Hollow chuck Double acting/single acting

CKF Series

Operating stroke length: 5, 7, 8, 16 mm

Double acting Single acting (normally open) Single acting (normally closed)









Specifications

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 НСА LBC CAC4 UCAC2 CAC-N UCAC-N RCS2 RCC2 PCC SHC MCP GLC MFC BBS

RRC GRC RV3 NHS HRL LN Hand Chuk MecHnd/Chuk ShkAbs FJ FK SpdContr

CKL2

CKLG2

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

Item	CKF							
Size	15CS	20CS	25CS	30CS	40CS			
Bore size mm	ø30	Ø-	40	ø50	ø80			
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							
Operating stroke length mm		5	7	8	16			
Rod diameter mm	ø16	Ø	24	ø28	ø34			
Volumetric capacity (reciprocating) cm ³	2.5	5.2	7.3	13.3	73.2			
Hollow 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 (use turbine oil class 1 ISO VG32 if necessary for lubrication)							

Switch specifications

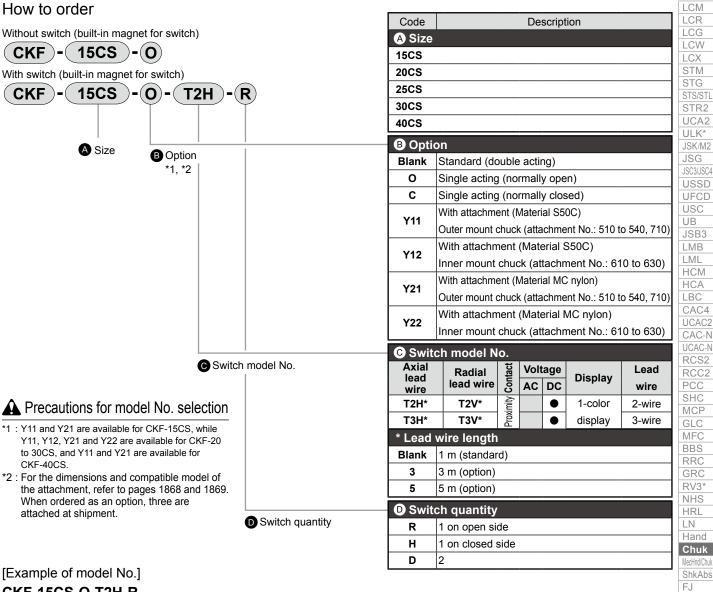
Item	Proximity 2-wire	Proximity 3-wire		
iteiii	T2H/V	T3H/V		
Applications	Dedicated for programmable controller	For programmable controller, relay		
Output method	-	NPN output		
Power supply voltage	-	10 to 28 VDC		
Load voltage/current	10 to 30 VDC, 5 to 20 mA (*1)	30 VDC or less, 100 mA or less		
Indicator lamp	LED (Lit v	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)

 $^{^{*}2\,}$: The weight of switch mounting bracket is 1.5 g.

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





CKF-15CS-O-T2H-R

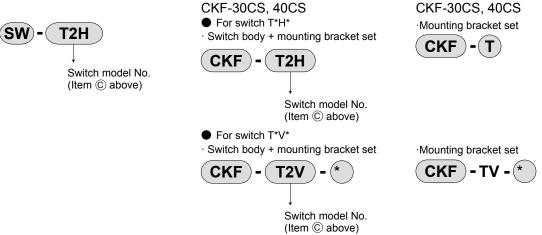
Model: Hollow chuck

A Size : 15CS

B Option : Single acting, normally open Switch model No. : Proximity T2H switch, lead wire 1 m

 Switch quantity : 1 on open side

How to order switch



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

Note) When the type with two switches is selected, if the model has a short operational stroke length, both switches may turn ON depending on the workpiece size.

FΚ

SpdContr

Ending

CKL2

CKLG2

CKL2-HC CKH₂

CKLB2 CKG

CK

CKA

CKS CKS-F

CKF

CKJ

CHC

Internal structure and parts list

CKF-15CS to 25CS

LCM

LCR LCG

LCX STM

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

RV3

NHS

HRL

Hand

Chuk

MecHnd/Chuk

ShkAbs FJ

SpdContr

Ending

CKL2

CKLG2

CKL2-HC CKH2

CKLB2

CKG CK

CKA CKS

CKS-F

CKF

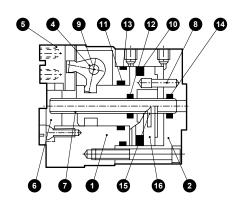
CKJ

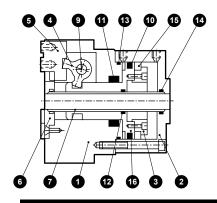
CHC

FΚ

LN

● CKF-30CS to 40CS



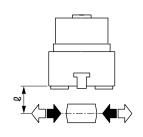


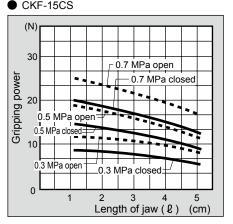
Cannot be disassembled

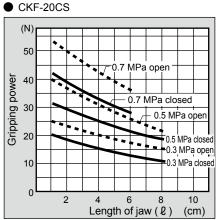
No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Body	Aluminum alloy		9	Fulcrum axis	Steel	
2	Cylinder	Aluminum alloy		10	Piston packing	Nitrile rubber	
3	Piston B	Stainless steel		11	Rod packing	Nitrile rubber	
4	Arm	Steel		12	Guide rod packing seal	Nitrile rubber	
5	Finger	Steel		13	Cylinder gasket	Nitrile rubber	
6	Center guard	Aluminum alloy		14	Pipe fixing gasket	Nitrile rubber	
7	Guide pipe	Stainless steel		15	Magnet		
8	Rotation-stop pin	Stainless steel		16	Piston A	Stainless steel	

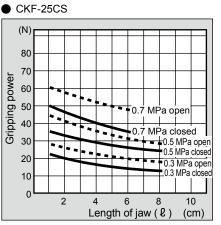
Gripping power performance data

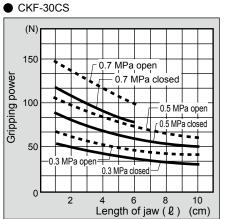
- Gripping power represents the thrust (per one finger) in the arrow direction shown in the figure.
- The gripping power in the opening/closing directions with jaw length L of hand with a supply pressure of 0.3, 0.5 and 0.7 MPa is shown.
- Open direction (⟨□) (shown with broken line)
- Closed direction (→) ----- (shown with continuous line)

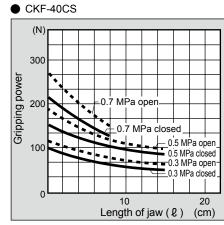












(Note) O type gripping power decreases approximately 20 to 30% in the closed direction compared to double acting. C type gripping power decreases approximately 10 to 20% in the open direction compared to the double acting. When making a selection, read the precautions for design and selection on page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

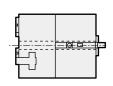


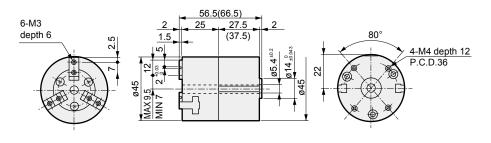
CAD **Dimensions**

CKF-15CS standard/O/C

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

(22) Open port M5 Closed port With switch





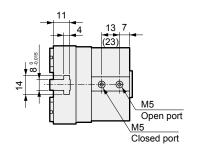


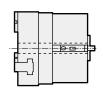


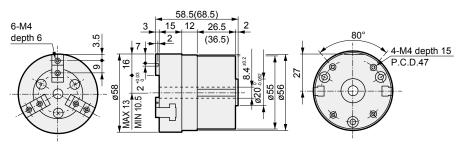
CKF-20CS standard/O/C

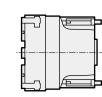
· Dimensions in () are for O [normally open] and C [normally closed] specifications.

With switch











LCW LCX STM STG STS/STI STR2 UCA2 ULK* JSK/M2 JSG JSC3/JSC4 USSD UFCD USC UB JSB3 LMB LML HCM НСА LBC CAC4 UCAC2 CAC-N UCAC-N RCS2 RCC2 PCC SHC MCP GLC MFC BBS RRC GRC RV3 NHS HRL LN Hand Chuk FJ

LCM LCR LCG

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SpdContr Ending CKL2

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

CHC

Dimensions

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

НСА LBC

CAC4

UCAC2

CAC-N

UCAC-N RCS2

RCC2 PCC SHC

MCP GLC MFC BBS RRC GRC RV3 NHS

HRL LN

Hand

FJ FK

CKG

CK

CKA

CKS

CKF

CKJ

CHC

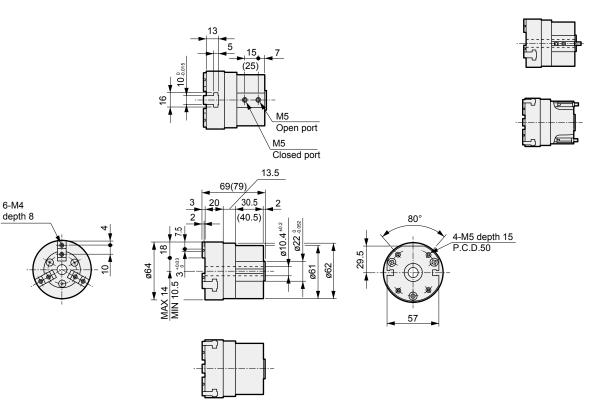
6-M4



CKF-25CS standard/O/C

With switch

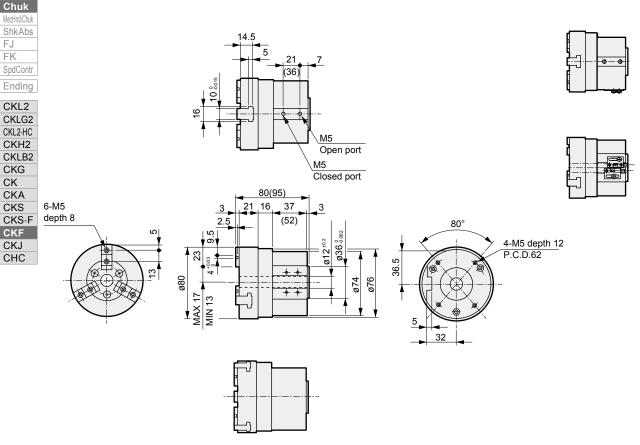
· Dimensions in () are for O [normally open] and C [normally closed] specifications.



● CKF-30CS standard/O/C

With switch

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



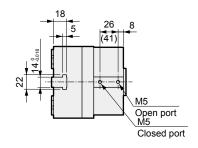




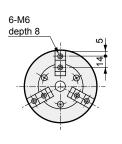
● CKF-40CS standard/O/C

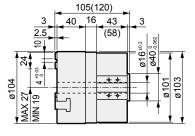
· Dimensions in () are for O [normally open] and C [normally closed] specifications.

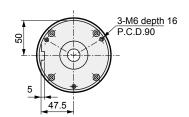
With switch



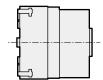












LCR LCG LCW LCX STM STG STS/STL STR2 UCA2 ULK* JSK/M2 JSG JSC3/JSC4 USSD UFCD USC UB JSB3 LMB LML HCM HCA LBC CAC4 UCAC2 CAC-N UCAC-N RCS2 RCC2 PCC SHC MCP GLC MFC BBS RRC GRC RV3 NHS HRL LN Hand

LCM

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FΚ SpdContr Ending

CKL2

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