



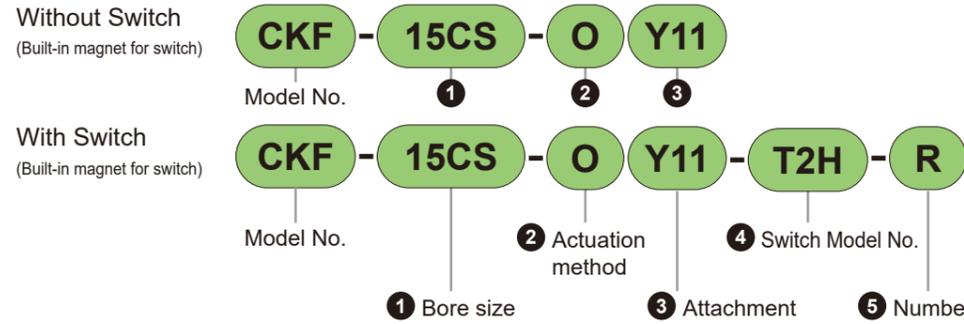
Hollow Chuck Double Acting/Single Acting

# CKF Series

● Operating stroke: 5, 7, 8, 16 mm



## Model No. Notation Method



### ① Bore Size (mm)

Code	Content
15CS	φ30
20CS	φ40
25CS	φ40
30CS	φ50
40CS	φ80

### ② Actuation method

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

### ③ Attachment

Code	Content
Blank	Without attachments
Y11	With attachments Material (S50C) For Outer Diameter Chuck (Attachment number: 510 to 540, 710)
Y12	With attachments Material (S50C) For Inner Diameter Chuck (Attachment number: 610 to 630) (20CS to 30CS)
Y21	With attachments Material (MC Nylon) For Outer Diameter Chuck (Attachment number: 510 to 540, 710)
Y22	With attachments Material (MC Nylon) For Inner Diameter Chuck (Attachment number: 610 to 630) (20CS to 30CS)

\* Refer to P. 486, 487 for the external dimensions and compatible models of the attachments. When ordered as an option, it will be shipped included with a quantity of 3.

### ④ Switch model Nos.

Refer to P. 573 for switch details. 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: For "□" in the switch model number, 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.

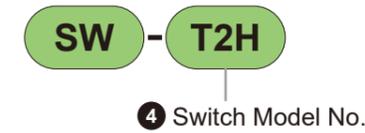
### ⑤ Number of Switches

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

\* 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.

## Switch Single Unit Model No. Notation Method

CKF-15CS to 25CS  
[T-type Switch]



CKF-30CS, 40CS

● For switch T□H□

[Switch Body + Mounting Bracket Kit] \*1

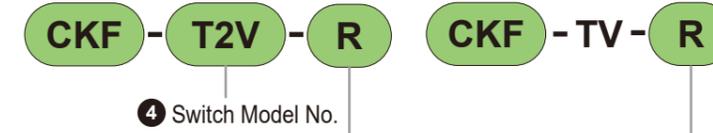
[Mounting Bracket Kit] \*1



● For switch T□V□

[Switch Body + Mounting Bracket Kit] \*1

[Mounting Bracket Kit] \*1



Code	Content
R	Open side
H	Closed side

Code	Content
R	Open side
H	Closed side

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

### \*Lead wire length

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

Example) Lead wire length

- 1 m T2H
- 3 m T2H③
- 5 m T2H⑤

## Specifications

Item		CKF				
Size		15CS	20CS	25CS	30CS	40CS
Bore size	mm	ø30	ø40		ø50	ø80
Actuation method		Double Acting/Single Acting Type				
Operating Fluid		Compressed Air				
Max. Working Pressure	MPa	0.7				
Min. Operating Pressure	MPa	0.3				
Ambient Temperature	°C	5 to 60				
Port Size		M5				
Operating stroke	mm	5		7	8	16
Rod diameter	mm	ø16	ø24		ø28	ø34
Internal volume (reciprocating)	cm <sup>3</sup>	2.5	5.2	7.3	13.3	73.2
Hollow Hole Diameter	mm	ø5.5	ø8.4	ø10.4	ø12	ø16
Repeatability	mm	±0.03				
Weight	kg	0.29	0.43	0.63	1.2	2.3
Lubrication		Not required (When lubricating, use turbine oil Class 1 ISO VG32)				

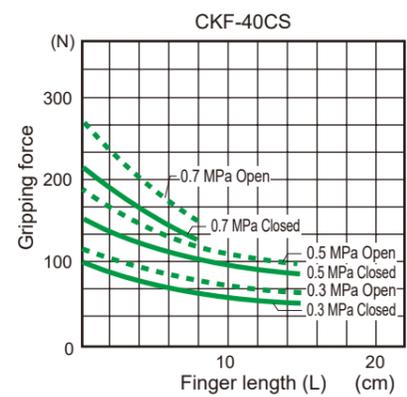
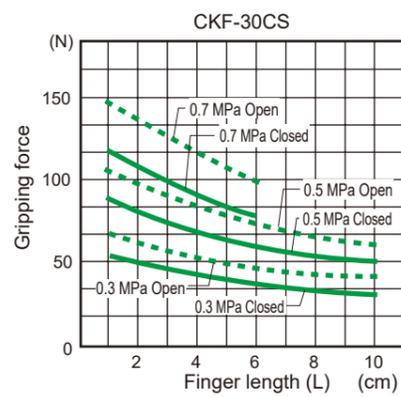
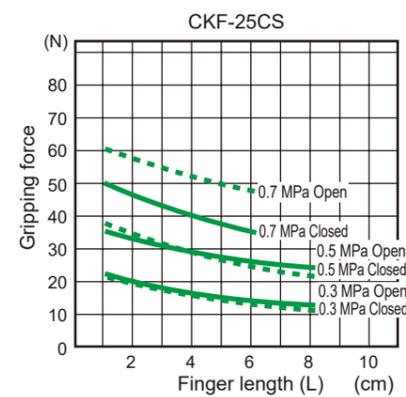
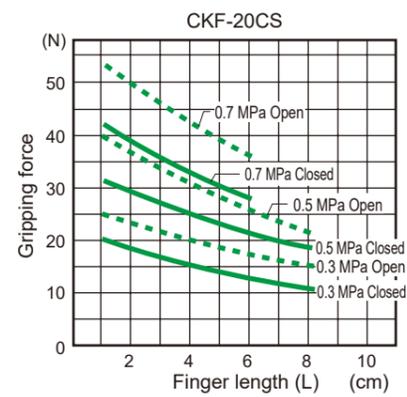
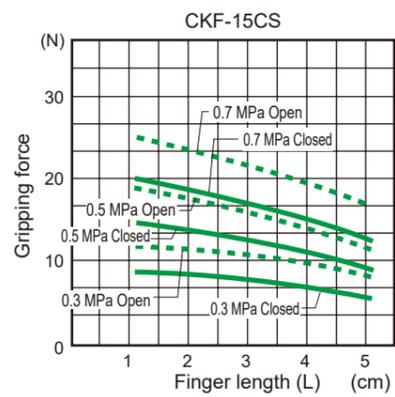
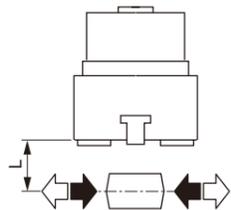
MEMO

## 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.

Check Valve

CKW-HP

CKL2

CKLG2

CKL2

-□-HC

CKH2

CKLB2

CKG

CK

CKA

CKS

CKS-F

CKF

CKJ

Cylinder

Switch

Ending

Cylinder

Switch

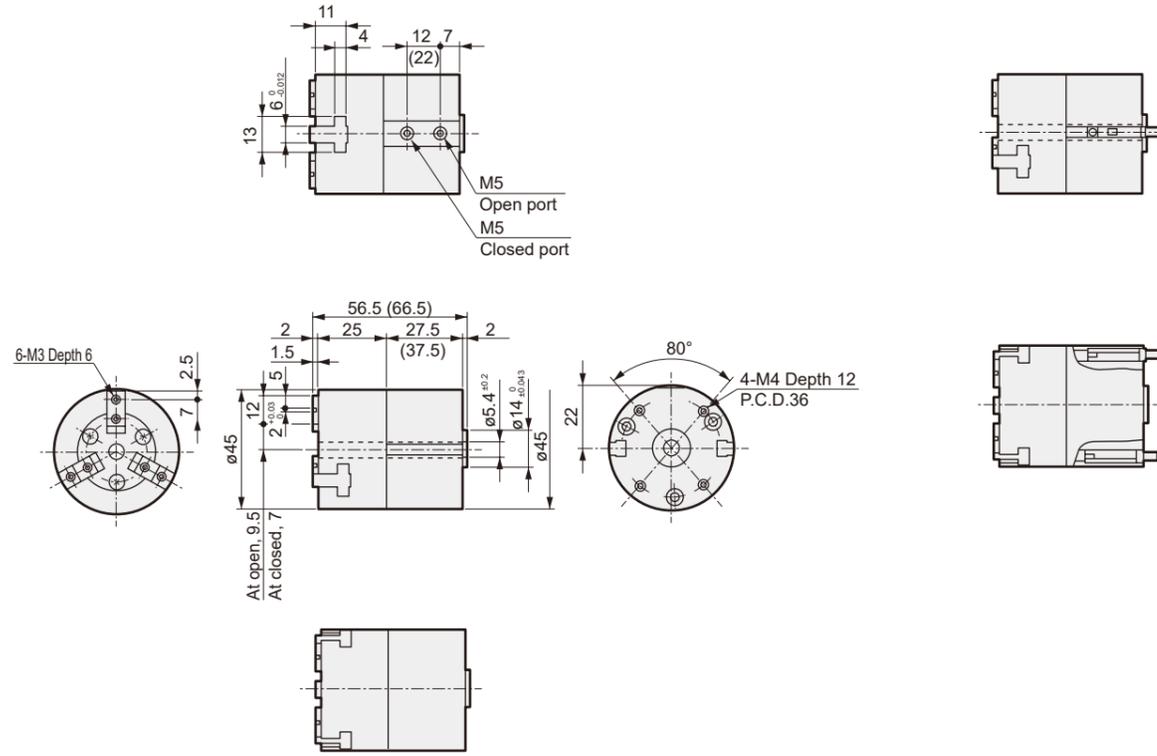
Ending

Outline Dimension Drawing

● CKF-15CS Standard/O/C

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

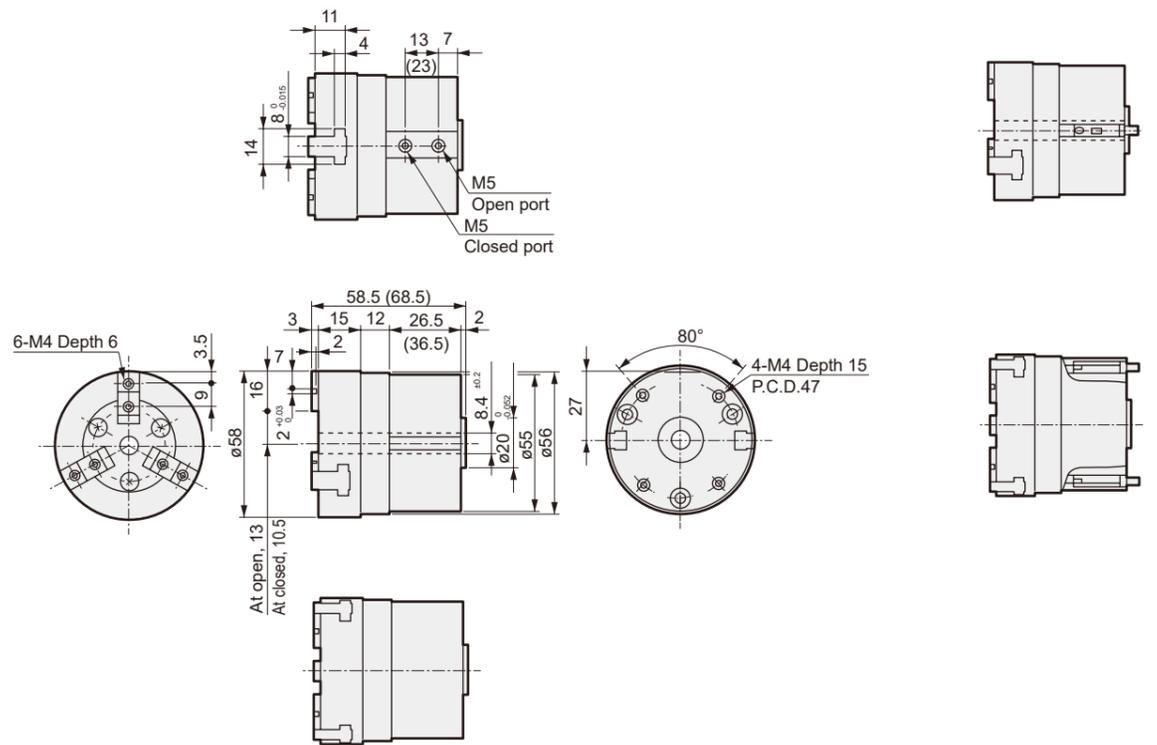
● With Switch



● CKF-20CS Standard/O/C

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

● With Switch

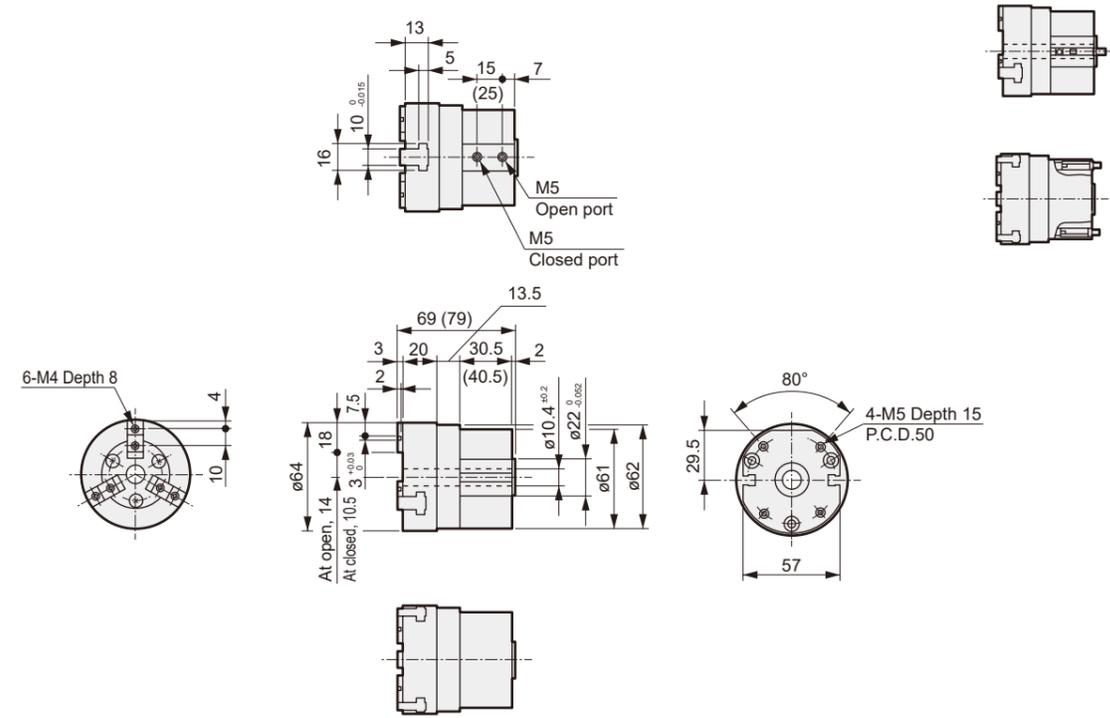


Outline Dimension Drawing

● CKF-25CS Standard/O/C

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

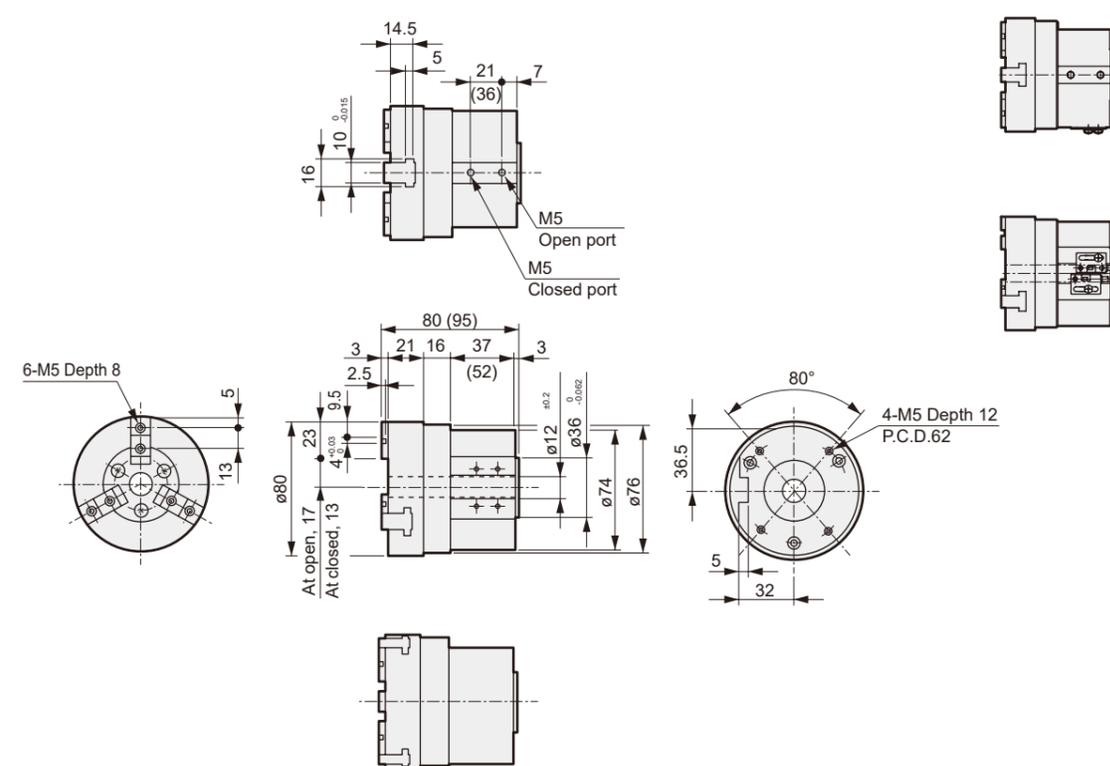
● With Switch



● CKF-30CS Standard/O/C

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

● With Switch



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

