

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKL2
CKLG2
CKL2HC
CKH2
CKLB2
CKG
CK
CKA
CKS
CKS-F
CKF
CKJ
CHC



3-way jaw bearing chuck Double acting/single acting

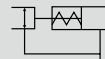
CKG Series

● Operating stroke length: 6, 8, 11, 16 mm

Double acting

Single acting (normally open)

Single acting (normally closed)



Specifications

Item		CKG				
Size		16CS	25CS	32CS	40CS	50CS
Bore size	mm	ø16	ø25	ø32	ø40	ø50
Actuation		Double acting/single acting				
Working fluid		Compressed air				
Max. working pressure	MPa	0.7 (≈100 psi, 7 bar)				
Min. working pressure *	MPa	Double acting	0.1 (≈15 psi, 1 bar)			
		Normally open	0.3 (≈44 psi, 3 bar)			
		Normally closed				
Ambient temperature	°C	5 (41°F) to 60 (140°F)				
Port size		M5				
Operating stroke length	mm	6		8	11	16
Rod diameter	mm	ø9	ø10	ø14	ø18	ø20
Volumetric capacity (reciprocating)	cm ³	1.0	2.2	5.1	10.1	36.1
Repeatability	mm	±0.01				
Weight	kg	0.24	0.47	0.80	1.4	2.3
Lubrication		Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)				

*: When a rubber cover (option) is attached, the min. working pressure is 0.2 MPa for 16CS and 0.15 MPa for 25CS to 50CS.

Switch specifications

Item	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 (*2)	

*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 : The weight of switch mounting bracket is 1.5 g.

*3 : Refer to Ending Page 1 for detailed switch specifications and dimensions.

Specifications for rechargeable battery (Catalog No. CC-1226A)

CKG - ... - G - P4*

● Design compatible with rechargeable battery manufacturing process.

* Contact CKD for details.

How to order

Without switch (built-in magnet for switch)

CKG - **16CS** - **O**

With switch (built-in magnet for switch)

CKG - **16CS** - **O** - **T2H** - **R**

A Size

B Option
*1, *2

C Switch model No.

D Switch quantity

⚠ Precautions for model No. selection

- *1 : Y11 and Y21 are available for CKG-16CS, while Y11, Y12, Y21 and Y22 are available for CKG-25CS to 40CS, and Y11 and Y21 are available for CKG-50CS.
- *2 : Refer to pages 1868 and 1869 for the dimensions and compatible model of the attachment. When ordered as an option, three are attached at shipment.

[Example of model No.]

CKG-16CS-O-T2H-R

Model: Bearing chuck

- A** Size : 16CS
- B** Option : Single acting, normally open type
- C** Switch model No.: Proximity T2H switch, lead wire 1 m
- D** Switch quantity : 1 on open side

How to order switch

[T type switch]

SW - **T2H**

Switch model No.
(Item **C** above)

CKG-50CS only

- For switch T*H*
· Switch body + mounting bracket set

CKG - **T2H**

Switch model No.
(Item **C** above)

- For switch T*V*
· Switch body + mounting bracket set

CKG - **T2V** - *

Switch model No.
(Item **C** above)

CKG-50CS only

- Mounting bracket set

CKG - **T**

- Mounting bracket set

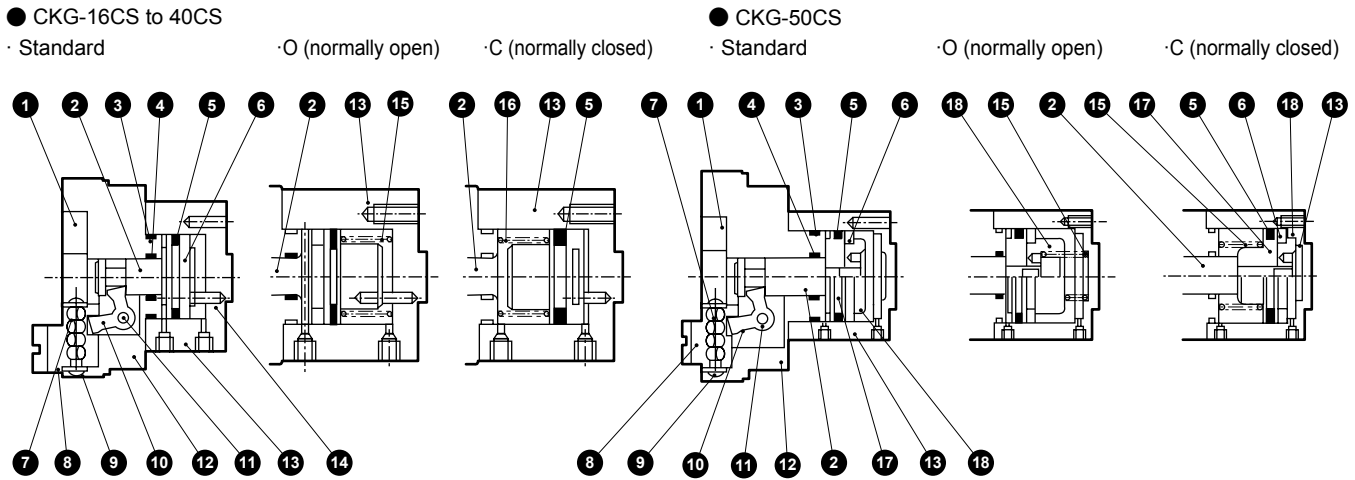
CKG - **TV** - *

(Select either R (open side) or H (closed side) for sections marked with an asterisk (*).)

Code	Description					
A Size						
16CS						
25CS						
32CS						
40CS						
50CS						
B Option						
Blank	Standard (double acting)					
O	Single acting (normally open)					
C	Single acting (normally closed)					
G	With rubber cover (nitrile rubber)					
Y11	With attachment (Material S50C) Outer mount chuck (attachment No.: 540 to 710)					
Y12	With attachment (Material S50C) Inner mount chuck (attachment No.: 610 to 630)					
Y21	With attachment (Material MC nylon) Outer mount chuck (attachment No.: 510 to 540, 710)					
Y22	With attachment (Material MC nylon) Inner mount chuck (attachment No.: 610 to 630)					
C Switch model No.						
Axial lead wire	Radial lead wire	Contact	Voltage		Display	Lead wire
			AC	DC		
T2H*	T2V*	Proximity		●	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					

LCM
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JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKL2
CKLG2
CKL2-HC
CKH2
CKLB2
CKG
CK
CKA
CKS
CKS-F
CKF
CKJ
CHC

Internal structure and parts list

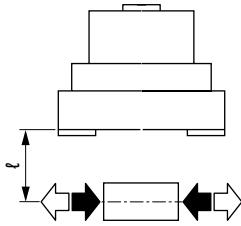


Cannot be disassembled

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Bearing guide	Steel		10	Arm	Steel	
2	Piston A	Stainless steel		11	Fulcrum axis	Steel	
3	Cylinder gasket	Nitrile rubber		12	Body	Aluminum alloy	
4	Rod packing	Nitrile rubber		13	Cylinder	Aluminum alloy	
5	Piston packing	Nitrile rubber		14	Rotation-stop	Stainless steel	
6	Magnet			15	Spring	Stainless steel	O type
7	Cross roller	Alloy steel		16	Spring	Stainless steel	C type
8	Finger	Steel		17	Piston B	Stainless steel	
9	Bearing holder	Steel		18	Piston C	Stainless steel	

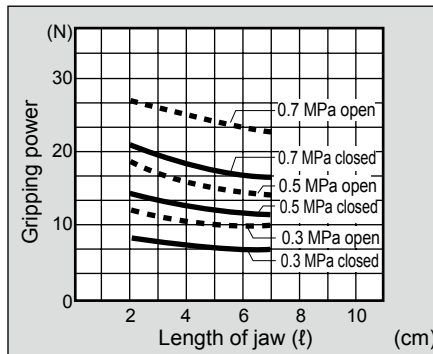
Gripping power performance data

- Gripping power represents the thrust (per one finger) in the arrow direction shown in the figure.
- 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)

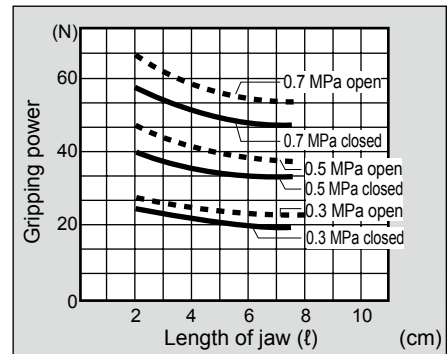


(Note) O type gripping power decreases approximately 20 to 30% in the closed direction compared to double acting. C type gripping power decreases approximately 10 to 20% in the open direction compared to the double acting. When making a selection, read the precautions for design and selection on page 1872.

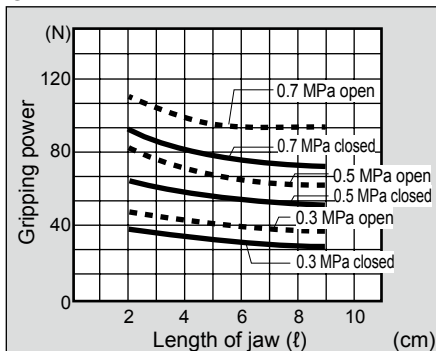
● CKG-16CS



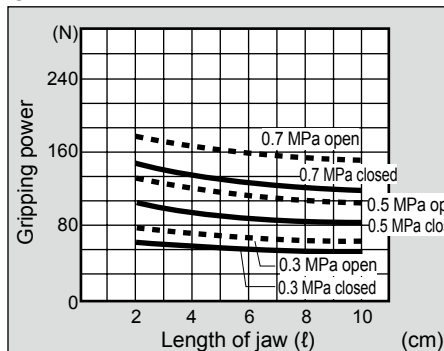
● CKG-25CS



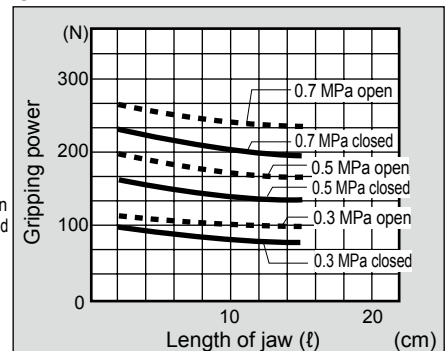
● CKG-32CS



● CKG-40CS



● CKG-50CS

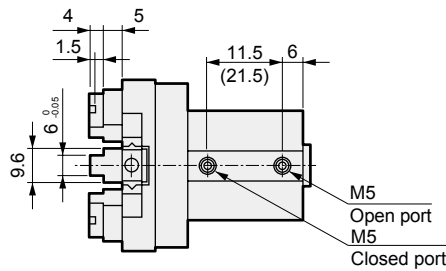


Dimensions

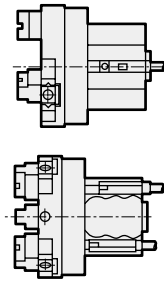


● CKG-16CS standard/O/C

· Dimensions in () are for O [normally open] and C [normally closed] specifications.

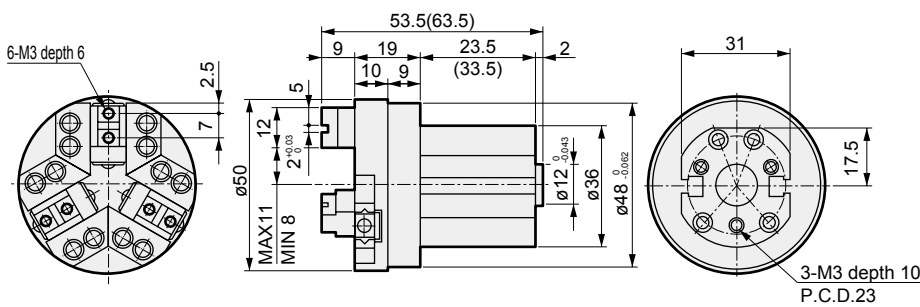
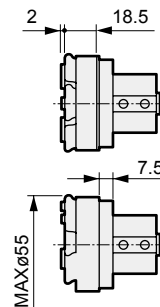


● With switch



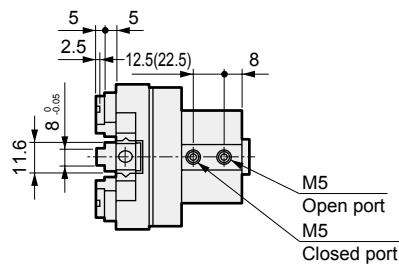
Note: When using T□H or T□V, the switches of both project from the end face of body head side.

● With rubber cover

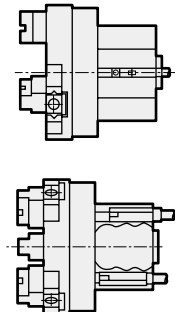


● CKG-25CS standard/O/C

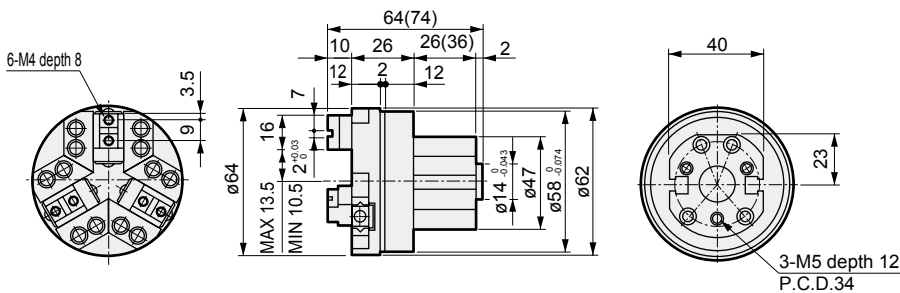
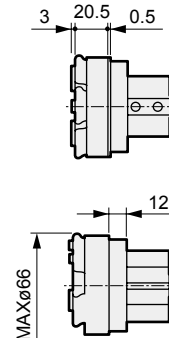
· Dimensions in () are for O [normally open] and C [normally closed] specifications.



● With switch



● With rubber cover



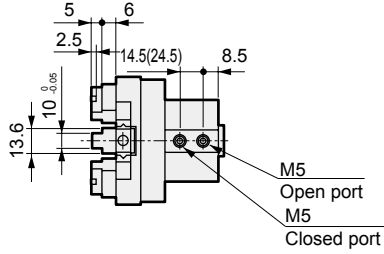
LCM
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RCS2
RCC2
PCC
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MCP
GLC
MFC
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RRC
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RV3*
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ShkAbs
FJ
FK
SpdContr
Ending
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CKLG2
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CKH2
CKLB2
CKG
CK
CKA
CKS
CKS-F
CKF
CKJ
CHC

Dimensions

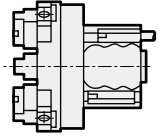
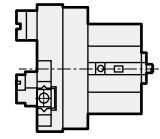


● CKG-32CS standard/O/C

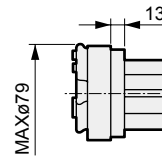
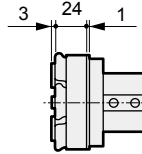
· Dimensions in () are for O [normally open] and C [normally closed] specifications.



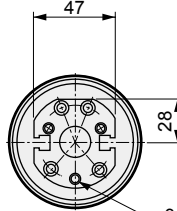
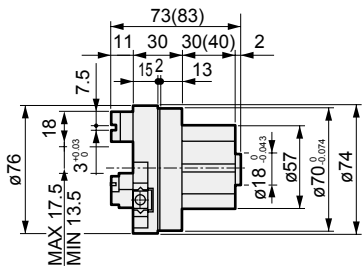
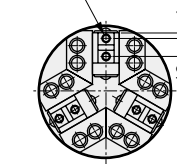
● With switch



● With rubber cover

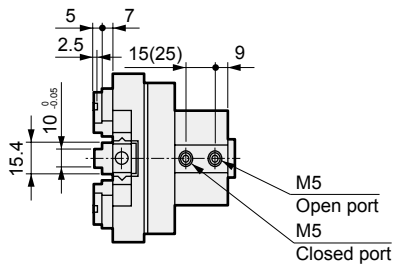


6-M4 depth 8

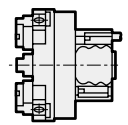
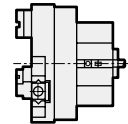


● CKG-40CS standard/O/C

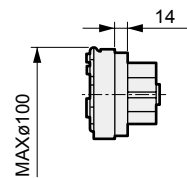
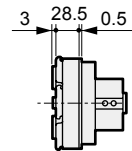
· Dimensions in () are for O [normally open] and C [normally closed] specifications.



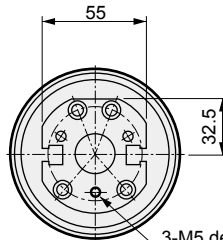
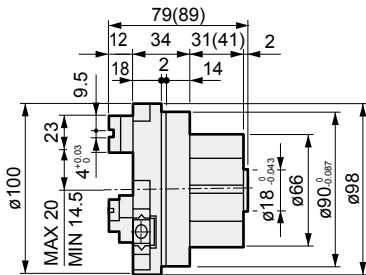
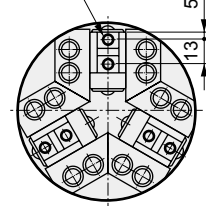
● With switch



● With rubber cover



6-M5 depth 8



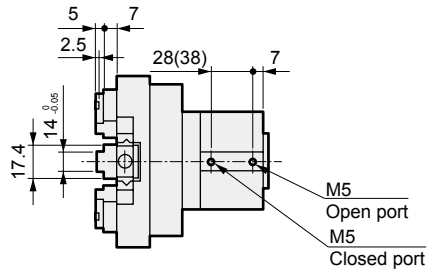
LCM
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UCA2
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JSG
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USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
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MCP
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MecHnd/Chuk
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FJ
FK
SpdContr
Ending
CKL2
CKLG2
CKL2-HC
CKH2
CKLB2
CKG
CK
CKA
CKS
CKS-F
CKF
CKJ
CHC

Dimensions

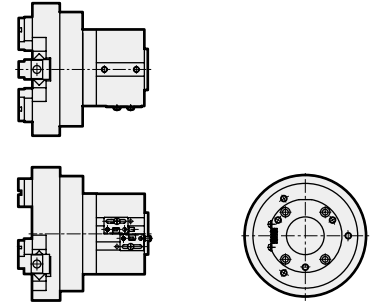


● CKG-50CS standard/O/C

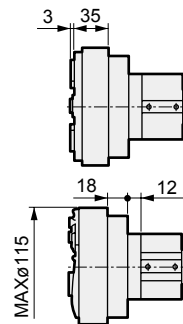
· Dimensions in () are for O [normally open] and C [normally closed] specifications.



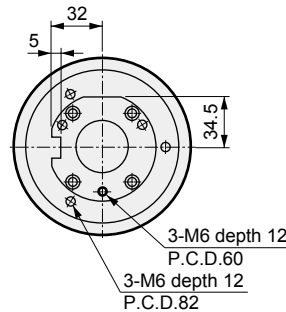
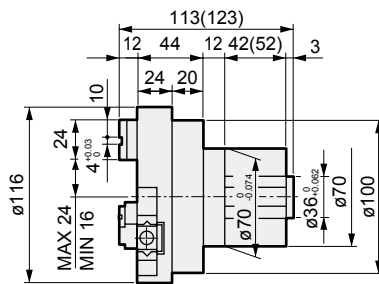
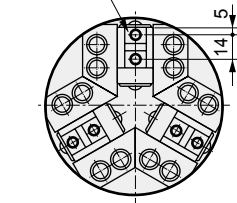
● With switch



● With rubber cover



6-M6 depth 8



LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
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HRL
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Hand
Chuk
MechMtlChuk
ShkAbs
FJ
FK
SpdContr
Ending

CKL2
CKLG2
CKL2-HC
CKH2
CKLB2
CKG
CK
CKA
CKS
CKS-F
CKF
CKJ
CHC