

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/USC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuk
MedHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC



3-way jaw long stroke chuck Double acting/single acting

CK Series

● Operating stroke length: 20, 40 mm

Double acting



Single acting (normally open)



Single acting (normally closed)



Specifications

Descriptions		CK	
Size		1CS	1.5CS2CS
Bore size	mm	φ25	φ44
Actuation		Double acting/single acting	
Working fluid		Compressed air	
Max. working pressure	MPa	0.7 (≈100 psi, 7 bar)	
Min. working pressure	MPa	0.3 (≈44 psi, 3 bar)	
Ambient temperature	°C	5 (41°F) to 60 (140°F)	
Port size		M5	Rc1/8
Operating stroke length	mm	20	40
Rod diameter	mm	φ12	φ16
Volumetric capacity (reciprocating)	cm³	7.9	26.452.8
Repeatability	mm	±0.03	
Weight	kg	0.85	1.902.90
Lubrication		Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)	

Switch specifications

Descriptions	Proximity 2-wire	Proximity 3-wire
	T2H/V	T3H/V
Applications	Dedicated for programmable controller	For programmable controller, relay
Output method	-	NPN output
Power supply voltage	-	10 to 28 VDC
Load voltage/current	10 to 30 VDC, 5 to 20 mA (*1)	30 VDC or less, 100 mA or less
Indicator lamp	LED (Lit when ON)	
Leakage current	1 mA or less	10 μA or less
Weight	1 m:18 g 3 m:49 g 5 m:80 g	

*1 : The above max. load current is 20 mA at 25°C. The current is lower than 20 mA if the operating ambient temperature around the switch is higher than 25°C. (5 to 10 mA at 60°C)

*2 : Refer to Ending Page 1 for other switch specifications.

How to order

Without switch (built-in magnet for switch)

CK - **1CS** - **O**

With switch (built-in magnet for switch)

CK - **1CS** - **O** - **T3H** - **R**

A Size

B Option
*1

C Switch model No.
*2

D Switch quantity

Code	Content					
A Size						
1CS						
1.5CS						
2CS						
B Option						
Blank	Standard (double acting)					
O	Single acting (normally open)					
C	Single acting (normally closed)					
Y1	With small jaw (Material S50C)					
Y2	With small jaw (Material MC nylon)					
C Switch model No.						
Axial lead wire	Radial lead wire	Contact Proximity	Voltage		Display	Lead wire
			AC	DC		
T2H*	T2V*			●	1-color	2-wire
T3H*	T3V*		●	display	3-wire	
* Lead wire length						
Blank	1 m (standard)					
3	3 m (option)					
5	5 m (option)					
D Switch quantity						
R	1 on open side					
H	1 on closed side					
D	2					

⚠ Precautions for model No. selection

*1: Refer to pages 1718 to 1719 for the dimensions and compatible model of the small jaw.
When ordered as an option, three are attached at shipment.

*2: Switches other than © Switch model No. are available. (Custom order) Refer to Ending Page 1 for details.

[Example of model No.]

CK-1CS-O-T3H-R

Model: Long stroke chuck

- A** Size : 1CS
- B** Option : Single acting, normally open
- C** Switch model No.: Proximity T3H switch, lead wire 1 m
- D** Switch quantity : 1 on open side

How to order switch

SW - **T2H**

Switch model No.
(Item © above)

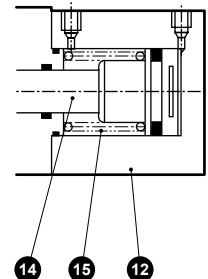
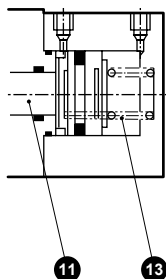
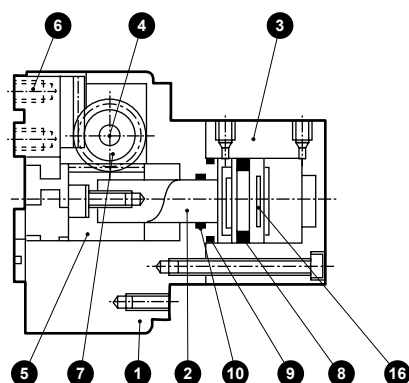
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Internal structure and parts list

● Standard (double acting)

● O (normally open)

● C (normally closed)



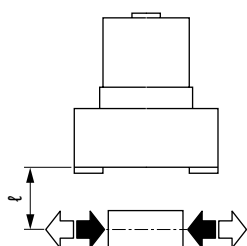
Cannot be disassembled

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Chuck body	Aluminum alloy		10	Rod packing	Nitrile rubber	
2	Piston	Steel		11	Piston	Steel	
3	Cylinder	Aluminum alloy		12	Cylinder	Aluminum alloy	
4	Pinion gear shaft	Steel		13	Spring	Stainless steel	
5	Rack	Steel		14	Piston	Steel	
6	Master key	Steel		15	Spring	Stainless steel	
7	Pinion gear	Steel		16	Magnet	MC	Nickeling
8	Piston packing	Nitrile rubber					
9	Cylinder gasket	Nitrile rubber					

Gripping power performance data

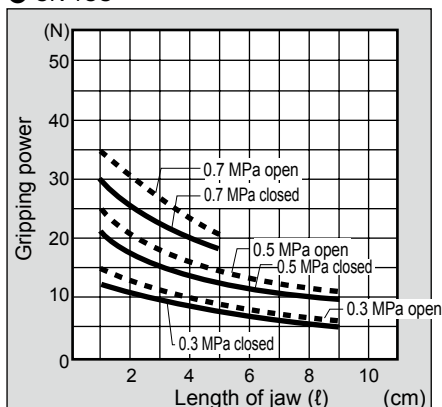
The gripping power in the opening/closing directions with jaw length L of hand with a supply pressure of 0.3, 0.5 and 0.7 MPa is shown.

- Open direction (↔) ----- (shown with broken line)
- Closed direction (→) ————— (shown with continuous line)

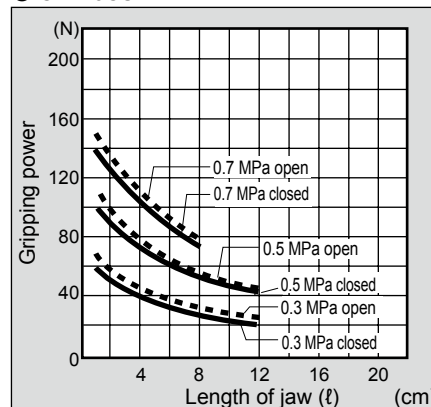


(Note) O type gripping power decreases approximately 20 to 30% in the closed direction compared to double acting. C type gripping power decreases approximately 10 to 20% in the open direction compared to the double acting. When making a selection, read the precautions for design and selection on page 1722.

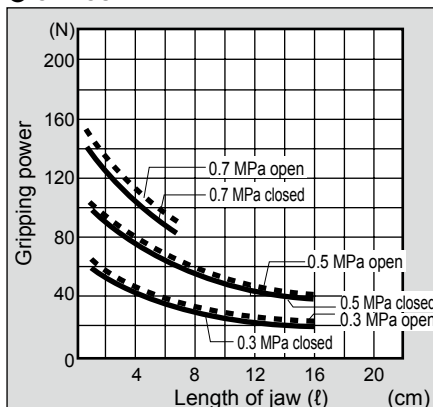
● CK-1CS



● CK-1.5CS



● CK-2CS

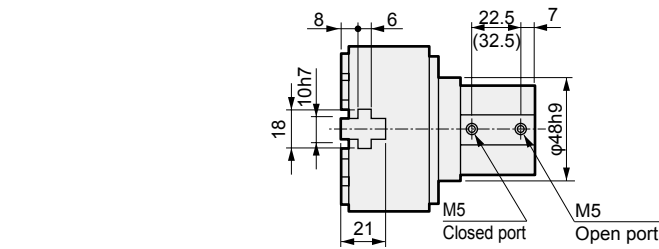


Dimensions

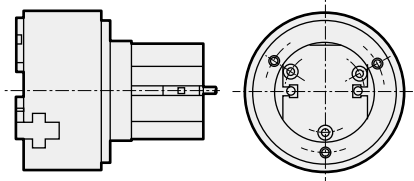
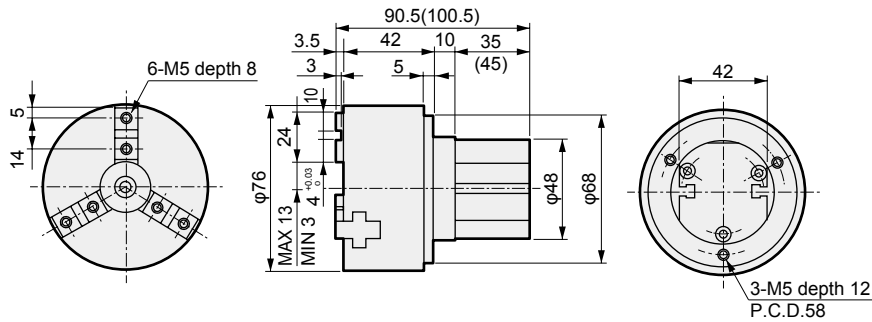
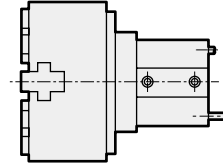


● CK-1CS standard/O/C

● Dimensions in () are for C [normally closed] specifications.

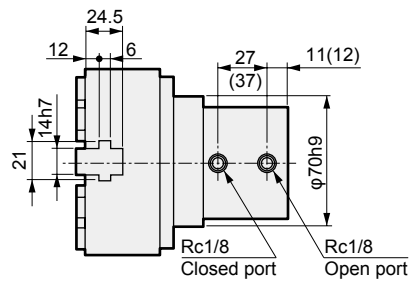


● With switch

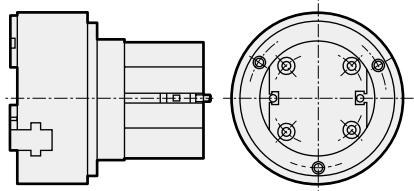
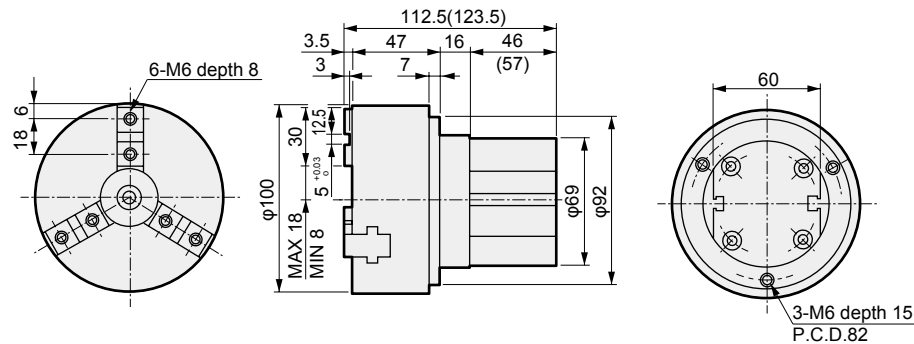
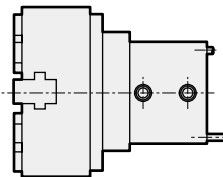


● CK-1.5CS standard/O/C

● Dimensions in () are for C [normally closed] specifications.



● With switch



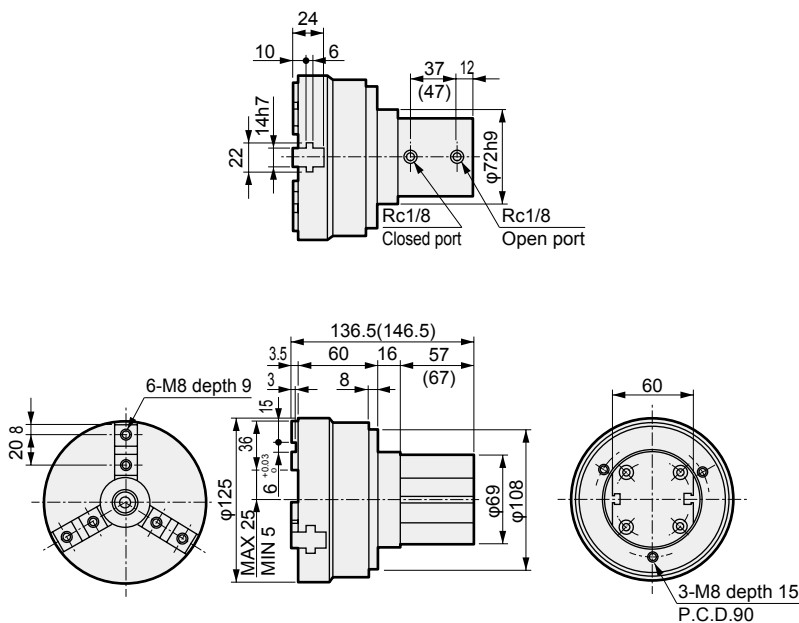
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Dimensions

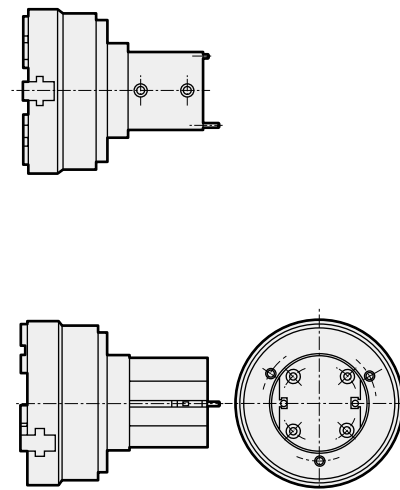


● CK-2CS standard/O/C

● Dimensions in () are for C [normally closed] specifications.



● With switch



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