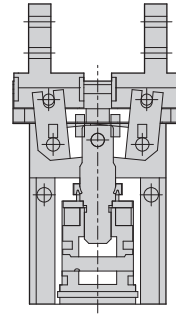
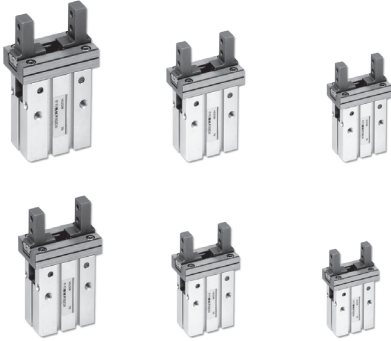


HDZ series - PARALLEL GRIPPER

Operation specification and Ordering expression

CHELIC PNEUMATIC

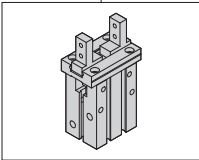
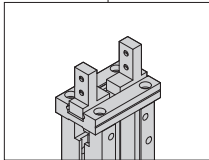
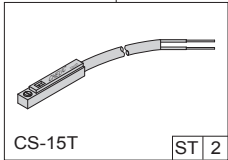
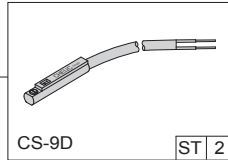
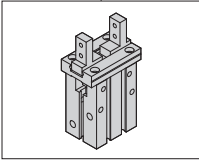
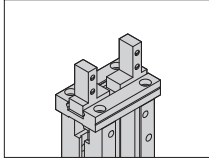
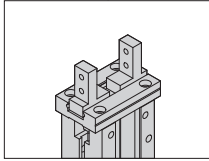
Internal structure



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/cm ² (kpa)	2~7(200~700)		1 ~ 7 (100 ~ 700)			
Range of service temperature	°C	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	
	10 - Ø 10 mm 16 - Ø 16 mm 20 - Ø 20 mm 25 - Ø 25 mm 32 - Ø 32 mm 40 - Ø 40 mm				
HDZ series : Standard double acting Parallel Gripper			None : Standard	None : Without sensor	None : Without sensor
				[ST] : Sensor code(CS-15T)	[SD] : Sensor code(CS-9D)
HRZ series : single acting Parallel Gripper			[B] : Side tapped mounting	[SB] : Sensor code(CS-15B)	[SB] : Sensor code(CS-9B)
				[SG] : Sensor code(CS-5G)	[SH] : Sensor code(CS-9H)
			[C] : Through-holes in opening / closing direction	[SGN] : Sensor code(CS-5GN)	[SDN] : Sensor code(CS-9DN)
				[SGP] : Sensor code(CS-5GP)	[SDP] : Sensor code(CS-9DP)
				[2] : Number of sensor 1 = 1 PCS 2 = 2 PCS	[SG] : Sensor code(CS-8G)
				HDZ Ø10 only suitable for 15T(B) sensor switch	[SGN] : Sensor code(CS-8GN)
					[SGP] : Sensor code(CS-8GP)
					※ CS-9H use for voltage AC / DC 5 ~ 240V
					[2] : Number of sensor 1 = 1 PCS 2 = 2 PCS

HDS
Angular
Gripper

HDM
180°Angular
Gripper

HDP
Parallel
Gripper

HDK
Parallel
Gripper

HDF
Parallel
Gripper

HDZ
Parallel
Gripper

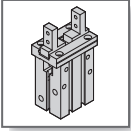
HDZL
Parallel
Gripper

HDW
Parallel
Gripper

HDL
Gripper

HDT
Gripper

HDR
Three
Finger
Gripper

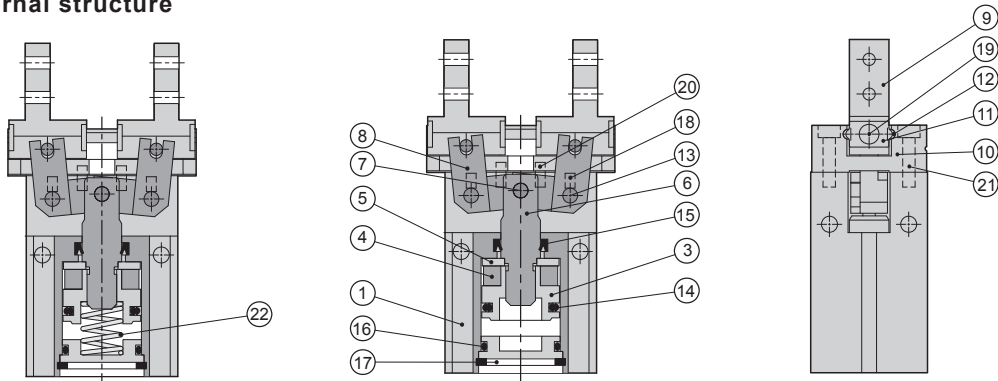


HDZ series - PARALLEL GRIPPER

Components and Material list

CHELIC PNEUMATIC

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

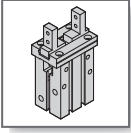
Packing and O-Ring

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

Note 1 : L : Gripping point length = 20 mm · P : Pressure = 5 Kgf/cm²

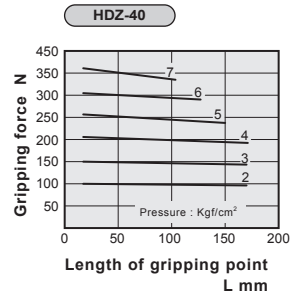
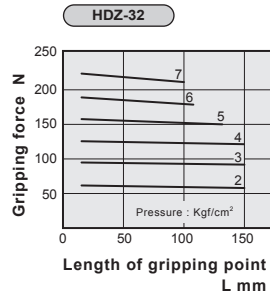
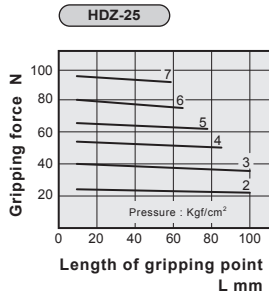
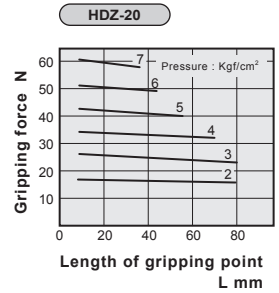
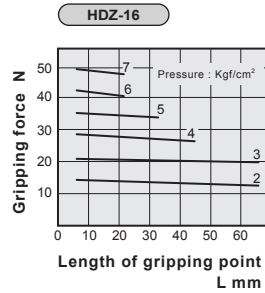
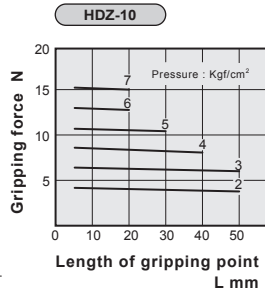
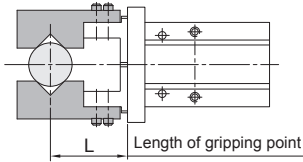


HDZ series - PARALLEL GRIPPER

Gripping force characteristic

CHELIC PNEUMATIC

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

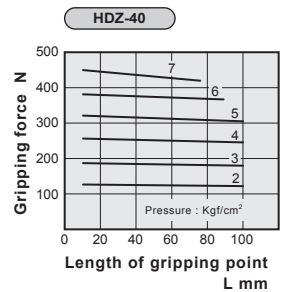
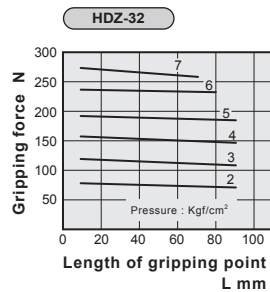
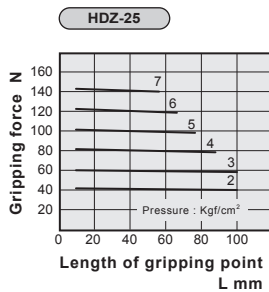
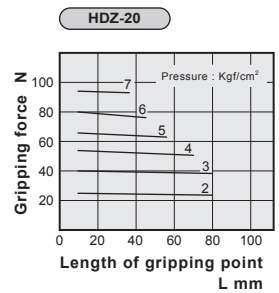
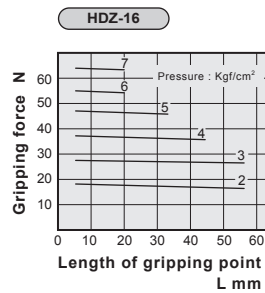
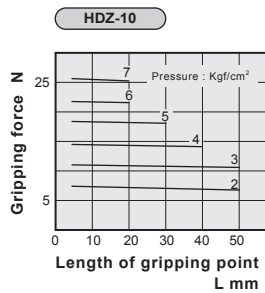
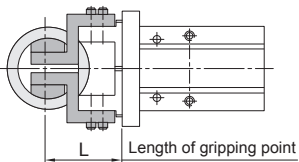
HDW
Parallel
Gripper

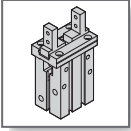
HDL
Gripper

HDT
Gripper

HDR
Three
Finger
Gripper

Inner gripping force characteristic






HDZ series - PARALLEL GRIPPER

Operating type, Data, and Mounting type

CHELIC PNEUMATIC

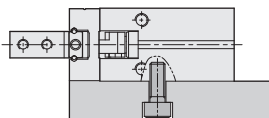
Operating type and Data

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)

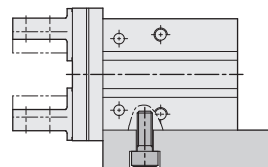
 Note : the gripping force is the force of open and close gripper which is in the length of gripping point is 30mm and acting pressure is 0.5Mpa

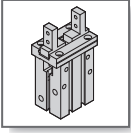
Mounting type

1. Use the thread in the bottom



2. Use the thread in the side of body





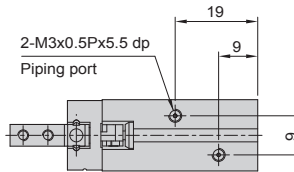
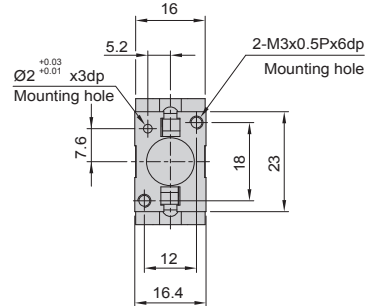
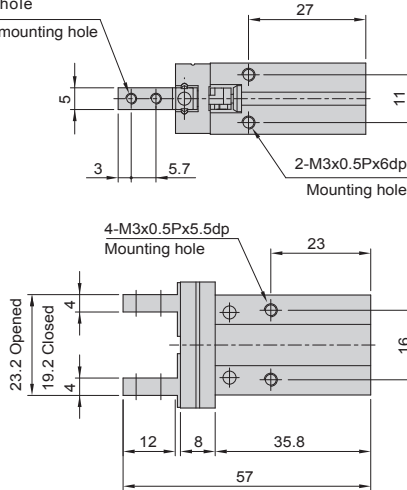
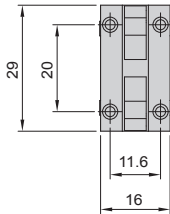
HDZ series - PARALLEL GRIPPER

External dimension

CHELIC PNEUMATIC

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

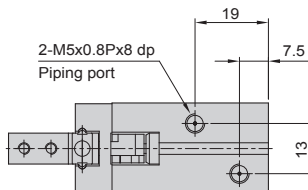
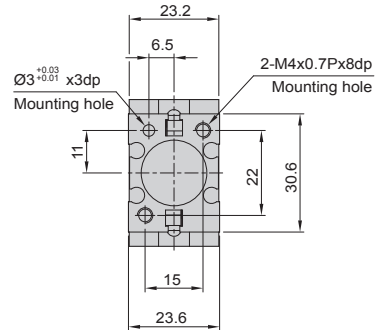
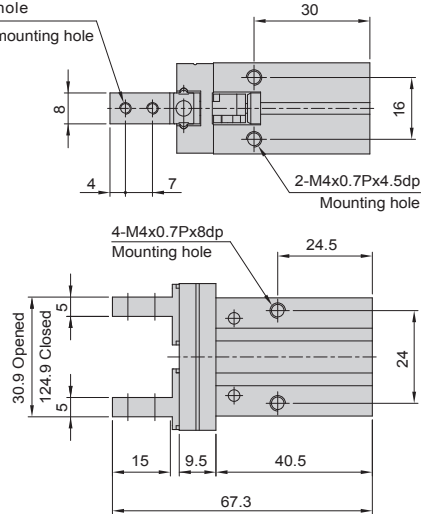
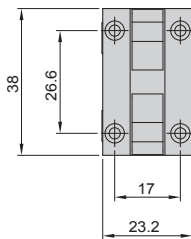
4-M2.5x0.45P
Thru-hole
Claw mounting hole



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



HDS
Angular
Gripper

HDM
180° Angular
Gripper

HDP
Parallel
Gripper

HDK
Parallel
Gripper

PDF
Parallel
Gripper

HDZ
Parallel
Gripper

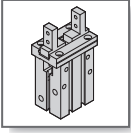
HDZL
Parallel
Gripper

HDW
Parallel
Gripper

HDL
Gripper

HDT
Gripper

HDR
Three
Finger
Gripper

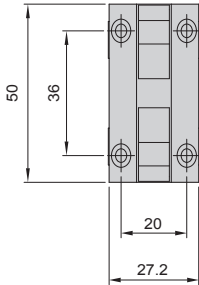
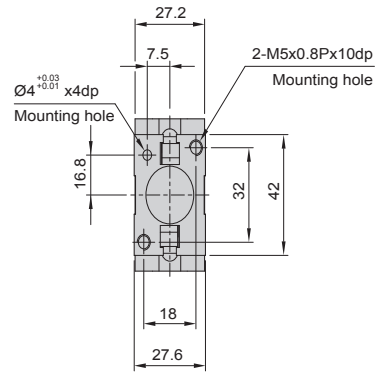
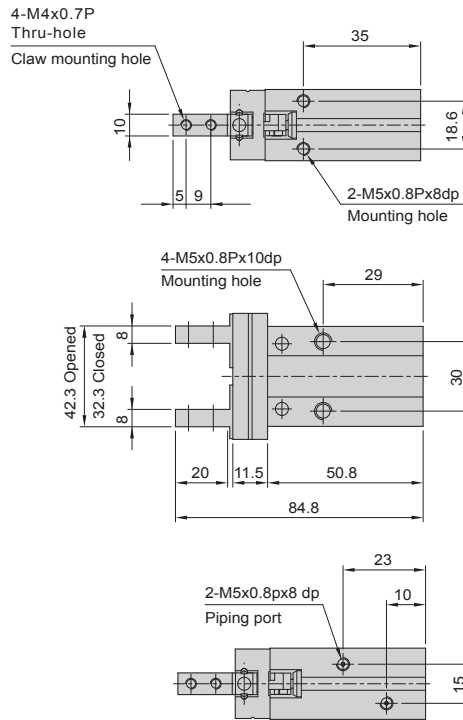


HDZ series - PARALLEL GRIPPER

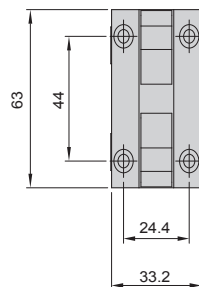
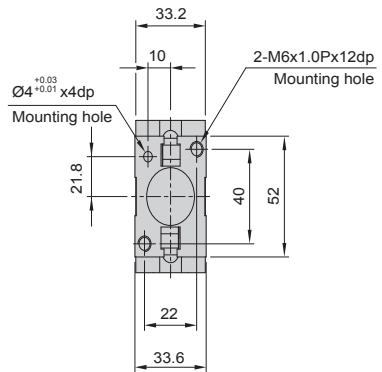
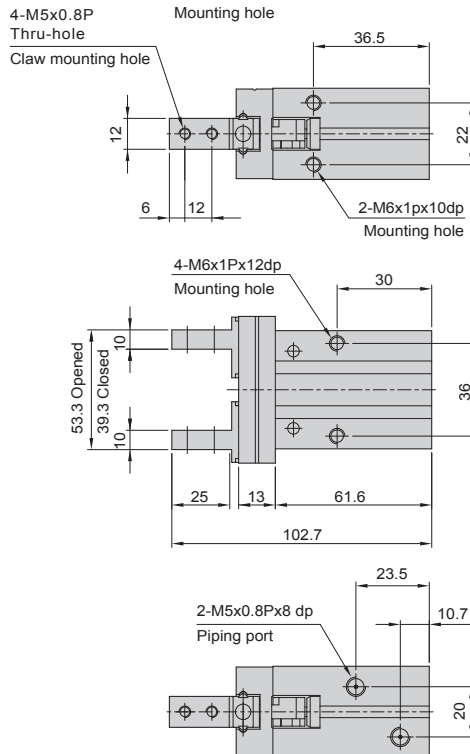
External dimension

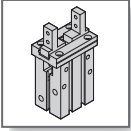
CHELIC PNEUMATIC

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



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





HDZ series - PARALLEL GRIPPER

External dimension

CHELIC PNEUMATIC

HDZ - 32

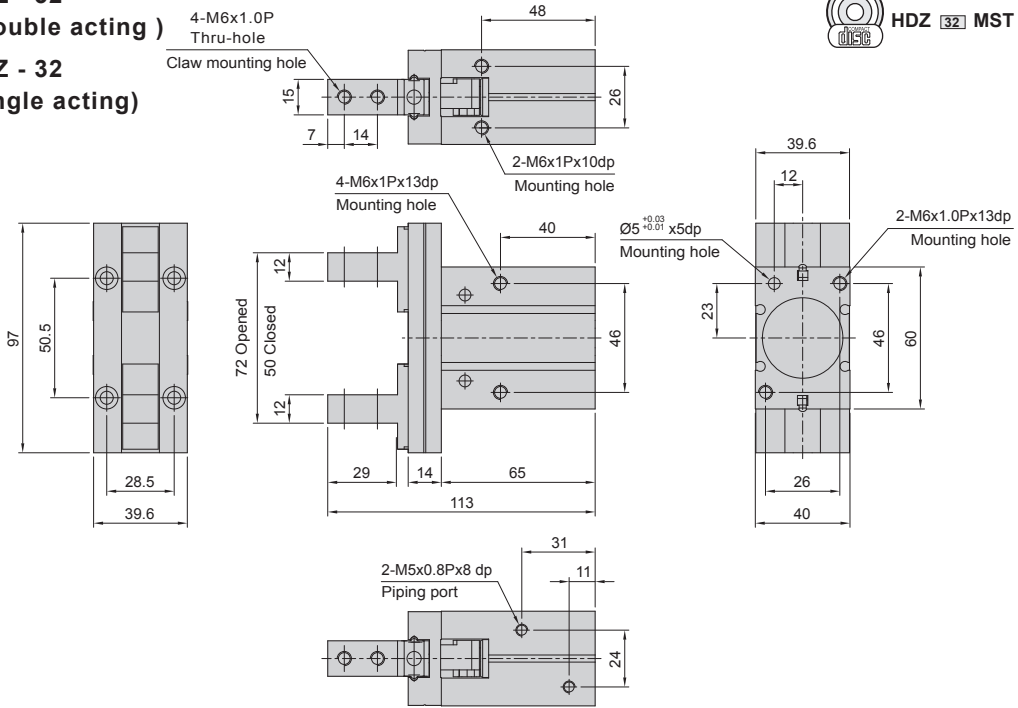
(Double acting)

HRZ - 32

(Single acting)



HDZ 32 MST



HDS
Angular
Gripper

HDM
180° Angular
Gripper

HDP
Parallel
Gripper

HDK
Parallel
Gripper

HDZ
Parallel
Gripper

HDZ
Parallel
Gripper

HDZL
Parallel
Gripper

HDW
Parallel
Gripper

HDL
Gripper

HDT
Gripper

HDR
Three
Finger
Gripper

HDZ - 40

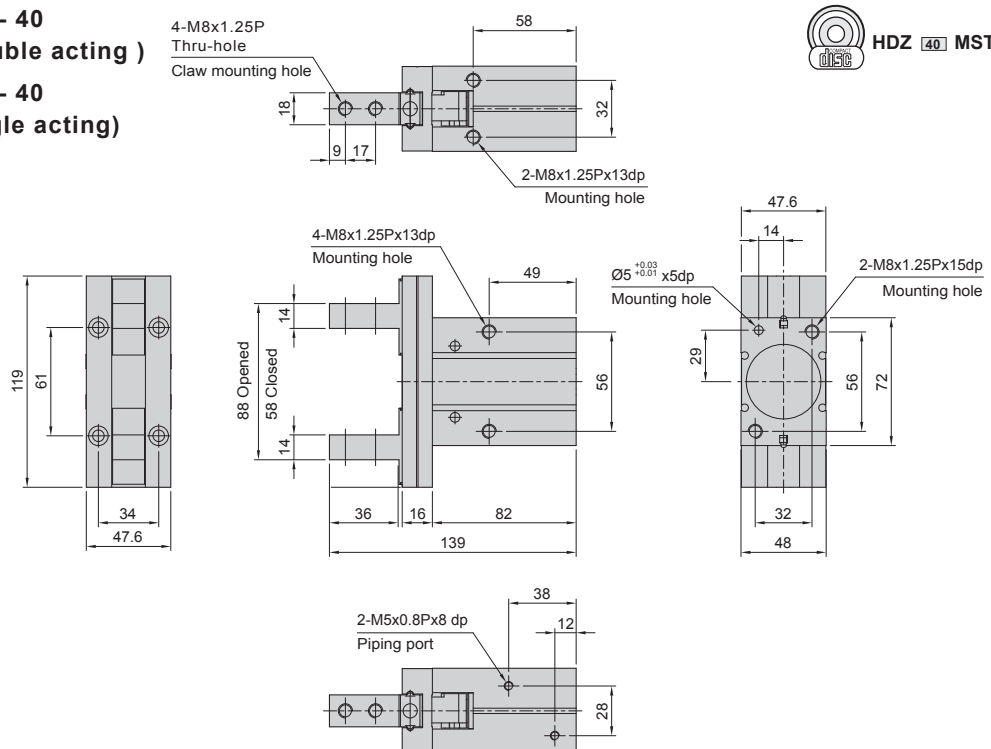
(Double acting)

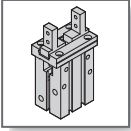
HRZ - 40

(Single acting)



HDZ 40 MST



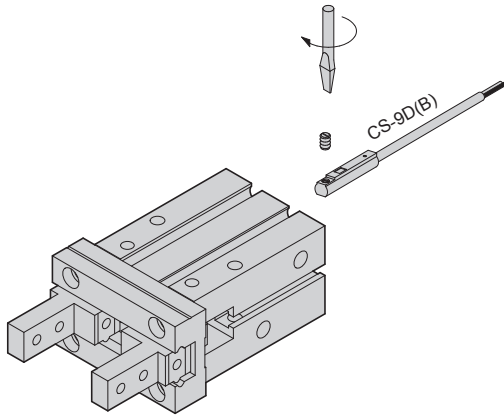


HDZ series - PARALLEL GRIPPER

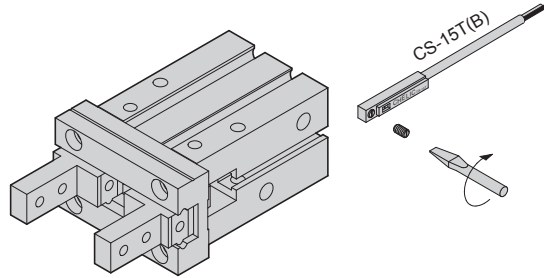
Sensing setting and Installation

CHELIC PNEUMATIC

◀ 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)

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

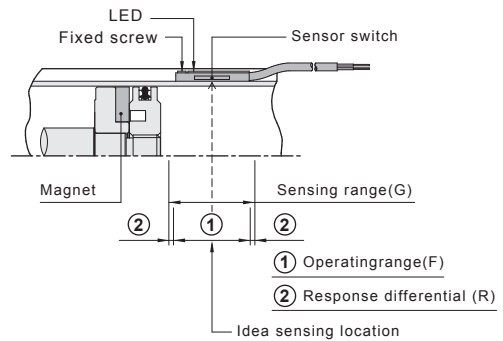
※ CS-9D (B / H) mounting type is in the front

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

◀ Sensor switch setting and Operating range



◀ Connection type

