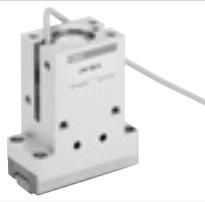


P4 Series

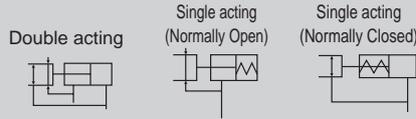


Pneumatic Cylinders II
Catalog No. CB-030SA

Linear guide hand Double acting/single acting

LHA Series

● Operating Stroke: 4, 5, 9, 11, 15, 20 mm



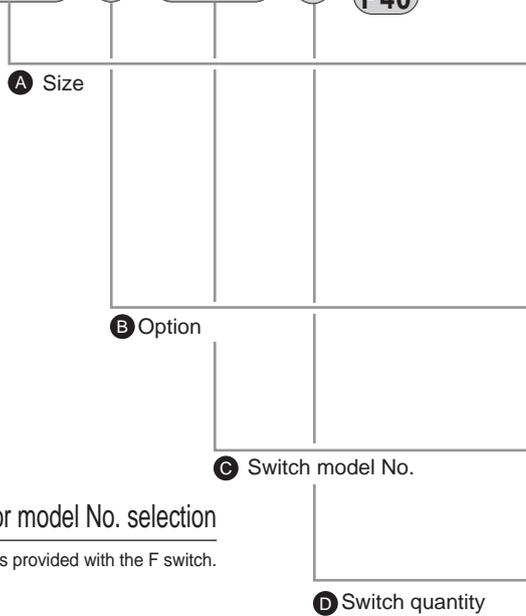
Specifications

Item	LHA					
	006CS	01CS	03CS	04CS	05CS	06CS
Size	006CS	01CS	03CS	04CS	05CS	06CS
Bore size mm	ø6	ø12	ø16	ø20	ø25	ø32
Actuation	Double acting/single acting					
Working fluid	Compressed air					
Max. working pressure MPa	0.7					
Min. working pressure MPa	Double acting	0.15			0.1	
	Single acting			0.3		
Ambient temperature °C	5 to 60					
Port size	M3			M5		
Operating Stroke mm	4	5	9	11	15	20
Rod diameter mm	ø3	ø6	ø8	ø10	ø12	ø16
Capacity of reciprocation cm ³	0.10	0.32	1.58	2.89	6.32	14.07
Repeatability mm	±0.01					
Product weight kg	0.04	0.085	0.15	0.36	0.52	0.82
Lubrication	Not available					

How to order

Without switch
LHA - 03CS - O ————— **P4 P40**

With switch
LHA - 03CS - O - SW81 - R ————— **P4 P40**



Code	Description
A Size	
006CS	
01CS	
03CS	
04CS	
05CS	
06CS	
B Option	
Blank	Standard (double acting)
O	Single acting (Normally Open)
C	Single acting (Normally Closed)
C Switch model No.	
Refer to the compatibility table on Intro Pages 23 to 26 for switch model No.	
D Switch quantity	
R	1 on open side
H	1 on closed side
D	2

⚠ Precautions for model No. selection

*1: Only the LHA-006CS is provided with the F switch.

Compatibility table by variation

Applicable bore size	Motor specifications	Double acting	Single acting Normally Open	Single acting Normally Closed
			O	C
ø6 to 32	P4	●	●	●
	P40	●	●	●

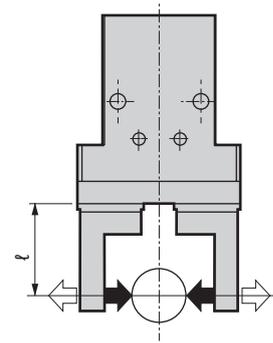
●: Applicable models ○: Semi-applicable models ▲: Contact CKD for details. □: Not applicable

Gripping power performance data

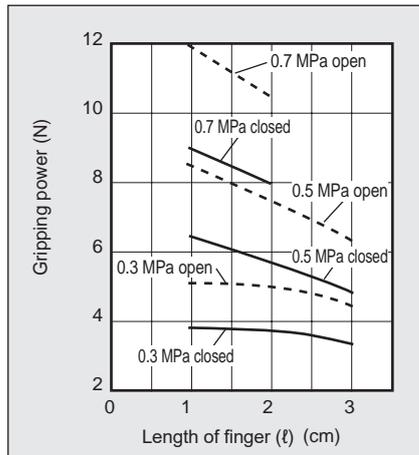
The gripping force in the opening/closing directions with finger length l of hand with a supply pressure of 0.3, 0.5 and 0.7 MPa is shown.

- Open direction(\leftarrow)----- (Broken line)
- Close direction(\rightarrow)————— (shown with continuous line)

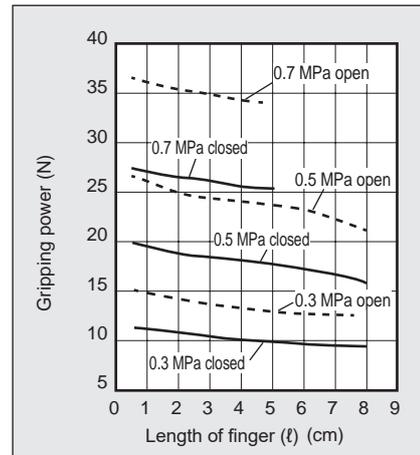
(Note) O type gripping force decreases approximately 20 to 30% in the closed direction compared to double acting.
C type gripping force decreases approximately 10 to 20% in the open direction compared to the double acting type.



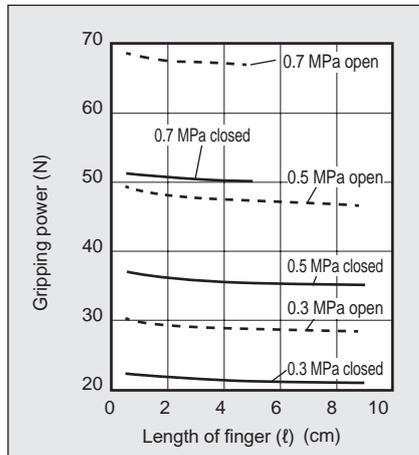
● LHA-006CS



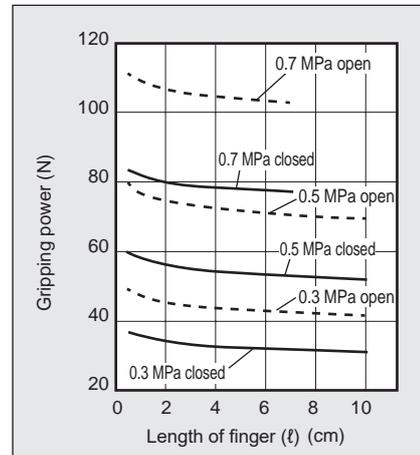
● LHA-01CS



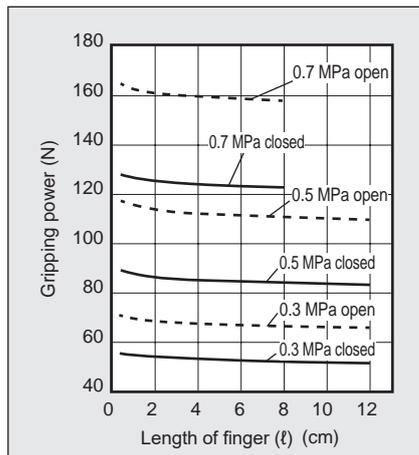
● LHA-03CS



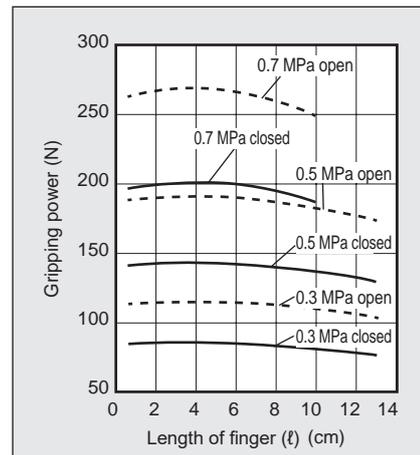
● LHA-04CS



● LHA-05CS



● LHA-06CS





Pneumatic Cylinders II
Catalog No. CB-030SA

Linear guide hand with rubber cover Double acting/single acting

LHAG Series

● Operating Stroke: 5, 9, 11, 15, 20 mm

Double acting

Single acting (Normally Open)

Single acting (Normally Closed)



Specifications

Item	LHAG				
Size	01CS	03CS	04CS	05CS	06CS
Bore size mm	ø12	ø16	ø20	ø25	ø32
Actuation	Double acting/single acting				
Working fluid	Compressed air				
Max. working pressure MPa	0.7				
Min. working pressure MPa	Double acting	0.2			
	Single acting	0.3			
Ambient temperature °C	5 to 60				
Port size	M3		M5		
Operating Stroke mm	5	9	11	15	20
Rod diameter mm	ø6	ø8	ø10	ø12	ø16
Capacity of reciprocation cm ³	0.32	1.58	2.89	6.32	14.07
Repeatability mm	±0.01				
Product weight kg	0.09	0.17	0.37	0.57	0.9
Lubrication	Not available				

How to order

Without switch

LHAG - **03CS** - **O** - **P4 P40**

With switch

LHAG - **03CS** - **O** - **SW11** - **R** - **P4 P40**

Model No.

A Size

B Option

C Switch model No.

D Switch quantity

Code	Description
A Size	
01CS	
03CS	
04CS	
05CS	
06CS	
B Option	
Blank	Standard (double acting with nitrile rubber guard)
O	Single acting (Normally Open)
C	Single acting (Normally Closed)
F	Fluoro rubber guard
T	Silicone rubber guard
C Switch model No.	
Refer to the compatibility table on Intro Pages 23 to 26 for switch model No.	
D Switch quantity	
R	1 on open side
H	1 on closed side
D	2

Compatibility table by variation

Applicable bore size		Actuation		
		Double acting	Single acting/ Normally Open	Single acting/ Normally Closed
ø12 to 32	P4	●	●	●
	P40	●	●	●

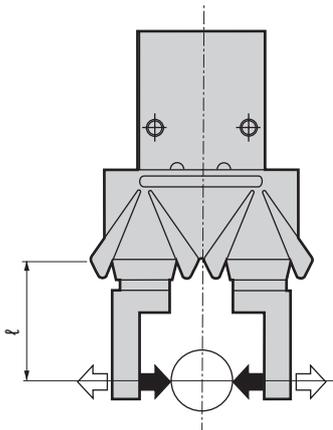
- Applicable models
- Semi-applicable models
- ▲ Contact CKD for details.
- Not applicable

Gripping power performance data

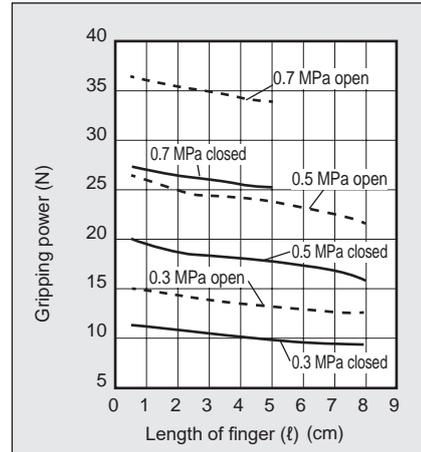
The gripping force in the opening and closing directions with finger length l of hand with a supply pressure of 0.3, 0.5 and 0.7 MPa is shown.

- Open direction(\leftarrow)------(Broken line)
- Close direction(\rightarrow)—————(shown with continuous line)

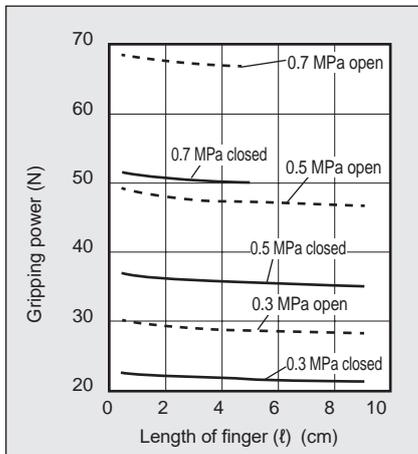
(Note) O type gripping force decreases approximately 20 to 30% in the closed direction compared to double acting.
C type gripping force decreases approximately 10 to 20% in the open direction compared to the double acting type.



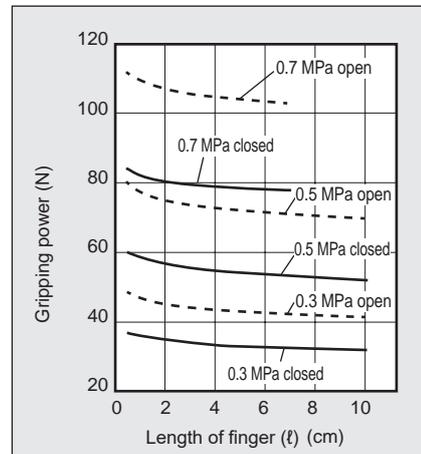
● LHAG-01CS



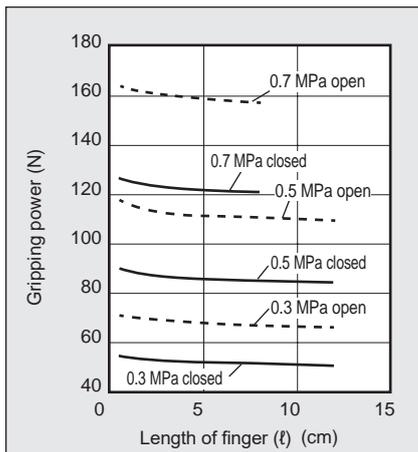
● LHAG-03CS



● LHAG-04CS



● LHAG-05CS



● LHAG-06CS

