



Position locking powerful chuck

# CKL2-\*HC Series

● Operational stroke length: 8, 10, 12, 16, 20mm



RRC  
GRC  
RV3\*  
NHS  
HR  
LN  
FH100  
HAP  
BSA2  
BHA/  
BHG  
LHA  
LHAG  
HKP  
HLA/  
HLB  
HLAG/  
HLBG  
HEP  
HCP  
HMF  
HMFb  
HFP  
HLC  
HGP  
FH500  
HBL  
HDL  
HMD  
HJL  
BHE  
CKG  
CK  
CKA  
CKS  
CKF  
CKJ  
CKL2  
CKL2  
\*HC  
CKH2  
CKLB2  
NCK/  
SCK/FCK  
FJ  
FK  
Ending

## Specifications

Descriptions	CKL2-32CS-HC	CKL2-40CS-HC	CKL2-50CS-HC	CKL2-63CS-HC	CKL2-80CS-HC
Cylinder bore size mm	φ32	φ40	φ50	φ63	φ80
Working fluid	Compressed air				
Max. working pressure MPa	0.7				
Min. working pressure MPa	0.4				
Ambient temperature °C	5 to 60				
Port size	M5				Rc1/8
Operational stroke length mm	8	10	12	16	20
Rod diameter mm	φ10	φ12	φ14	φ16	φ16
Capacity of reciprocating cm <sup>3</sup>	7.7	15.6	28.3	60.3	118.2
Repeatability mm	±0.01				
Product weight kg	0.42	0.60	0.82	1.66	3.20
Lubrication	Not required (use turbine oil Class 1 ISO VG32 for lubrication)				

Note 1: Use port only, since spring clamp method is used.

Do not supply compressed air from closed port, or may cause damage.

Note 2: Do not plug closed port.

Note 3: When using at poor environment, sucked foreign matters from closed port may cause air leakage.

In that case, use a filter to prevent foreign matters from entering.

Note 4: Consider safety factors carefully for selection, since gripping power differs depending on clamp position

(open end, intermediate position or closed end) and clamp distance (jaw length).

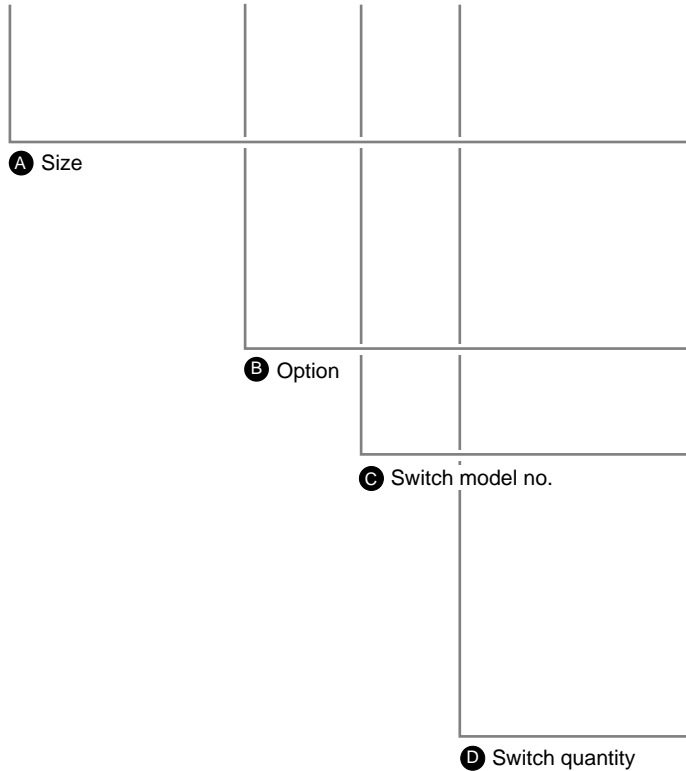
## Switch specifications

Descriptions	Proximity 2 wire	Proximity 3 wire
	T2H/V	T3H/V
Applications	Programmable controller	Programmable controller, relay
Output method	-	NPN output
Power voltage	-	10 to 28 VDC
Load voltage/current	10 to 30 VDC, 5 to 20mA (Note 1)	30 VDC or less, 100mA or less
Light	LED (ON lighting)	
Leakage current	1mA or less	10μA or less

Note 1: Maximum load current above: 20mA applies at 25°C. If switch ambient temperature is higher than 25°C, value is lower than 20mA.  
(5 to 10mA with 60°C)

### How to order

**CKL2** - **32CS** - **HC** - **Y1** - **T2H** - **R**



Symbol	Descriptions			
<b>A Size</b>				
32CS				
40CS				
50CS				
63CS				
80CS				
<b>B Option</b>				
Y1	With small jaw material: S45C			
Y2	With small jaw material: MC nylon			
<b>C Switch model no.</b>				
Axial lead wire	Radial lead wire	Contact	Indicator	Lead wire
T2H*	T2V*	Proximity	1 color indicator type	2-wire
T3H*	T3V*			3-wire
<b>*Lead wire length</b>				
Blank	1m (standard)			
3	3m (option)			
5	5m (option)			
<b>D Switch quantity</b>				
R	One on open side			
H	One on closed side			
D	Two			

### ⚠ Note on model no. selection

Note 1: Small jaw is commonly used for inner and outer chuck.

Note 2: Refer to pages 494 to 497 for the dimensions and applicable model of the small jaw.  
When ordering as option, 3 pieces are provided.

### <Example of model number>

**CKL2-32CS-HC-Y1-T2H-R**

- A** Size : 32CS
- B** Option : With small jaw Material: S45C
- C** Switch model no. : Proximity T2H, lead wire 1m
- D** Switch quantity : One on open side

### How to order switch

**SW** - **T2H**

↓  
Switch model no.  
(Item above **C**)

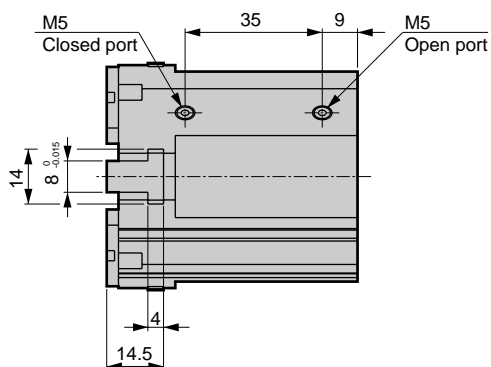
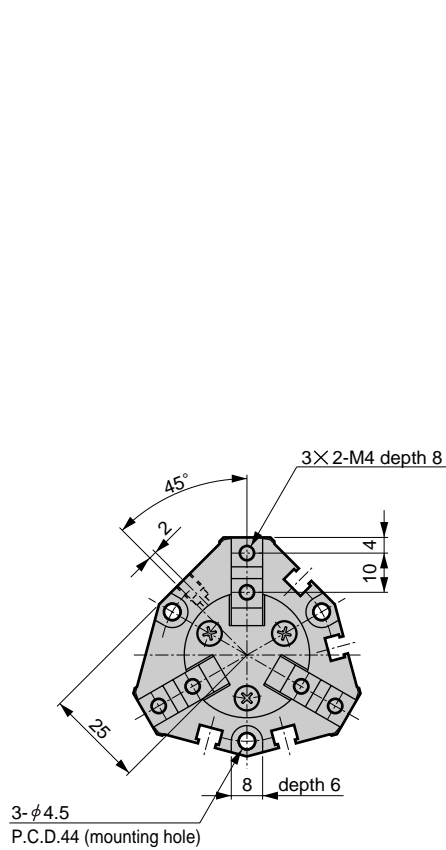
RRC
GRC
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Ending

Position locking powerful chuck  
Chuck

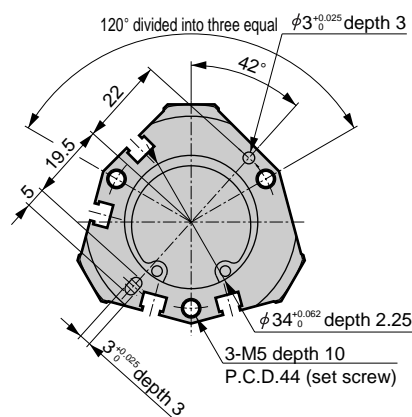
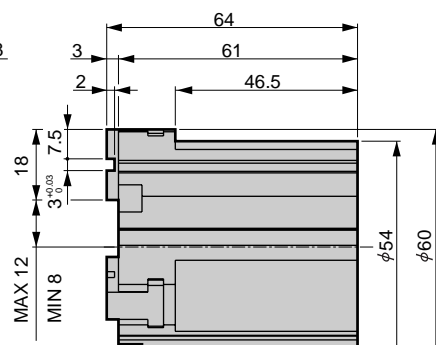
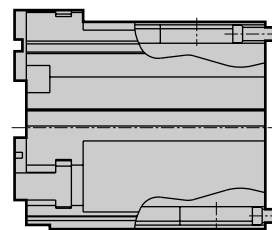
### Dimensions



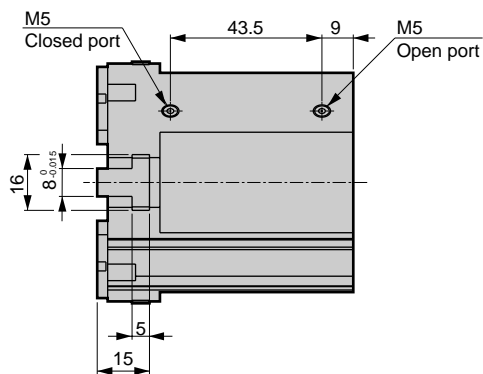
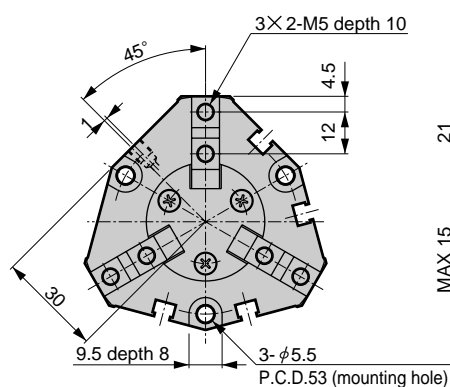
#### ● CKL2-32CS-HC standard



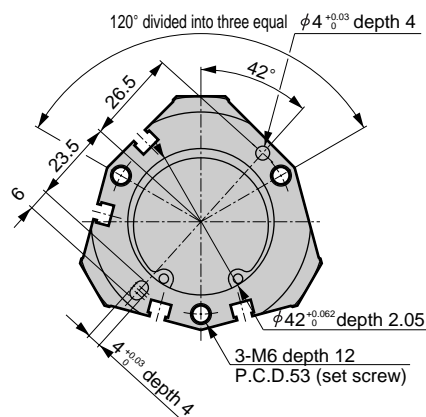
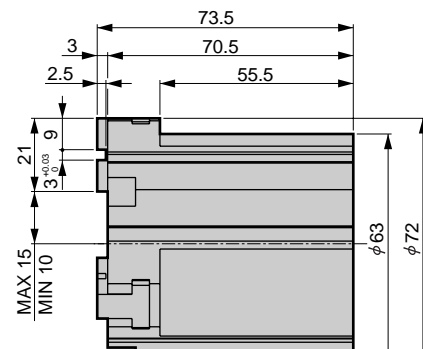
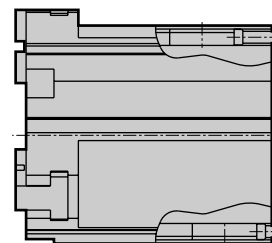
#### ● With switch



#### ● CKL2-40CS-HC standard



#### ● With switch



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NHS
HR
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FH100
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<b>CKL2<sup>-</sup>HC</b>
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CKLB2
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Ending

Position locking powerful chuck  
Chuck

# CKL2-\*--HC Series

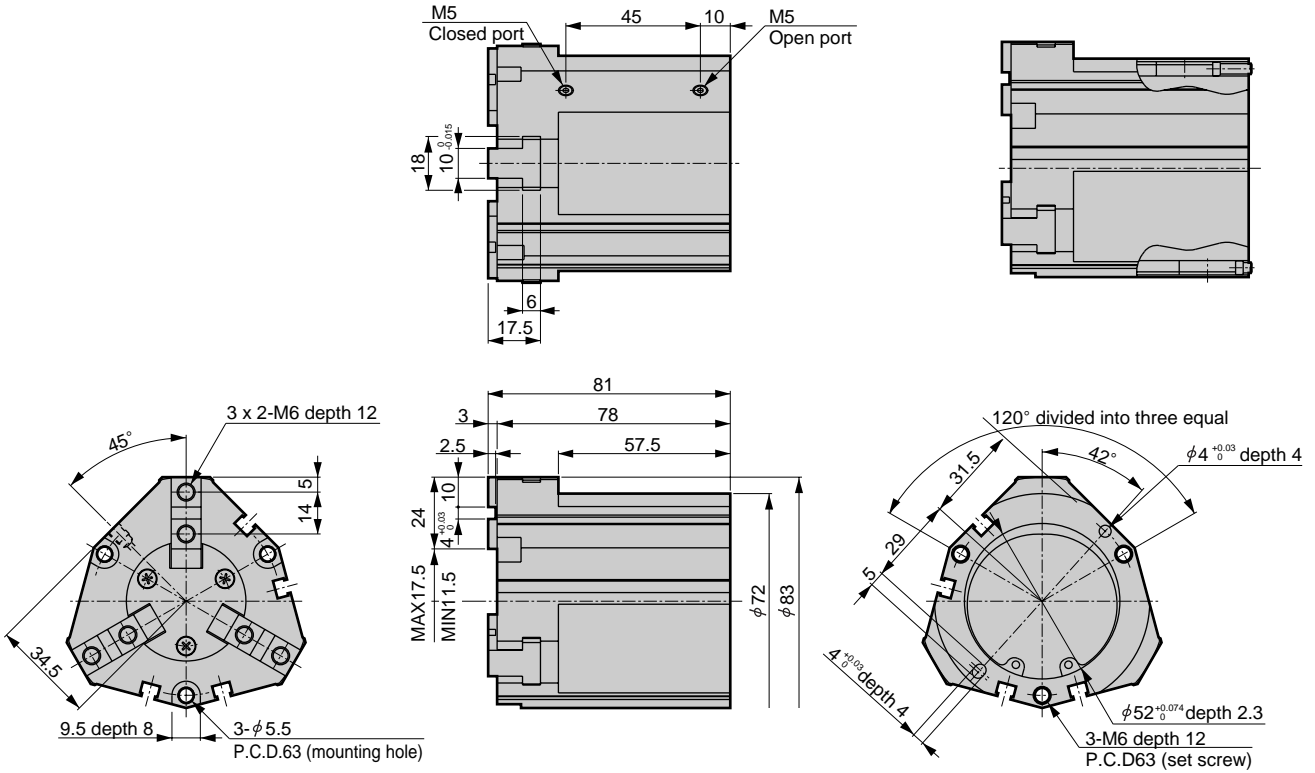
## Dimensions



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- LN
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- BSA2
- BHA/BHG
- LHA
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- HLC
- HGP
- FH500
- HBL
- HDL
- HMD
- HJL
- BHE
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2-\*--HC**
- CKH2
- CKLB2
- NCK/SCK/FCK
- FJ
- FK
- Ending

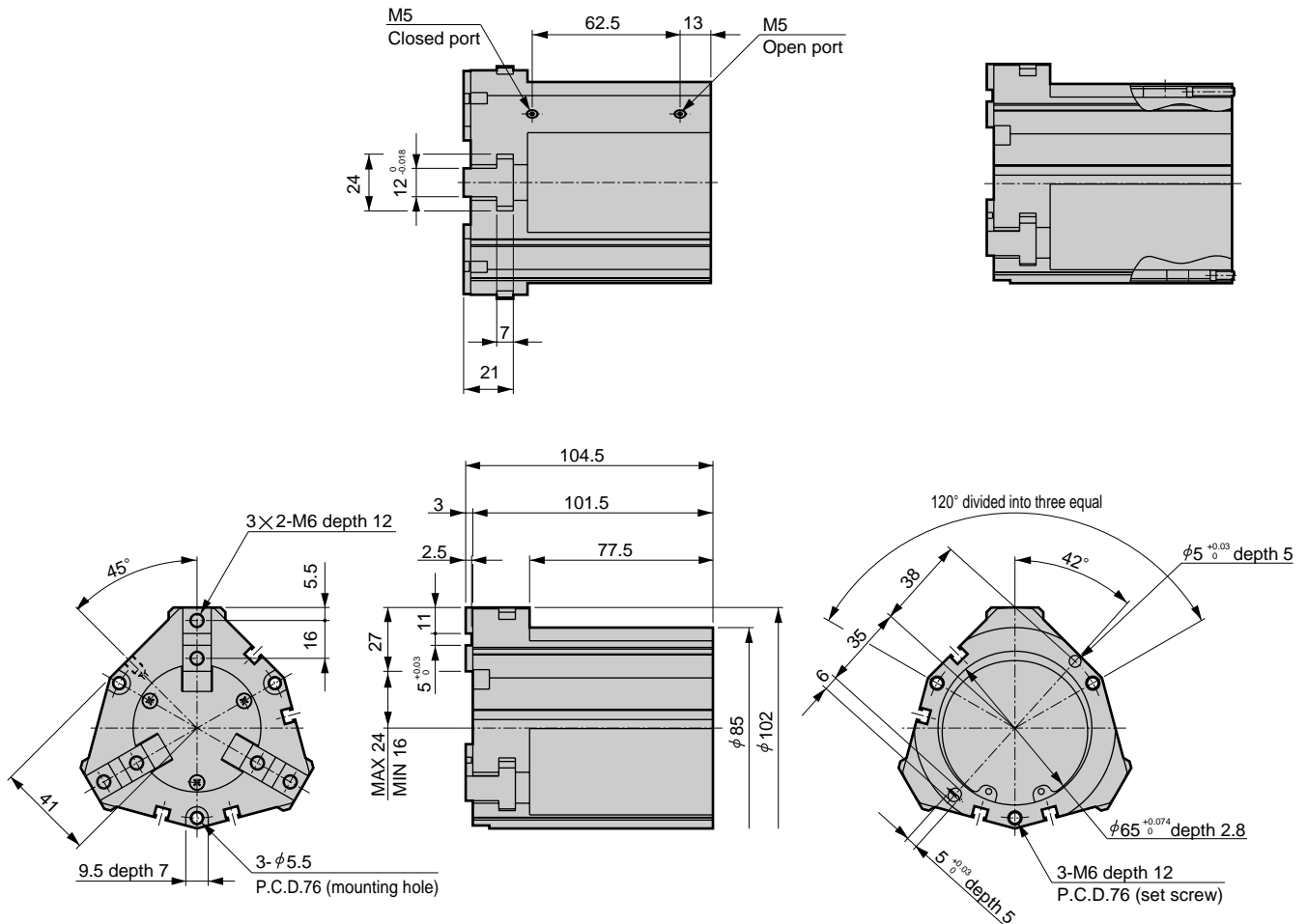
### ● CKL2-50CS-HC standard

### ● With switch



### ● CKL2-63CS-HC standard

### ● With switch



# CKL2-\*<sup>-</sup>HC Series

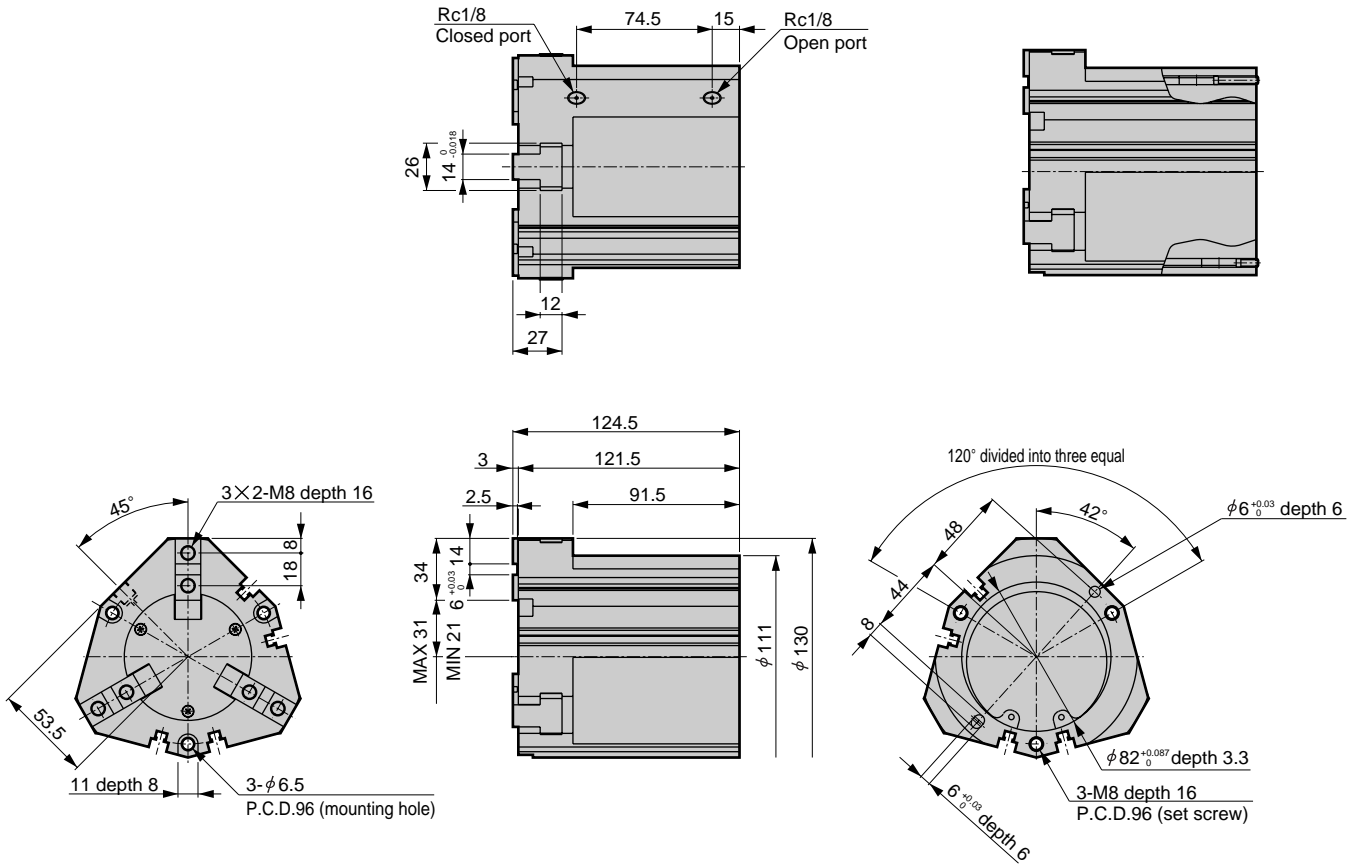
Position locking powerful chuck

## Dimensions



● CKL2-80CS-HC standard

● With switch



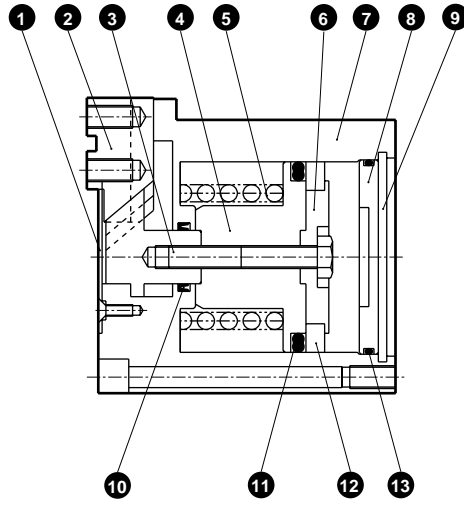
RRC
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NHS
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HLA/ HLB
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HLC
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FH500
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HDL
HMD
HJL
BHE
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
<b>CKL2 -*<sup>-</sup>HC</b>
CKH2
CKLB2
NCK/ SCK/FCK
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Position locking powerful chuck  
Chuck

# CKL2-\*<sup>-</sup>-HC Series

## Internal structure and parts list

● CKL2-32CS to 80CS-HC



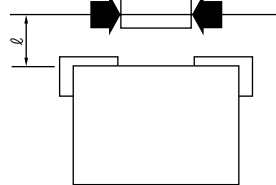
## Parts list

No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Center cover	Stainless steel		7	Body	Aluminum alloy	
2	Master key	Carbon steel		8	Cylinder guard	Aluminum alloy	
3	Piston A	32CS: Stainless steel 40CS to 80CS: Carbon steel		9	Snap ring	Stainless steel	Steel (40, 80CS)
4	Piston B	Aluminum alloy		10	Rod packing seal	Nitrile rubber	
5	Spring	Stainless steel		11	Magnet		
6	Piston C	Aluminum alloy		12	Piston packing seal	Nitrile rubber	
				13	Cylinder gasket	Nitrile rubber	

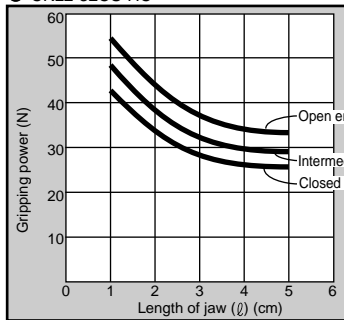
## Gripping performance data

Gripping power which functions to closed direction with hand jaw length  $\ell$  is shown.

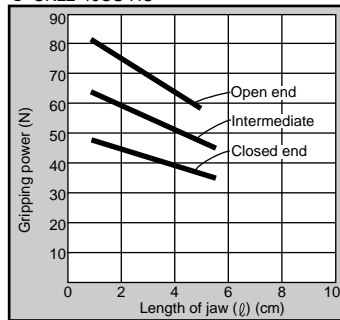
· Closed direction (■) (shown with continuous line)



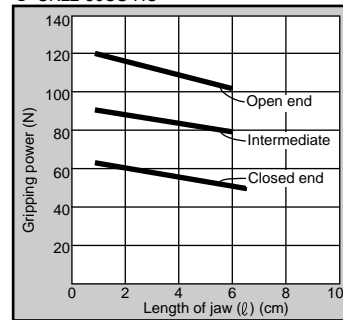
● CKL2-32CS-HC



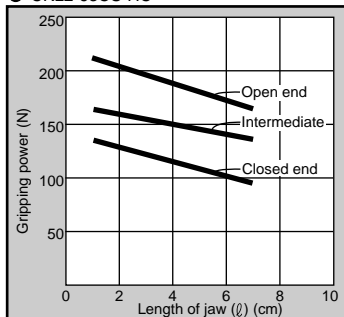
● CKL2-40CS-HC



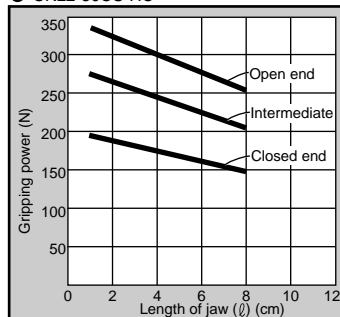
● CKL2-50CS-HC



● CKL2-63CS-HC



● CKL2-80CS-HC



(Note) Grip performance data indicates the grip for one jaw. There are three jaws, so multiply the holding force in the graph by three when making a selection.