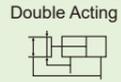




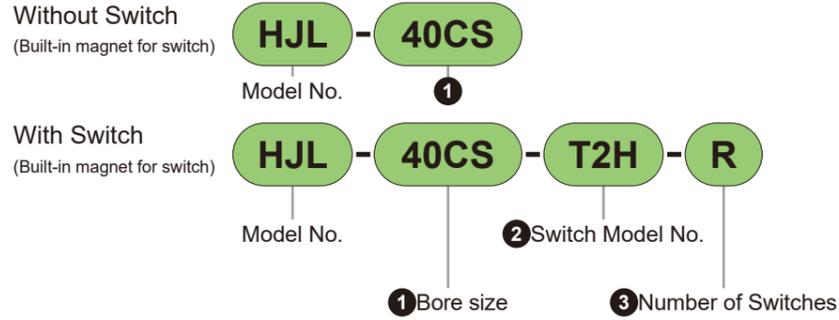
Toggle Gripper Double Acting

HJL Series

●Opening/closing angle: -3° to 28°



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.

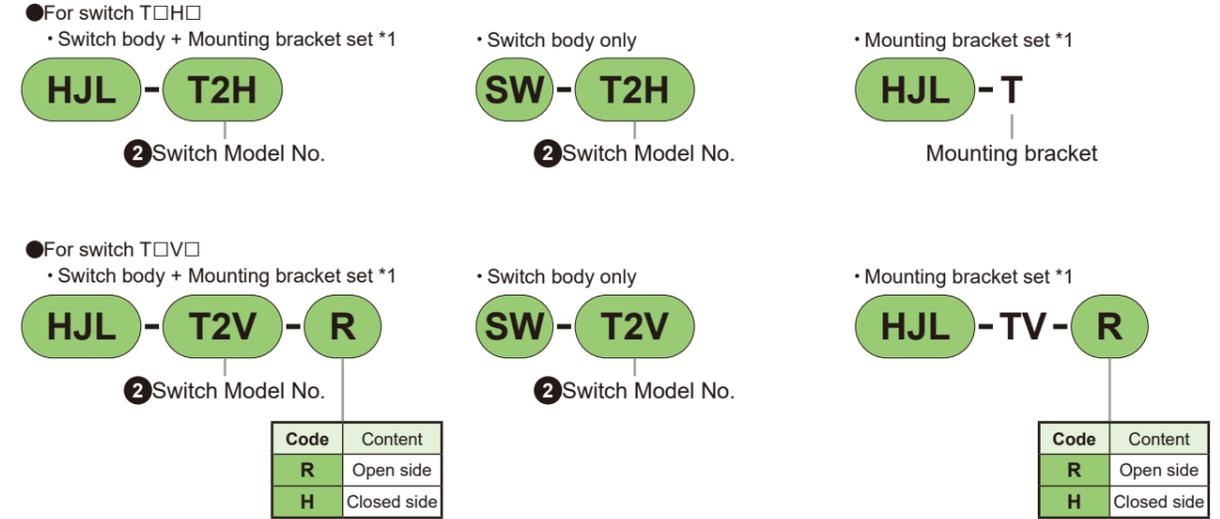
Contact	Indicator LED Special Function	Wiring (Output)	Load Voltage (V)		Load Current (mA)		Lead wire *1	
			AC	DC	AC	DC	Straight	L-shape
Solid State	1-Color	2-wire	-	10 to 30	-	5 to 20 *2	T2H□	T2V□
	1-Color Flexible Lead Wire	2-wire	-	10 to 30	-	5 to 20 *2	T2HR3	T2VR3
	1-Color	3-wire (NPN)	-	30 or less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

*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

Switch Single Unit Model No. Notation Method



*1: For HJL-[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.

* Lead wire length

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

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

Hand (Gripper)

LSH-HP

LSH

FH100

BSA2

BHA

BHG

BHE

LHA

LHAG

HAP-1C

HAP-2 to 4CS

HKP

HCP

HGP

LST-HP

HLF2

HLA/HLB

HLAG/HLBG

HLC

HLD

HMC-HP

HMF

HMF-G

HMF-B

HFP

FH500

HBL

HJL

HMD

HDL

HJD

Cylinder Switch

Ending

Hand (Gripper)

LSH-HP

LSH

FH100

BSA2

BHA

BHG

BHE

LHA

LHAG

HAP-1C

HAP-2 to 4CS

HKP

HCP

HGP

LST-HP

HLF2

HLA/HLB

HLAG/HLBG

HLC

HLD

HMC-HP

HMF

HMF-G

HMF-B

HFP

FH500

HBL

HJL

HMD

HDL

HJD

Cylinder Switch

Ending

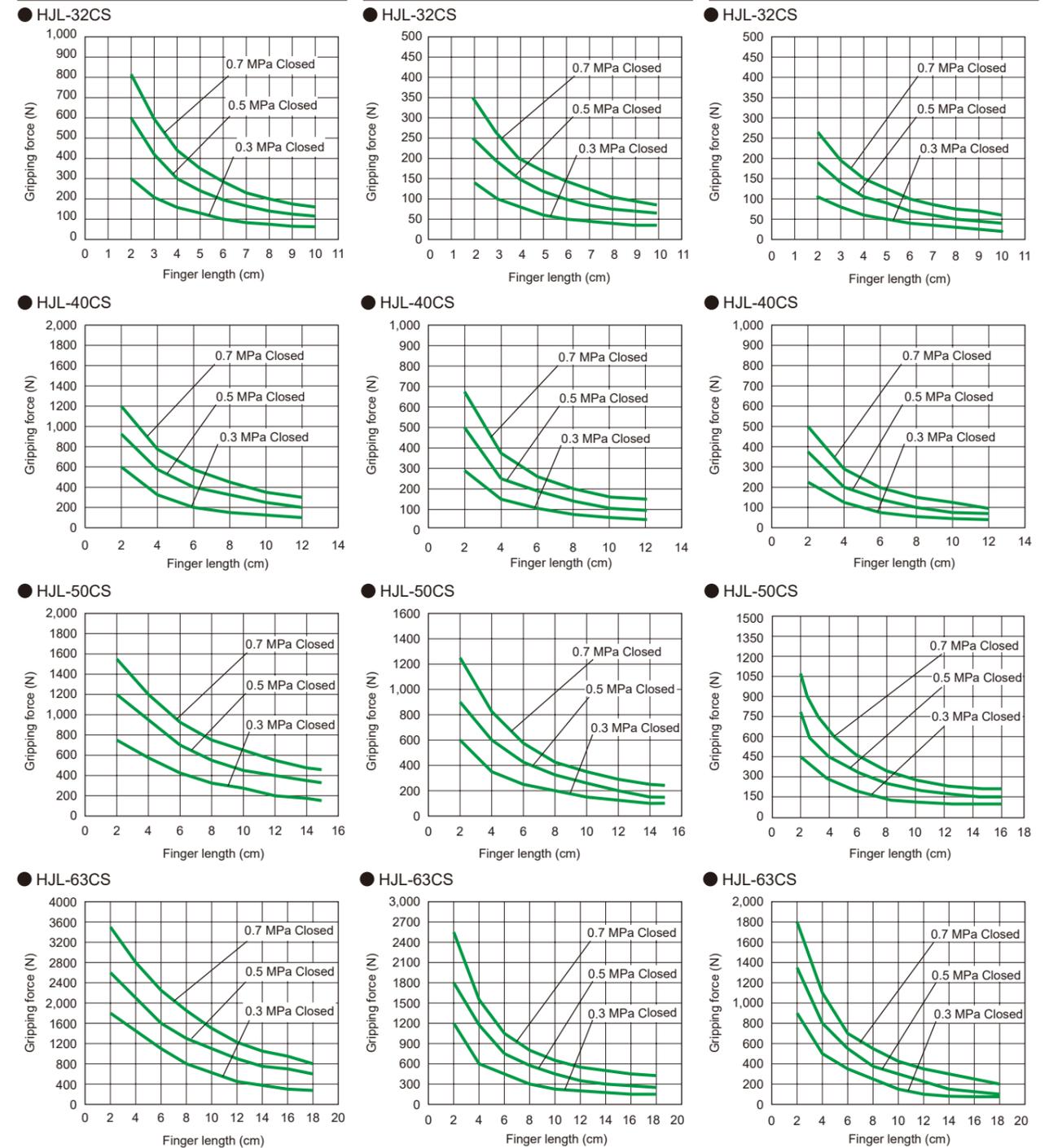
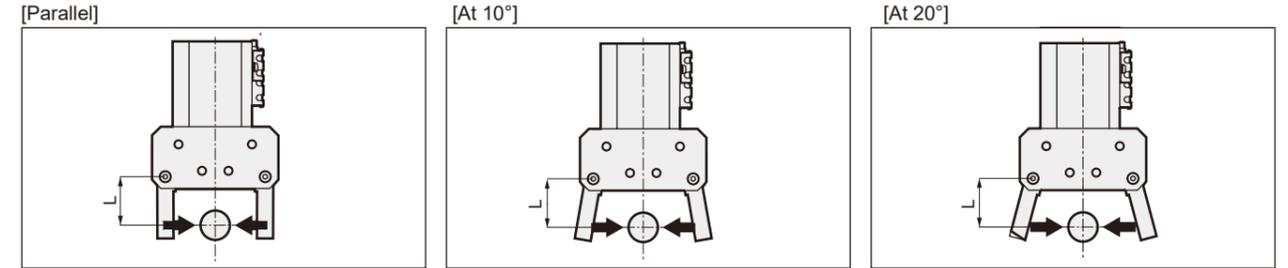
Specifications

Item	HJL			
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		
Opening/closing angle	° -3 to 28			
Rod diameter	mm $\phi 14$	$\phi 16$	$\phi 20$	$\phi 20$
Internal volume (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 (When lubricating, use turbine oil Class 1 ISO VG32)			

Gripping Force Performance Data

Gripping Force Performance Data

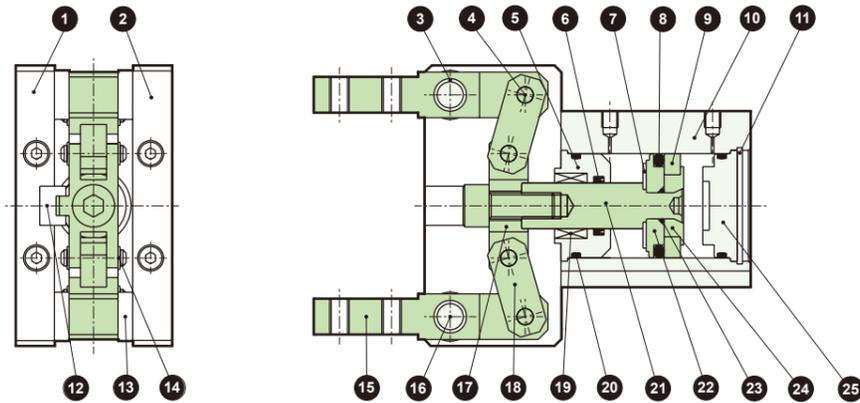
- Gripping force represents the thrust (for one finger) in the direction of the arrow shown in the figure.
- This represents the gripping force at the gripper's finger length L when the supply pressure is 0.3, 0.5, and 0.7 MPa.
- Closing direction (→) (solid line)



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

Hand (Gripper)
LSH-HP
LSH
FH100
BSA2
BHA
BHG
BHE
LHA
LHAG
HAP-1C
HAP-2 to 4CS
HKP
HCP
HGP
LST-HP
HLF2
HLA/HLB
HLAG/HLBG
HLC
HLD
HMC-HP
HMF
HMF-G
HMF-B
HFP
FH500
HBL
HJL
HMD
HDL
HJD
Cylinder Switch
Ending

Hand (Gripper)
LSH-HP
LSH
FH100
BSA2
BHA
BHG
BHE
LHA
LHAG
HAP-1C
HAP-2 to 4CS
HKP
HCP
HGP
LST-HP
HLF2
HLA/HLB
HLAG/HLBG
HLC
HLD
HMC-HP
HMF
HMF-G
HMF-B
HFP
FH500
HBL
HJL
HMD
HDL
HJD
Cylinder Switch
Ending



Do not disassemble

Part No.	Part Name	Material	Remarks	Part No.	Part Name	Material	Remarks
1	Side plate B	Aluminum Alloy		14	E-type Retaining Ring	Steel	
2	Side plate A	Aluminum Alloy		15	Finger	Steel	
3	Bearing	Oil-Impregnated Bearing Alloy		16	Pivot Shaft	Steel	
4	Operating shaft	Steel		17	Operation plate	Steel	
5	Rod Cover	Aluminum Alloy		18	Link	Steel	
6	Rod Packing	Nitrile Rubber		19	Bushing	Copper Alloy	
7	Cushion	Urethane Rubber		20	Cylinder seal	Nitrile Rubber	
8	Piston seal	Nitrile Rubber		21	Piston Rod	Stainless Steel	
9	Magnet			22	Piston A	Aluminum Alloy	
10	Body	Aluminum Alloy		23	O-ring	Nitrile Rubber	
11	C-type retaining ring	Stainless Steel		24	Piston B	Aluminum Alloy	
12	Guide rail	Steel		25	Cover	Aluminum Alloy	
13	Collar	Steel					

Hand (Gripper)
LSH-HP
LSH
FH100
BSA2
BHA
BHG
BHE
LHA
LHAG
HAP-1C
HAP-2 to 4CS
HKP
HCP
HGP
LST-HP
HLF2
HLA/HLB
HLAG/HLBG
HLC
HLD
HMC-HP
HMF
HMF-G
HMF-B
HFP
FH500
HBL
HJL
HMD
HDL
HJD
Cylinder Switch
Ending

Hand (Gripper)
LSH-HP
LSH
FH100
BSA2
BHA
BHG
BHE
LHA
LHAG
HAP-1C
HAP-2 to 4CS
HKP
HCP
HGP
LST-HP
HLF2
HLA/HLB
HLAG/HLBG
HLC
HLD
HMC-HP
HMF
HMF-G
HMF-B
HFP
FH500
HBL
HJL
HMD
HDL
HJD
Cylinder Switch
Ending