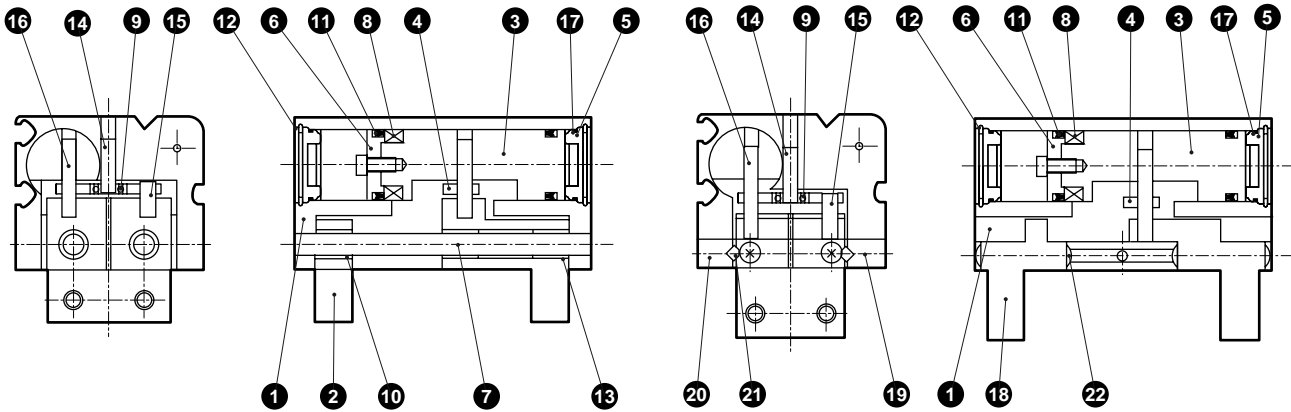


Internal structure and parts list

● HLA-12CS to 20CS

● HLB-12CS to 20CS

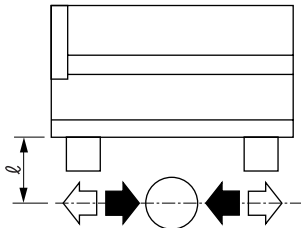


No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Body	Aluminum alloy		12	Snap ring	Stainless steel	
2	Master key	Aluminum alloy		13	Bush	Sintering oil impregnated alloy	
3	Piston	Stainless steel		14	Parallel pin	Steel	
4	Cam	Stainless steel		15	Needle roller A	Alloy steel	
5	Cylinder guard	Acetar resin		16	Needle roller B	Alloy steel	
6	Magnet holder	Aluminum alloy		17	Cylinder gasket	Nitrile rubber	
7	Guide rod	Alloy steel		18	Master key	Steel	
8	Magnet			19	Bearing guide A	Steel	
9	Small diameter sphere bearing	Alloy steel		20	Bearing guide B	Steel	
10	Bush	Sintering oil impregnated alloy		21	Cross roller	Alloy steel	
11	Piston packing seal	Nitrile rubber		22	Truss machine screw	Stainless steel	

Gripping power performance data

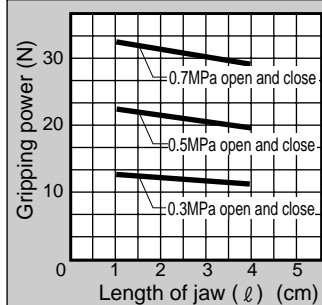
Gripping power that functions to open and closed directions with jaw length ℓ of hand at supply pressure 0.3, 0.5 and 0.7 MPa is shown.

- Both open direction (⇐) closed direction (⇒)
- (shown with continuous line)

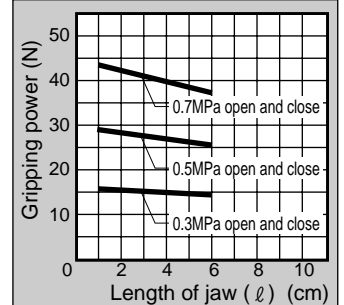


(Note) Grip performance data indicates the grip for one jaw. Since two jaws are used, double the grip in the graph when making a selection.

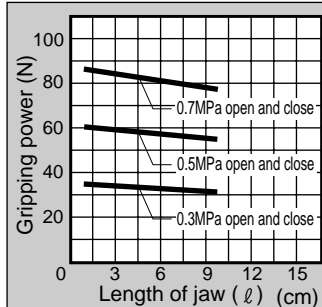
● HLA-12CS



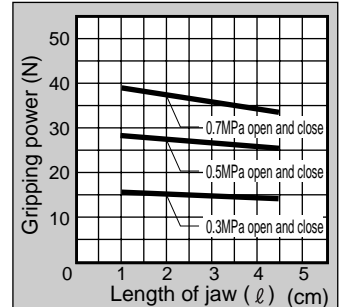
● HLA-15CS



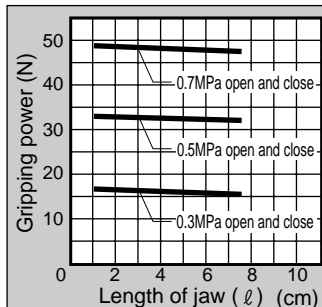
● HLA-20CS



● HLB-12CS



● HLB-15CS



● HLB-20CS

