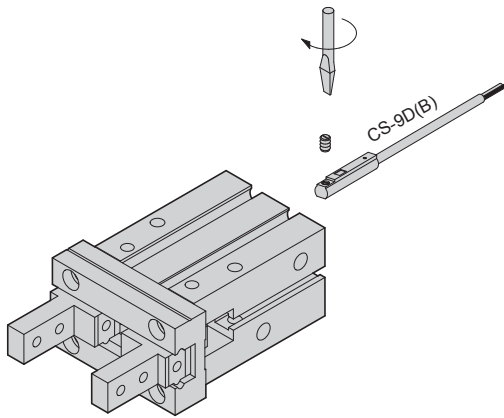


HDZ series - PARALLEL GRIPPER

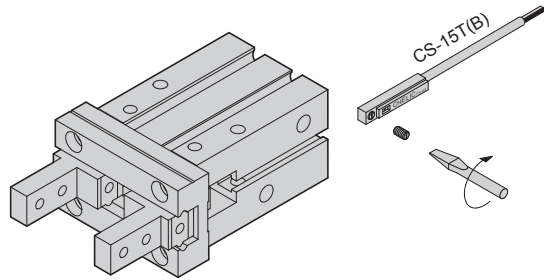
Sensing setting and Installation



◀ Sensing setting and Installation



- CS-9D(B)
(Please refer to P.22-1.15 Sensor switch standard)
- CS-15T(B)
(Please refer to P.22-1.18 Sensor switch standard)



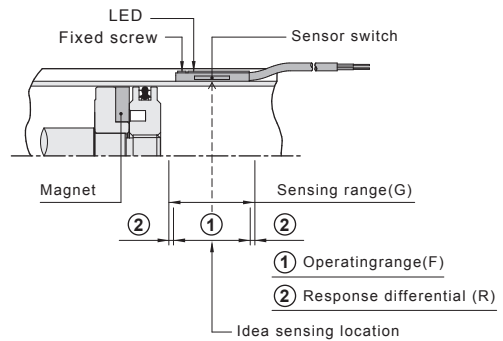
◀ Sensing range

Sensor switch is fixed on the cylinder body.
The magnetic piston head will activate the sensor switch when it enters the operating range. It has 0.5mm differential.

◀ Operating range

When piston head moves the switch setting and adjustment will be based on the responding range generated by the magnetic field and the switch.
(Please refer to the below table)

◀ Sensor switch setting and Operating range



Unit : mm

Model	CS-9D(B/H)	
Bore size	Operating range (F)	Response differential(R)
10	—	—
16	5	1
20	8	1
25	8	1
32	10	1
40	13	1.2

※ CS-9D (B / H) mounting type is in the front

Unit : mm

Model	CS-15T(B)	
Bore size	Operating range (F)	Response differential(R)
10	5	1
16	11.5	1
20	10	1
25	12	1
32	10	1.2
40	12	1.2

※ CS-15T (B) mounting type is in the side

◀ Connection type

