



180-degree Opening/Closing High Gripping Force Wide Angle Gripper

HJD Series

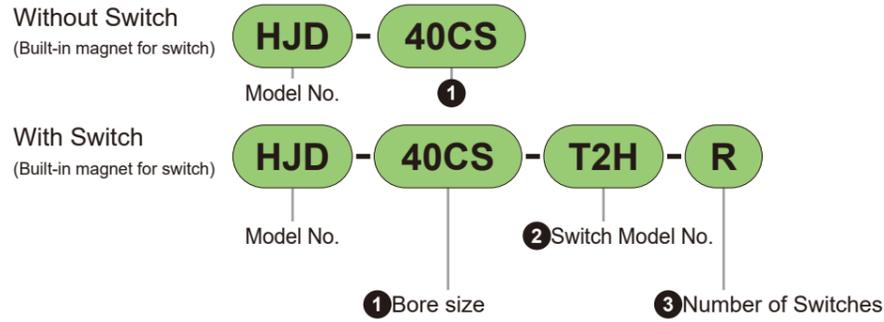
●Opening/closing angle: -4 to 184°



HJD Series

Model No. Notation Method

Model No. Notation Method



1 Bore Size (mm)

Code	Content
32CS	ø32
40CS	ø40
50CS	ø50
63CS	ø63

2 Switch Model No.

For switch details, please refer to P. 573.
Switches are included with the product and shipped.

Contact	Indicator LED Special Function	Wiring (Output)	Load Voltage (V)		Load Current (mA)		Lead wire *1	
			AC	DC	AC	DC	Straight	L-shape
Solid State	1-Color	2-wire	-	10 to 30	-	5 to 20 Note *	T2H□	T2V□
	1-Color Flex-Resistant Lead Wire	2-wire	-	10 to 30	-	5 to 20 *2	T2HR3	T2VR3
	1-Color	3-wire (NPN)	-	30 or less	-	100 or less	T3H□	T3V□
		3-wire (PNP)	-	-	-	-	T3PH□	T3PV□
	2-Color	2-wire	-	24 ± 10%	-	5 to 20 *2	T2WH□	T2WV□
		3-wire (NPN)	-	30 or less	-	50 or less	T3WH□	T3WV□

*1: For "□" in the switch model number, enter the code selected from the "Lead wire length" table.
*2: The maximum load current value above, 20 mA, is at 25 °C. If the switch operating ambient temperature is higher than 25 °C, it will be lower than 20 mA. (At 60 °C, it will be 5 to 10 mA.)
*3: Switches other than the model numbers listed above are also available. (Custom Product) For details, see P. 573.

3 Number of Switches

Code	Content
R	With 1 pc. on Open Side
H	With 1 pc. on Close Side
D	With 2 pcs

*Lead wire length

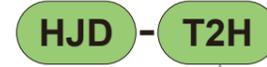
Code	Content
Blank	1 m (Standard)
3	3 m (Option)
5	5 m (Option)

Example) Lead wire length
1 m T2H
3 m T2H³
5 m T2H⁵

Switch Single Unit Model No. Notation Method

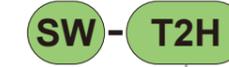
●For switch T□H□, T□WH□

• Switch body + Mounting bracket set *1



2 Switch Model No.

• Switch body only



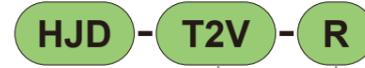
2 Switch Model No.

• Mounting bracket set *1



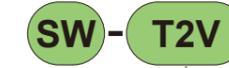
●For switch T□V□, T□WV□

• Switch body + Mounting bracket set *1



2 Switch Model No.

• Switch body only



2 Switch Model No.

• Mounting bracket set *1



Code	Content
R	Open side
H	Closed side

Code	Content
R	Open side
H	Closed side

*1: For HJD-[50CS, 63CS], mounting is possible without using mounting brackets. Select "Switch body only".

*2: The weight of the switch mounting bracket is 1.5 g.

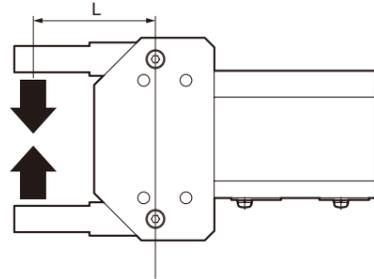
Specifications

Model No.	HJD			
Size	32CS	40CS	50CS	63CS
Bore size	mm $\phi 32$	$\phi 40$	$\phi 50$	$\phi 63$
Operating Fluid	Compressed Air			
Max. Working Pressure	MPa 0.7			
Min. Operating Pressure	MPa 0.3			
Ambient Temperature	°C 5 to 60			
Port Size	M5	Rc1/8		
Open/close angle	° -4 to 184			
Rod Diameter	mm $\phi 14$	$\phi 16$	$\phi 20$	$\phi 20$
Internal volume (reciprocating)	cm ³ 46	88.7	180.8	331.5
Repeatability	mm	±0.1		
Weight	kg 1.03	1.58	2.67	3.97
Lubrication	Not required (When lubricating, use turbine oil Class 1 ISO VG32)			

Gripping Force Performance Data

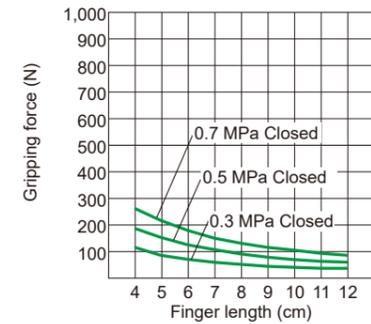
- Gripping force represents the thrust (for one finger) in the direction of the arrow shown in the figure.
- The gripping force in the opening/closing directions with Finger length L of hand with a supply pressure of 0.3, 0.5 and 0.7 MPa is shown.

● Closing direction (⇐)

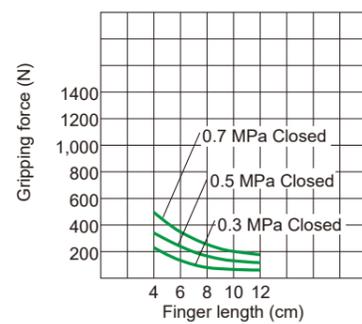


Note) When selecting, check the design and selection precautions on P. 336.

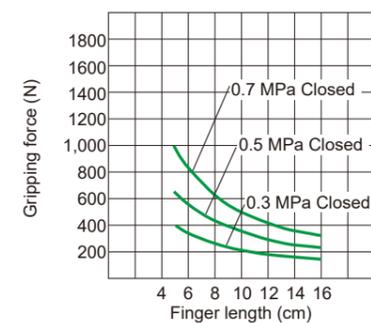
● HJD-32CS



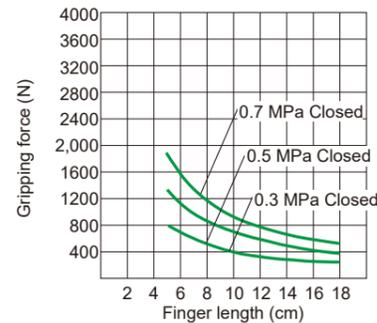
● HJD-40CS



● HJD-50CS

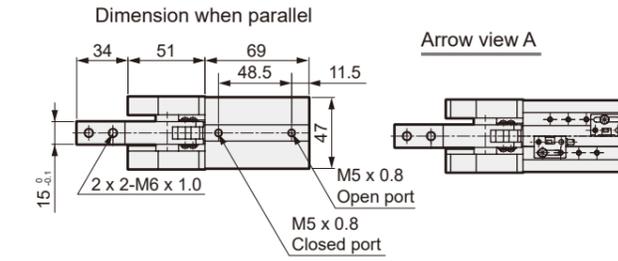


● HJD-63CS

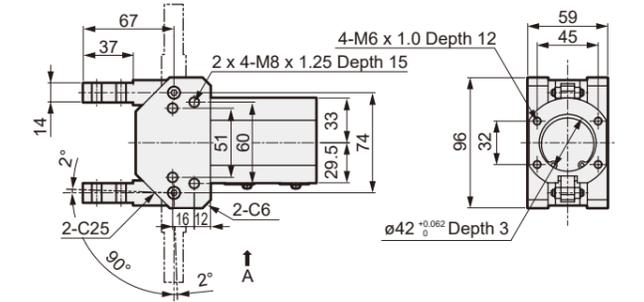
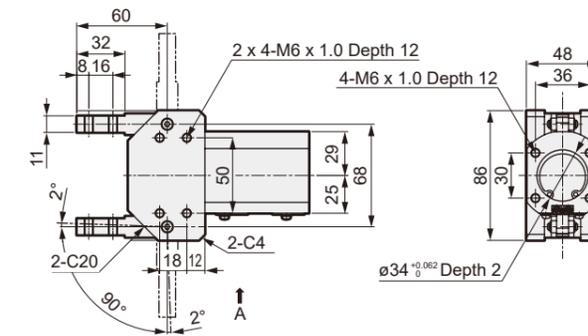
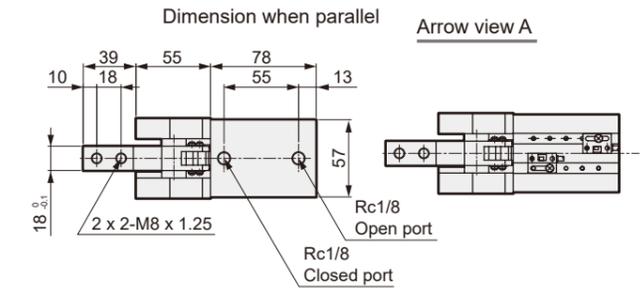


Outline Dimension Drawing

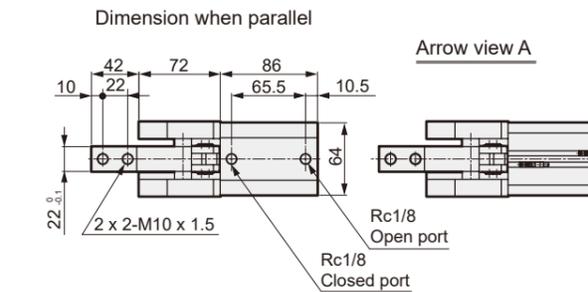
● HJD-32CS



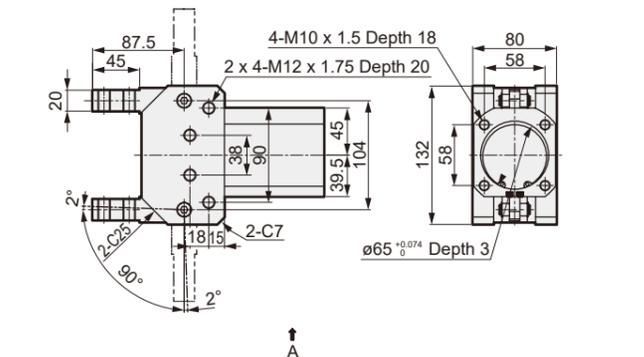
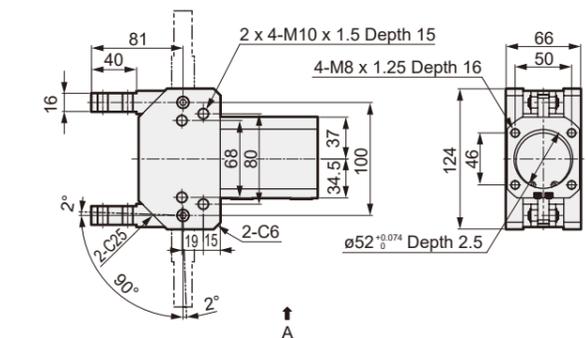
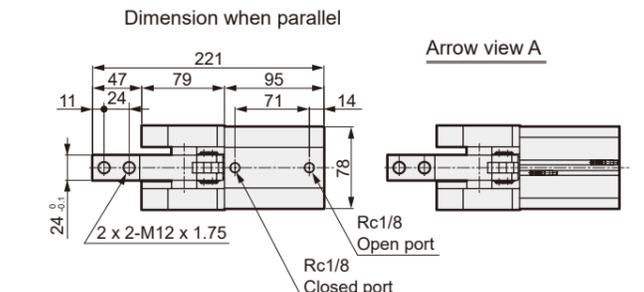
● HJD-40CS



● HJD-50CS

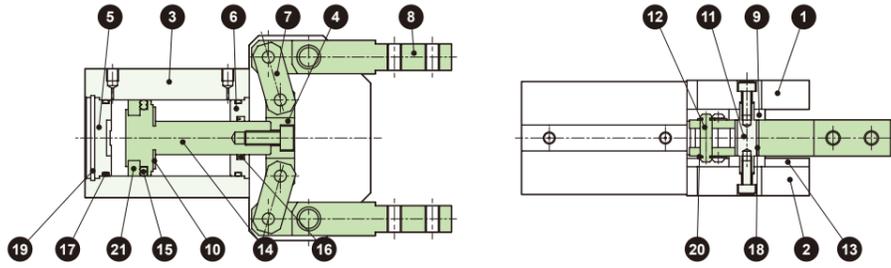


● HJD-63CS

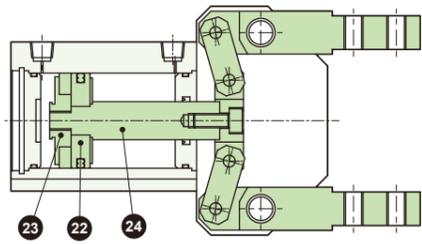


Internal Structure Diagram/Material

● HJD-32CS



● HJD-40CS to 63CS



Do not disassemble

No.	Part Name	Material	No.	Part Name	Material	No.	Part Name	Material
1	Side plate A	Aluminum Alloy	9	Collar	Steel	17	Seal	Nitrile Rubber
2	Side plate B	Aluminum Alloy	10	Cushion	Urethane Rubber	18	Bushing	Oil-Impregnated Bearing Alloy
3	Body	Aluminum Alloy	11	Pivot Shaft	Steel	19	C-type retaining ring	Stainless Steel
4	Operation plate	Steel	12	Operating Shaft	Steel	20	E-type retaining ring	Stainless Steel
5	Cover	Aluminum Alloy	13	Guide rail	Steel	21	Magnet	
6	Rod Cover	Aluminum Alloy	14	Piston	Aluminum alloy, Stainless steel	22	Piston A	Aluminum Alloy
7	Link	Steel	15	Piston seal	Nitrile Rubber	23	Piston B	Stainless Steel
8	Finger	Steel	16	Rod seal	Nitrile Rubber	24	Piston Rod	Stainless Steel

MEMO