



180 degree open/close high gripping wide angle hand

# HJD Series

● Open/close angle:  $-4^{\circ}$  to  $184^{\circ}$



## Specifications

Model No.	HJD				
Size	32CS	40CS	50CS	63CS	
Bore size	mm	$\varnothing 32$	$\varnothing 40$	$\varnothing 50$	$\varnothing 63$
Working fluid	Compressed air				
Max. working pressure	MPa	0.7 ( $\approx 100$ psi, 7 bar)			
Min. working pressure	MPa	0.3 ( $\approx 44$ psi, 3 bar)			
Ambient temperature	$^{\circ}\text{C}$	5 ( $41^{\circ}\text{F}$ ) to 60 ( $140^{\circ}\text{F}$ )			
Port size	M5	Rc1/8			
Open and close angle	$^{\circ}$	-4 to 184			
Rod diameter	mm	$\varnothing 14$	$\varnothing 16$	$\varnothing 20$	$\varnothing 20$
Volumetric capacity (reciprocating)	$\text{cm}^3$	46	88.7	180.8	331.5
Repeatability	mm	$\pm 0.1$			
Weight	kg	1.03	1.58	2.67	3.97
Lubrication	Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)				

## Switch specifications

Item	Proximity 2-wire		Proximity 3-wire	
	T2H/T2V	T2WH/T2WV (2-color display)	T3H/T3V	T3WH/T3WV (2-color display)
Applications	Dedicated for programmable controller		For programmable controller, relay	
Output method	-		NPN output	
Power supply voltage	-		10 to 28 VDC	
Load voltage	10 to 30 VDC	24 VDC $\pm 10\%$	30 VDC or less	
Load current	5 to 20 mA		100 mA or less	50 mA or less
Indicator lamp	LED (Lit when ON)	Red/green LED (Lit when ON)	LED (Lit when ON)	Red/green LED (Lit when ON)
Leakage current	1 mA or less		10 $\mu\text{A}$ or less	
Weight	1 m:18 g 3 m:49 g 5 m:80 g		1 m:18 g 3 m:49 g 5 m:80 g	

\*1 : The above max. load current is 20 mA at  $25^{\circ}\text{C}$ .

The current is lower than 20 mA if the operating ambient temperature around the switch is higher than  $25^{\circ}\text{C}$ . (5 to 10 mA at  $60^{\circ}\text{C}$ )

\*2 : Refer to Ending Page 1 for detailed switch specifications and dimensions.

LCM  
LCR  
LCG  
LCW  
LCX  
STM  
STG  
STS/STL  
STR2  
UCA2  
ULK\*  
JSK/M2  
JSG  
JSC3/JSC4  
USSD  
UFCD  
USC  
UB  
JSB3  
LMB  
LML  
HCM  
HCA  
LBC  
CAC4  
UCAC2  
CAC-N  
UCAC-N  
RCS2  
RCC2  
PCC  
SHC  
MCP  
GLC  
MFC  
BBS  
RRC  
GRC  
RV3\*  
NHS  
HRL  
LN  
Hand  
Chuk  
MecHnd/Chuk  
ShkAbs  
FJ  
FK  
SpdContr  
Ending  
LSH-HP  
LSH  
FH100  
BSA2  
BHA/BHG  
LHA  
LHAG  
HAP  
HKP  
HCP  
HGP  
HLF2  
HLA/HLB  
HLAG/HLBG  
HLC  
HLD  
HMF  
HMF-G  
HMF-B  
HFP  
FH500  
HBL  
HJL  
HMD  
HDL  
HJD  
BHE

## How to order

Without switch (built-in magnet for switch)

**HJD - 40CS**

With switch (built-in magnet for switch)

**HJD - 40CS - T2H - R**

Ⓐ Size

Ⓑ Switch model No.

Ⓒ Switch quantity

[Example of model No.]

**HJD-40CS-T2H-R**

- Ⓐ Size : 40CS
- Ⓑ Switch model No. : Proximity T2H switch, lead wire 1 m
- Ⓒ Switch quantity : 1 on open side

Code		Description				
<b>Ⓐ Size</b>						
32CS						
40CS						
50CS						
63CS						
<b>Ⓑ Switch model No.</b>						
Axial lead wire	Radial lead wire	Contact	Voltage		Display	Lead wire
			AC	DC		
T2H*	T2V*	Proximity		●	1-color display	2-wire
T3H*	T3V*			●	display	3-wire
T2WH*	T2WV*			●	2-color display	2-wire
T3WH*	T3WV*			●	display	3-wire
<b>* Lead wire length</b>						
Blank	1 m (standard)					
3	3 m (option)					
5	5 m (option)					
<b>Ⓒ Switch quantity</b>						
R	1 on open side					
H	1 on closed side					
D	2					

## How to order switch

- For switch T\*H\* or T\*WH\*

· Switch body + mounting bracket set

**HJD - T2H**

Switch model No.  
(Item Ⓑ above)

· Switch body

**SW - T2H**

Switch model No.  
(Item Ⓑ above)

· Mounting bracket set

**HJD - T**

- For switch T\*V\* or T\*WV\*

· Switch body + mounting bracket set

**HJD - T2V - \***

Switch model No.  
(Item Ⓑ above)

· Switch body

**SW - T2V**

Switch model No.  
(Item Ⓑ above)

· Mounting bracket set

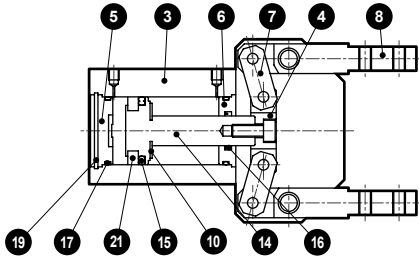
**HJD - TV - \***

- Select either R (open side) or H (closed side) for sections marked with an asterisk (\*).
- HJD (- 50CS, 63CS) can be mounted without a mounting bracket.

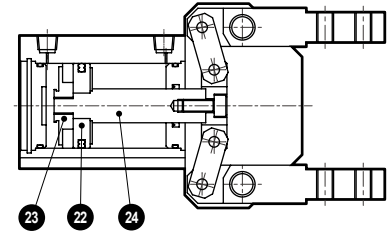
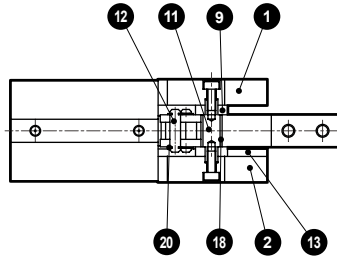
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
<b>Hand</b>
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
LSH-HP
LSH
FH100
BSA2
BHA/BHG
LHA
LHAG
HAP
HKP
HCP
HGP
HLF2
HLA/HLB
HLA/HLBG
HLC
HLD
HMF
HMF-G
HMFB
HFP
FH500
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HJL
HMD
HDL
<b>HJD</b>
BHE

## Internal structure and parts list

### ● HJD-32CS



### ● HJD-40CS to 63CS



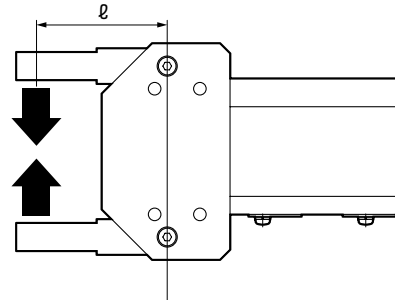
**Cannot be disassembled**

No.	Part name	Material	No.	Part name	Material	No.	Part name	Material
1	Body A	Aluminum alloy	9	Collar	Steel	17	Cylinder sealant	Nitrile rubber
2	Body B	Aluminum alloy	10	Cushion	Urethane rubber	18	Bush	Sintering oil impregnated alloy
3	Cylinder	Aluminum alloy	11	Fulcrum axis	Steel	19	C type snap ring	Stainless steel
4	Operation plate	Steel	12	Operation shaft	Steel	20	E type snap ring	Stainless steel
5	Cylinder guard	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 sealant	Nitrile rubber	24	Piston rod	Stainless steel

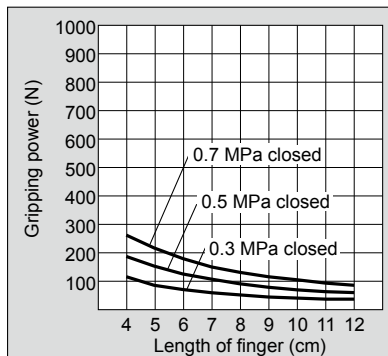
## Gripping power performance data

- Gripping power represents the thrust (per one finger) in the arrow direction shown in the figure.
- The gripping power 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.
- Closed direction (⇐⇒)

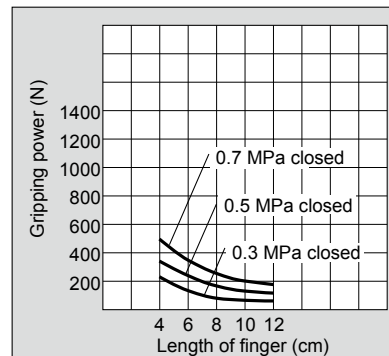
(Note) When making a selection, read the precautions for design and selection on page 1764.



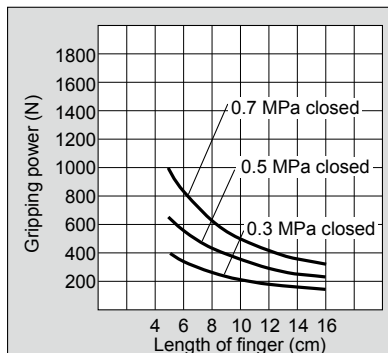
### ● HJD-32CS



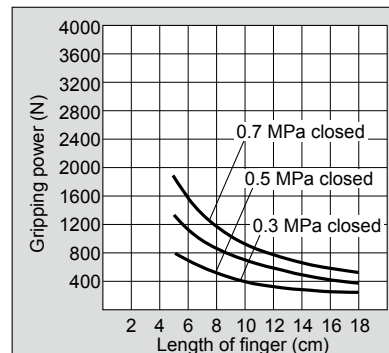
### ● HJD-40CS



### ● HJD-50CS



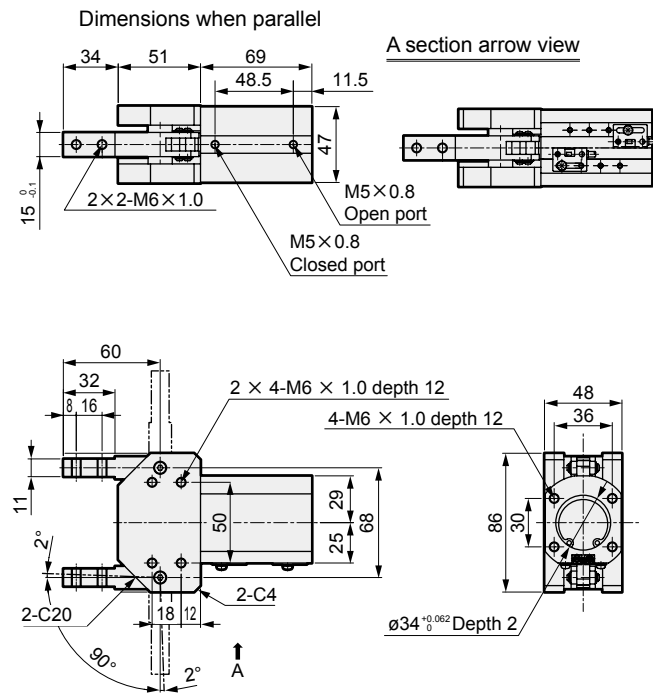
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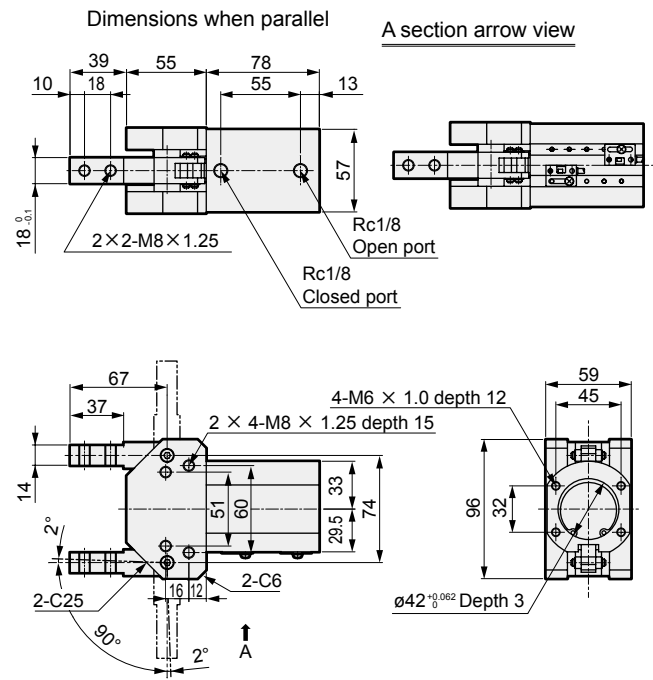
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STM  
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HMD  
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BHE

### Dimensions

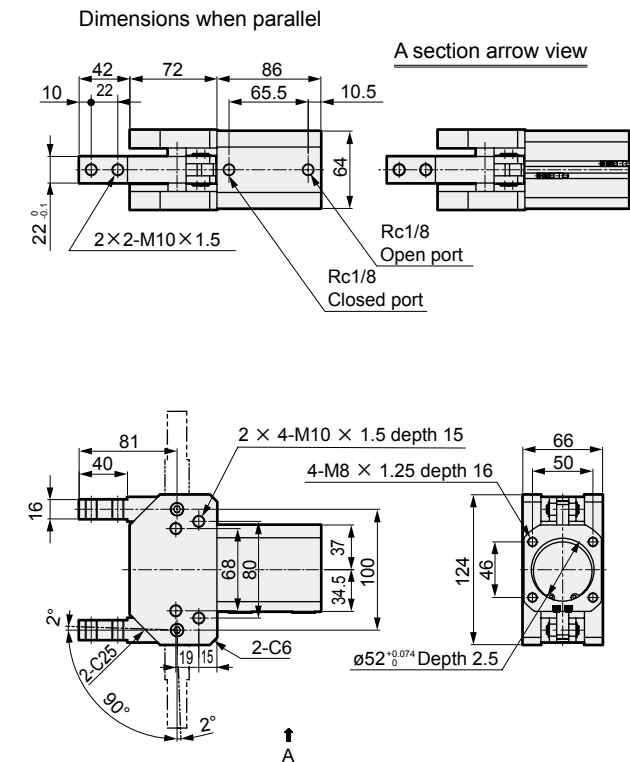
#### ● HJD-32CS



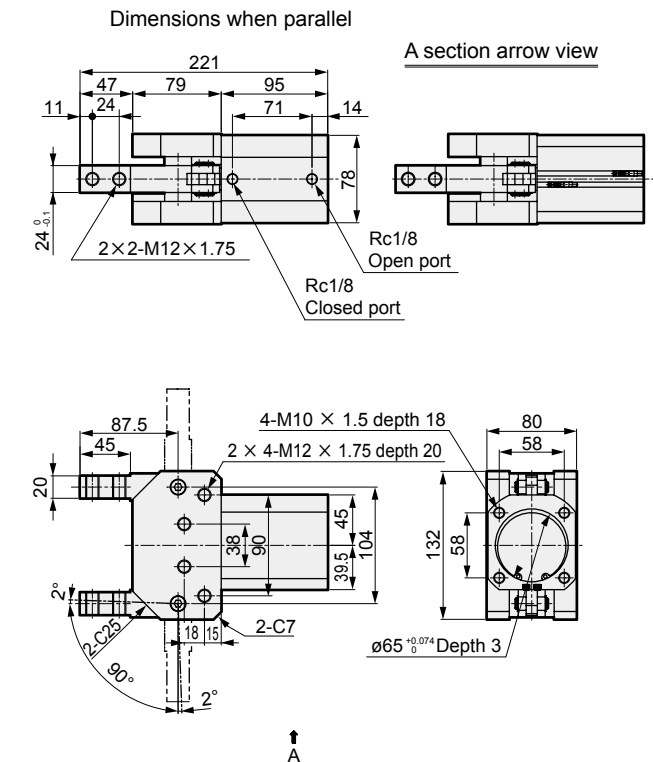
#### ● HJD-40CS



#### ● HJD-50CS



#### ● HJD-63CS



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