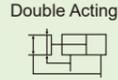


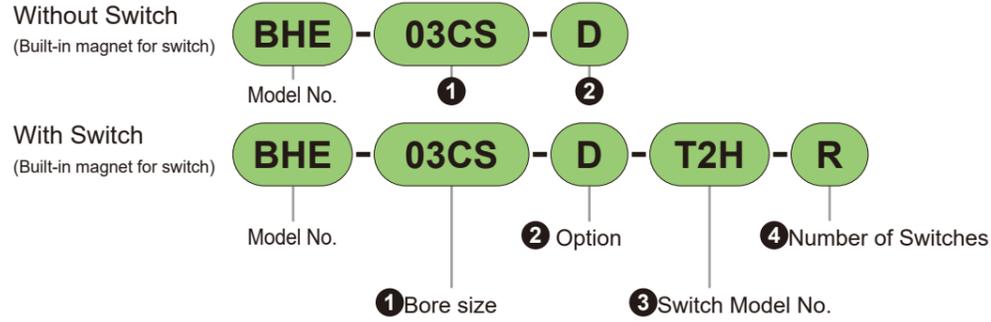


Centering Gripper BHE Series

● Operating stroke: 7, 10, 14, 16, 22 mm



Model No. Notation Method



① Bore Size (mm)

Code	Content
01CS	ø12
03CS	ø16
04CS	ø20
05CS	ø25
06CS	ø32

② Option

Code	Content
Blank	Standard
D	With opening amount adjustment mechanism
E	With closing amount adjustment mechanism
DE	With opening/closing amount adjustment mechanism

③ 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)	-	-	30 or less	-	100 or less	T3PH□	T3PV□

*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

*1: For "□" in the switch model No., 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 No.s listed above are also available. (Custom Product) For details, see P. 573.

④ Number of Switches

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

Rechargeable Battery Compatible Specification

(Catalog No. CC-1226AA)

● Structure usable in rechargeable battery manufacturing processes



*Please contact us for details.

Switch Single Unit Model No. Notation Method



③ Switch Model No.

Specifications

Item	BHE-01CS	BHE-03CS	BHE-04CS	BHE-05CS	BHE-06CS
Bore size	mm ø12	ø16	ø20	ø25	ø32
Operating Fluid	Compressed Air				
Max. Working Pressure	MPa 0.7				
Min. Operating Pressure	MPa 0.2				
Ambient Temperature	°C 5 to 60				
Port Size	M3		M5		
Operating stroke	mm 7	10	14	16	22
Rod diameter	mm ø6	ø8	ø10	ø12	ø16
Repeatability	mm ±0.01				
Centering accuracy	mm ±0.05 *1, *2				
Weight	kg 0.108	0.154	0.260	0.438	1.040
Lubrication	Not required (When lubricating, use turbine oil Class 1 ISO VG32)				

*1 Centering accuracy is based on the spigot center of the gripper end face mounting part.

*2 This is the initial value.

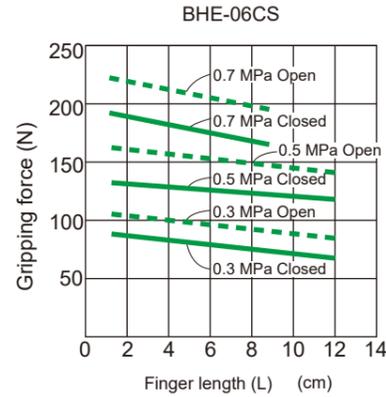
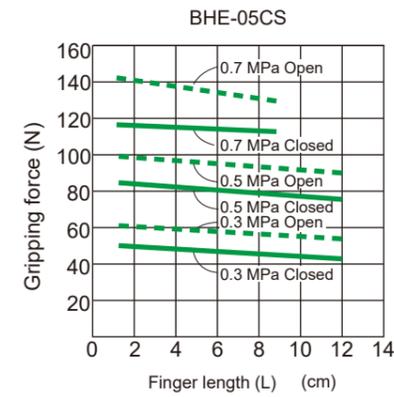
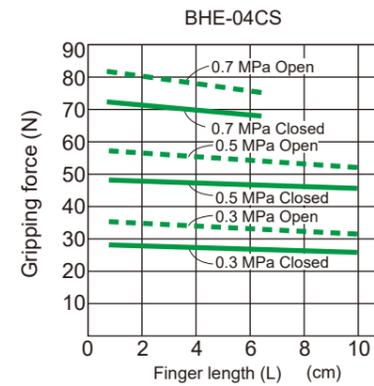
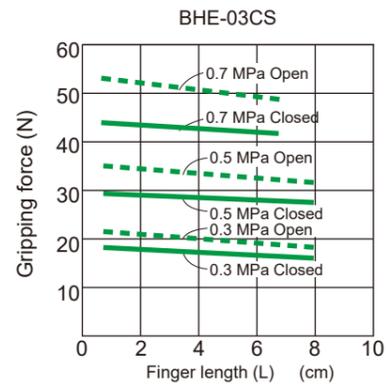
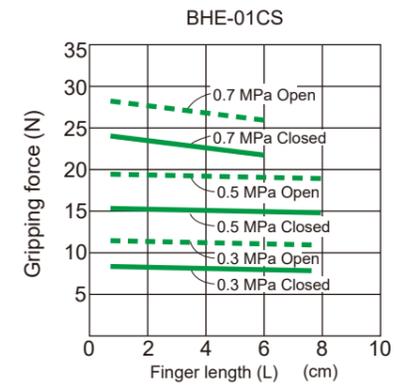
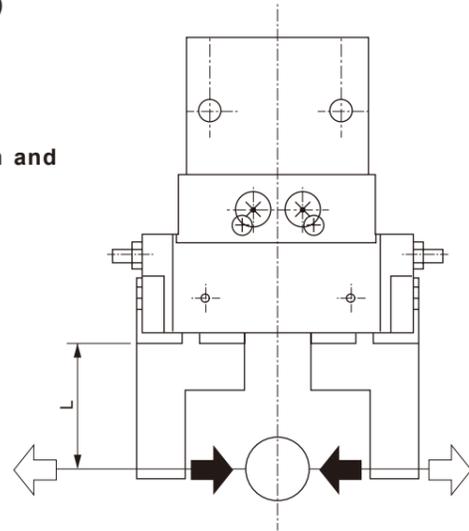
* BHE-LN series with length measurement function (with Linear Norm Sensor) is also available. For details, refer to "Pneumatic Cylinders ④ No. RJ-005AA".

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.

- Open direction (←) - - - (broken line)
- Closing direction (→) ——— (solid line)

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



Hand (Gripper)

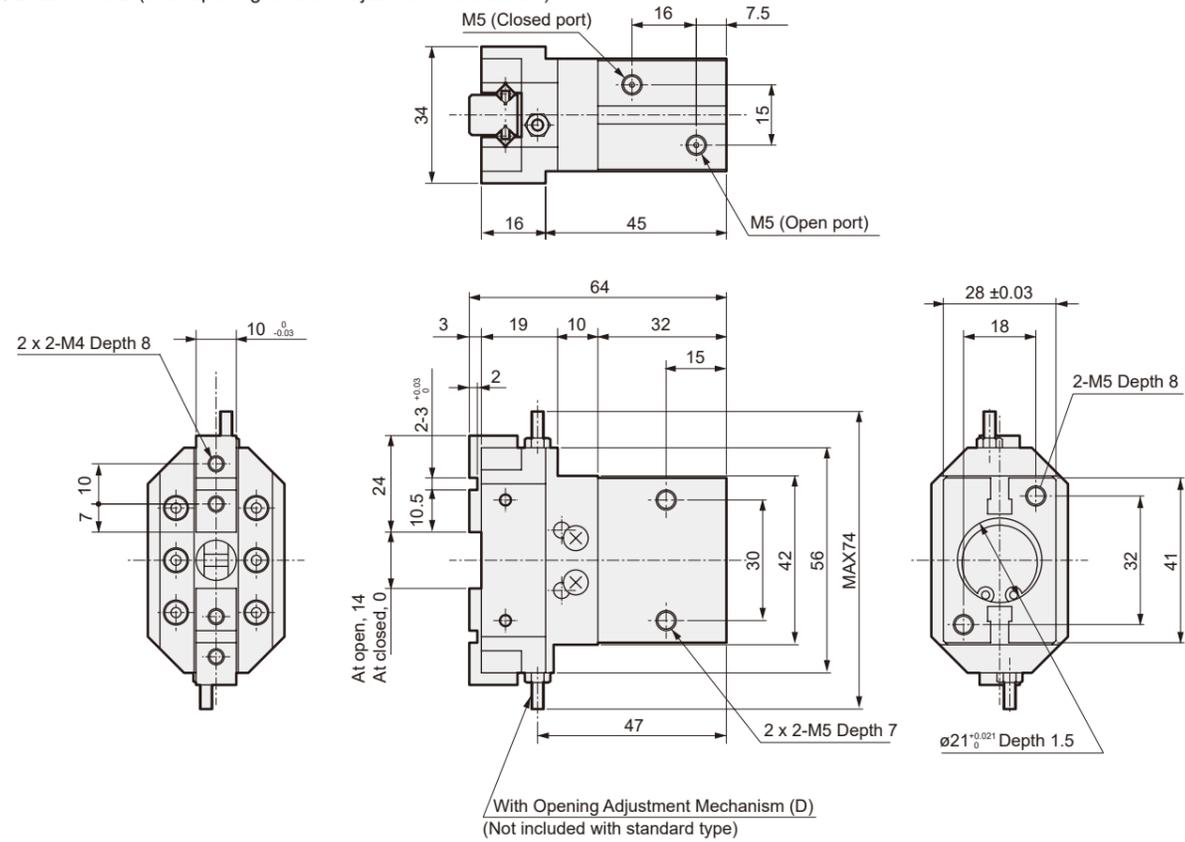
- LSH-HP
- LSH
- FH100
- BSA2
- BHA
- BHG
- BHE**
- LHA
- LHAG
- HAP-1C
- HAP-2 to 4CS
- HKP
- HCP
- HGP
- LST-HP
- HLF2
- HLA/HLB
- HLAG/HLBG
- HLC
- HLD
- HMC-HP
- HMF
- HMF-G
- HMFB
- HFP
- FH500
- HBL
- HJL
- HMD
- HDL
- HJD
- Cylinder Switch
- Ending

Hand (Gripper)

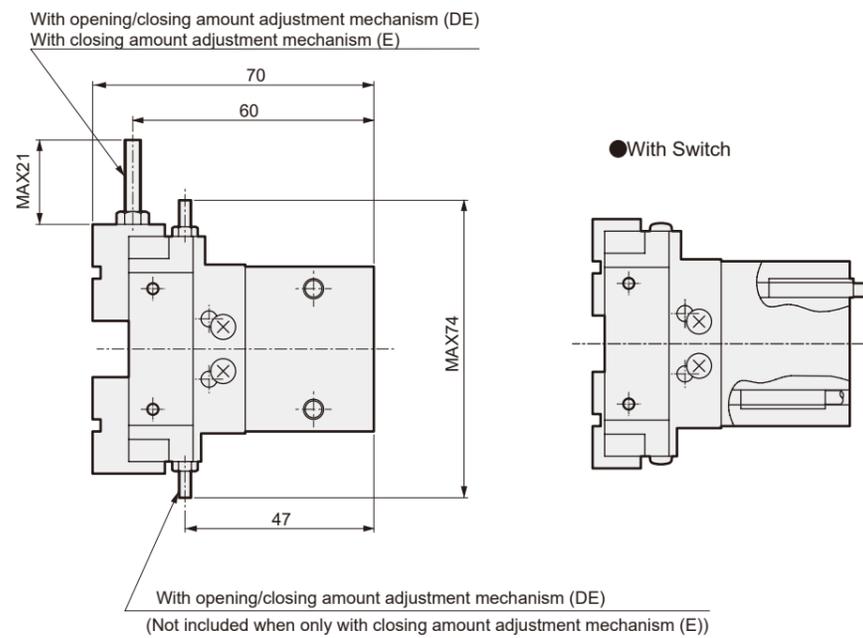
- LSH-HP
- LSH
- FH100
- BSA2
- BHA
- BHG
- BHE**
- LHA
- LHAG
- HAP-1C
- HAP-2 to 4CS
- HKP
- HCP
- HGP
- LST-HP
- HLF2
- HLA/HLB
- HLAG/HLBG
- HLC
- HLD
- HMC-HP
- HMF
- HMF-G
- HMFB
- HFP
- FH500
- HBL
- HJL
- HMD
- HDL
- HJD
- Cylinder Switch
- Ending

Outline Dimension Drawing

- BHE-04CS (Standard)
- BHE-04CS-D (With opening amount adjustment mechanism)



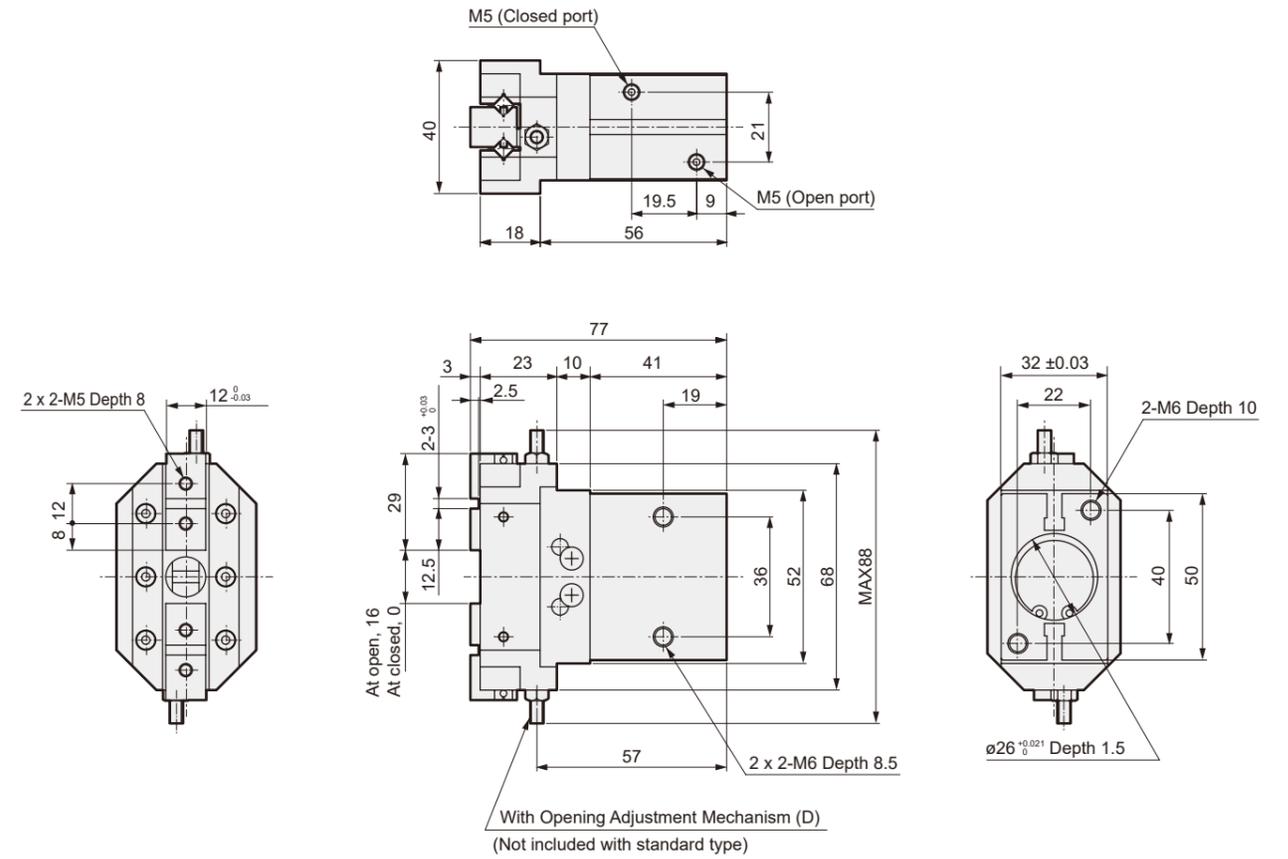
- BHE-04CS-E (With closing amount adjustment mechanism)
- BHE-04CS-DE (With opening/closing amount adjustment mechanism)



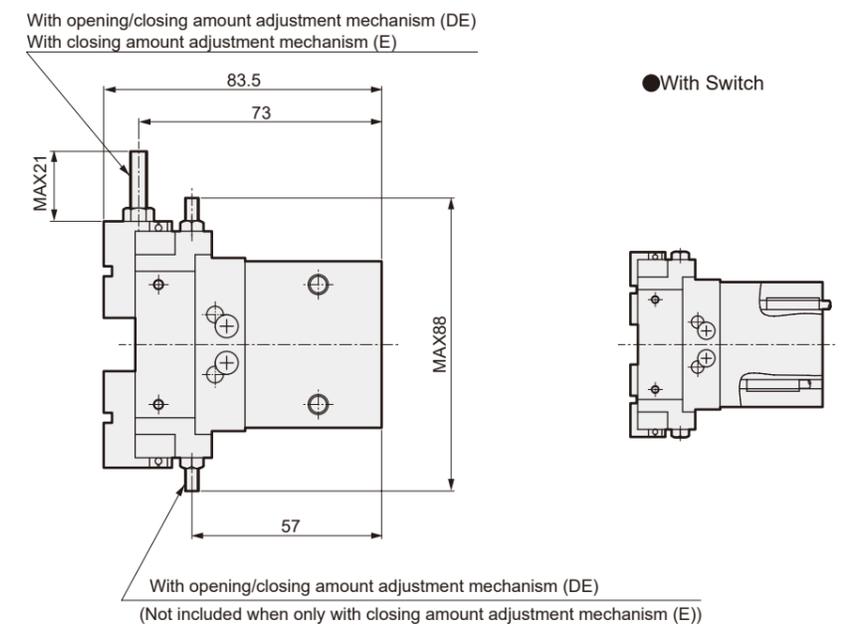
Outline Dimension Drawing

Outline Dimension Drawing

- BHE-05CS (Standard)
- BHE-05CS-D (With opening amount adjustment mechanism)



- BHE-05CS-E (With closing amount adjustment mechanism)
- BHE-05CS-DE (With opening/closing amount adjustment mechanism)



Hand (Gripper)

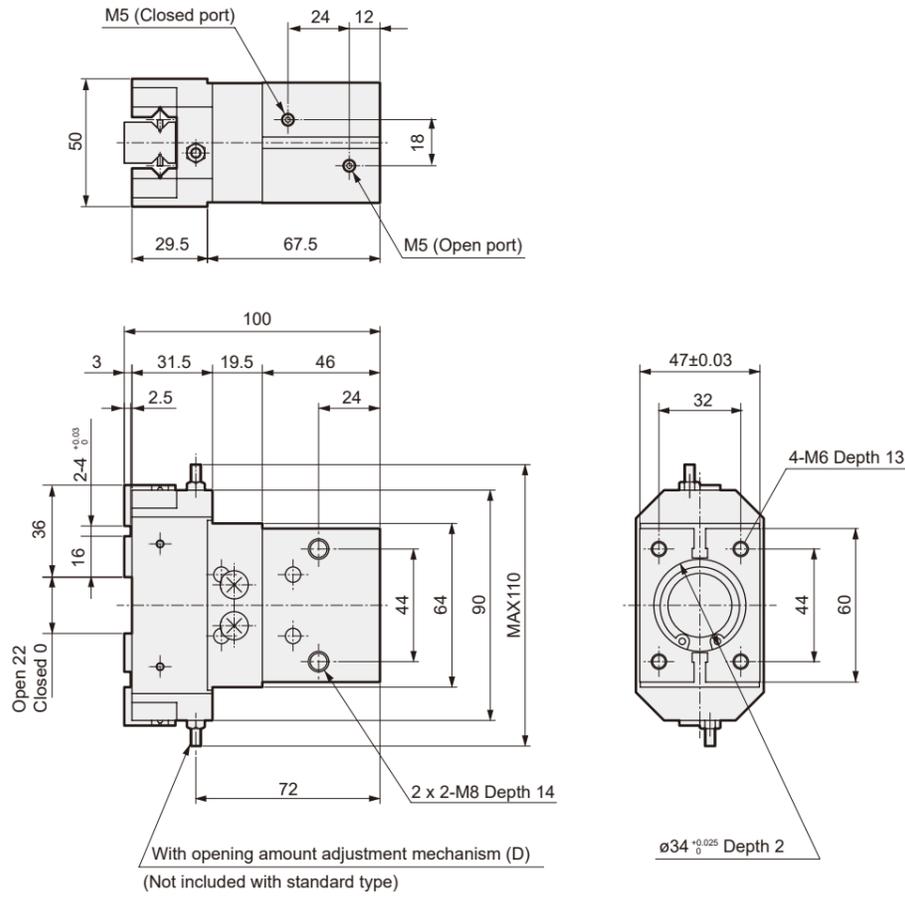
- LSH-HP
- LSH
- FH100
- BSA2
- BHA
- BHG
- BHE**
- LHA
- LHAG
- HAP-1C
- HAP-2 to 4CS
- HKP
- HCP
- HGP
- LST-HP
- HLF2
- HLA/HLB
- HLAG/HLBG
- HLC
- HLD
- HMC-HP
- HMF
- HMF-G
- HMF-B
- HFP
- FH500
- HBL
- HJL
- HMD
- HDL
- HJD
- Cylinder Switch
- Ending

Hand (Gripper)

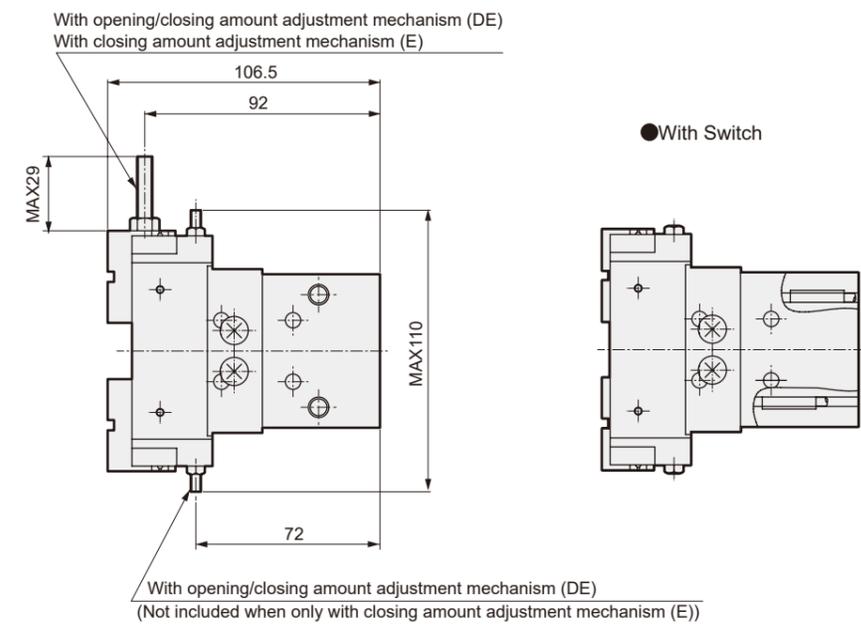
- LSH-HP
- LSH
- FH100
- BSA2
- BHA
- BHG
- BHE**
- LHA
- LHAG
- HAP-1C
- HAP-2 to 4CS
- HKP
- HCP
- HGP
- LST-HP
- HLF2
- HLA/HLB
- HLAG/HLBG
- HLC
- HLD
- HMC-HP
- HMF
- HMF-G
- HMF-B
- HFP
- FH500
- HBL
- HJL
- HMD
- HDL
- HJD
- Cylinder Switch
- Ending

Outline Dimension Drawing

- BHE-06CS (Standard)
- BHE-06CS-D (With opening amount adjustment mechanism)

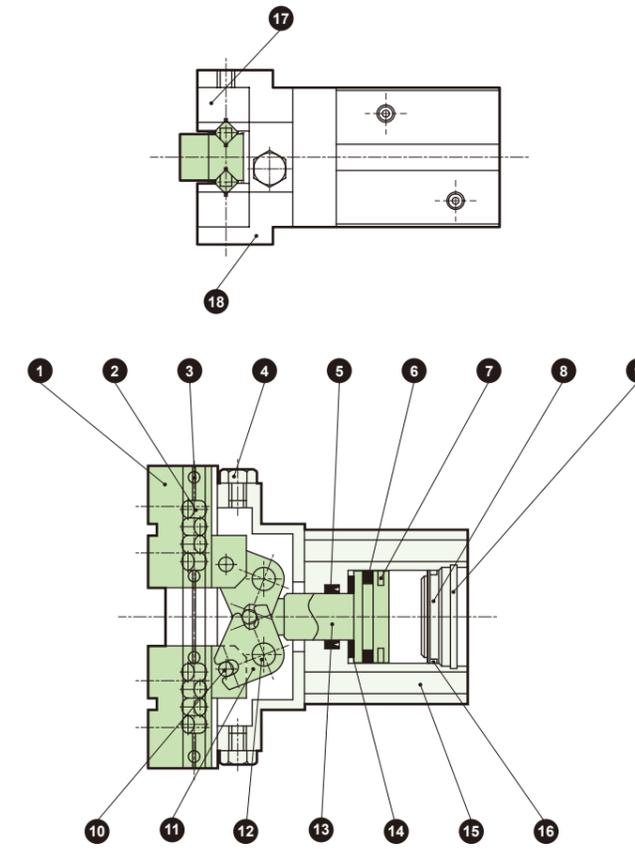


- BHE-06CS-E (With closing amount adjustment mechanism)
- BHE-06CS-DE (With opening/closing amount adjustment mechanism)



Internal Structure Diagram/Material

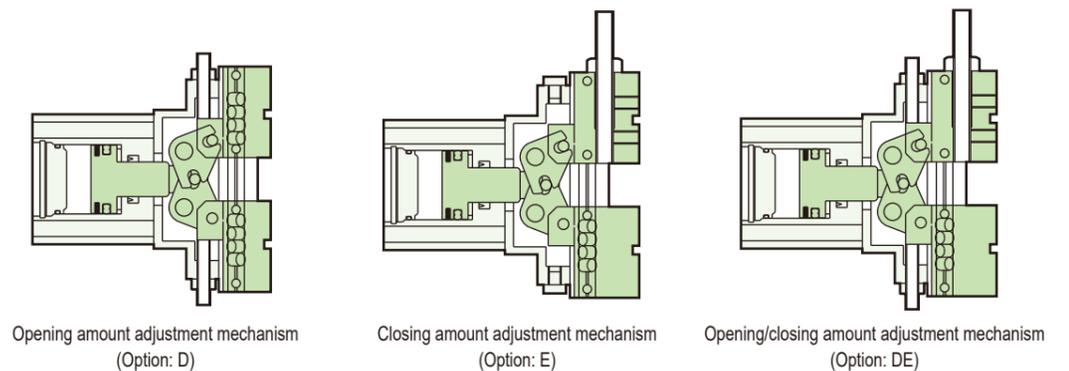
- BHE-01CS to 06CS



Do not disassemble

Part No.	Part Name	Material	Remarks	Part No.	Part Name	Material	Remarks
1	Finger	Stainless Steel		10	Operating Shaft	High carbon chromium bearing steel	
2	Cross Roller	High carbon chromium bearing steel		11	Arm	Stainless Steel	
3	Spring Pin	Stainless Steel		12	Pivot Shaft	High carbon chromium bearing steel	
4	Plug	Copper Alloy		13	Piston	Stainless Steel	
5	Rod Packing	Nitrile Rubber		14	Cushion	Urethane Rubber	
6	Piston Packing	Nitrile Rubber		15	Body	Aluminum Alloy	
7	Magnet			16	Gasket	Nitrile Rubber	
8	Cover	Resin		17	Bearing guide	Stainless Steel	
9	Retaining ring	Stainless Steel		18	Body	Aluminum Alloy	

Option internal structure diagram



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