



Toggle hand HJL Series

Double acting



Specifications

Item	HJL			
	32CS	40CS	50CS	63CS
Size	32CS	40CS	50CS	63CS
Bore size mm	ø32	ø40	ø50	ø63
Working fluid	Compressed air			
Max. working pressure MPa	0.7 (≈100 psi, 7 bar)			
Min. working pressure MPa	0.3 (≈44 psi, 3 bar)			
Ambient temperature °C	5 (41°F) to 60 (140°F)			
Port size	M5	Rc1/8		
Open and close angle °	-3 to 28			
Rod diameter mm	ø14	ø16	ø20	ø20
Volumetric capacity (reciprocating) cm ³	21.9	37.0	72.3	118.4
Repeatability mm	±0.1			
Weight kg	0.88	1.24	2.11	3.00
Lubrication	Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)			

Switch specifications

Item	Proximity 2-wire	Proximity 3-wire
	T2H/V	T3H/V
Applications	Dedicated for programmable controller	For programmable controller, relay
Output method	-	NPN output
Power supply voltage	-	10 to 28 VDC
Load voltage/current	10 to 30 VDC, 5 to 20 mA (*1)	30 VDC or less, 100 mA or less
Indicator lamp	LED (Lit when ON)	
Leakage current	1 mA or less	10 µA or less
Weight	1 m:18 g 3 m:49 g 5 m:80 g *3	

*1 : The above max. load current is 20 mA at 25°C.

The current is lower than 20 mA if the operating ambient temperature around the switch is higher than 25°C. (5 to 10 mA at 60°C)

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

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

- 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
- HMFB
- HFP
- FH500
- HBL
- HJL**
- HMD
- HDL
- HJD
- BHE

How to order

Without switch (built-in magnet for switch)

HJL - 40CS

With switch (built-in magnet for switch)

HJL - 40CS - T2H - R

A Size

B Switch model No.
* indicates the lead wire length.

C Switch quantity

[Example of model No.]

HJL-40CS-T2H-R

Model : Toggle hand

A Size : 12CS

B Switch model No.: Proximity T2H switch, lead wire 1 m

C Switch quantity : 1 on open side

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

How to order switch

● For switch T*H*

· Switch body + mounting bracket set

HJL - T2H

Switch model No.
(Item **B** above)

· Switch body only

SW - T2H

Switch model No.
(Item **B** above)

· Mounting bracket set

HJL - T

Mounting bracket

● For switch T*V*

· Switch body + mounting bracket set

HJL - T2V - *

Switch model No.
(Item **B** above)

· Switch body only

SW - T2V

Switch model No.
(Item **B** above)

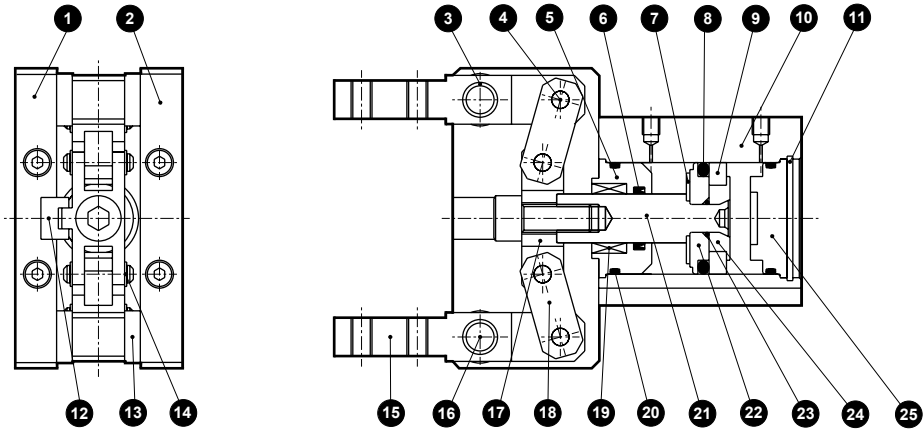
· Mounting bracket set

HJL - TV - *

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

LCM
LCR
LCG
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UCA2
ULK*
JSK/M2
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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
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Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
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HLC
HLD
HMF
HMF-G
HMFB
HFP
FH500
HBL
HJL
HMD
HDL
HJD
BHE

Internal structure and parts list




Cannot be disassembled

Parts list

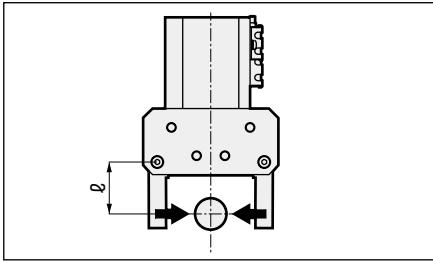
No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Body B	Aluminum alloy		14	E type snap ring	Carbon steel	
2	Body A	Aluminum alloy		15	Finger	Carbon steel	
3	DU dry bearing	Sintering oil impregnated alloy		16	Fulcrum axis	Carbon steel	
4	Operation axis	Carbon steel		17	Operation plate	Carbon steel	
5	Rod cover	Aluminum alloy		18	Link	Carbon steel	
6	Rod sealant	Nitrile rubber		19	Die slide bush	Copper alloy casting	
7	Cushion	Urethane rubber		20	Cylinder sealant	Nitrile rubber	
8	Piston seal	Nitrile rubber		21	Piston rod	Stainless steel	
9	Magnet			22	Piston A	Aluminum alloy	
10	Cylinder	Aluminum alloy		23	O-ring	Nitrile rubber	
11	C type snap ring	Stainless steel		24	Piston B	Aluminum alloy	
12	Guide rail	Carbon steel		25	Cylinder guard	Aluminum alloy	
13	Collar	Carbon steel					

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- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
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- GRC
- RV3*
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- HMF
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- HFP
- FH500
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- HJL**
- HMD
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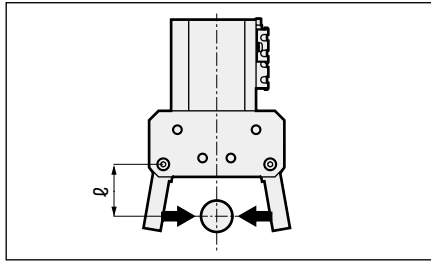
Gripping power performance data

- Gripping power represents the thrust (per one finger) in the arrow direction shown in the figure.
- The gripping power with finger length L of hand and a supply pressure of 0.3, 0.5 and 0.7 MPa is shown.
- Closed direction () (shown with continuous line)

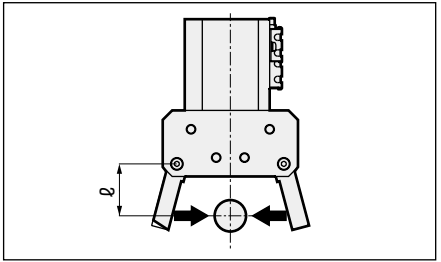
[Parallel]



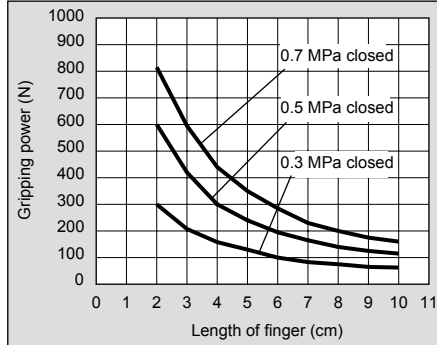
[At 10°]



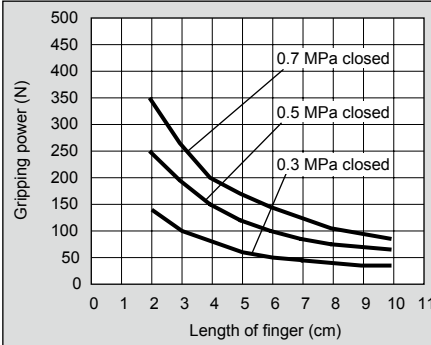
[At 20°]



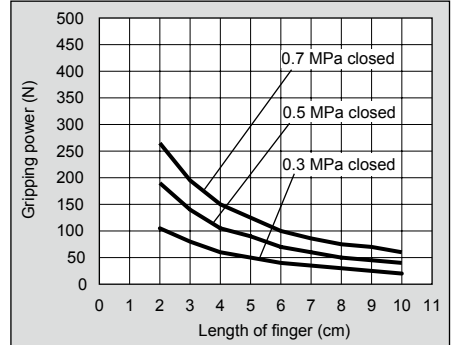
● HJL-32CS



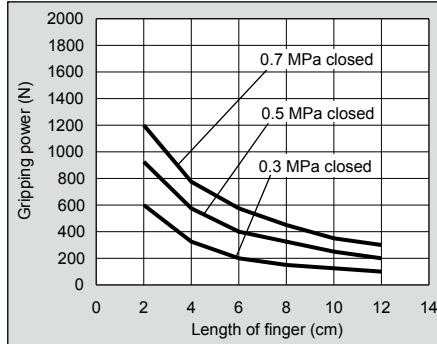
● HJL-32CS



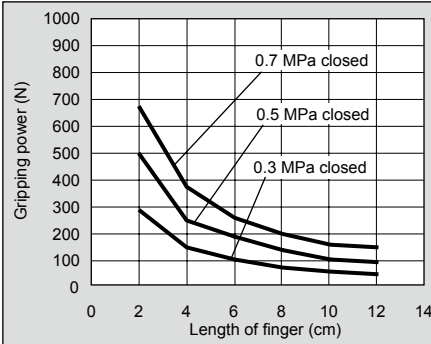
● HJL-32CS



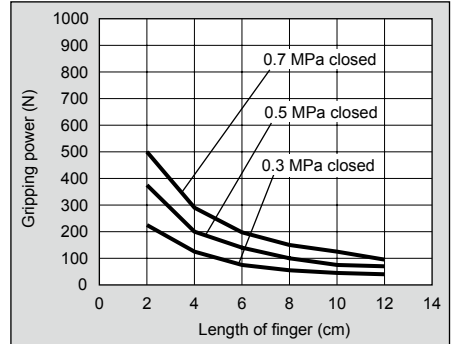
● HJL-40CS



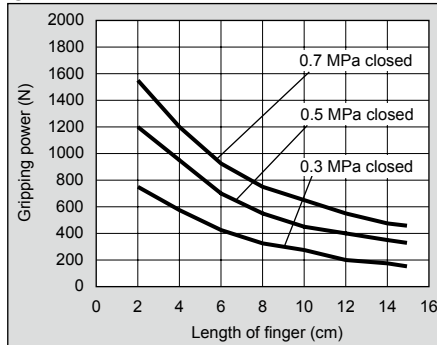
● HJL-40CS



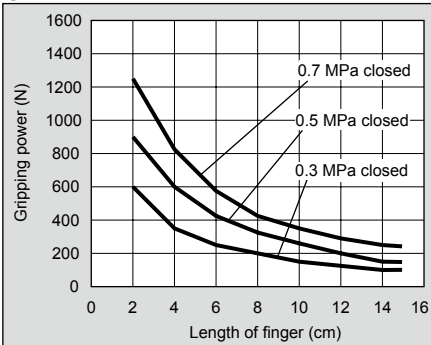
● HJL-40CS



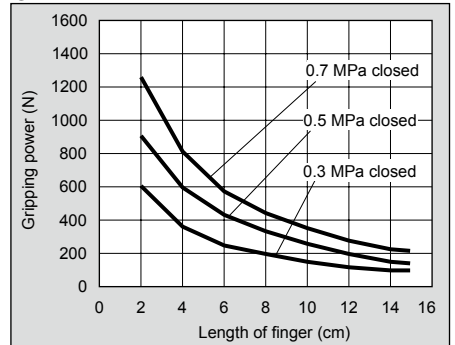
● HJL-50CS



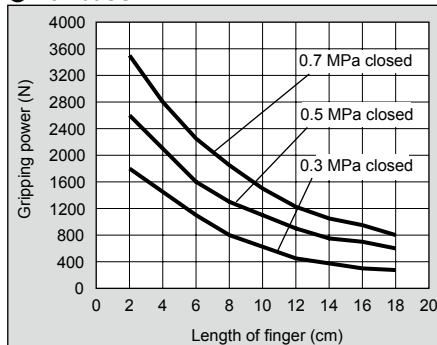
● HJL-50CS



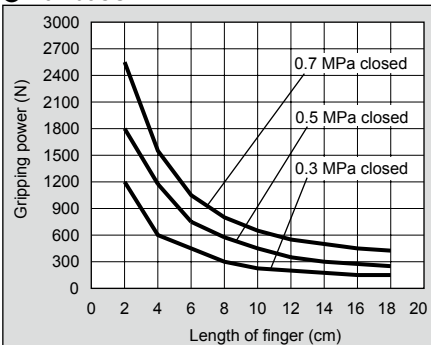
● HJL-50CS



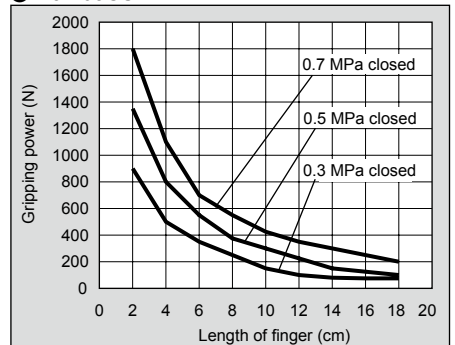
● HJL-63CS



● HJL-63CS



● HJL-63CS



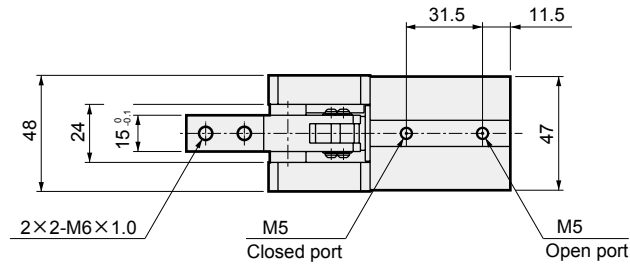
(Note) When making a selection, read the precautions for design and selection on page 1764.

LCM
LCR
LCG
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STM
STG
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STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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USC
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JSB3
LMB
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HCM
HCA
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CAC4
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RCS2
RCC2
PCC
SHC
MCP
GLC
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HLD
HMF
HMF-G
HMFB
HFP
FH500
HBL
HJL
HMD
HDL
HJD
BHE

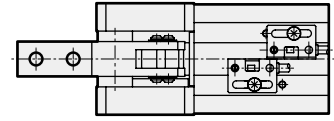
Dimensions



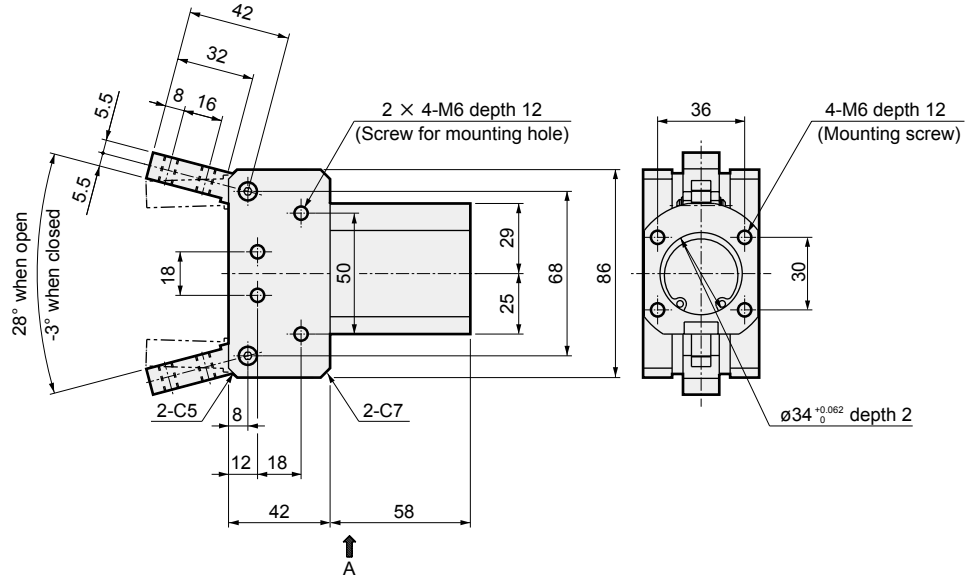
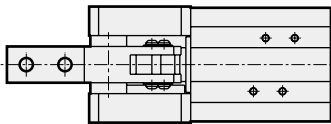
● HJL-32CS



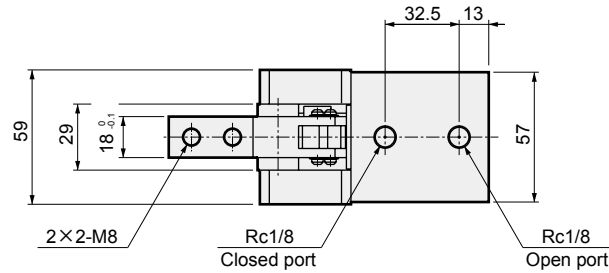
● With switch



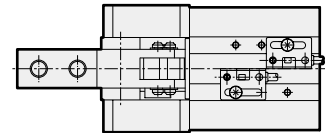
A section arrow view



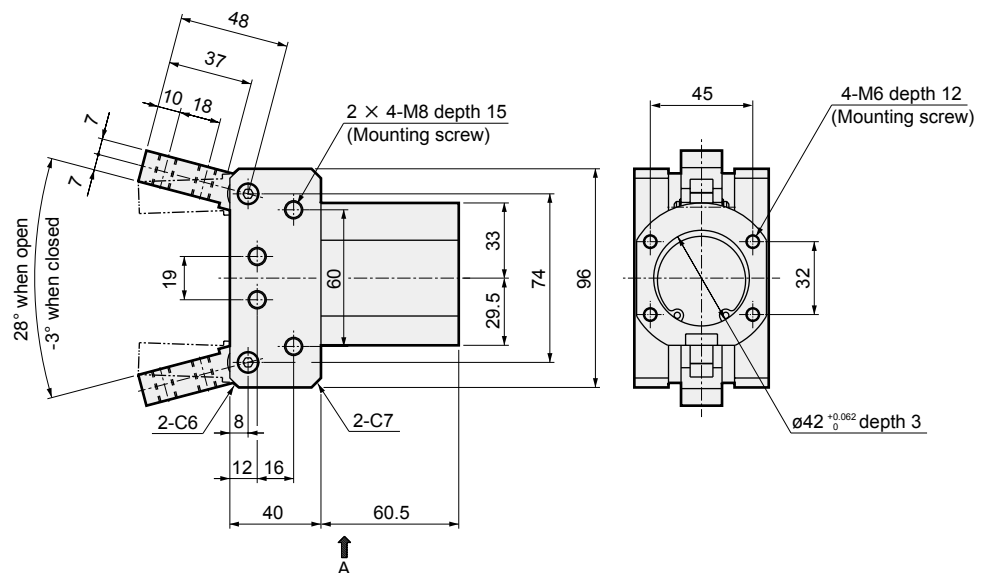
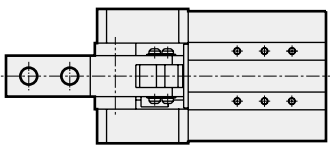
● HJL-40CS



● With switch



A section arrow view

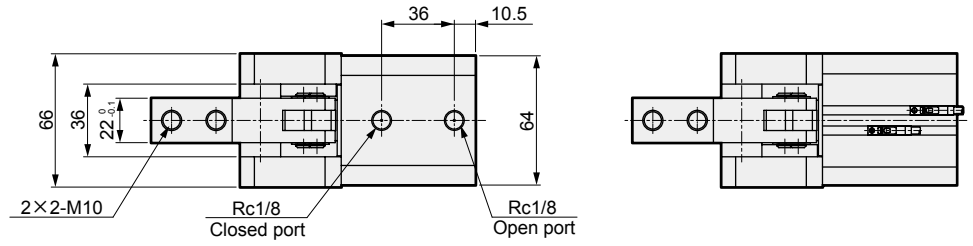


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HJD
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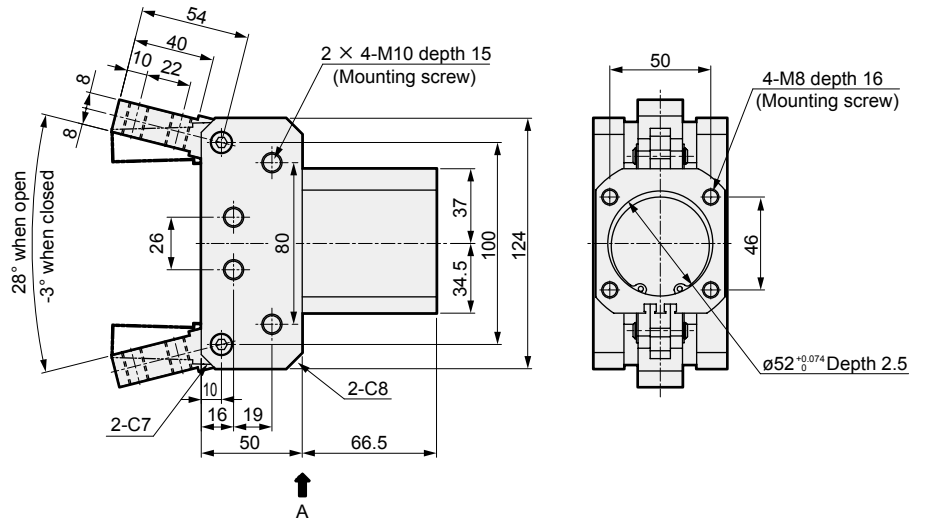
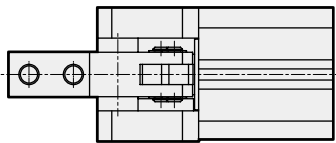
Dimensions

● HJL-50CS

● With switch

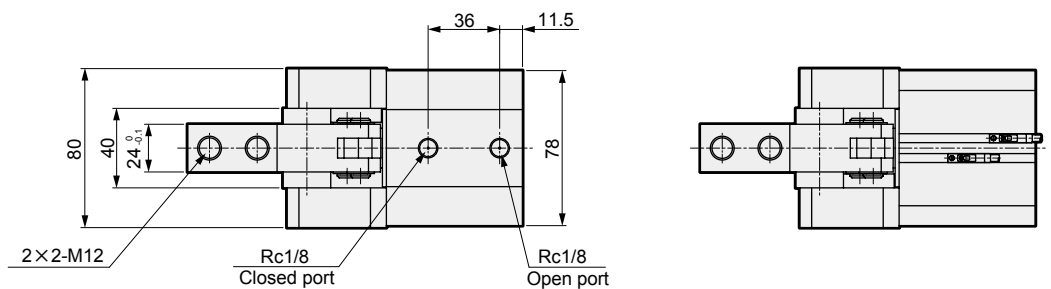


A section arrow view

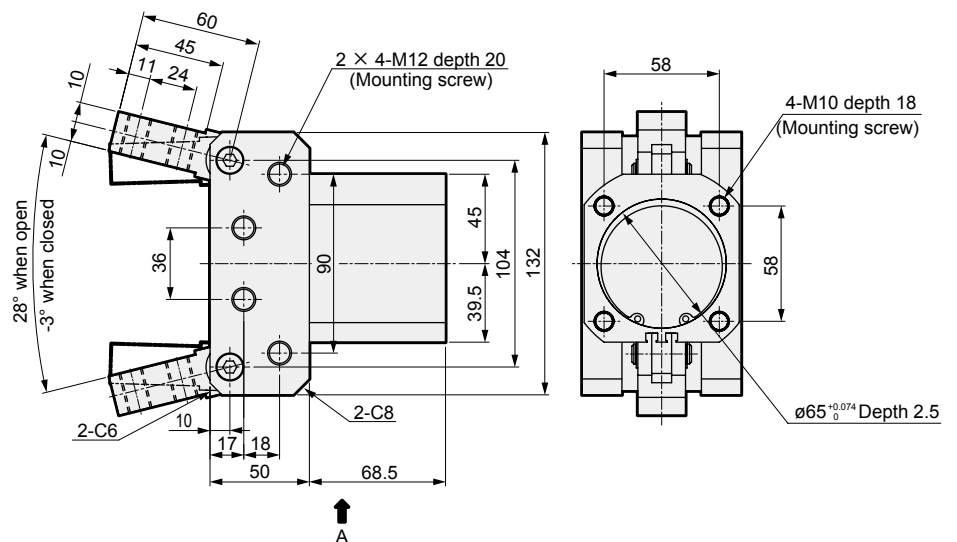
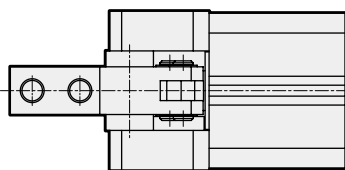


● HJL-63CS

● With switch



A section arrow view



LCM
LCR
LCG
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STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
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USSD
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