



3-Jaw Bearing Chuck, Double Acting/Single Acting

CKG Series

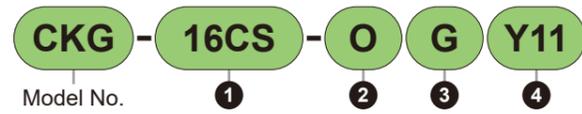
● Operating stroke: 6, 8, 11, 16 mm



Model No. Notation Method

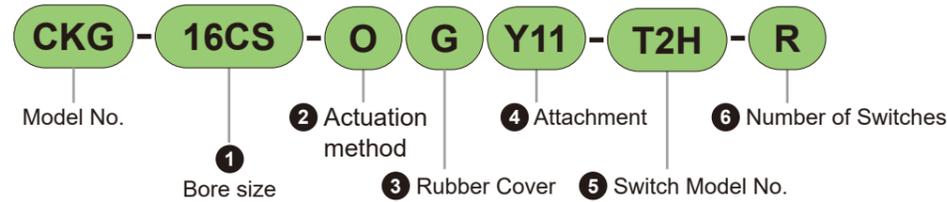
Without Switch

(Built-in magnet for switch)



With Switch

(Built-in magnet for switch)



1 Bore Size (mm)

Code	Content
16CS	φ16
25CS	φ25
32CS	φ32
40CS	φ40
50CS	φ50

2 Actuation method

Code	Content
Blank	Standard (Double Acting)
O	Single acting type (Normally open:)
C	Single acting type (Normally closed:)

3 Rubber Cover

Code	Content
Blank	Without Rubber Cover
G	With Rubber Cover (Nitrile Rubber)

4 Attachment

Code	Content
Blank	Without attachments
Y11	With attachments Material (S50C) For Outer Diameter Chuck (attachment No.: 510 to 540, 710)
Y12	With attachments Material (S50C) For Inner Diameter Chuck (attachment No.: 610 to 630) (φ25 to φ40 only)
Y21	With attachments Material (MC Nylon) For Outer Diameter Chuck (attachment No.: 510 to 540, 710)
Y22	With attachments Material (MC Nylon) For Inner Diameter Chuck (attachment No.: 610 to 630) (φ25 to φ40 only)

Note) For the outline dimensions and compatible models of the attachments, refer to P. 486. When ordered as an option, it will be shipped included with a quantity of 3.

5 Switch Model No.

For switch details, please refer to P. 573. Switches are included to the product and shipped.

Contact	Indicator LED Special Function	Wiring (Output)	Load Voltage (V)		Load Current (mA)		Lead wire *1	
			AC	DC	AC	DC	Straight	L-shape
Solid State	1-Color	2-wire	-	10 to 30	-	5 to 20 *2	T2H□	T2V□
		3-wire (NPN)	-	30 or less	-	100 or less	T3H□	T3V□
	1-Color Flexible Lead Wire Type	2-wire	-	10 to 30	-	5 to 20 *2	T2HR3	T2VR3

*Lead wire length

Code	Content
Blank	1 m (Standard)
3	3 m (Option)
5	5 m (Option)

Example) Lead wire length
1m T2H
3m T2H③
5m T2H⑤

*1: For "□" in the switch model No., enter the code selected from the "□Lead wire length" table.

*2: Maximum load current value above: 20 mA, is at 25°C. If the switch operating ambient temperature is higher than 25°C, it will be lower than 20 mA. (At 60°C, it will be 5 to 10 mA.)

*3: Switches other than the switch model numbers are also available. (Custom Product) For details, see P. 573.

6 Number of Switches

Code	Content
R	With 1 pc. on Open Side
H	With 1 pc. on Close Side
D	With 2 pcs

Note)

When 2 switches are included, for models with a short operating stroke, both switches may turn ON depending on the size of the workpiece. Please be careful.

Rechargeable Battery Compatible Specification (Catalog No. CC-1226AA)

● Design compatible with rechargeable battery manufacturing process



*Please contact us for details.

Food Manufacturing Process Compatible Specification (Catalog No. CC-1271AA)

● Uses food grade grease that can be used in food manufacturing processes



Switch Single Unit Model No. Notation Method

CKG-16CS to 50CS

[T-type Switch]



5 Switch Model No.

CKG-50CS

● For switch T□H□

[Switch Body + Mounting Bracket Kit] *1



5 Switch Model No.

[Mounting Bracket Kit] *1



● For switch T□V□

[Switch Body + Mounting Bracket Kit] *1



5 Switch Model No.

[Mounting Bracket Kit] *1



Code	Content
R	Open side
H	Closed side

*1: The weight of the mounting bracket is 1.5 g.

Code	Content
R	Open side
H	Closed side

Specifications

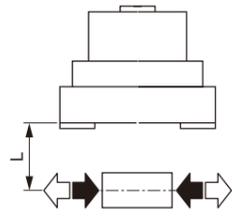
Item	CKG					
Size	16CS	25CS	32CS	40CS	50CS	
Bore size	mm	ø16	ø25	ø32	ø40	ø50
Actuation method	Double Acting/Single Acting Type					
Operating Fluid	Compressed Air					
Max. Working Pressure	MPa					
Min. working pressure	MPa					
	Double Acting					
	Normally Open					
Normally Closed						
Ambient Temperature	°C					
Port Size	M5					
Operating stroke	mm					
Rod diameter	mm					
Internal volume (reciprocating)	cm ³					
Repeatability	mm					
Weight	kg					
Lubrication	Not required (When lubricating, use turbine oil Class 1 ISO VG32)					

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

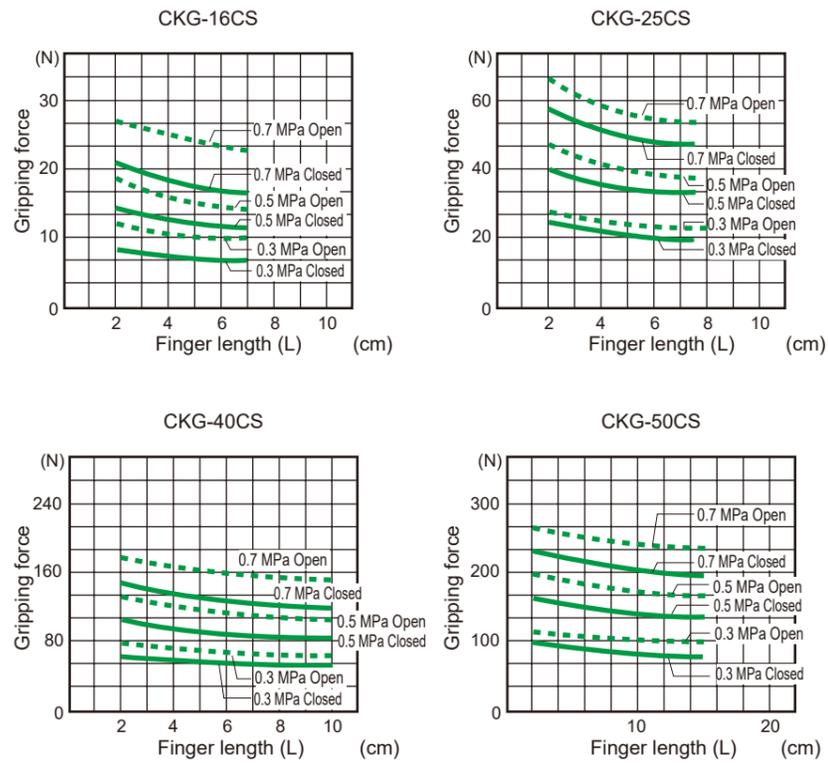
Gripping Force Performance Data

• Gripping force represents the thrust (for one finger) in the direction of the arrow shown in the figure.
 • 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 (←) - - - - - (broken line)
- Closing direction (→) - - - - - (solid line)



Note) O type gripping force is approx. 20 to 30 % lower in the closing direction compared to the double acting type. C type gripping force is approx. 10 to 20 % lower in the opening direction compared to the double acting type. When selecting, check the design and selection precautions on P. 490.



MEMO

Check Valve

CKW-HP

CKL2

CKLG2

CKL2

-□-HC

CKH2

CKLB2

CKG

CK

CKA

CKS

CKS-F

CKF

CKJ

Cylinder

Switch

Ending

Check Valve

CKW-HP

CKL2

CKLG2

CKL2

-□-HC

CKH2

CKLB2

CKG

CK

CKA

CKS

CKS-F

CKF

CKJ

Cylinder

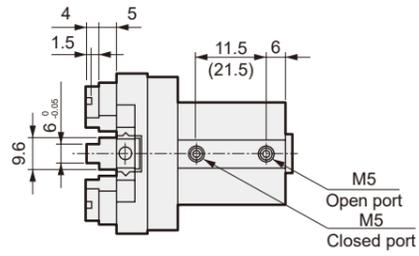
Switch

Ending

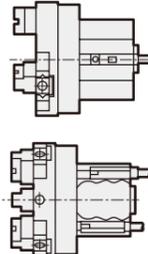
Outline Dimension Drawing

● CKG-16CS Standard/O/C

· Dimensions in () are for O [Normally Open] and C [Normally Closed] specifications.

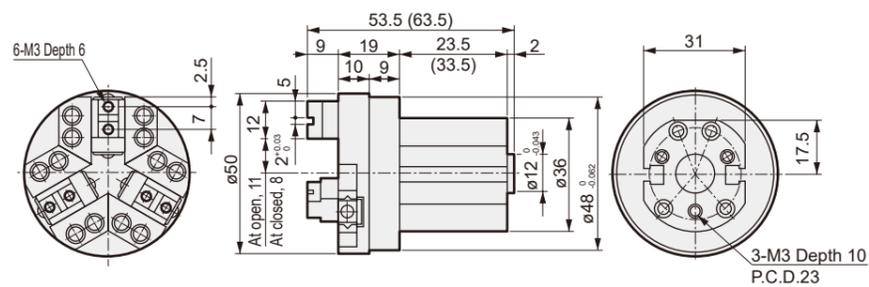
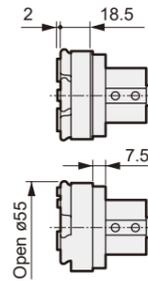


● With Switch

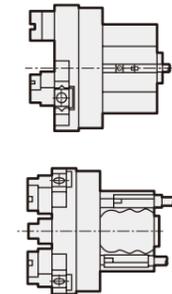


Note) For both T□H, T□V, the switch protrudes from the main body head side end face.

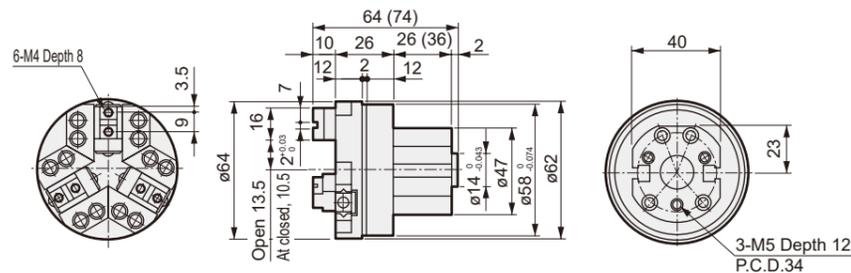
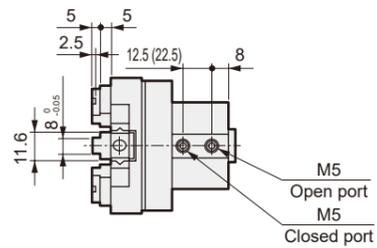
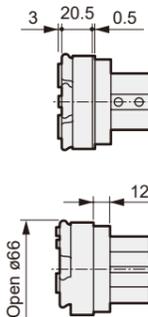
● With rubber cover



● With Switch



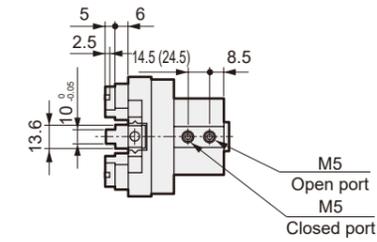
● With rubber cover



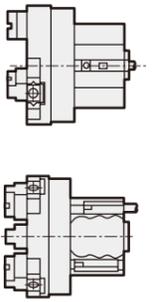
Outline Dimension Drawing

● CKG-32CS Standard/O/C

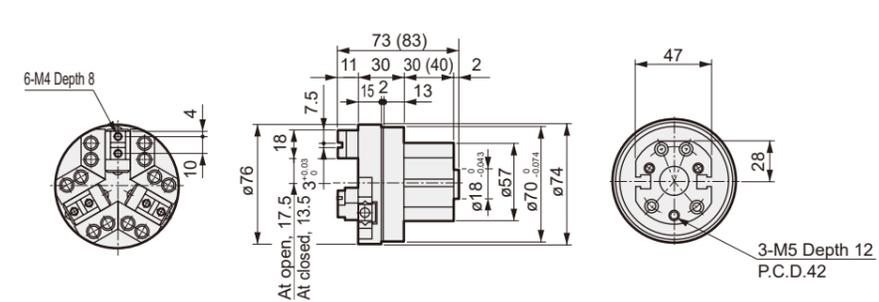
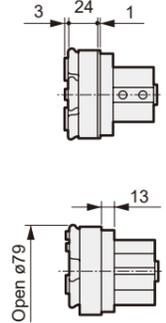
· Dimensions in () are for O [Normally Open] and C [Normally Closed] specifications.



● With Switch

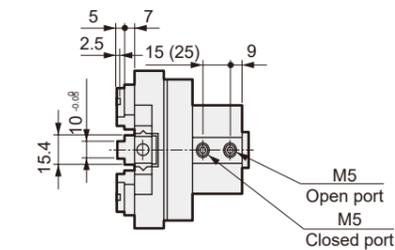


● With rubber cover

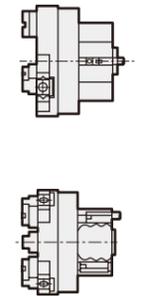


● CKG-40CS Standard/O/C

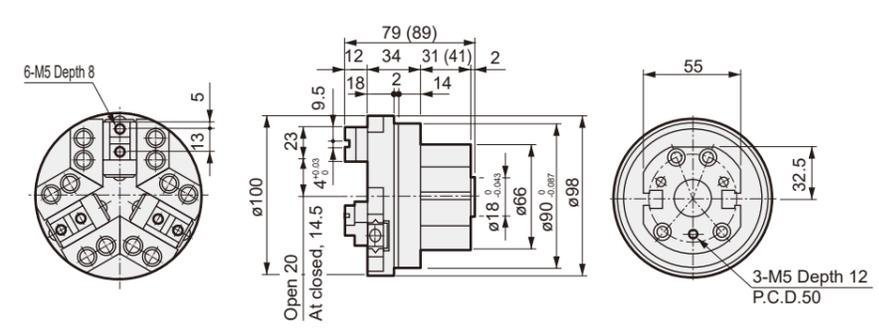
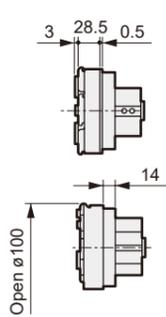
· Dimensions in () are for O [Normally Open] and C [Normally Closed] specifications.



● With Switch



● With rubber cover



Check Valve

- CKW-HP
- CKL2
- CKLG2
- CKL2 -□-HC
- CKH2
- CKLB2
- CKG**
- CK
- CKA
- CKS
- CKS-F
- CKF
- CKJ

Cylinder Switch Ending

Check Valve

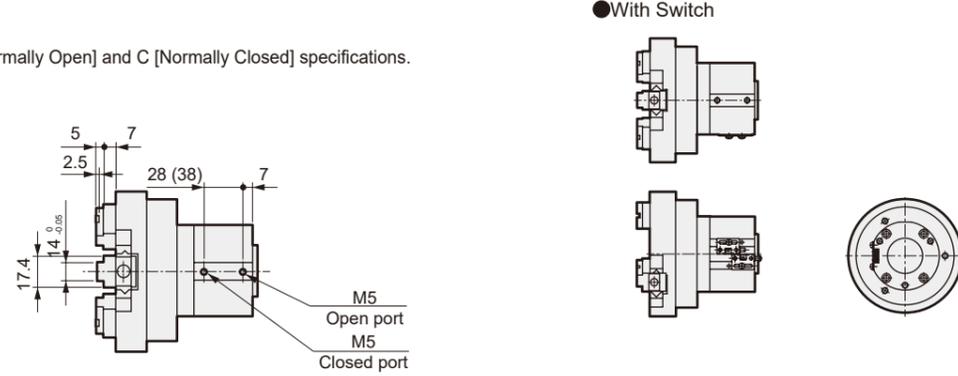
- CKW-HP
- CKL2
- CKLG2
- CKL2 -□-HC
- CKH2
- CKLB2
- CKG**
- CK
- CKA
- CKS
- CKS-F
- CKF
- CKJ

Cylinder Switch Ending

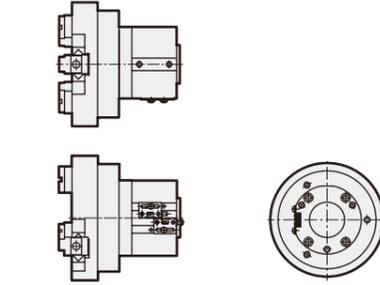
Outline Dimension Drawing

● CKG-50CS Standard/O/C

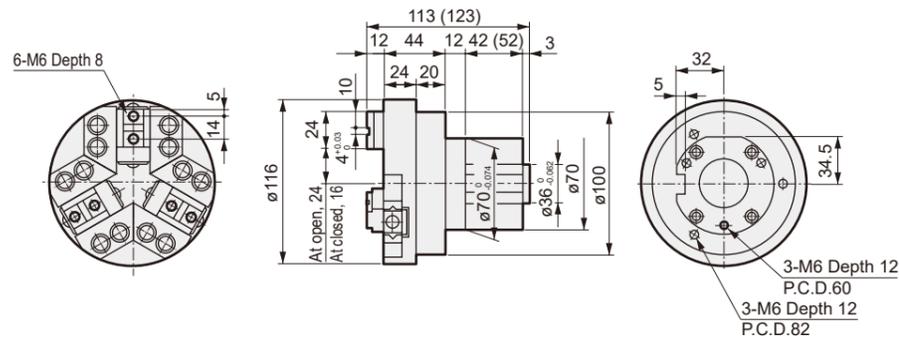
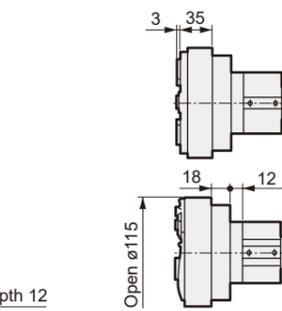
· Dimensions in () are for O [Normally Open] and C [Normally Closed] specifications.



● With Switch



● With rubber cover

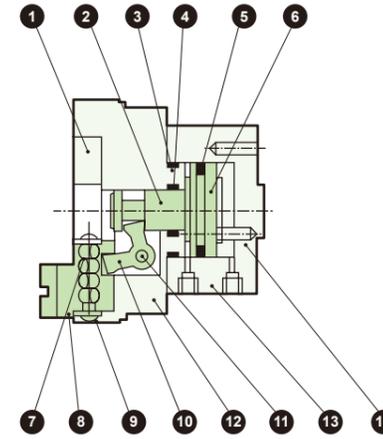


Internal Structure Diagram/Material

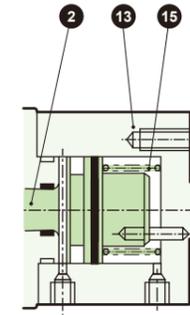
Internal Structure Diagram/Material

● CKG-16CS to 40CS

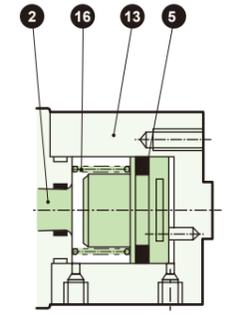
· Standard type



· O (normally open) type

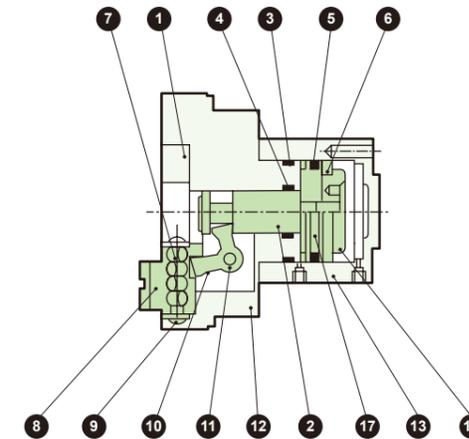


· C (normally closed) type

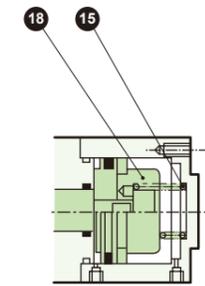


● CKG-50CS

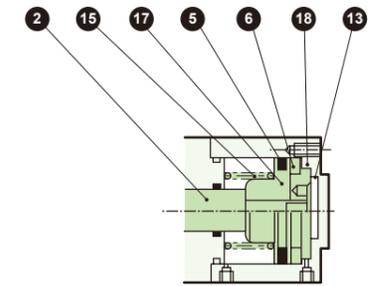
· Standard type



· O (normally open) type



· C (normally closed) type



Do not disassemble

Part No.	Part Name	Material	Remarks	Part No.	Part Name	Material	Remarks
1	Bearing guide	Steel		10	Arm	Steel	
2	Piston A	Stainless Steel		11	Pivot Shaft	Steel	
3	Gasket	Nitrile Rubber		12	Adapter	Aluminum Alloy	
4	Rod Packing	Nitrile Rubber		13	Body	Aluminum Alloy	
5	Piston Packing	Nitrile Rubber		14	Non-Rotating	Stainless Steel	
6	Magnet			15	Coil Spring	Stainless Steel	O type only
7	Cross Roller	Alloy Steel		16	Coil Spring	Stainless Steel	C type only
8	Finger	Steel		17	Piston B	Stainless Steel	
9	Bearing Retainer	Steel		18	Piston C	Stainless Steel	

Check Valve

- CKW-HP
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- CKL2 -□-HC
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- CK
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Cylinder Switch Ending

Check Valve

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Cylinder Switch Ending