

Pneumatic Cylinders II  
Catalog No. CB-030SA

Thin long stroke parallel hand Double acting  
(Standard/long stroke 1)

# HLC Series

● Operating Stroke: Standard 20, 30, 40, 50, 60, 70 mm  
Long stroke 1 60, 80, 100, 120, 140 mm

Double acting

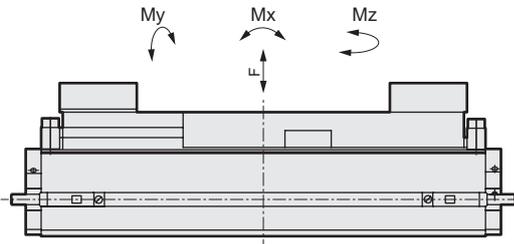


## Specifications

Descriptions	HLC											
	08CS		12CS		16CS		20CS		25CS		30CS	
Size	Standard		Standard	L1	Standard	L1	Standard	L1	Standard	L1	Standard	L1
Bore size mm	ø8 x 2		ø12 x 2		ø16 x 2		ø20 x 2		ø25 x 2		ø30 x 2	
Working fluid	Compressed air											
Max. working pressure MPa	0.7											
Min. working pressure MPa	0.2											
Ambient temperature °C	5 to 60											
Port size	M3				M5							
Operating Stroke mm	20	30	60	40	80	50	100	60	120	70	140	
Capacity of reciprocation cm <sup>3</sup>	2.0	6.8	13.6	16.1	32.2	31.4	62.8	58.9	117.8	99	198	
Repeatability mm	±0.01				±0.03							
Product weight kg	0.14	0.29	0.44	0.71	0.85	1.03	1.4	1.62	2.23	2.74	3.69	
Lubrication	Not available											

## HLC allowable load and allowable moment (static)

Allowable load and allowable moment	F	Mx	Mz	My
Model No.	N	N·m	N·m	N·m
HLC-08CS	102	10	8.5	1.6
HLC-12CS	151	11.9	8.2	4.68
HLC-12CS-L1	151	11.9	8.2	4.68
HLC-16CS	325	27.5	25.6	7.96
HLC-16CS-L1	325	27.5	25.6	10.6
HLC-20CS	306	29.9	27	10.6
HLC-20CS-L1	306	29.9	27	11.2
HLC-25CS	423	105.1	96.4	19.7
HLC-25CS-L1	423	105.1	96.4	19.7
HLC-30CS	694	109.3	116.5	33.3
HLC-30CS-L1	694	109.3	116.5	43.1



## Compatibility table by variation

Applicable bore size		Double acting
ø8 x 2 to ø30 x 2	P4	●
	P40	●

●: Applicable models ○: Semi-applicable models ▲: Contact CKD for details. □: Not applicable

## How to order

**HLC** - **20CS** - **L1** - **SW11** - **R** - **P4 P40**

**A** Size

**B** Option  
\*1

**C** Switch model No.

**D** Switch quantity

Code	Item						
<b>A Size</b>							
08CS							
12CS							
16CS							
20CS							
25CS							
30CS							
<b>B Option</b>							
	Size	08CS	12CS	16CS	20CS	25CS	30CS
Blank	Standard	●	●	●	●	●	●
L1	Long stroke 1	□	●	●	●	●	●
<b>C Switch model No.</b>							
Refer to the compatibility table on Intro Pages 23 to 26 for switch model No.							
<b>D Switch quantity</b>							
R	1 on open side						
H	1 on closed side						
D	2						

### ⚠ Precautions for model No. selection

\*1: Long stroke "L1" is not available for 08CS.

**P4**  
Series

Pneumatic  
cylinders  
Hand/  
Chuck  
Related  
products  
Cylinder  
Switch

**Pneumatic actuator**

Vacuum components

Pneumatic valves

Clean air  
components  
controller

**Pneumatic auxiliary components**

Fitting  
Auxiliary  
valve  
Silencer

Tube

**Gas generator**

Fluid control components

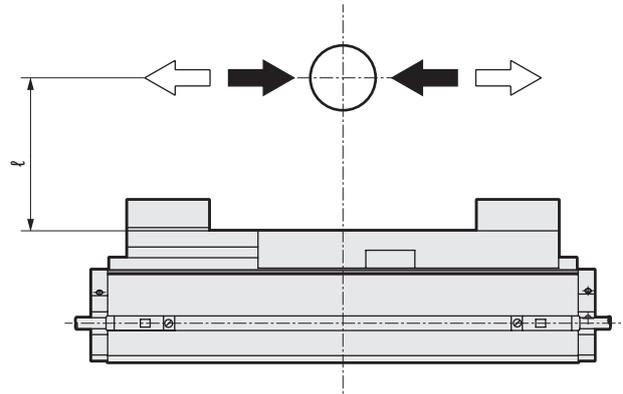
Motor  
specification  
Motorless  
specifications

**Electric actuator**

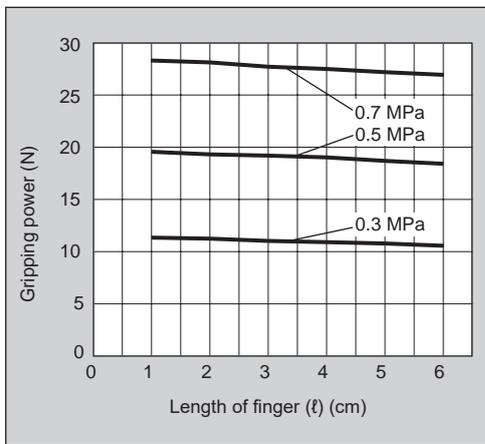
## Gripping power performance data

The gripping force with a finger length  $\ell$  of the hand and a supply pressure of 0.3, 0.5 and 0.7 MPa is shown.

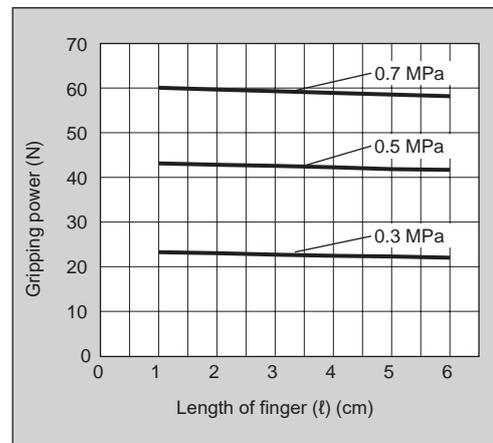
- Both open direction (←) and closed direction (→)
- (shown with continuous line)



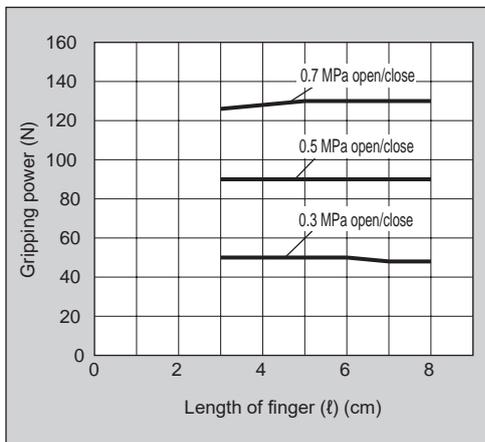
● HLC-08CS



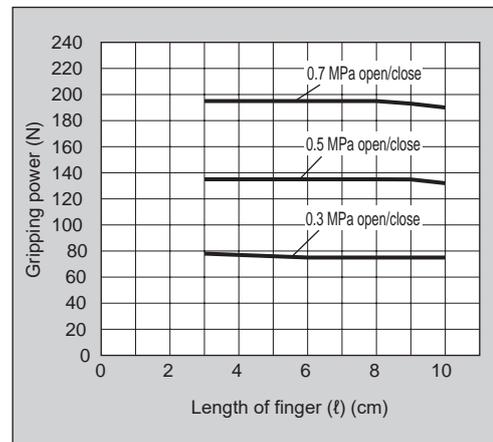
● HLC-12CS



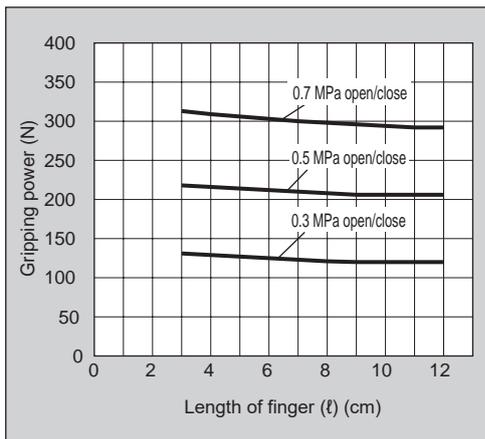
● HLC-16CS



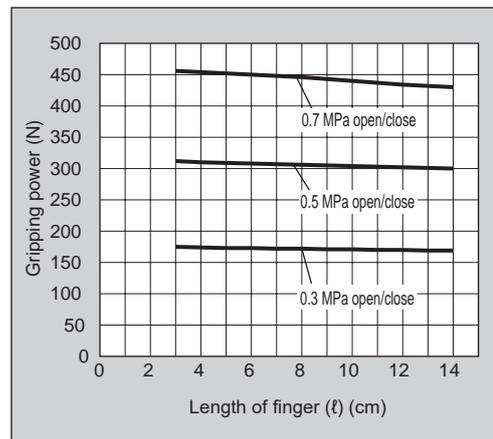
● HLC-20CS



● HLC-25CS



● HLC-30CS



Pneumatic actuator  
 Hand/Chuck  
 Pneumatic cylinders  
 Related products  
 Cylinder/Switch  
 Vacuum components  
 Clean air components  
 Speed controller  
 Fitting  
 Auxiliary valve  
 Silencer  
 Tube  
 Gas generator  
 Fluid control components  
 Motor specifications  
 Motor specifications