

Series variation

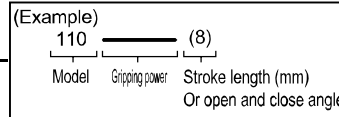


Chuck Series

Range of gripping power at supply pressure 0.5 MPa and general jaw length

Variation	Model No.	Action of jaw (J)	Gripping power (N)		
			5	10	50
3-way jaw bearing chuck	CKG			16CS ⁽⁶⁾ 25CS ⁽⁶⁾	
3-way jaw long stroke chuck	CK			1CS ⁽²⁰⁾ 1.5CS 2CS	
3-way jaw thin chuck	CKA		15CS ⁽⁶⁾	20CS ⁽⁵⁾ 25CS ⁽⁵⁾ 30CS	
Thin chuck	CKS			08CS ⁽¹⁰⁾ 12CS	
Hollow chuck	CKF			15CS ⁽⁵⁾ 20CS ⁽⁵⁾ 25CS ⁽⁷⁾	
Ultra long stroke chuck	CKJ			16CS	
Powerful chuck	CKL2			20CS ⁽⁵⁾ 25CS	
Position locking powerful chuck	CKL2*-HC			32CS ⁽⁸⁾ 40CS	
Powerful chuck with high gripping power	CKH2				
2-way powerful chuck	CKLB2			20CS ⁽⁵⁾ 25CS	

Gripping power (N)					Switch model No.	Page
50	100	500	1000	2000		
32CS (8)	40CS (11) 50CS (16)				T2H/V / T3H/V	1644
	(20) (40)				T2H/V T2H/V	1650
(7) (9)	40CS	50CS (20)	60CS (25) 70CS (30)	(38)	T2H/V / T3H/V	1656
(12)	16CS (16) 20CS (20)	25CS (28) 32CS (32)			T2H/V T3H/V	1664
30CS (8)	40CS (16)				T2H/V / T3H/V	1674
(80)(40)	40CS (80)(40)		63CS (130)(65)		T2H/V, T3H/V	1680
(6)	32CS (8) 40CS (10)	50CS (12) 63CS (16)	80CS (20)	100CS (23)	T2H/V T3H/V	1690
(10)	50CS (12) 63CS (16)	80CS (20)			T2H/V T3H/V	1698
	50CS (6) 63CS (8)	80CS (10)	100CS (12)		T2H/V T3H/V	1704
	32CS (6) 80CS (8)	50CS (10) 63CS (12)	80CS (16)	100CS (20) (23)	T2H/V T3H/V	1710



- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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
- Chuck**
- MechHnd/Chuck
- ShkAbs
- FJ
- FK
- SpdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC



3-way jaw bearing chuck Double acting/single acting

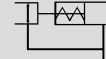
CKG Series

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

Double acting

Single acting (normally open)

Single acting (normally closed)



Specifications

Descriptions	CKG				
	16CS	25CS	32CS	40CS	50CS
Size	16CS	25CS	32CS	40CS	50CS
Bore size mm	φ16	φ25	φ32	φ40	φ50
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	φ9	φ10	φ14	φ18	φ20
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

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 (*2)	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 *4	

*2 : The above max. load current is the value at 25°C. If the operating ambient temperature around switch is higher than 25°C, 5 to 10 mA at 60°C for T2 type, with 5 to 15 mA at 60°C for S2 type.

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

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

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** - **○**

With switch (built-in magnet for switch)

CKG - **16CS** - **○** - **T2H** - **R**

A Size

B Option
*1, *2

C Switch model No.
*3

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 1718 to 1719 for the dimensions and compatible model of the small jaw. When ordered as an option, three are attached at shipment.
- *3 : Switches other than © Switch model No. are available. (Custom order) Refer to Ending Page 1 for details.

[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 © above)

CKG-50CS only

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

CKG - **T2H**

Switch model No.
(Item © above)

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

CKG - **T2V** - *

Switch model No.
(Item © above)

CKG-50CS only

- Mounting bracket set

CKG - **T**

CKG - **TV** - *

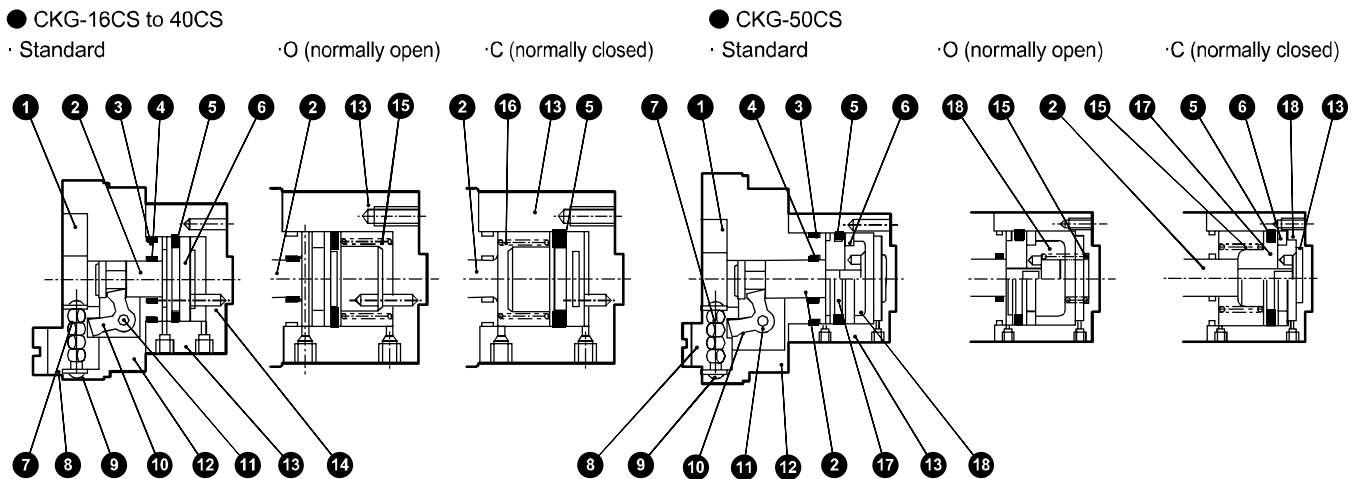
(Select either R (open side) or H (closed side) for sections marked with an asterisk (*).)

Code	Content					
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 small jaw (Material S50C) Outer mount chuck (small jaw No.: 540 to 710)					
Y12	With small jaw (Material S50C) Inner mount chuck (small jaw No.: 610 to 630)					
Y21	With small jaw (Material MC nylon) Outer mount chuck (small jaw No.: 510 to 540, 710)					
Y22	With small jaw (Material MC nylon) Inner mount chuck (small jaw 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 display	2-wire
T3H*	T3V*			●		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					

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*+HC
CKH2
CKLB2
CHC

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- Mec/Hnd/Chuk
- ShkAbs
- FJ
- FK
- SsdContr
- Ending
- CKG**
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

Internal structure and parts list

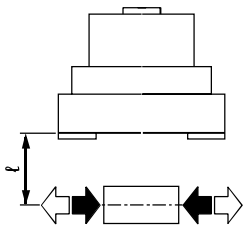


No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Bearing guide	Steel		10	Arm	Steel	
2	Piston A	Stainless steel		11	Fulcrum axis	Steel	
3	Cylinder gasket	Nitrile rubber		12	Body	Aluminum alloy	
4	Rod packing	Nitrile rubber		13	Cylinder	Aluminum alloy	
5	Piston packing	Nitrile rubber		14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

Gripping power performance data

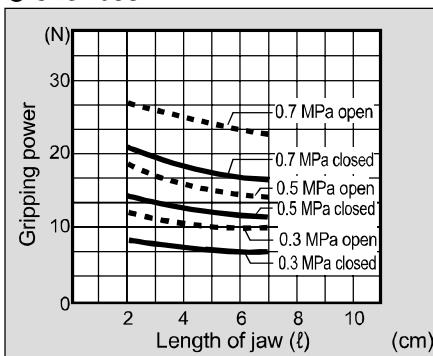
The gripping power in the opening/closing directions with jaw length L of hand with a supply pressure of 0.3, 0.5 and 0.7 MPa is shown.

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

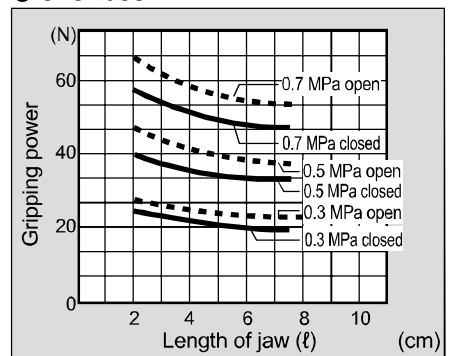


(Note) O type gripping power decreases approximately 20 to 30% in the closed direction compared to double acting.
C type gripping power decreases approximately 10 to 20% in the open direction compared to the double acting.
When making a selection, read the precautions for design and selection on page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

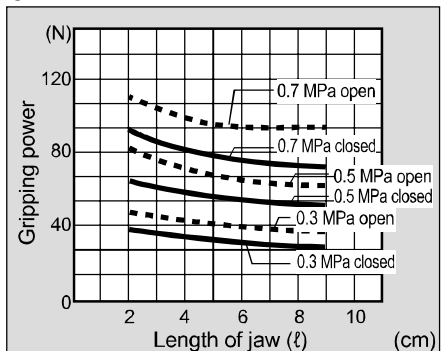
● CKG-16CS



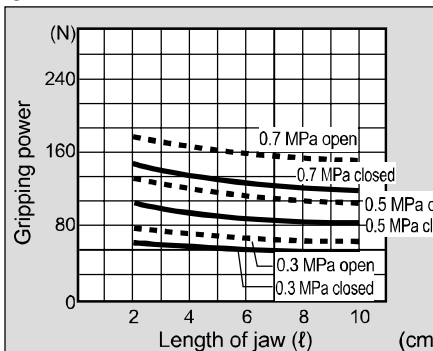
● CKG-25CS



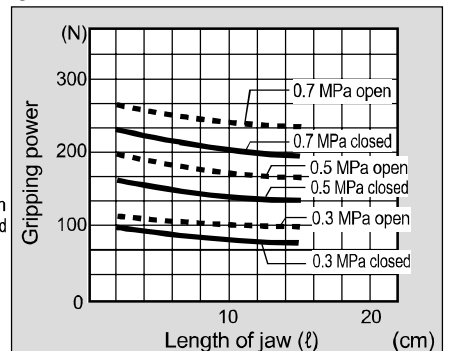
● CKG-32CS



● CKG-40CS



● CKG-50CS

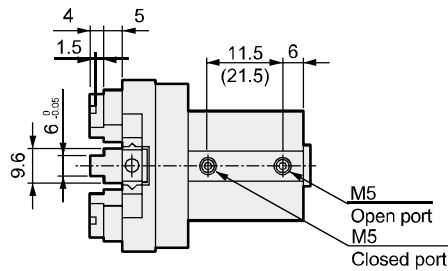


Dimensions

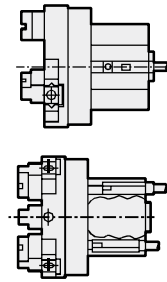


● CKG-16CS standard/O/C

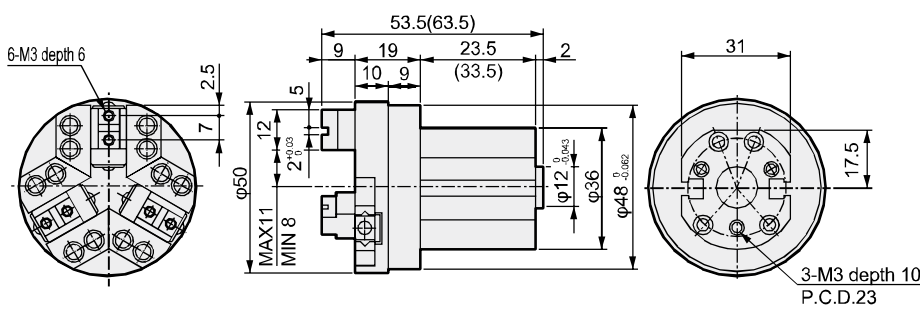
· Dimensions in () are for O [normally open] and C [normally closed] specifications.



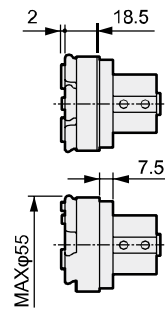
● With switch



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

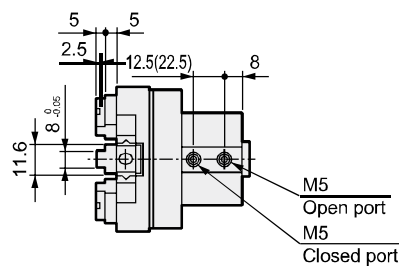


● With rubber cover

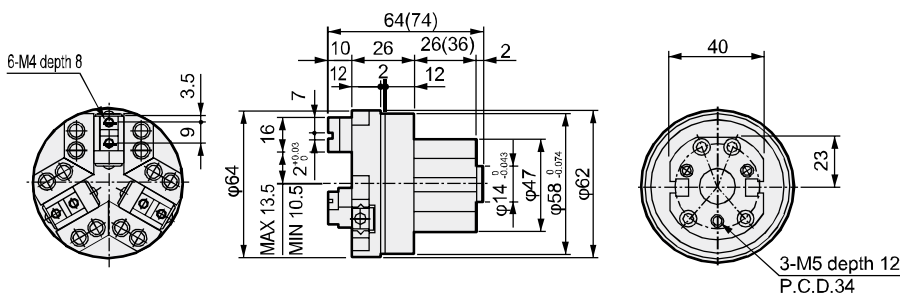
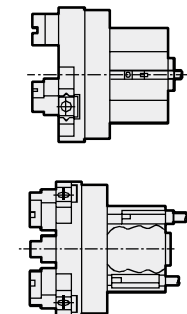


● CKG-25CS standard/O/C

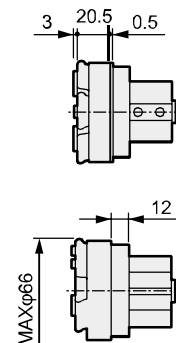
· Dimensions in () are for O [normally open] and C [normally closed] specifications.



● With switch



● With rubber cover



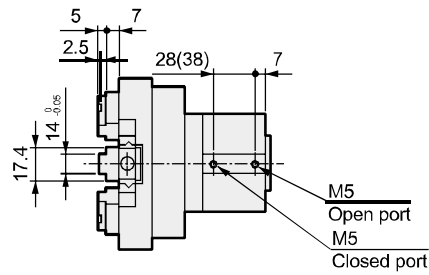
LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuck
MecHnd/Chuck
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Dimensions

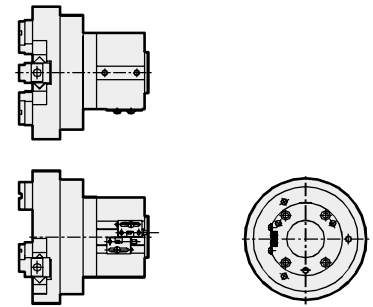


● CKG-50CS standard/O/C

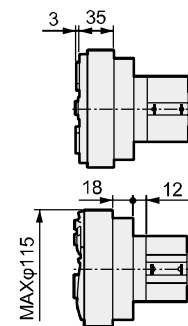
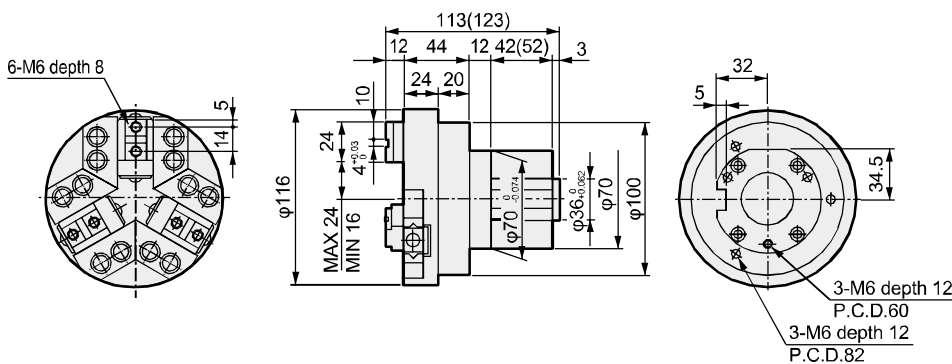
· Dimensions in () are for O [normally open] and C [normally closed] specifications.



● With switch



● With rubber cover



LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*+HC
CKH2
CKLB2
CHC



Small jaw

● Material: Iron, engineering plastic



Features

A variety of small jaws (soft jaw) is available to match user machining needs.

● Spigot section machined

Troublesome reference section (spigot section) machined.

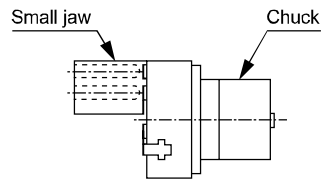
Wide series variation to select according to workpiece shape and dimension.

● 2 types of material for small jaw

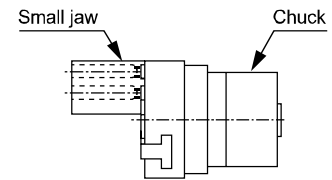
Iron (S50C) and engineering plastic (MC nylon) are available for optimum selection according to material and working condition of workpiece.

Compatible model for standard small jaw

CK type



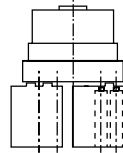
CKA/CKG type



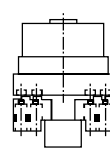
Small jaw applications

Chuck applications

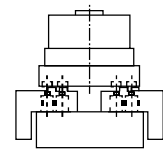
Soft jaw



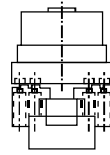
Compact workpiece



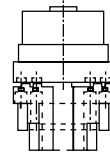
Large workpiece



For large and small workpieces



For inner tensive large and small workpieces



How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKA - **Y1** - **610**

A Model **B** Material **C** Small jaw No.

A Model		B Material		C Small jaw No.	
Code	Content	Code	Content	Code	Compatibility
CKG	3-way jaw bearing chuck	Y1	Material S50C	510	CKG-16S,CKA-15CS,CKF-15CS
CK	3-way jaw long stroke chuck	Y2	Material MC nylon	520	CKG-25S,CKA-20CS,CKF-20CS
CKA	3-way jaw thin chuck			530	CKG-32CS,CKA-25CS,CKF-25CS
CKF	Hollow chuck			540	CKG-40CS,CKA-30CS,CKF-30CS
				610	CKG-25S,CKA-20CS,CKF-20CS
				620	CKG-32CS,CKA-25CS,CKF-25CS
				630	CKG-40CS,CKA-30CS,CKF-30CS
				710	CKG-50CS,CKA-40CS,CKF-40CS
				720	CK-1CS
				730	CK-1.5CS
				740	CK-2CS
				750	CKA-50CS
				760	CKA-60CS
				770	CKA-70CS

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STR/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SrdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

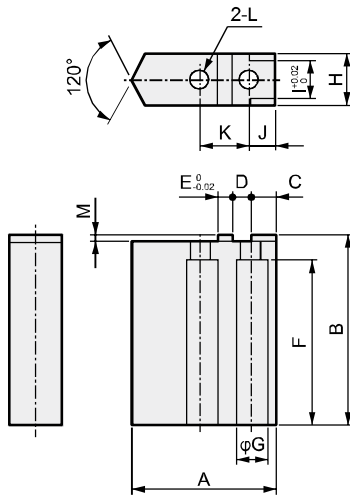
Small jaw

Dimensions

Dimensions



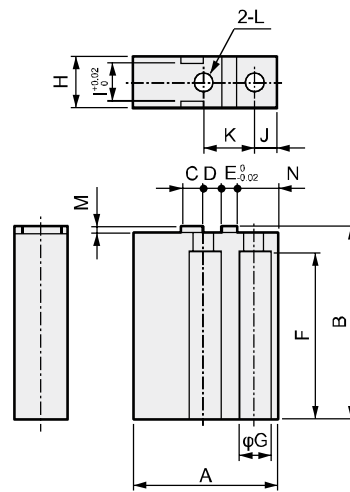
● 510 to 540



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
			Y1*1	Y2*2													
510	CKA-15CS CKG-16CS CKF-15CS		17.5	25	3.5	2.5	2	20	6	8	6	3.5	7	3.5	1	17	5
520	CKA-20CS CKG-25CS CKF-20CS		24	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	45	11
530	CKA-25CS CKG-32CS CKF-25CS		31	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	103	21
540	CKA-30CS CKG-40CS CKF-30CS		37	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	136	30

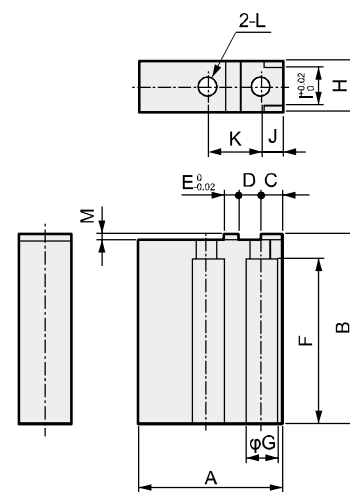
● 610 to 630



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
			Y1*1	Y2*2														
610	CKA-20CS CKG-25CS CKF-20CS		30	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	8	65	10
620	CKA-25CS CKG-32CS CKF-25CS		35	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	8	126	19
630	CKA-30CS CKG-40CS CKF-30CS		45	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	10.5	188	28

● 710 to 770



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
			Y1*1	Y2*2													
710	CKA-40CS CKG-50CS CKF-40CS		44.5	60	6	5	4	52	11	18	14	6	14	6.5	2	285	43
720	CK-1CS		33.5	50	6	5	4	43	9.5	14	10	6	14	5.5	2	128	19
730	CK-1.5CS		43.5	65	7	6.5	5	56	11	18	14	7	18	6.5	2	302	45
740	CK-2CS		55.5	80	8	7	6	71	14	19	14	8	20	8.5	2	471	70
750	CKA-50CS		51.5	70	6	5	5	58	11	18	14	6	15	6.5	2	402	62
760	CKA-60CS		64	80	8	6	6	68	14	20	16	8	18	9	2	608	94
770	CKA-70CS		74	100	8	7	6	88	14	20	16	8	20	9	2	913	140

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

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

Small jaw

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKL2 - Y1 - 810

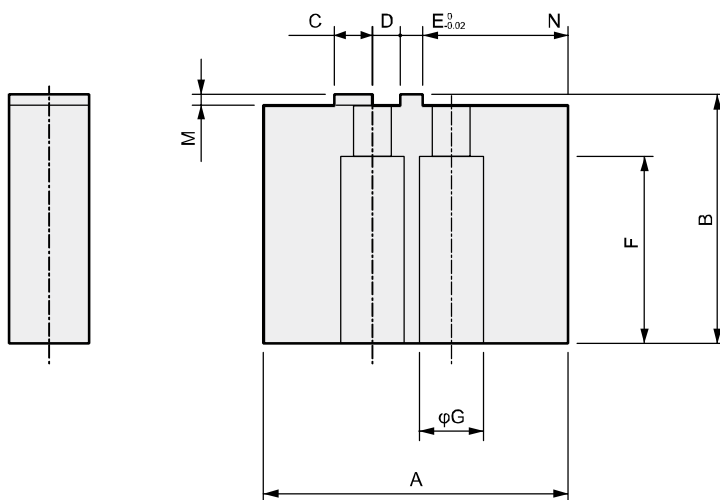
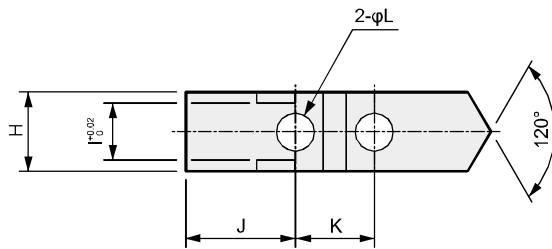
A Model

B Material

C Small jaw No.

Code	Content
A Model	
CKL2	Powerful chuck with high gripping power
CKH2	Powerful chuck with high gripping power
CKLB2	Bi-directional powerful chuck
B Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
C Small jaw No.	
810	CKLB2-20CS
820	CKLB2-25CS
830	CKL2-32CS,CKLB2-32CS
840	CKL2-40CS,CKLB2-40CS
850	CKL2-50CS,CKH2-50CS,CKLB2-50CS
860	CKL2-63CS,CKH2-63CS,CKLB2-63CS
870	CKL2-80CS,CKH2-80CS,CKLB2-80CS
880	CKL2-100CS,CKH2-100CS,CKLB2-100CS

Dimensions



Code Small jaw No.	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
															Y1	Y2
810	29.5	29	3.5	2.5	2	23	6.5	10	6	12	7	3.5	1	13	64	10
820	34.5	33.5	4.5	3.5	2	24	8	10	7	12.5	9	4.5	1.5	16.5	86	13
830	39.5	33.5	4.5	3.5	3	24	8	12	8	14	10	4.5	1.5	19	118	18
840	49.5	39	6	4.5	3	31	9	12	8	18.5	12	5.5	2	23.5	171	26
850	54.5	44	6	5	4	33	11	14	10	18.5	14	6.5	2	27	250	37
860	69.5	49	8	5.5	5	38	11	16	12	24.5	16	6.5	2	34.5	408	61
870	84.5	59	10	6	6	47	14	18	14	28	18	9	2	44.5	676	101
880	99.5	64	10	7	6	52	14	20	16	31.5	20	9	2	55	962	144

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKS - **Y1** - **910**

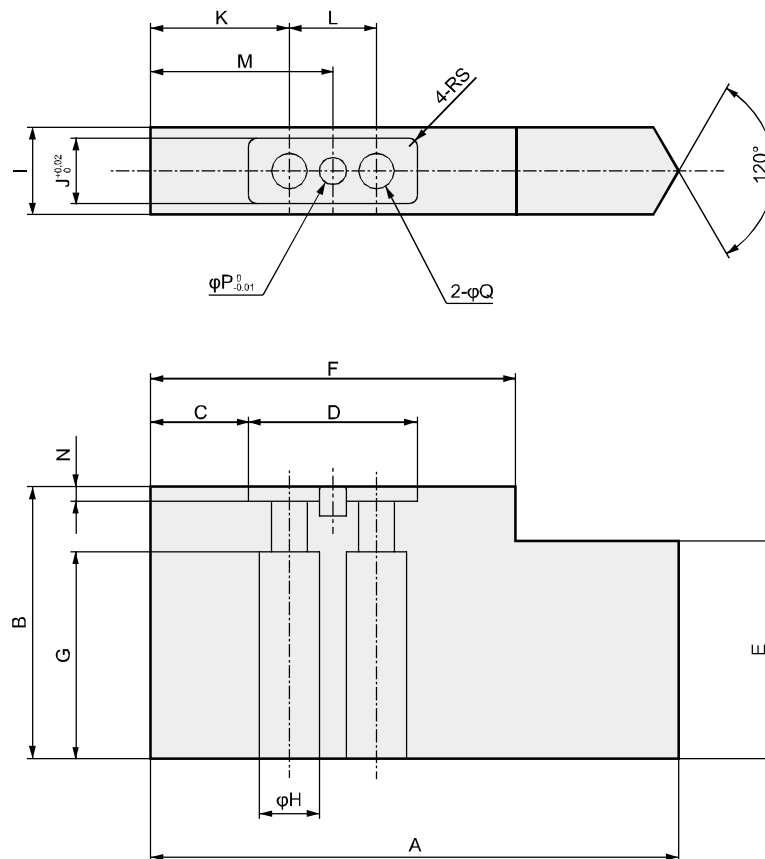
Model

A Material

B Small jaw No.

Code	Content
A Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
B Small jaw No.	
910	CKS-08CS
920	CKS-12CS
930	CKS-16CS
940	CKS-20CS
950	CKS-25CS
960	CKS-32CS

Dimensions



Code	Small jaw No.	Compatible models	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	S	Weight (g)	
																				Y1	Y2
910	CKS-08CS		42.5	30	6.5	15	20	27.5	23	6.5	10	6	10.5	7	14	1.7	2	3.5	1	74	12
920	CKS-12CS		48	35	7.5	19	25	34	27	8	11	7	12.5	9	17	2.7	2	4.5	1	108	17
930	CKS-16CS		56.5	35	9.5	21	25	40.5	27	8	12	8	15	10	20	2.7	3	4.5	1	145	23
940	CKS-20CS		66.5	40	11	25	30	48	32	9.5	12	8	17.5	12	23.5	2.7	3	5.5	1.5	192	31
950	CKS-25CS		85.5	45	16	28	35	60	33	11	14	10	23	14	30	2.7	4	6.5	1.5	335	53
960	CKS-32CS		97	50	18	31	40	67	38	11	16	12	25.5	16	33.5	2.7	5	6.5	1.5	500	79

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
Mec:Hnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC



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

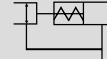
CK Series

● Operating stroke length: 20, 40 mm

Double acting

Single acting (normally open)

Single acting (normally closed)



Specifications

Descriptions	CK		
	1CS	1.5CS	2CS
Size	1CS	1.5CS	2CS
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) cm ³	7.9	26.4	52.8
Repeatability mm	±0.03		
Weight kg	0.85	1.90	2.90
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	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					

⚠ 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)

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
Chuck
MecHnd/Chuck
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*+HC
CKH2
CKLB2
CHC

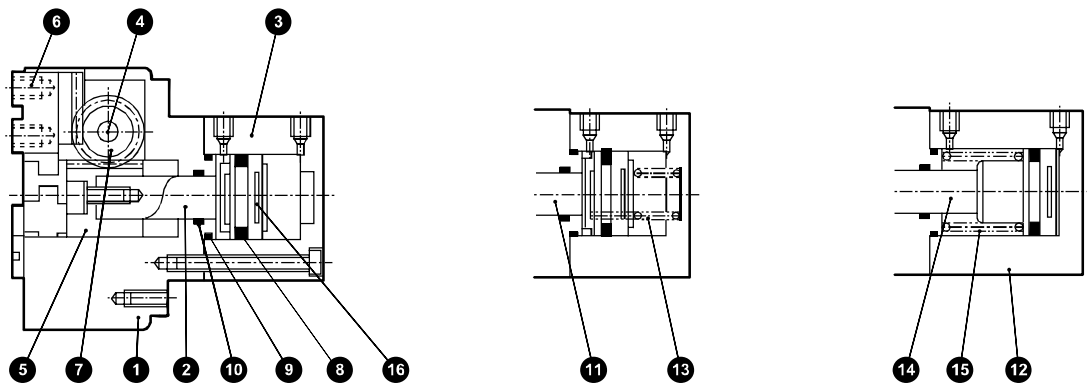
- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCC2
- RCS
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HR
- LN
- Hand
- Chuk**
- MecHnd/Chuk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

Internal structure and parts list

● Standard (double acting)

● O (normally open)

● C (normally closed)



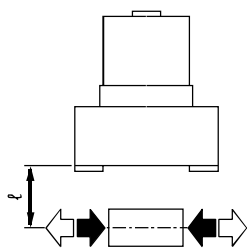
Cannot be disassembled

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

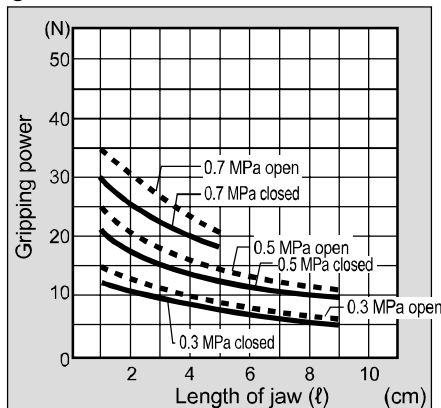
The gripping power in the opening/closing directions with jaw length L of hand with a supply pressure of 0.3, 0.5 and 0.7 MPa is shown.

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

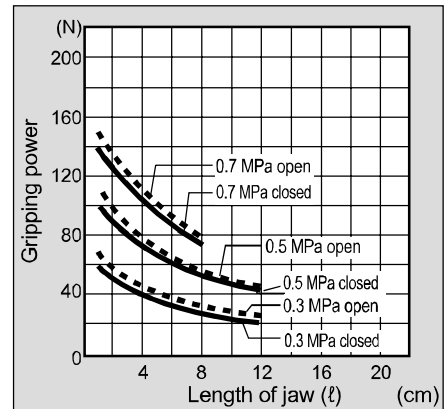


(Note) O type gripping power decreases approximately 20 to 30% in the closed direction compared to double acting. C type gripping power decreases approximately 10 to 20% in the open direction compared to the double acting. When making a selection, read the precautions for design and selection on page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

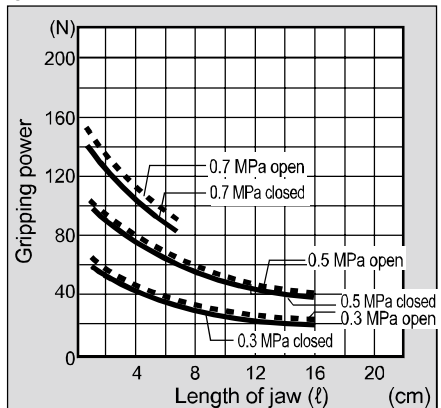
● CK-1CS



● CK-1.5CS



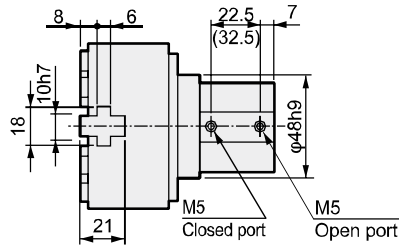
● CK-2CS



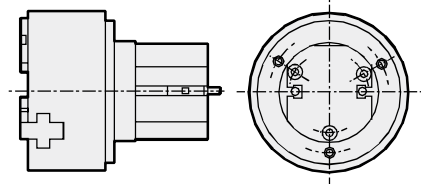
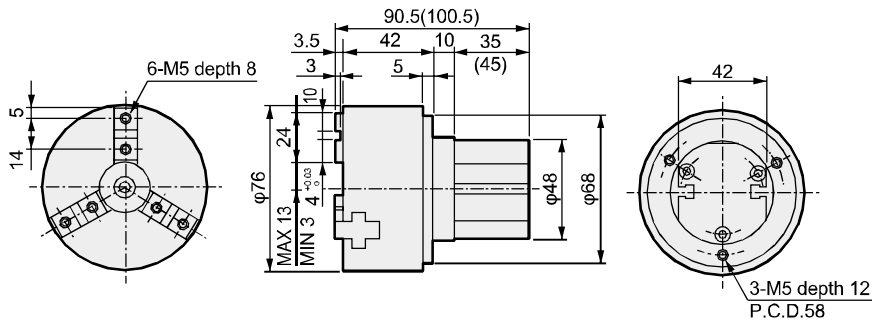
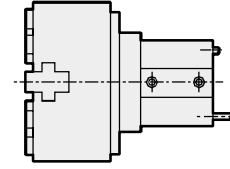
Dimensions

● CK-1CS standard/O/C

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

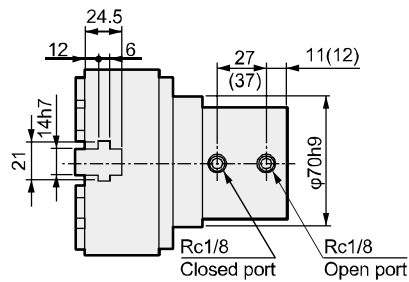


● With switch

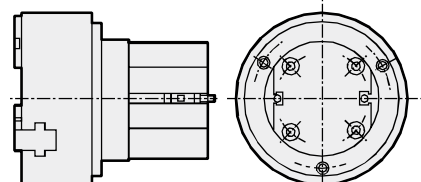
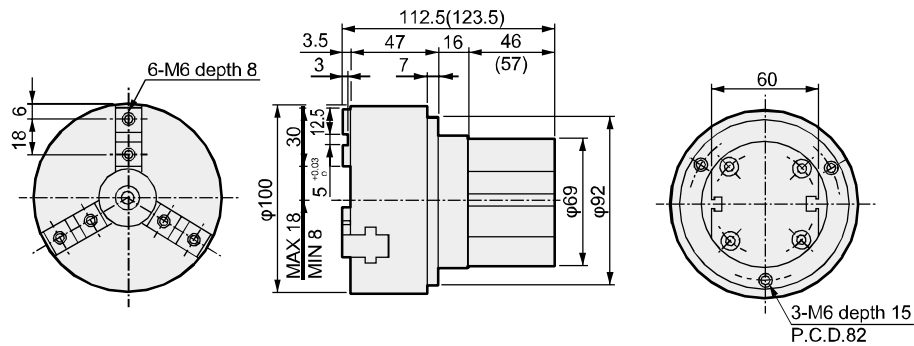
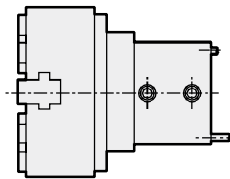


● CK-1.5CS standard/O/C

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



● With switch



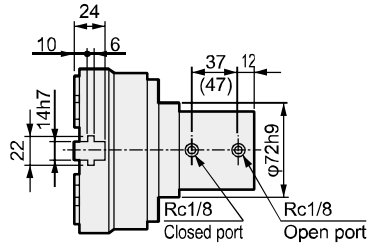
LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuck
MechHnd/Chuck
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Dimensions

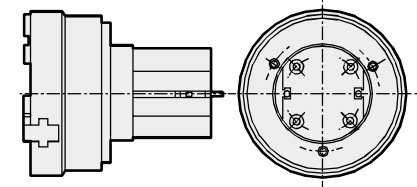
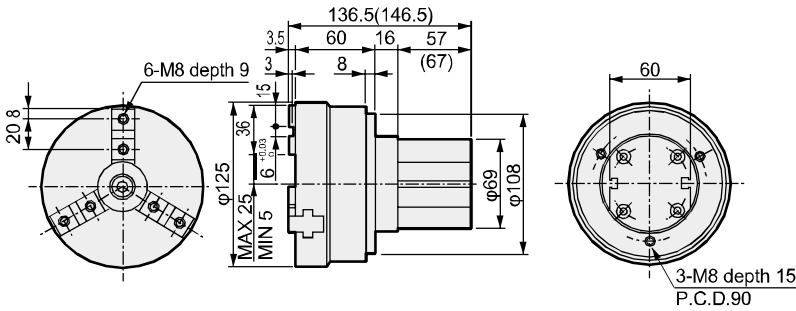
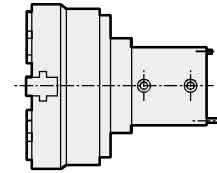


● CK-2CS standard/O/C

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



● With switch



LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending

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

MEMO

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*+C
CKH2
CKLB2
CHC



Small jaw

● Material: Iron, engineering plastic



Features

A variety of small jaws (soft jaw) is available to match user machining needs.

● Spigot section machined

Troublesome reference section (spigot section) machined.

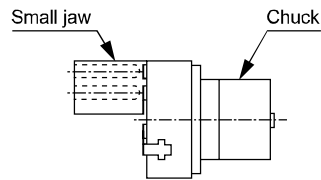
Wide series variation to select according to workpiece shape and dimension.

● 2 types of material for small jaw

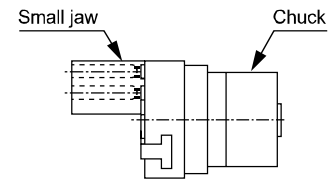
Iron (S50C) and engineering plastic (MC nylon) are available for optimum selection according to material and working condition of workpiece.

Compatible model for standard small jaw

CK type



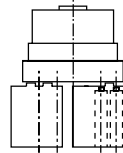
CKA/CKG type



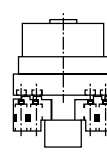
Small jaw applications

Chuck applications

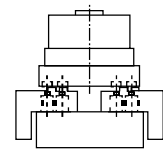
Soft jaw



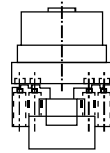
Compact workpiece



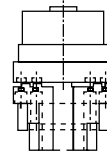
Large workpiece



For large and small workpieces



For inner tensive large and small workpieces



How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKA - **Y1** - **610**

A Model **B** Material **C** Small jaw No.

A Model		B Material		C Small jaw No.	
Code	Content	Code	Content	Code	Compatibility
CKG	3-way jaw bearing chuck	Y1	Material S50C	510	CKG-16S,CKA-15CS,CKF-15CS
CK	3-way jaw long stroke chuck	Y2	Material MC nylon	520	CKG-25S,CKA-20CS,CKF-20CS
CKA	3-way jaw thin chuck			530	CKG-32CS,CKA-25CS,CKF-25CS
CKF	Hollow chuck			540	CKG-40CS,CKA-30CS,CKF-30CS
				610	CKG-25S,CKA-20CS,CKF-20CS
				620	CKG-32CS,CKA-25CS,CKF-25CS
				630	CKG-40CS,CKA-30CS,CKF-30CS
				710	CKG-50CS,CKA-40CS,CKF-40CS
				720	CK-1CS
				730	CK-1.5CS
				740	CK-2CS
				750	CKA-50CS
				760	CKA-60CS
				770	CKA-70CS

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STR/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SrdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

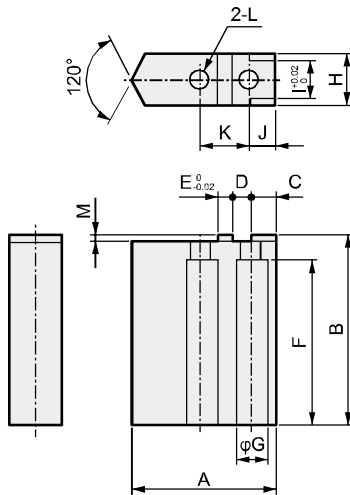
Small jaw

Dimensions

Dimensions



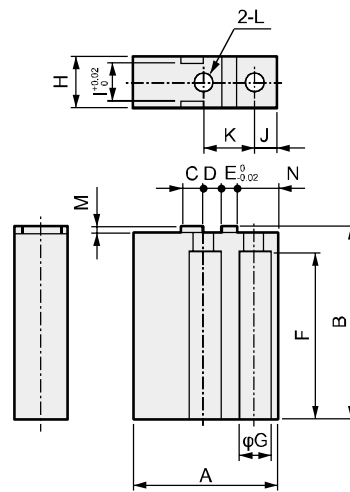
● 510 to 540



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
			Y1*1	Y2*2													
510	CKA-15CS CKG-16CS CKF-15CS		17.5	25	3.5	2.5	2	20	6	8	6	3.5	7	3.5	1	17	5
520	CKA-20CS CKG-25CS CKF-20CS		24	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	45	11
530	CKA-25CS CKG-32CS CKF-25CS		31	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	103	21
540	CKA-30CS CKG-40CS CKF-30CS		37	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	136	30

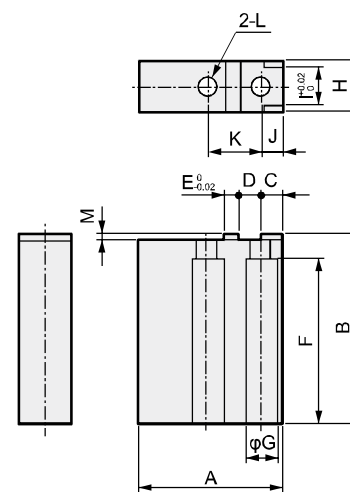
● 610 to 630



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
			Y1*1	Y2*2														
610	CKA-20CS CKG-25CS CKF-20CS		30	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	8	65	10
620	CKA-25CS CKG-32CS CKF-25CS		35	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	8	126	19
630	CKA-30CS CKG-40CS CKF-30CS		45	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	10.5	188	28

● 710 to 770



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
			Y1*1	Y2*2													
710	CKA-40CS CKG-50CS CKF-40CS		44.5	60	6	5	4	52	11	18	14	6	14	6.5	2	285	43
720	CK-1CS		33.5	50	6	5	4	43	9.5	14	10	6	14	5.5	2	128	19
730	CK-1.5CS		43.5	65	7	6.5	5	56	11	18	14	7	18	6.5	2	302	45
740	CK-2CS		55.5	80	8	7	6	71	14	19	14	8	20	8.5	2	471	70
750	CKA-50CS		51.5	70	6	5	5	58	11	18	14	6	15	6.5	2	402	62
760	CKA-60CS		64	80	8	6	6	68	14	20	16	8	18	9	2	608	94
770	CKA-70CS		74	100	8	7	6	88	14	20	16	8	20	9	2	913	140

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Small jaw

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SsdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKL2 - Y1 - 810

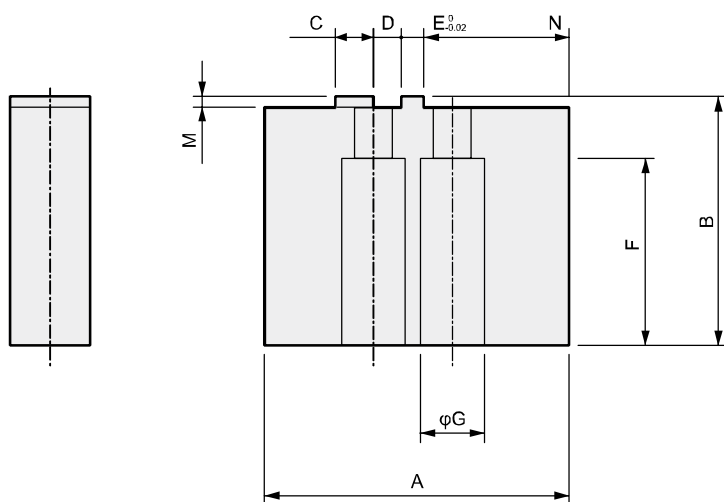
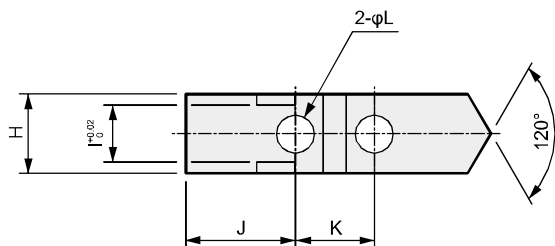
A Model

B Material

C Small jaw No.

Code	Content
A Model	
CKL2	Powerful chuck with high gripping power
CKH2	Powerful chuck with high gripping power
CKLB2	Bi-directional powerful chuck
B Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
C Small jaw No.	
810	CKLB2-20CS
820	CKLB2-25CS
830	CKL2-32CS,CKLB2-32CS
840	CKL2-40CS,CKLB2-40CS
850	CKL2-50CS,CKH2-50CS,CKLB2-50CS
860	CKL2-63CS,CKH2-63CS,CKLB2-63CS
870	CKL2-80CS,CKH2-80CS,CKLB2-80CS
880	CKL2-100CS,CKH2-100CS,CKLB2-100CS

Dimensions



Code Small jaw No.	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
															Y1	Y2
810	29.5	29	3.5	2.5	2	23	6.5	10	6	12	7	3.5	1	13	64	10
820	34.5	33.5	4.5	3.5	2	24	8	10	7	12.5	9	4.5	1.5	16.5	86	13
830	39.5	33.5	4.5	3.5	3	24	8	12	8	14	10	4.5	1.5	19	118	18
840	49.5	39	6	4.5	3	31	9	12	8	18.5	12	5.5	2	23.5	171	26
850	54.5	44	6	5	4	33	11	14	10	18.5	14	6.5	2	27	250	37
860	69.5	49	8	5.5	5	38	11	16	12	24.5	16	6.5	2	34.5	408	61
870	84.5	59	10	6	6	47	14	18	14	28	18	9	2	44.5	676	101
880	99.5	64	10	7	6	52	14	20	16	31.5	20	9	2	55	962	144

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKS - **Y1** - **910**

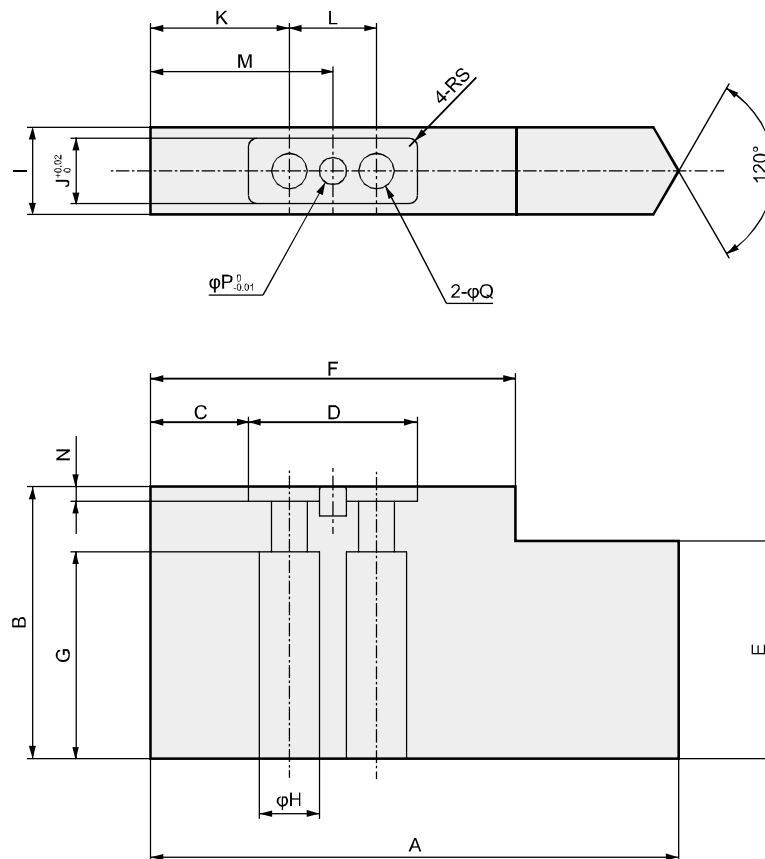
Model

A Material

B Small jaw No.

Code	Content
A Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
B Small jaw No.	
910	CKS-08CS
920	CKS-12CS
930	CKS-16CS
940	CKS-20CS
950	CKS-25CS
960	CKS-32CS

Dimensions



Code		A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	S	Weight (g)	
Small jaw No.	Compatible models																		Y1	Y2
910	CKS-08CS	42.5	30	6.5	15	20	27.5	23	6.5	10	6	10.5	7	14	1.7	2	3.5	1	74	12
920	CKS-12CS	48	35	7.5	19	25	34	27	8	11	7	12.5	9	17	2.7	2	4.5	1	108	17
930	CKS-16CS	56.5	35	9.5	21	25	40.5	27	8	12	8	15	10	20	2.7	3	4.5	1	145	23
940	CKS-20CS	66.5	40	11	25	30	48	32	9.5	12	8	17.5	12	23.5	2.7	3	5.5	1.5	192	31
950	CKS-25CS	85.5	45	16	28	35	60	33	11	14	10	23	14	30	2.7	4	6.5	1.5	335	53
960	CKS-32CS	97	50	18	31	40	67	38	11	16	12	25.5	16	33.5	2.7	5	6.5	1.5	500	79

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC



3-way jaw thin chuck Double acting/single acting

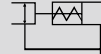
CKA Series

● Operational stroke length: 5, 6, 7, 9, 20, 25, 30, 38mm

Double acting

Single acting (normally open)

Single acting (normally closed)



Specifications

Descriptions	CKA							
	15CS	20CS	25CS	30CS	40CS	50CS	60CS	70CS
Size	15CS	20CS	25CS	30CS	40CS	50CS	60CS	70CS
Bore size mm	φ16	φ25	φ32	φ40	φ50	φ63	φ80	φ100
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	6	5	7	9	20	25	30	38
Rod diameter mm	φ9	φ10	φ14	φ18	φ20		φ24	φ28
Volumetric capacity (reciprocating) cm ³	1.0	2.2	5.1	10.1	36.1	76.9	148.8	294.0
Repeatability mm	±0.03							
Weight kg	0.11	0.25	0.42	0.61	1.41	2.6	4.5	6.4
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 *3	

If operating ambient temperature around switch is higher than 25°C, 5 to 10 mA at 60°C for T2 type, while 5 to 15 mA at 60°C for S2 type.

*1 : The above max. load current is the value at 25°C.

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

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

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MechHnd/Chuk
ShkAbs
FJ
FK
SrdContr
Ending

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

How to order

Without switch (built-in magnet for switch)

CKA - **15CS** - **O**

With switch (built-in magnet for switch)

CKA - **15CS** - **O** - **T2H** - **R**

A Size

B Option
*1, *2

C Switch model No.
*3, *4
* indicates the lead wire length.

⚠ Precautions for model No. selection

*1 : Y11 and Y21 are available for CKA-15CS, while Y12 and Y22 are available for CKA-20CS to 40CS, and Y11 and Y21 are available for CKA-50 to 70CS.

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

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

*4 : As the switch groove of 50CS to 70CS has a different shape, a mounting bracket is required when ordering an individual switch.

[Example of model No.]

CKA-15CS-O-T2H-R

Model: Thin chuck

- A** Size : 15CS
- B** Option : Single acting, normally open
- 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 © above)

CKA-50CS to 70CS

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

CKA - **T2H**

Switch model No.
(Item © above)

CKA-50CS to 70CS

- Mounting bracket set

CKA - **T**

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

CKA - **T2V** - *

Switch model No.
(Item © above)

- Mounting bracket set

CKA - **TV** - *

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

Code	Content					
A Size						
15CS						
20CS						
25CS						
30CS						
40CS						
50CS						
60CS						
70CS						
B Option						
Blank	Standard (double acting)					
O	Single acting (normally open)					
C	Single acting (normally closed)					
Y11	With small jaw (Material S50C) Outer mount chuck (small jaw No.: 510 to 540, 710 to 770)					
Y12	With small jaw (Material S50C) Inner mount chuck (small jaw No.: 610 to 630)					
Y21	With small jaw (Material MC nylon) Outer mount chuck (small jaw No.: 510 to 540, 710 to 770)					
Y22	With small jaw (Material MC nylon) Inner mount chuck (small jaw 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					

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

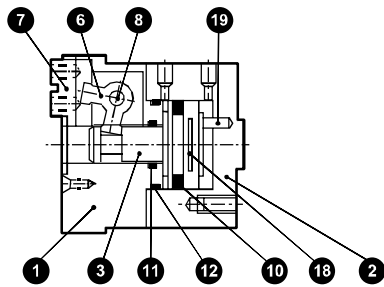
Note) When the type with two switches is selected, if the model has a short operational stroke length, both switches may turn ON depending on the workpiece size.

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MecHnd/Chuk
- ShkAbs
- FJ
- FK
- SsdContr
- Ending
- CKG
- CK
- CKA**
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

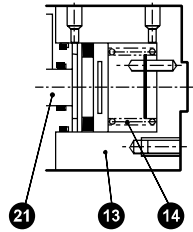
Internal structure and parts list

● CKA-15CS

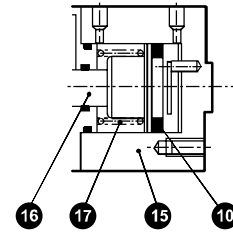
Standard (double acting)



O (normally open)

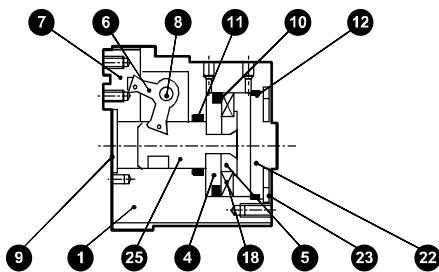


C (normally closed)

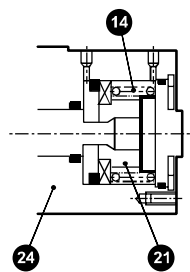


● CKA-20CS to 40CS

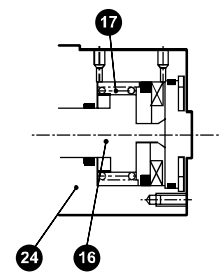
Standard (double acting)



O (normally open)

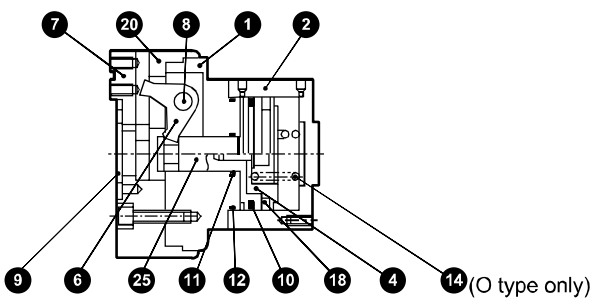


C (normally closed)

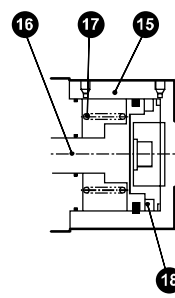


● CKA-50CS to 70CS

Standard (double acting)/O (normally open)



C (normally closed)



Cannot be disassembled

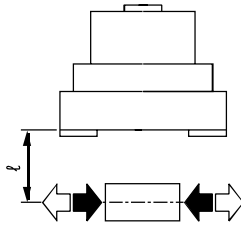
No.	Part name	Material	No.	Part name	Material	No.	Part name	Material	No.	Part name	Material
1	Body	Aluminum alloy	8	Fulcrum axis	Steel	15	C cylinder	Aluminum alloy	22	Cylinder guard	Aluminum alloy
2	Cylinder	Aluminum alloy	9	Center guard	Stainless steel	16	C piston rod	Stainless steel	23	Snap ring	Stainless steel
3	Piston A	Stainless steel	10	Piston packing	Nitrile rubber	17	C spring	Steel	24	O, C body	Aluminum alloy
4	Piston B	Aluminum alloy	11	Rod packing	Nitrile rubber	18	Magnet	Plastic magnet	25	Piston	Aluminum alloy
5	Piston C	Aluminum alloy	12	Cylinder gasket	Nitrile rubber	19	Rotation-stop pin	Stainless steel			
6	Arm	Steel	13	O cylinder	Aluminum alloy	20	Chuck cover	Aluminum alloy			
7	Master key	Steel	14	O spring	Steel	21	O piston B	Stainless steel			

Note) Structures differ to some extent by model.

Gripping power performance data

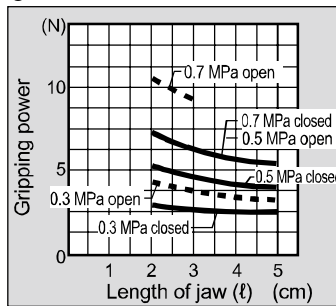
The gripping power in the opening/closing directions with jaw length L of hand with a supply pressure of 0.3, 0.5 and 0.7 MPa is shown.

- Open direction (⇐) ----- (shown with broken line)
- Closed direction (⇒) ——— (shown with continuous line)

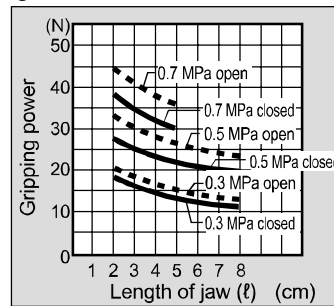


(Note) O type gripping power decreases approximately 20 to 30% in the closed direction compared to double acting.
 C type gripping power decreases approximately 10 to 20% in the open direction compared to the double acting.
 When making a selection, read the precautions for design and selection on page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

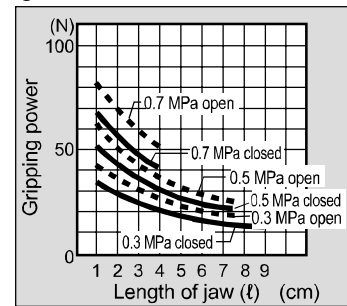
● CKA-15CS



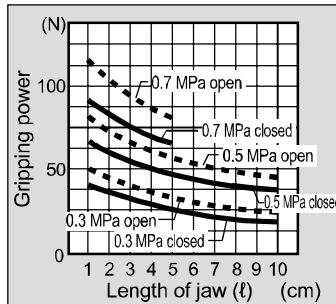
● CKA-20CS



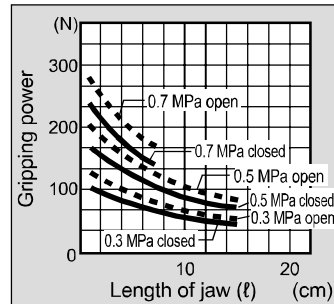
● CKA-25CS



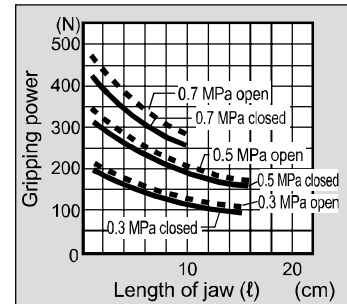
● CKA-30CS



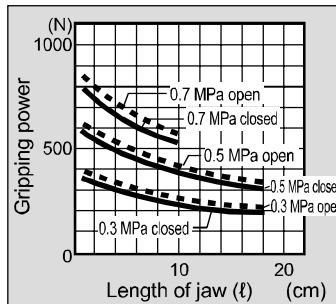
● CKA-40CS



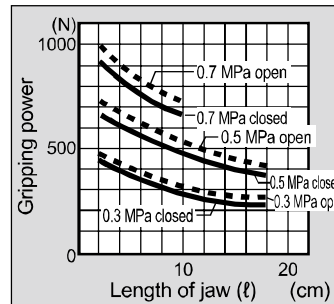
● CKA-50CS



● CKA-60CS



● CKA-70CS



LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MechHand/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

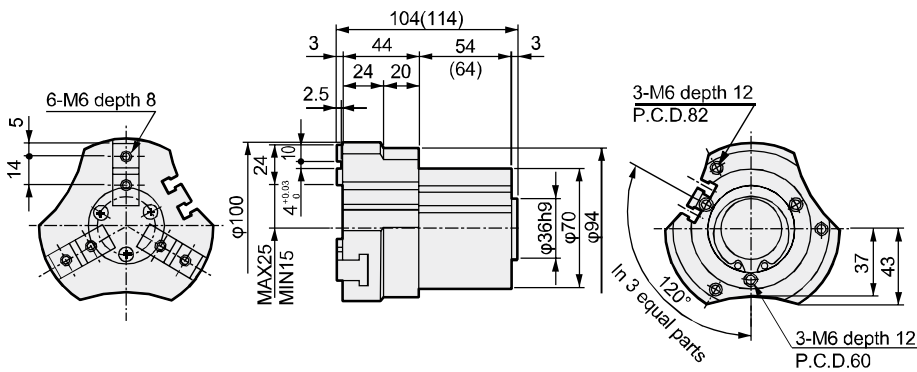
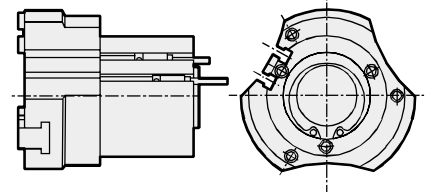
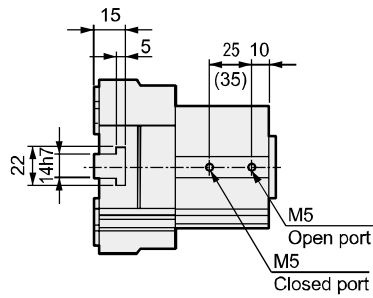
Dimensions



● CKA-40CS standard/O/C

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

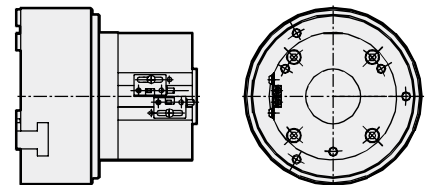
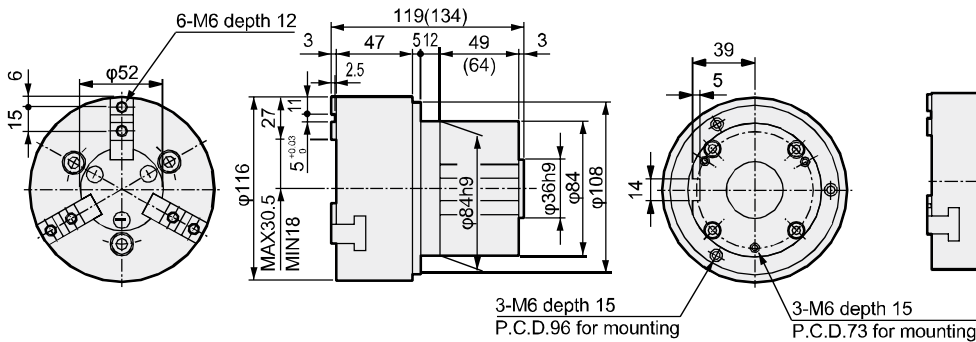
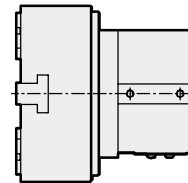
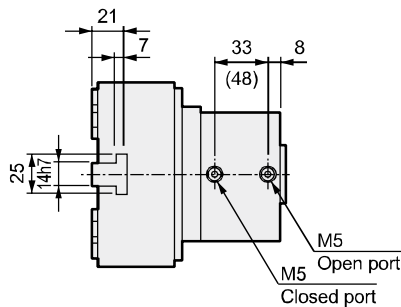
● With switch



● CKA-50CS standard/O/C

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

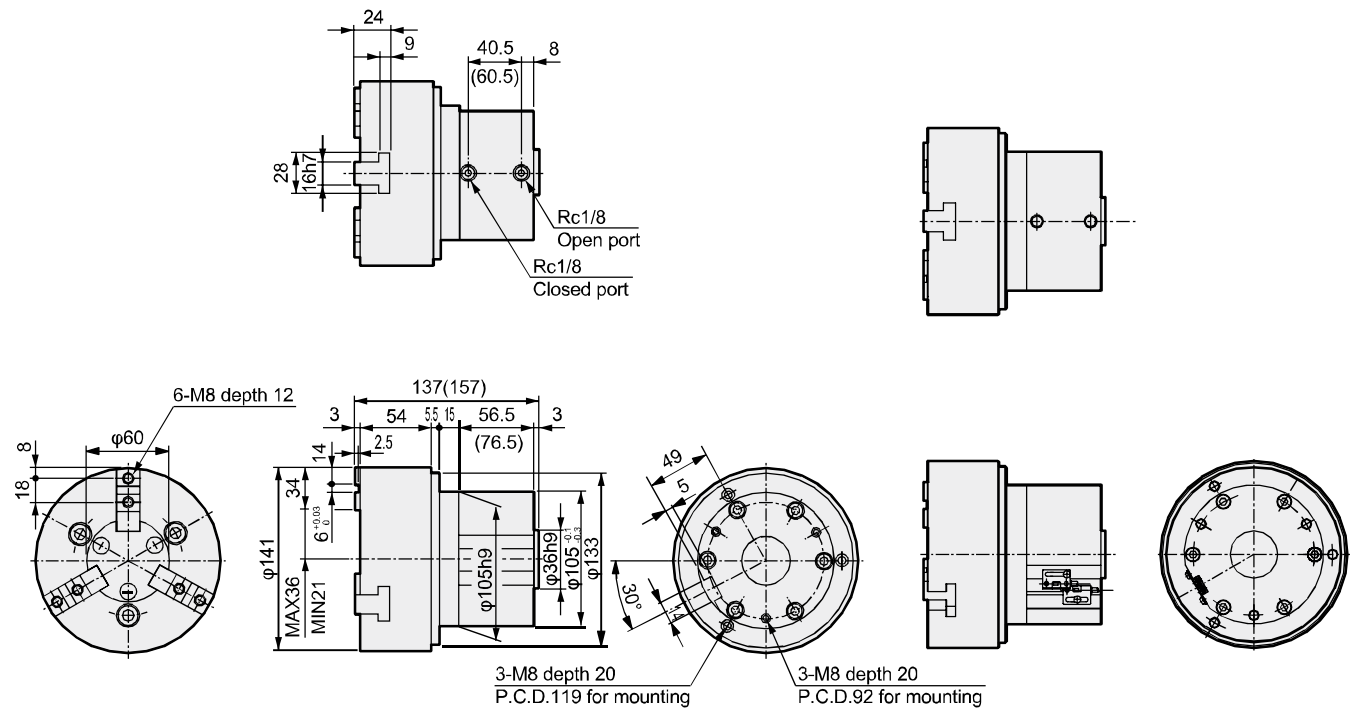
● With switch



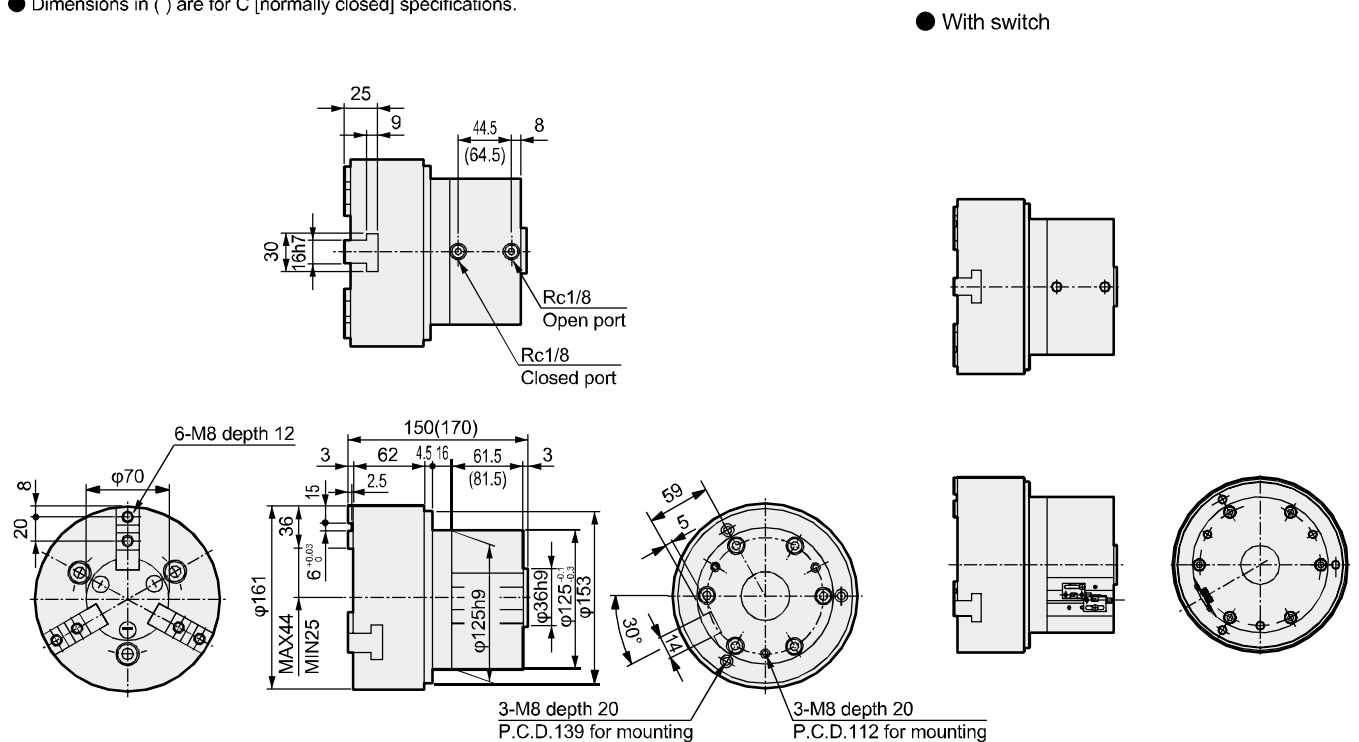
LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Dimensions

- CKA-60CS standard/O/C
- Dimensions in () are for C [normally closed] specifications.



- CKA-70CS standard/O/C
- Dimensions in () are for C [normally closed] specifications.



LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*+HC
CKH2
CKLB2
CHC



Small jaw

● Material: Iron, engineering plastic



Features

A variety of small jaws (soft jaw) is available to match user machining needs.

● Spigot section machined

Troublesome reference section (spigot section) machined.

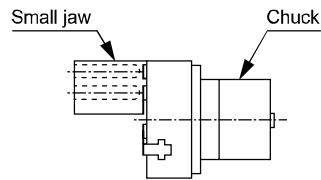
Wide series variation to select according to workpiece shape and dimension.

● 2 types of material for small jaw

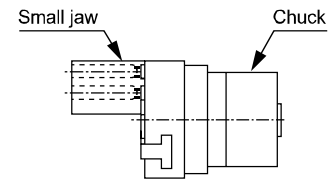
Iron (S50C) and engineering plastic (MC nylon) are available for optimum selection according to material and working condition of workpiece.

Compatible model for standard small jaw

CK type



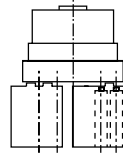
CKA/CKG type



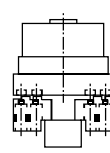
Small jaw applications

Chuck applications

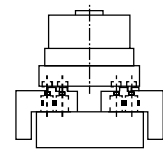
Soft jaw



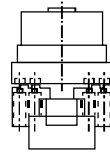
Compact workpiece



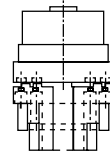
Large workpiece



For large and small workpieces



For inner tensive large and small workpieces



How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKA - **Y1** - **610**

A Model **B** Material **C** Small jaw No.

A Model		B Material		C Small jaw No.	
Code	Content	Code	Content	Code	Compatibility
CKG	3-way jaw bearing chuck	Y1	Material S50C	510	CKG-16S,CKA-15CS,CKF-15CS
CK	3-way jaw long stroke chuck	Y2	Material MC nylon	520	CKG-25S,CKA-20CS,CKF-20CS
CKA	3-way jaw thin chuck			530	CKG-32CS,CKA-25CS,CKF-25CS
CKF	Hollow chuck			540	CKG-40CS,CKA-30CS,CKF-30CS
				610	CKG-25S,CKA-20CS,CKF-20CS
				620	CKG-32CS,CKA-25CS,CKF-25CS
				630	CKG-40CS,CKA-30CS,CKF-30CS
				710	CKG-50CS,CKA-40CS,CKF-40CS
				720	CK-1CS
				730	CK-1.5CS
				740	CK-2CS
				750	CKA-50CS
				760	CKA-60CS
				770	CKA-70CS

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STR/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SrdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

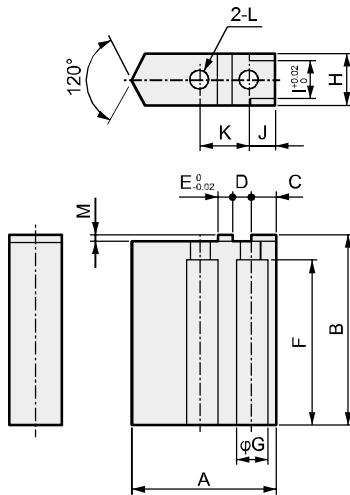
Small jaw

Dimensions

Dimensions



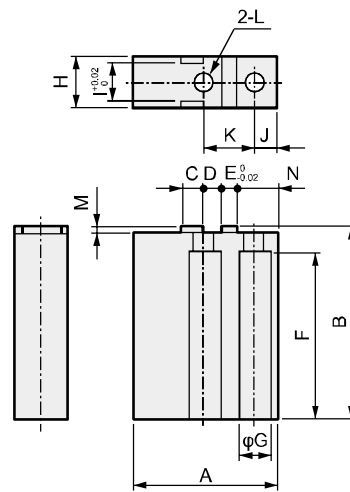
● 510 to 540



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
			Y1*1	Y2*2													
510	CKA-15CS CKG-16CS CKF-15CS		17.5	25	3.5	2.5	2	20	6	8	6	3.5	7	3.5	1	17	5
520	CKA-20CS CKG-25CS CKF-20CS		24	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	45	11
530	CKA-25CS CKG-32CS CKF-25CS		31	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	103	21
540	CKA-30CS CKG-40CS CKF-30CS		37	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	136	30

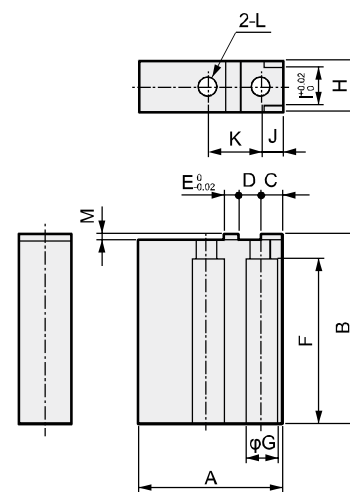
● 610 to 630



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
			Y1*1	Y2*2														
610	CKA-20CS CKG-25CS CKF-20CS		30	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	8	65	10
620	CKA-25CS CKG-32CS CKF-25CS		35	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	8	126	19
630	CKA-30CS CKG-40CS CKF-30CS		45	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	10.5	188	28

● 710 to 770



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
			Y1*1	Y2*2													
710	CKA-40CS CKG-50CS CKF-40CS		44.5	60	6	5	4	52	11	18	14	6	14	6.5	2	285	43
720	CK-1CS		33.5	50	6	5	4	43	9.5	14	10	6	14	5.5	2	128	19
730	CK-1.5CS		43.5	65	7	6.5	5	56	11	18	14	7	18	6.5	2	302	45
740	CK-2CS		55.5	80	8	7	6	71	14	19	14	8	20	8.5	2	471	70
750	CKA-50CS		51.5	70	6	5	5	58	11	18	14	6	15	6.5	2	402	62
760	CKA-60CS		64	80	8	6	6	68	14	20	16	8	18	9	2	608	94
770	CKA-70CS		74	100	8	7	6	88	14	20	16	8	20	9	2	913	140

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MecHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

Small jaw

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKL2 - Y1 - 810

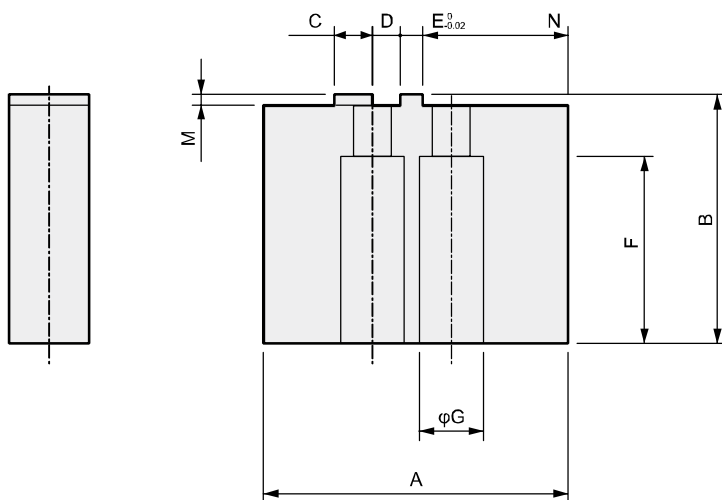
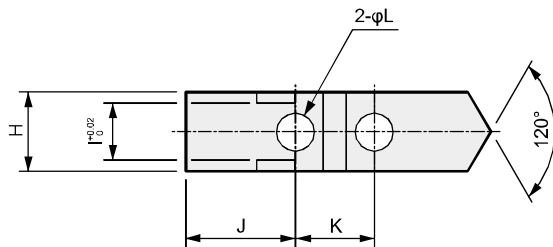
A Model

B Material

C Small jaw No.

Code	Content
A Model	
CKL2	Powerful chuck with high gripping power
CKH2	Powerful chuck with high gripping power
CKLB2	Bi-directional powerful chuck
B Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
C Small jaw No.	
810	CKLB2-20CS
820	CKLB2-25CS
830	CKL2-32CS,CKLB2-32CS
840	CKL2-40CS,CKLB2-40CS
850	CKL2-50CS,CKH2-50CS,CKLB2-50CS
860	CKL2-63CS,CKH2-63CS,CKLB2-63CS
870	CKL2-80CS,CKH2-80CS,CKLB2-80CS
880	CKL2-100CS,CKH2-100CS,CKLB2-100CS

Dimensions



Code Small jaw No.	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
															Y1	Y2
810	29.5	29	3.5	2.5	2	23	6.5	10	6	12	7	3.5	1	13	64	10
820	34.5	33.5	4.5	3.5	2	24	8	10	7	12.5	9	4.5	1.5	16.5	86	13
830	39.5	33.5	4.5	3.5	3	24	8	12	8	14	10	4.5	1.5	19	118	18
840	49.5	39	6	4.5	3	31	9	12	8	18.5	12	5.5	2	23.5	171	26
850	54.5	44	6	5	4	33	11	14	10	18.5	14	6.5	2	27	250	37
860	69.5	49	8	5.5	5	38	11	16	12	24.5	16	6.5	2	34.5	408	61
870	84.5	59	10	6	6	47	14	18	14	28	18	9	2	44.5	676	101
880	99.5	64	10	7	6	52	14	20	16	31.5	20	9	2	55	962	144

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKS - **Y1** - **910**

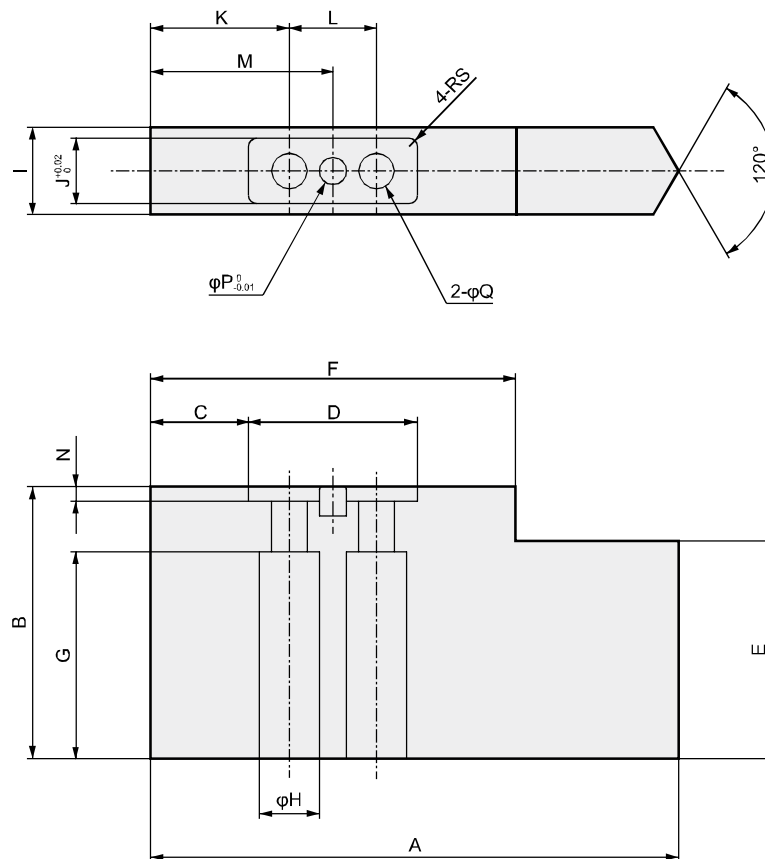
Model

A Material

B Small jaw No.

Code	Content
A Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
B Small jaw No.	
910	CKS-08CS
920	CKS-12CS
930	CKS-16CS
940	CKS-20CS
950	CKS-25CS
960	CKS-32CS

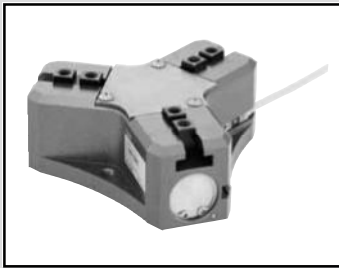
Dimensions



Code	Small jaw No. Compatible models	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	S	Weight (g)	
																			Y1	Y2
910	CKS-08CS	42.5	30	6.5	15	20	27.5	23	6.5	10	6	10.5	7	14	1.7	2	3.5	1	74	12
920	CKS-12CS	48	35	7.5	19	25	34	27	8	11	7	12.5	9	17	2.7	2	4.5	1	108	17
930	CKS-16CS	56.5	35	9.5	21	25	40.5	27	8	12	8	15	10	20	2.7	3	4.5	1	145	23
940	CKS-20CS	66.5	40	11	25	30	48	32	9.5	12	8	17.5	12	23.5	2.7	3	5.5	1.5	192	31
950	CKS-25CS	85.5	45	16	28	35	60	33	11	14	10	23	14	30	2.7	4	6.5	1.5	335	53
960	CKS-32CS	97	50	18	31	40	67	38	11	16	12	25.5	16	33.5	2.7	5	6.5	1.5	500	79

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
Mec/Hnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC



Thin chuck
CKS Series

● Operating stroke length: 10, 12, 16, 20, 28, 32mm
Double acting



Specifications

Descriptions		CKS					
Size		08CS	12CS	16CS	20CS	25CS	32CS
Actuation		Double acting					
Working fluid		Compressed air					
Max. working pressure MPa		0.7 (≈100 psi, 7 bar)					
Min. working pressure MPa		0.2 (≈29 psi, 2 bar)					
Ambient temperature °C		5 (41°F) to 60 (140°F)					
Port size		M5					
Operating stroke length mm		10	12	16	20	28	32
Bore size	Open direction	φ6×3	φ10×3	φ12×3	φ16×3	φ20×3	φ25×3
	Closed direction	φ8×3	φ12×3	φ16×3	φ20×3	φ25×3	φ32×3
Volumetric capacity (reciprocating) cm ³		1.2	3.5	7.6	15.5	33.8	62.2
Repeatability mm		±0.01					
Weight kg		0.16	0.26	0.40	0.63	1.14	1.8
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)

CKS - **16CS** - **Y1**

With switch (built-in magnet for switch)

CKS - **16CS** - **Y1** - **T2H** - **R**

Model No.

A Size

B Option
*1

C Switch model No.

* indicates the lead wire length.

D Switch quantity

Code	Content					
A Size						
08CS						
12CS						
16CS						
20CS						
25CS						
32CS						
B Option						
Blank	Standard (double acting)					
W	With spring					
Y1	With small jaw Material: S50C					
Y2	With small jaw Material: MC nylon					
C Switch model No.						
Axial lead wire	Radial lead wire	Contact	Voltage		Display	Lead wire
			AC	DC		
T2H*	T2V*	Proximity		●	1-color display	2-wire
T3H*	T3V*			●		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.

[Example of model No.]

CKS-16CS-Y1-T2H-R

Thin chuck

- A** Size : 16CS
- B** Option : With small jaw Material S50C
- C** Switch model No. : Proximity T2H switch, lead wire 1 m
- D** Switch quantity : 1 on open side

How to order switch

SW - **T2H***

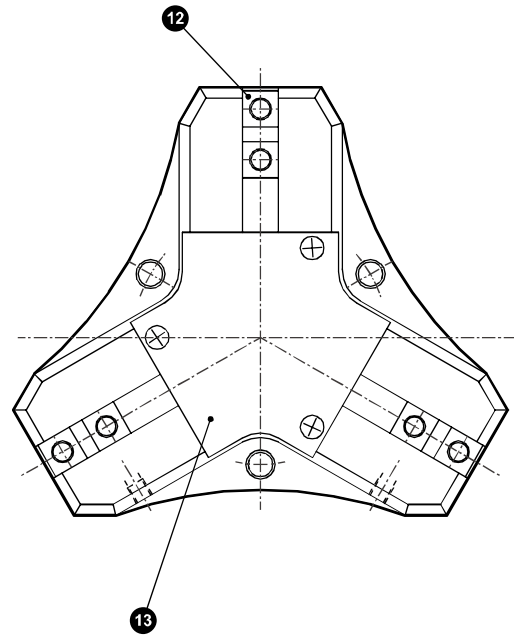
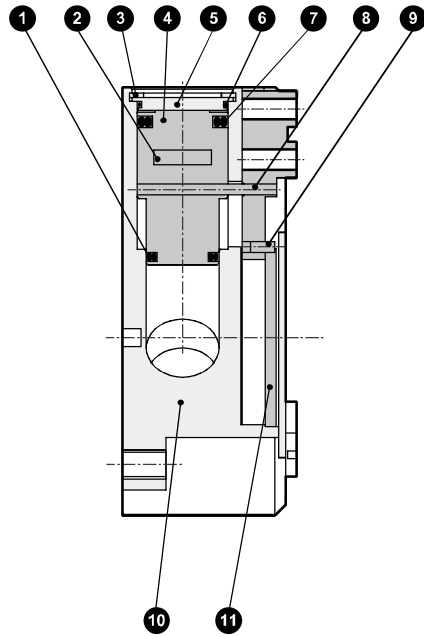
Switch model No.
(Item **C** above)

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
Chuck
MecHnd/Chuck
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*+HC
CKH2
CKLB2
CHC

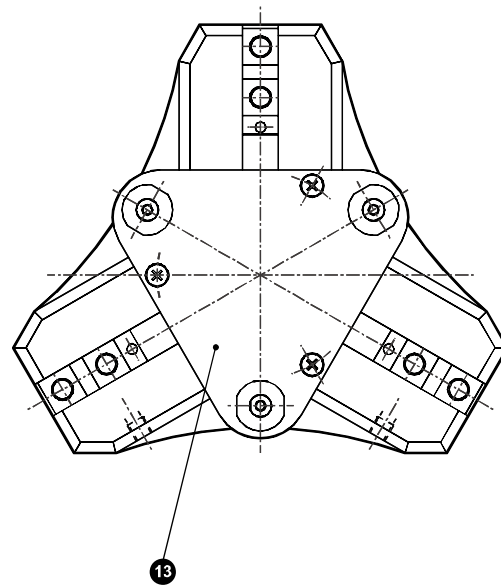
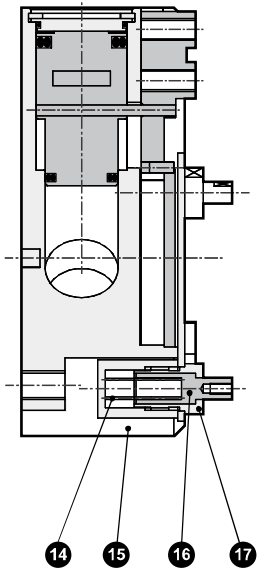
Internal structure and parts list

LCW
LCR
LCG
LCX
LCM
STM
STG
ST5/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

● CKS standard



● W (with spring)



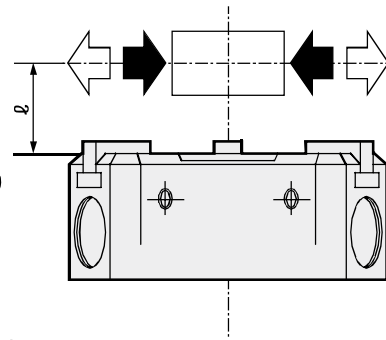
Cannot be disassembled

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Piston seal B	Nitrile rubber		10	Body	Aluminum alloy	
2	Magnet			11	Link	Steel	
3	C type snap ring	Stainless steel		12	Master key	Steel	
4	Piston	Aluminum alloy		13	Center guard	Stainless steel	
5	Cylinder guard	Aluminum alloy		14	Spring	Steel	
6	Cylinder sealant	Nitrile rubber		15	Case	Stainless steel	
7	Piston seal A	Nitrile rubber		16	Pin	Stainless steel	
8	Operation shaft A	Alloy steel		17	Nut	Stainless steel	
9	Operation shaft B	Alloy steel					

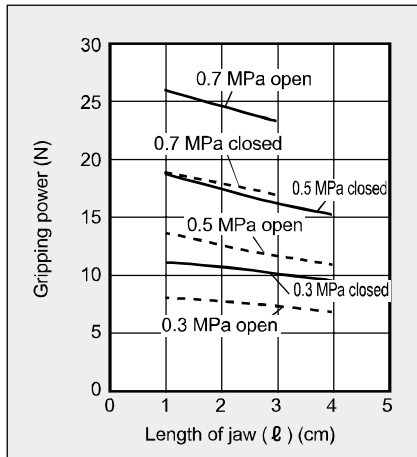
Gripping power performance data

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.

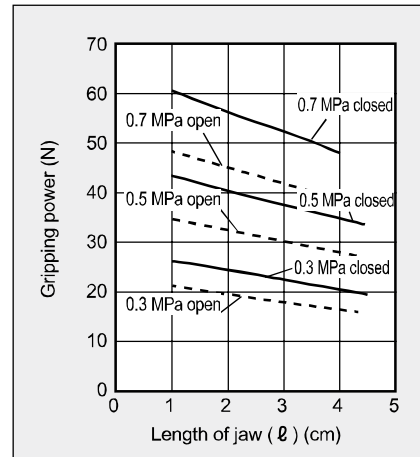
- Open direction (←) ----- (shown with broken line)
- Closed direction (→) _____ (shown with continuous line)



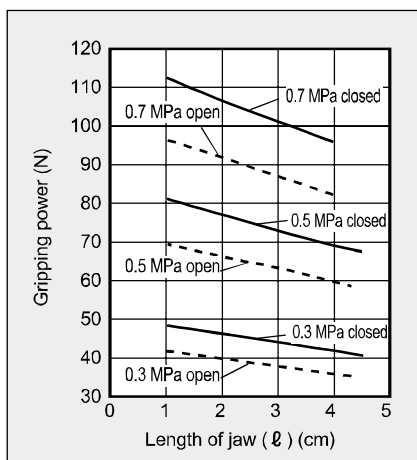
● CKS-08CS



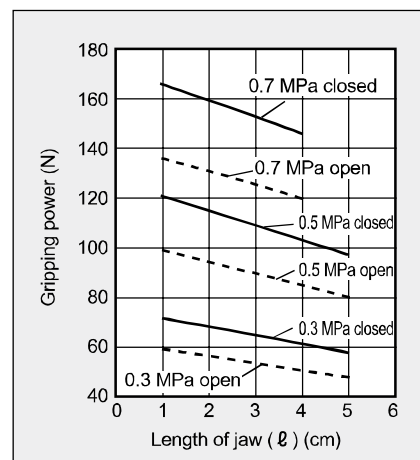
● CKS-12CS



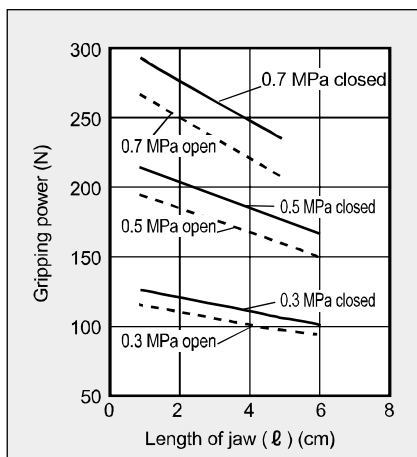
● CKS-16CS



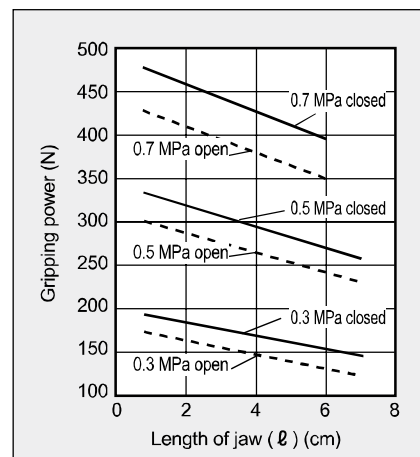
● CKS-20CS



● CKS-25CS



● CKS-32CS



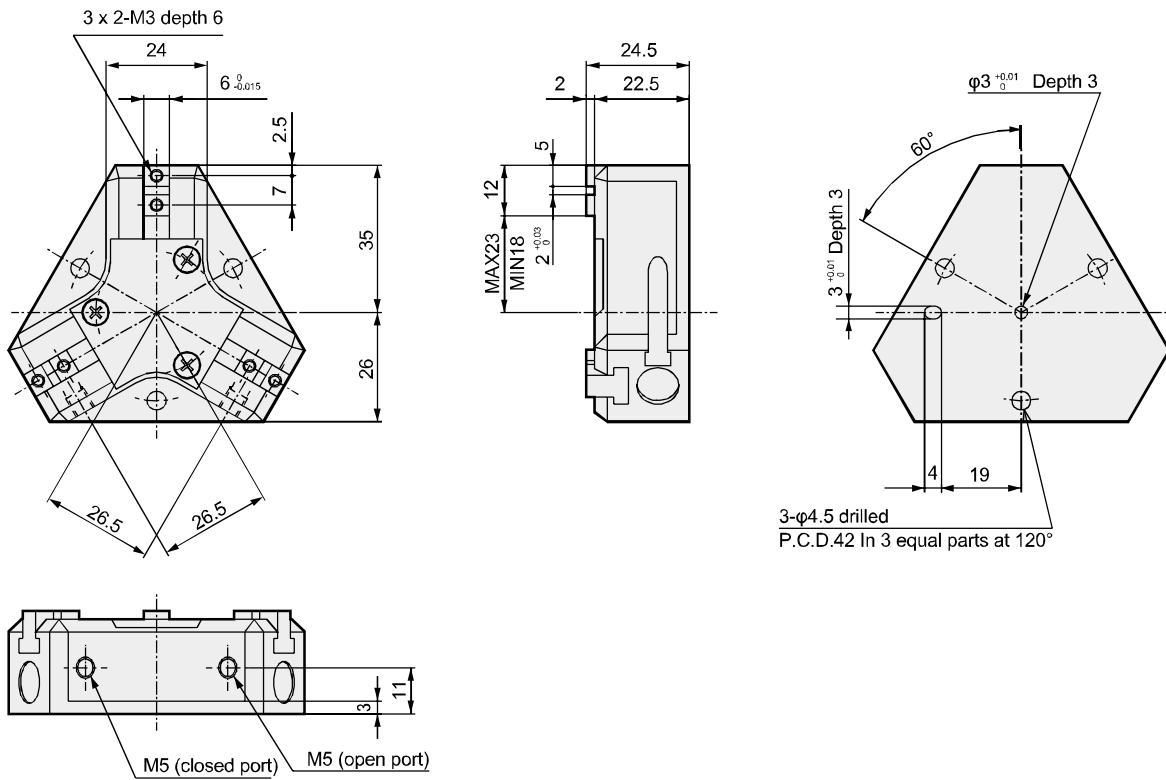
(Note) When making a selection, read the precautions for design and selection on page 1722.

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MechHand/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Dimensions

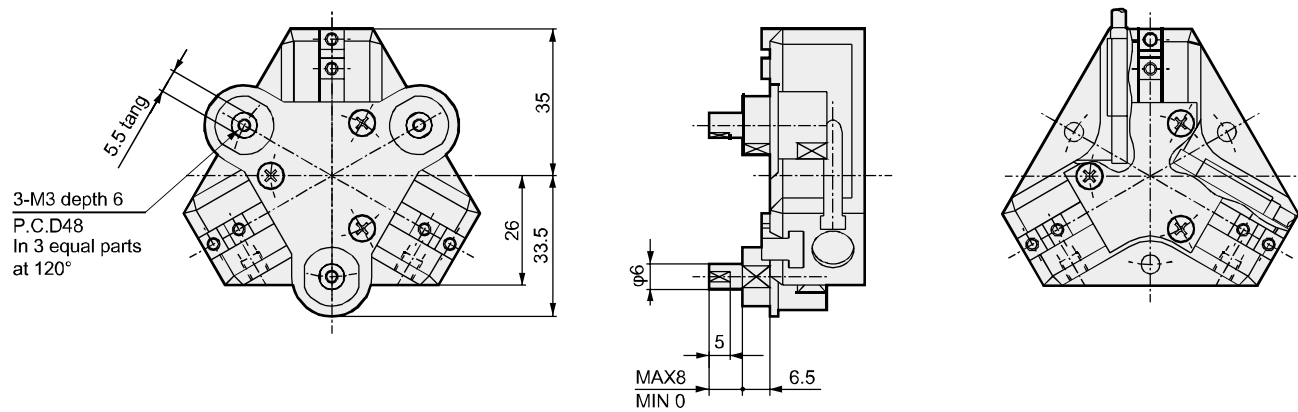


● CKS-08CS standard



● CKS-08CS-W (with spring) (spring force (3 pcs.) 2.1 to 4.8N)

● With switch

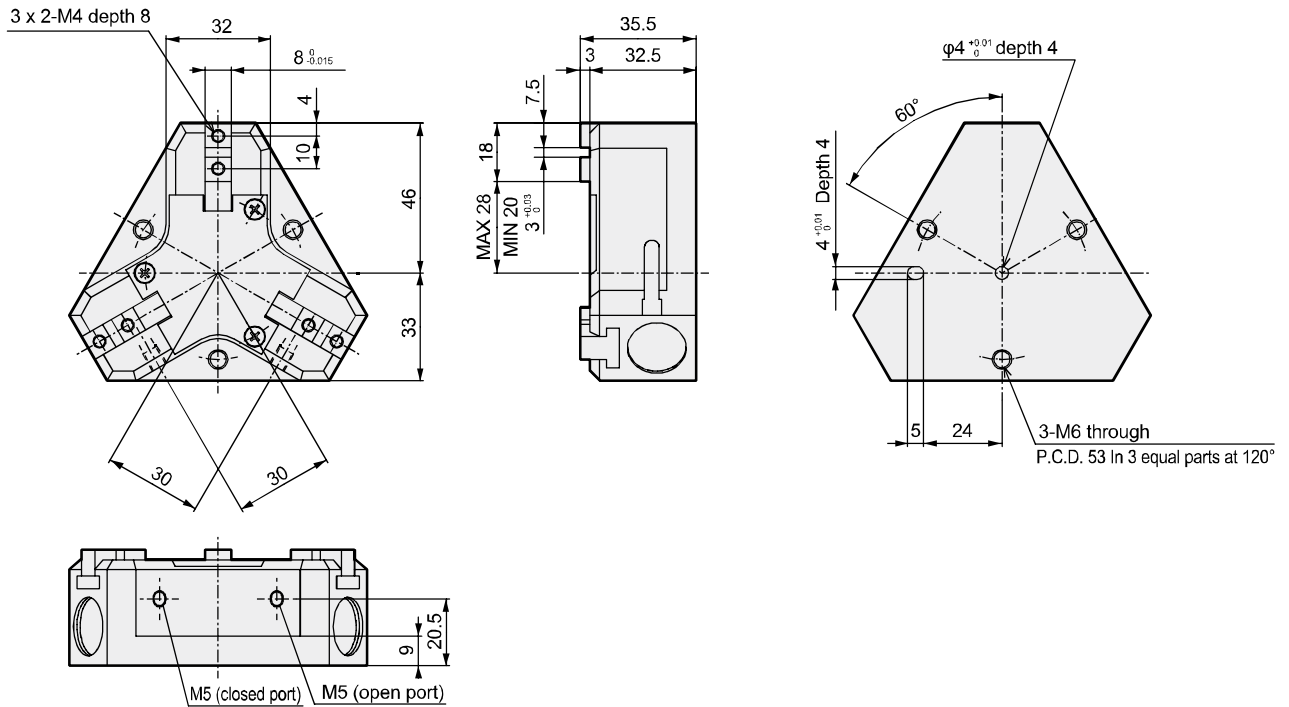


LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuk
Mec/Hnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Dimensions

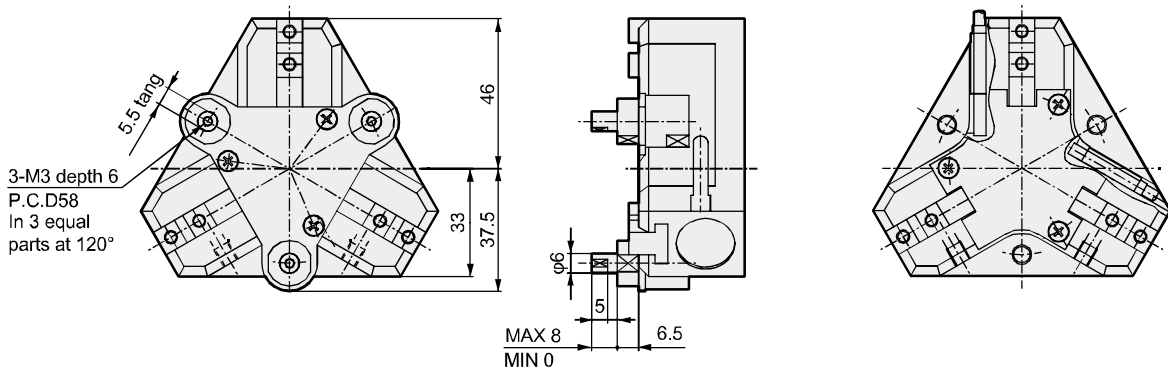


● CKS-16CS standard



● CKS-16CS-W (with spring) (spring force (3 pcs.) 7.2 to 19N)

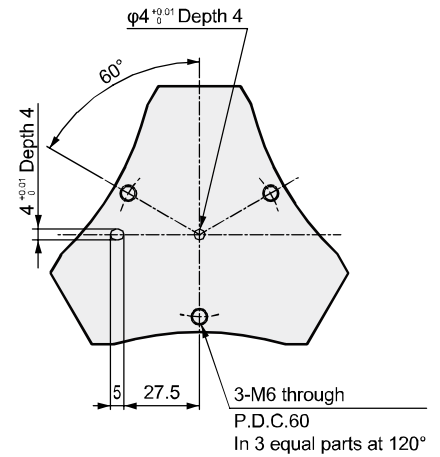
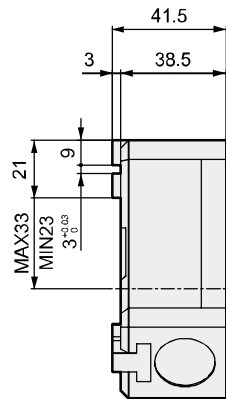
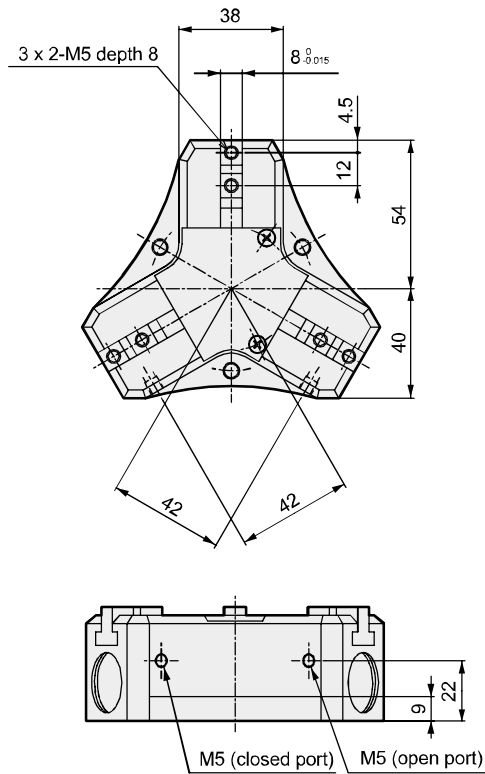
● With switch



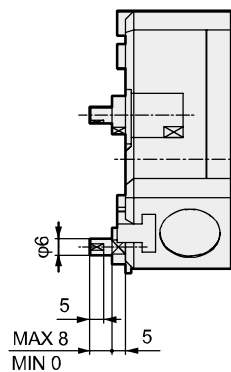
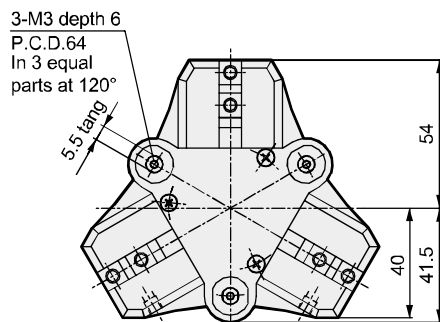
LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuk
Mec/Hnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Dimensions

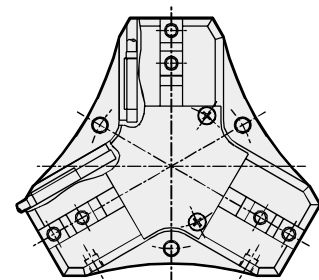
- CKS-20CS standard



- CKS-20CS-W (with spring) (spring force (3 pcs.) 7.5 to 28N)



- With switch

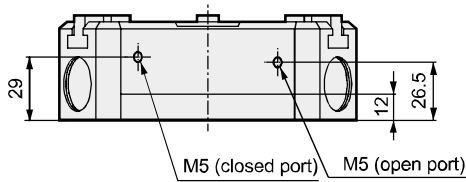
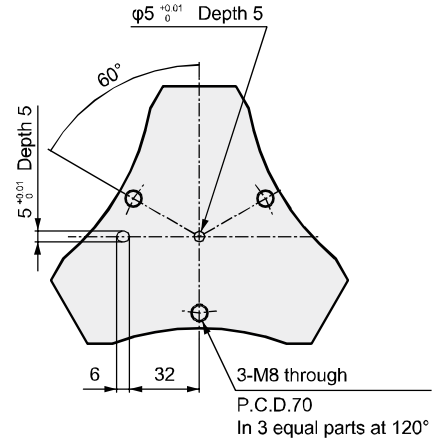
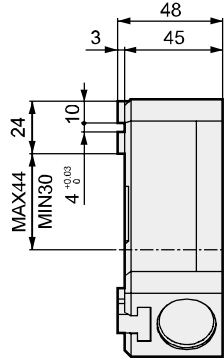
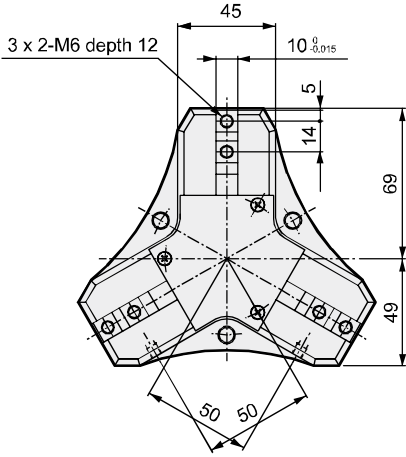


LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuck
MechHnd/Chuck
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Dimensions

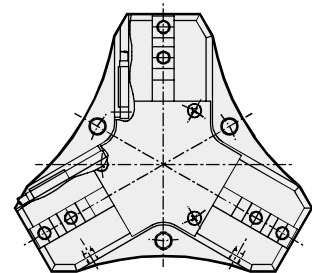
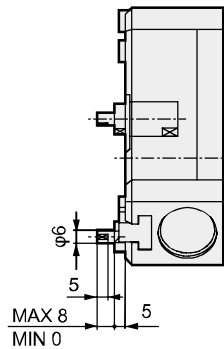
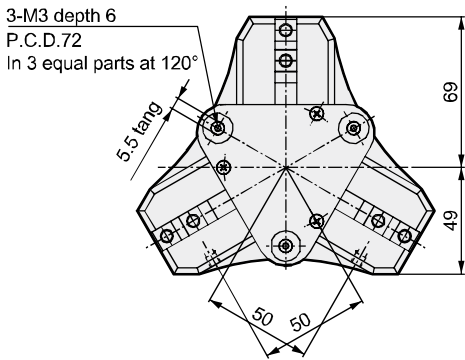


● CKS-25CS standard



● CKS-25CS-W (with spring) (spring force (3 pcs.) 15 to 39 N)

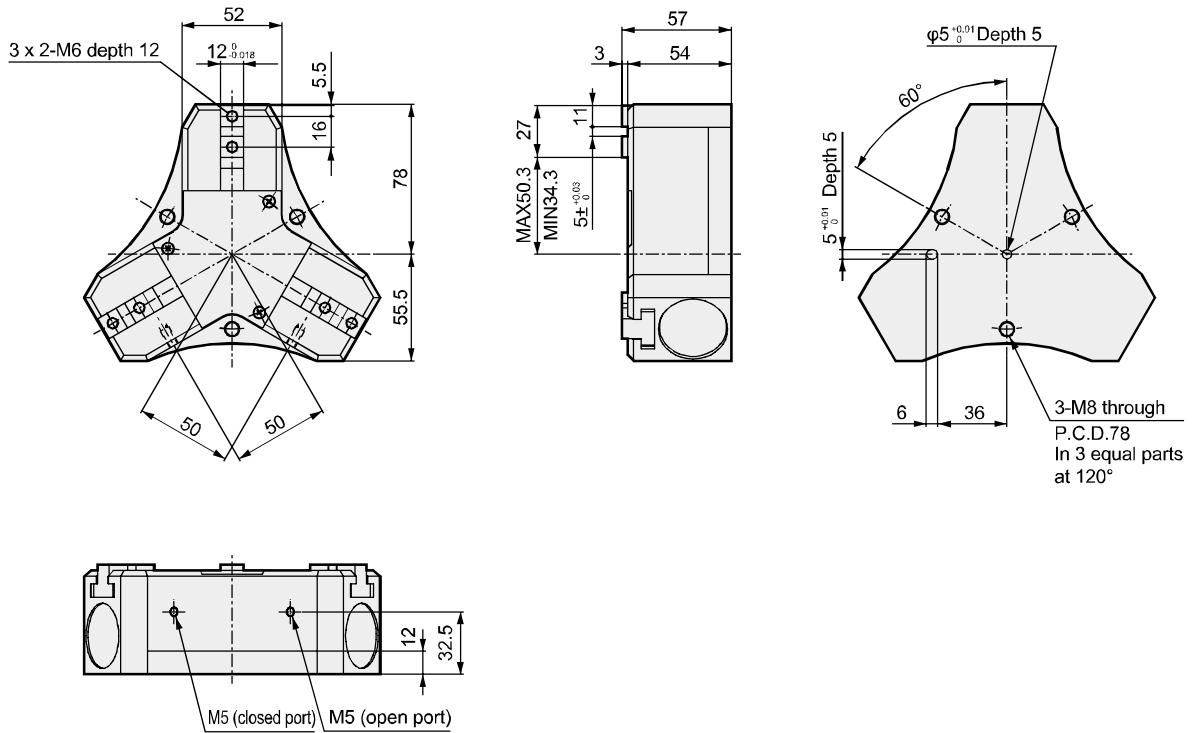
● With switch



LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
Mec:Hnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

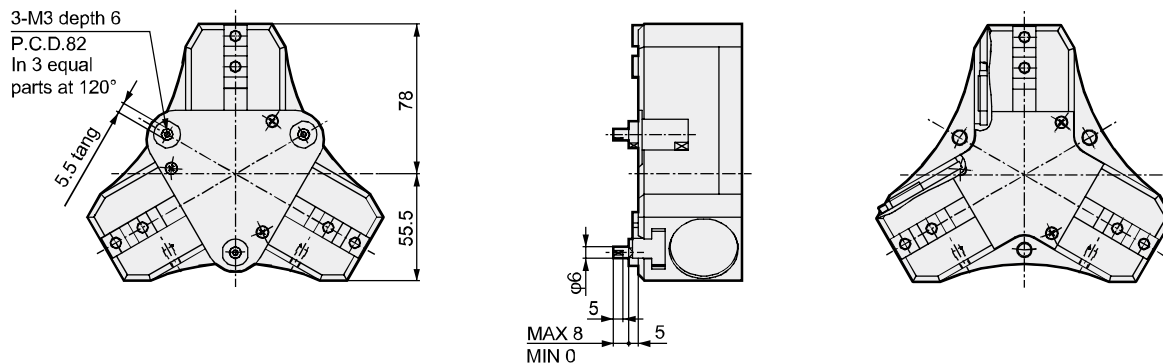
Dimensions

- CKS-32CS standard



- CKS-32CS-W (with spring) (spring force (3 pcs.) 26 to 67 N)

- With switch



LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC



Small jaw

● Material: Iron, engineering plastic



Features

A variety of small jaws (soft jaw) is available to match user machining needs.

● Spigot section machined

Troublesome reference section (spigot section) machined.

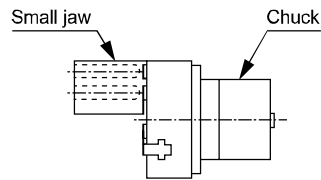
Wide series variation to select according to workpiece shape and dimension.

● 2 types of material for small jaw

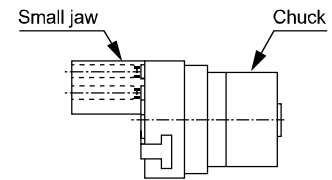
Iron (S50C) and engineering plastic (MC nylon) are available for optimum selection according to material and working condition of workpiece.

Compatible model for standard small jaw

CK type



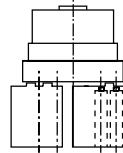
CKA/CKG type



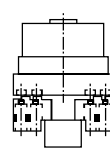
Small jaw applications

Chuck applications

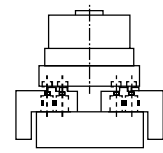
Soft jaw



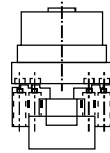
Compact workpiece



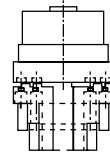
Large workpiece



For large and small workpieces



For inner tensive large and small workpieces



How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKA - **Y1** - **610**

A Model **B** Material **C** Small jaw No.

A Model		B Material		C Small jaw No.	
Code	Content	Code	Content	Code	Compatibility
CKG	3-way jaw bearing chuck	Y1	Material S50C	510	CKG-16S,CKA-15CS,CKF-15CS
CK	3-way jaw long stroke chuck	Y2	Material MC nylon	520	CKG-25S,CKA-20CS,CKF-20CS
CKA	3-way jaw thin chuck			530	CKG-32CS,CKA-25CS,CKF-25CS
CKF	Hollow chuck			540	CKG-40CS,CKA-30CS,CKF-30CS
				610	CKG-25S,CKA-20CS,CKF-20CS
				620	CKG-32CS,CKA-25CS,CKF-25CS
				630	CKG-40CS,CKA-30CS,CKF-30CS
				710	CKG-50CS,CKA-40CS,CKF-40CS
				720	CK-1CS
				730	CK-1.5CS
				740	CK-2CS
				750	CKA-50CS
				760	CKA-60CS
				770	CKA-70CS

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STR/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SrdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

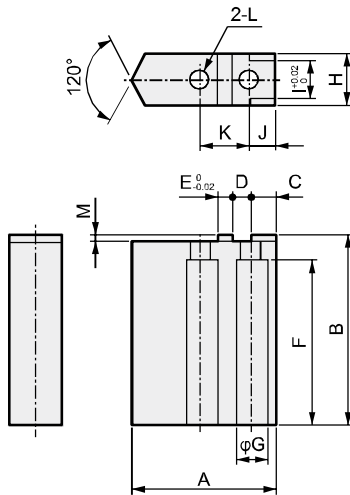
Small jaw

Dimensions

Dimensions



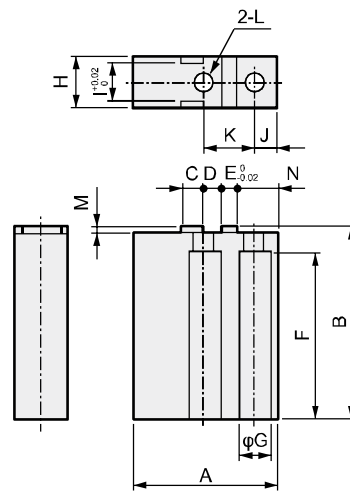
● 510 to 540



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
			Y1*1	Y2*2													
510	CKA-15CS CKG-16CS CKF-15CS		17.5	25	3.5	2.5	2	20	6	8	6	3.5	7	3.5	1	17	5
520	CKA-20CS CKG-25CS CKF-20CS		24	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	45	11
530	CKA-25CS CKG-32CS CKF-25CS		31	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	103	21
540	CKA-30CS CKG-40CS CKF-30CS		37	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	136	30

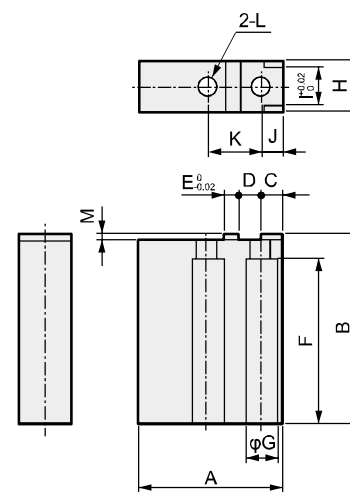
● 610 to 630



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
			Y1*1	Y2*2														
610	CKA-20CS CKG-25CS CKF-20CS		30	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	8	65	10
620	CKA-25CS CKG-32CS CKF-25CS		35	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	8	126	19
630	CKA-30CS CKG-40CS CKF-30CS		45	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	10.5	188	28

● 710 to 770



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
			Y1*1	Y2*2													
710	CKA-40CS CKG-50CS CKF-40CS		44.5	60	6	5	4	52	11	18	14	6	14	6.5	2	285	43
720	CK-1CS		33.5	50	6	5	4	43	9.5	14	10	6	14	5.5	2	128	19
730	CK-1.5CS		43.5	65	7	6.5	5	56	11	18	14	7	18	6.5	2	302	45
740	CK-2CS		55.5	80	8	7	6	71	14	19	14	8	20	8.5	2	471	70
750	CKA-50CS		51.5	70	6	5	5	58	11	18	14	6	15	6.5	2	402	62
760	CKA-60CS		64	80	8	6	6	68	14	20	16	8	18	9	2	608	94
770	CKA-70CS		74	100	8	7	6	88	14	20	16	8	20	9	2	913	140

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

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

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKS - **Y1** - **910**

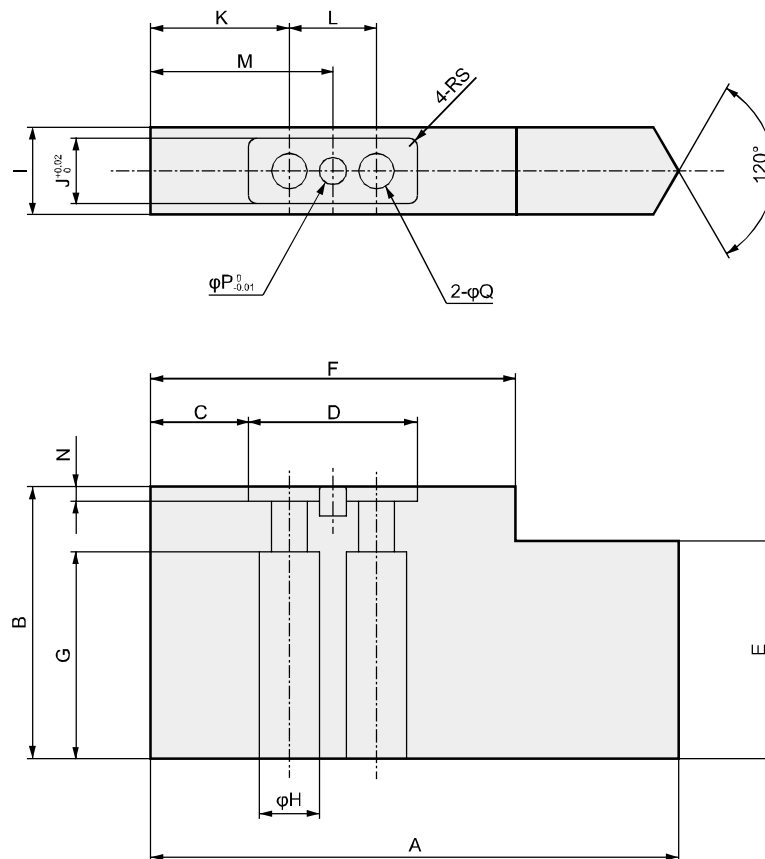
Model

A Material

B Small jaw No.

Code	Content
A Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
B Small jaw No.	
910	CKS-08CS
920	CKS-12CS
930	CKS-16CS
940	CKS-20CS
950	CKS-25CS
960	CKS-32CS

Dimensions



Code		A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	S	Weight (g)	
Small jaw No.	Compatible models																		Y1	Y2
910	CKS-08CS	42.5	30	6.5	15	20	27.5	23	6.5	10	6	10.5	7	14	1.7	2	3.5	1	74	12
920	CKS-12CS	48	35	7.5	19	25	34	27	8	11	7	12.5	9	17	2.7	2	4.5	1	108	17
930	CKS-16CS	56.5	35	9.5	21	25	40.5	27	8	12	8	15	10	20	2.7	3	4.5	1	145	23
940	CKS-20CS	66.5	40	11	25	30	48	32	9.5	12	8	17.5	12	23.5	2.7	3	5.5	1.5	192	31
950	CKS-25CS	85.5	45	16	28	35	60	33	11	14	10	23	14	30	2.7	4	6.5	1.5	335	53
960	CKS-32CS	97	50	18	31	40	67	38	11	16	12	25.5	16	33.5	2.7	5	6.5	1.5	500	79

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Small jaw

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKL2 - Y1 - 810

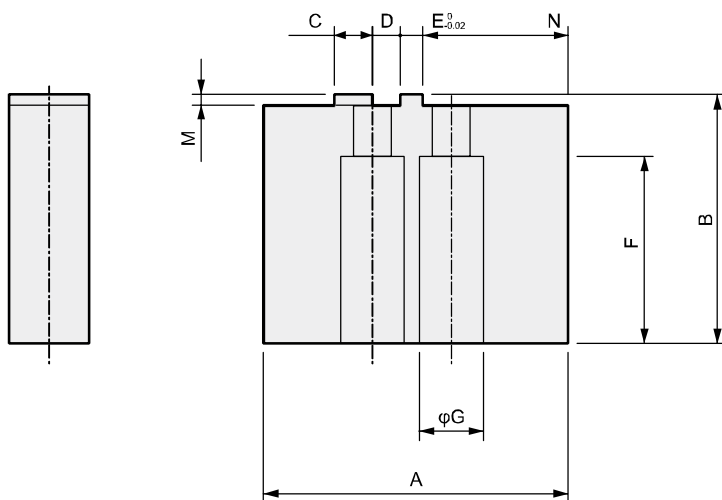
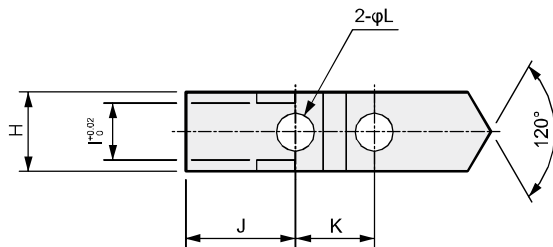
A Model

B Material

C Small jaw No.

Code	Content
A Model	
CKL2	Powerful chuck with high gripping power
CKH2	Powerful chuck with high gripping power
CKLB2	Bi-directional powerful chuck
B Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
C Small jaw No.	
810	CKLB2-20CS
820	CKLB2-25CS
830	CKL2-32CS,CKLB2-32CS
840	CKL2-40CS,CKLB2-40CS
850	CKL2-50CS,CKH2-50CS,CKLB2-50CS
860	CKL2-63CS,CKH2-63CS,CKLB2-63CS
870	CKL2-80CS,CKH2-80CS,CKLB2-80CS
880	CKL2-100CS,CKH2-100CS,CKLB2-100CS

Dimensions



Code Small jaw No.	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
															Y1	Y2
810	29.5	29	3.5	2.5	2	23	6.5	10	6	12	7	3.5	1	13	64	10
820	34.5	33.5	4.5	3.5	2	24	8	10	7	12.5	9	4.5	1.5	16.5	86	13
830	39.5	33.5	4.5	3.5	3	24	8	12	8	14	10	4.5	1.5	19	118	18
840	49.5	39	6	4.5	3	31	9	12	8	18.5	12	5.5	2	23.5	171	26
850	54.5	44	6	5	4	33	11	14	10	18.5	14	6.5	2	27	250	37
860	69.5	49	8	5.5	5	38	11	16	12	24.5	16	6.5	2	34.5	408	61
870	84.5	59	10	6	6	47	14	18	14	28	18	9	2	44.5	676	101
880	99.5	64	10	7	6	52	14	20	16	31.5	20	9	2	55	962	144



Hollow chuck Double acting/single acting

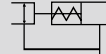
CKF Series

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

Double acting

Single acting (normally open)

Single acting (normally closed)



Specifications

Descriptions	CKF				
	15CS	20CS	25CS	30CS	40CS
Size	15CS	20CS	25CS	30CS	40CS
Bore size mm	φ30	φ40		φ50	φ80
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	φ16	φ24		φ28	φ34
Volumetric capacity (reciprocating) cm ³	2.5	5.2	7.3	13.3	73.2
Hollow diameter mm	φ5.5	φ8.4	φ10.4	φ12	φ16
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

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 *3	

*1 : The above max. load current is the value at 25°C. If the operating ambient temperature around switch is higher than 25°C, 5 to 10 mA at 60°C for T2 type, with 5 to 15 mA at 60°C for S2 type.

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

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

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF**
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

How to order

Without switch (built-in magnet for switch)

CKF - **15CS** - **O**

With switch (built-in magnet for switch)

CKF - **15CS** - **O** - **T2H** - **R**

A Size

B Option
*1, *2

C Switch model No.
*3

D Switch quantity

⚠ Precautions for model No. selection

*1 : Y11 and Y21 are available for CKF-15CS, while Y11, Y12, Y21 and Y22 are available for CKF-20 to 30CS, and Y11 and Y21 are available for CKF-40CS.

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

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

[Example of model No.]

CKF-15CS-O-T2H-R

Model: Hollow chuck

A Size : 15CS

B Option : Single acting, normally open

C Switch model No. : Proximity T2H switch, lead wire 1 m

D Switch quantity : 1 on open side

How to order switch

SW - **T2H**

Switch model No.
(Item © above)

CKF-30CS, 40CS

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

CKF - **T2H**

Switch model No.
(Item © above)

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

CKF - **T2V** - *

Switch model No.
(Item © above)

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

CKF-30CS, 40CS

- Mounting bracket set

CKF - **T**

- Mounting bracket set

CKF - **TV** - *

Code	Content					
A Size						
15CS						
20CS						
25CS						
30CS						
40CS						
B Option						
Blank	Standard (double acting)					
O	Single acting (normally open)					
C	Single acting (normally closed)					
Y11	With small jaw (Material S50C) Outer mount chuck (small jaw No.: 510 to 540, 710)					
Y12	With small jaw (Material S50C) Inner mount chuck (small jaw No.: 610 to 630)					
Y21	With small jaw (Material MC nylon) Outer mount chuck (small jaw No.: 510 to 540, 710)					
Y22	With small jaw (Material MC nylon) Inner mount chuck (small jaw 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 display	2-wire
T3H*	T3V*			●		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					

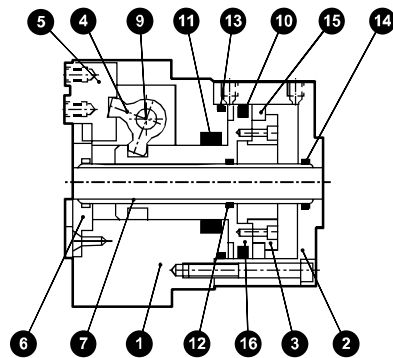
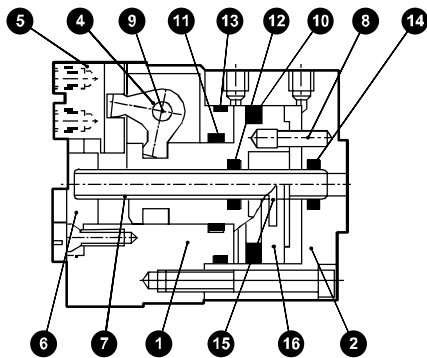
LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuk
Mech/Hand/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

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.

Internal structure and parts list

● CKF-15CS to 25CS

● CKF-30CS to 40CS



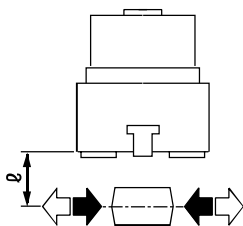
Cannot be disassembled

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	Master key	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	

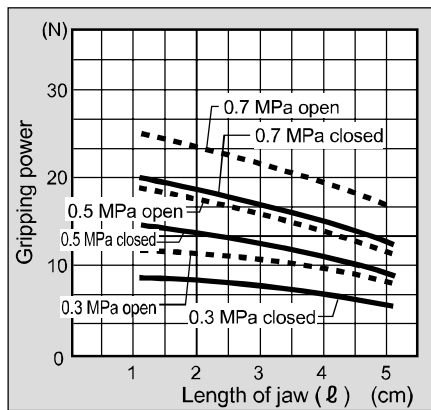
Gripping power performance data

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.

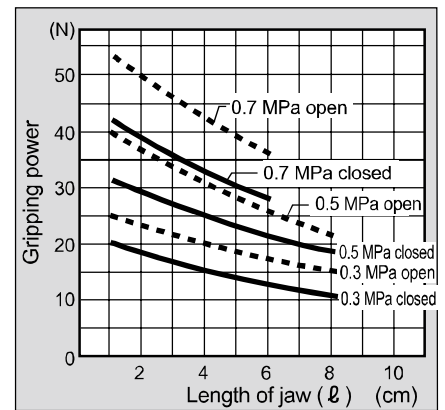
- Open direction (←)..... (shown with broken line)
- Closed direction (→)..... (shown with continuous line)



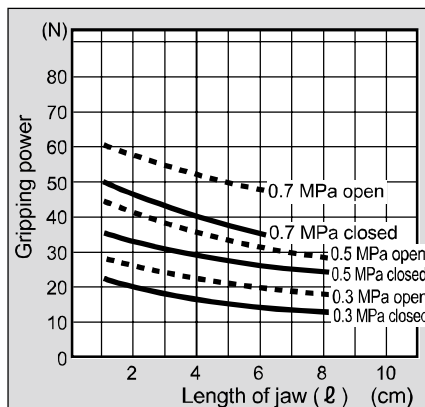
● CKF-15CS



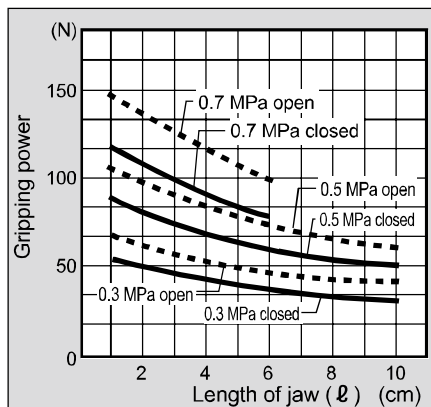
● CKF-20CS



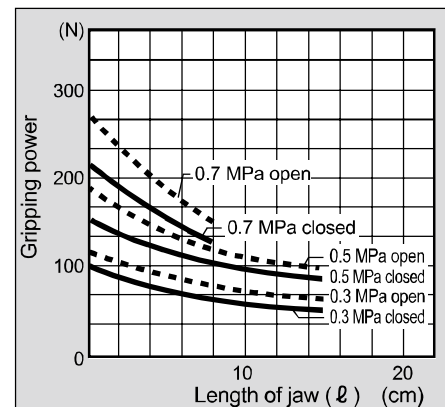
● CKF-25CS



● CKF-30CS



● CKF-40CS



(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.

Dimensions

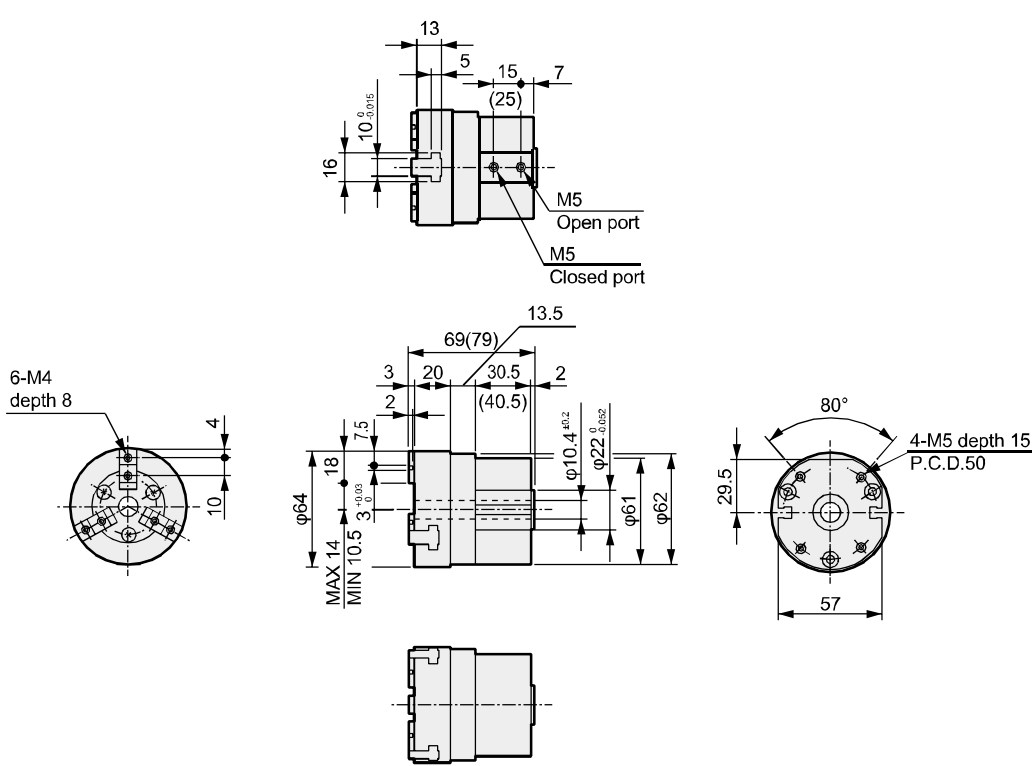


LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuk
MecHnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

● CKF-25CS standard/O/C

● With switch

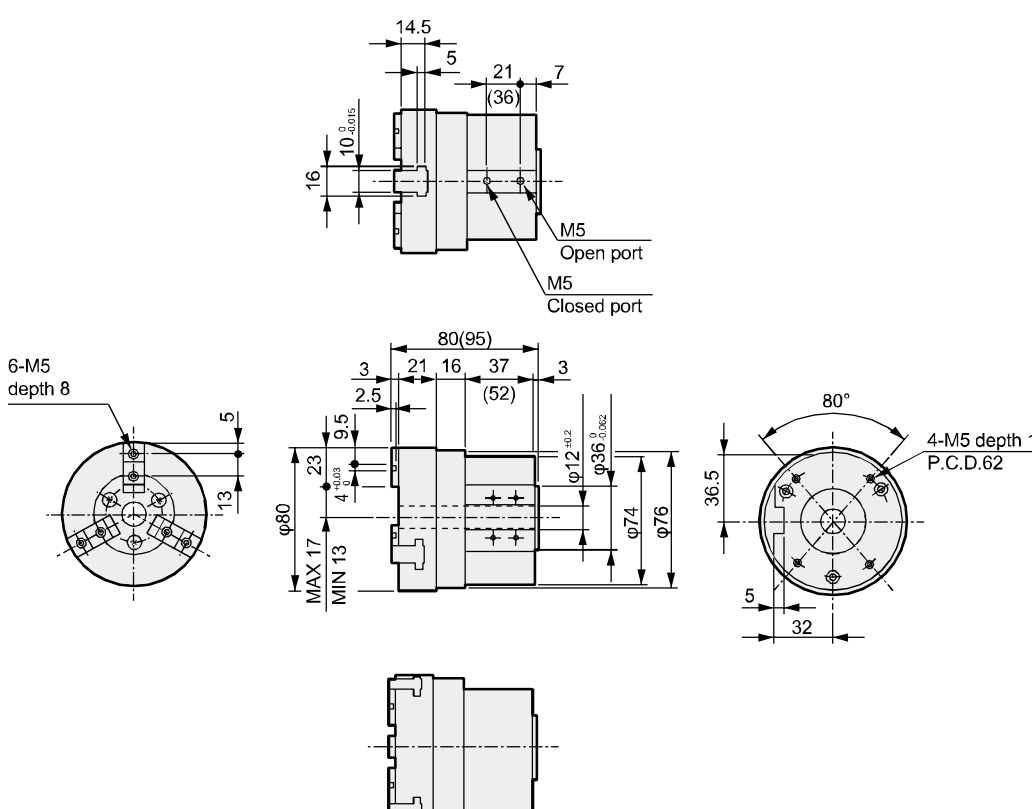
· Dimensions in () are for O [normally open] and C [normally closed] specifications.



● CKF-30CS standard/O/C

● With switch

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

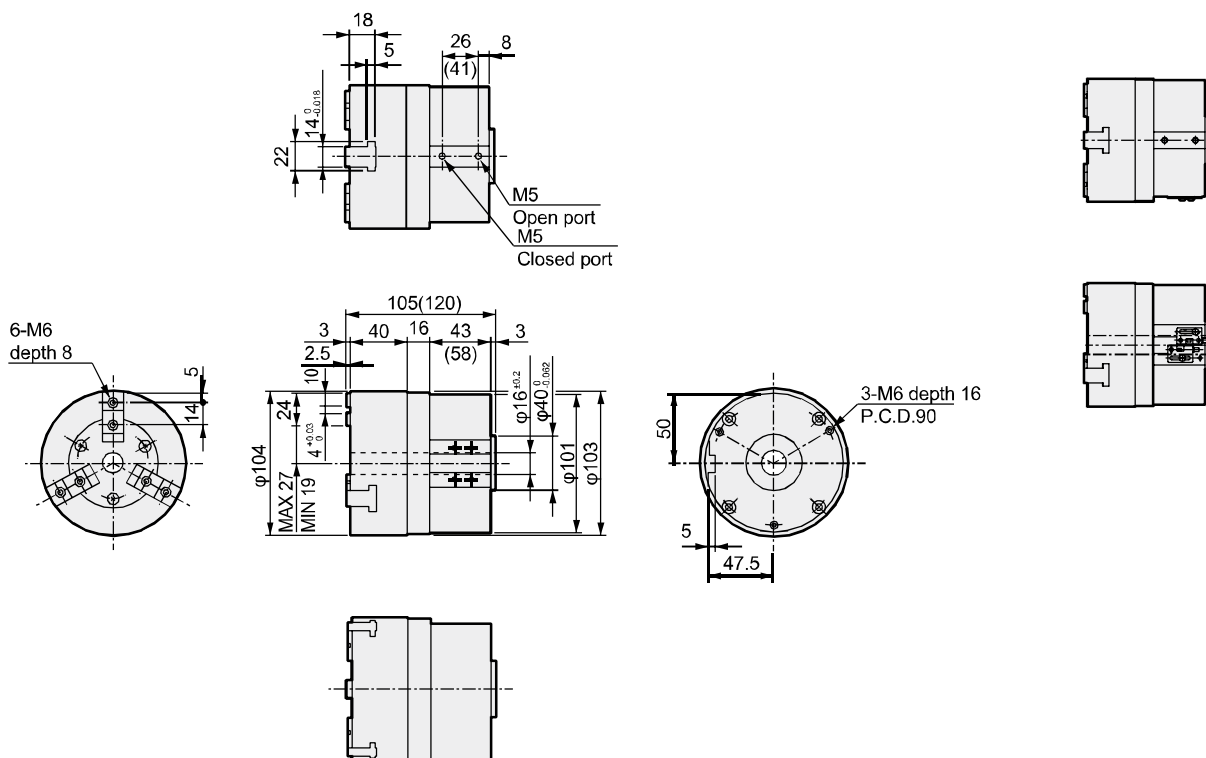


Dimensions

● CKF-40CS standard/O/C

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

● With switch



LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
Chuck
MecHnd/Chuck
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*+HC
CKH2
CKLB2
CHC



Small jaw

● Material: Iron, engineering plastic



Features

A variety of small jaws (soft jaw) is available to match user machining needs.

● Spigot section machined

Troublesome reference section (spigot section) machined.

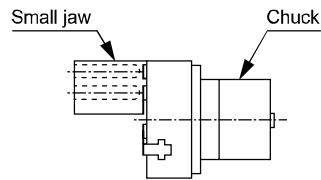
Wide series variation to select according to workpiece shape and dimension.

● 2 types of material for small jaw

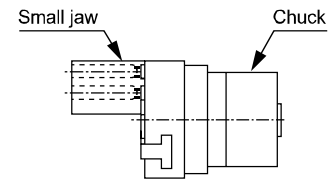
Iron (S50C) and engineering plastic (MC nylon) are available for optimum selection according to material and working condition of workpiece.

Compatible model for standard small jaw

CK type



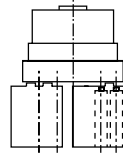
CKA/CKG type



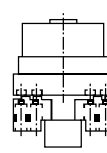
Small jaw applications

Chuck applications

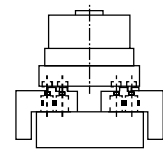
Soft jaw



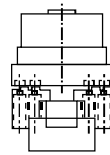
Compact workpiece



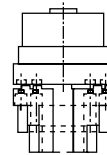
Large workpiece



For large and small workpieces



For inner tensive large and small workpieces



How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKA - **Y1** - **610**

A Model **B** Material **C** Small jaw No.

A Model		B Material		C Small jaw No.	
Code	Content	Code	Content	Code	Compatibility
CKG	3-way jaw bearing chuck	Y1	Material S50C	510	CKG-16S,CKA-15CS,CKF-15CS
CK	3-way jaw long stroke chuck	Y2	Material MC nylon	520	CKG-25S,CKA-20CS,CKF-20CS
CKA	3-way jaw thin chuck			530	CKG-32CS,CKA-25CS,CKF-25CS
CKF	Hollow chuck			540	CKG-40CS,CKA-30CS,CKF-30CS
				610	CKG-25S,CKA-20CS,CKF-20CS
				620	CKG-32CS,CKA-25CS,CKF-25CS
				630	CKG-40CS,CKA-30CS,CKF-30CS
				710	CKG-50CS,CKA-40CS,CKF-40CS
				720	CK-1CS
				730	CK-1.5CS
				740	CK-2CS
				750	CKA-50CS
				760	CKA-60CS
				770	CKA-70CS

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STR/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SrdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

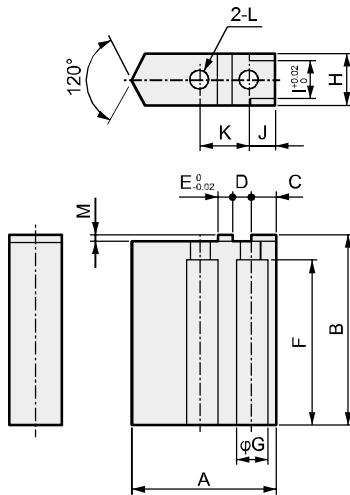
Small jaw

Dimensions

Dimensions



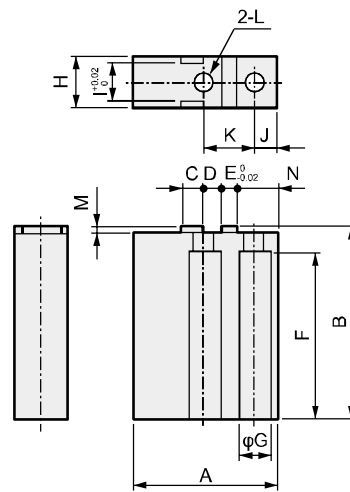
● 510 to 540



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
																Y1*1	Y2*2
510	CKA-15CS CKG-16CS CKF-15CS		17.5	25	3.5	2.5	2	20	6	8	6	3.5	7	3.5	1	17	5
520	CKA-20CS CKG-25CS CKF-20CS		24	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	45	11
530	CKA-25CS CKG-32CS CKF-25CS		31	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	103	21
540	CKA-30CS CKG-40CS CKF-30CS		37	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	136	30

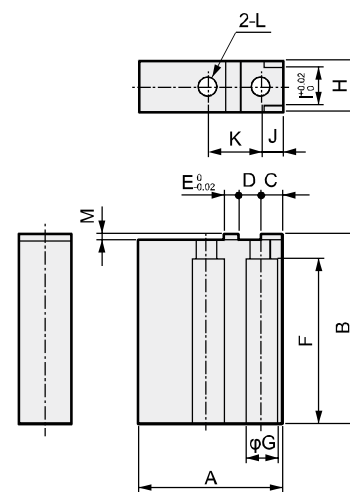
● 610 to 630



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
																	Y1*1	Y2*2
610	CKA-20CS CKG-25CS CKF-20CS		30	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	8	65	10
620	CKA-25CS CKG-32CS CKF-25CS		35	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	8	126	19
630	CKA-30CS CKG-40CS CKF-30CS		45	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	10.5	188	28

● 710 to 770



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
																Y1*1	Y2*2
710	CKA-40CS CKG-50CS CKF-40CS		44.5	60	6	5	4	52	11	18	14	6	14	6.5	2	285	43
720	CK-1CS		33.5	50	6	5	4	43	9.5	14	10	6	14	5.5	2	128	19
730	CK-1.5CS		43.5	65	7	6.5	5	56	11	18	14	7	18	6.5	2	302	45
740	CK-2CS		55.5	80	8	7	6	71	14	19	14	8	20	8.5	2	471	70
750	CKA-50CS		51.5	70	6	5	5	58	11	18	14	6	15	6.5	2	402	62
760	CKA-60CS		64	80	8	6	6	68	14	20	16	8	18	9	2	608	94
770	CKA-70CS		74	100	8	7	6	88	14	20	16	8	20	9	2	913	140

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Small jaw

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKL2 - Y1 - 810

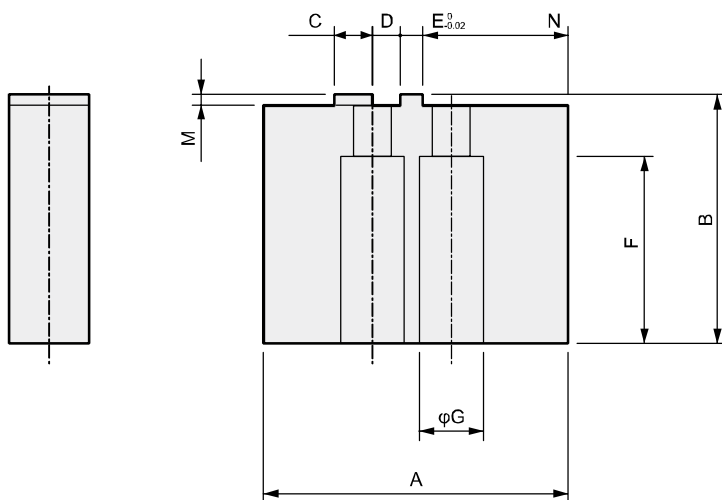
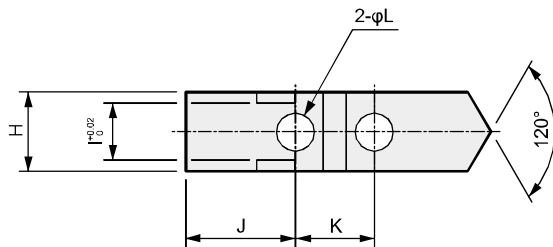
A Model

B Material

C Small jaw No.

Code	Content
A Model	
CKL2	Powerful chuck with high gripping power
CKH2	Powerful chuck with high gripping power
CKLB2	Bi-directional powerful chuck
B Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
C Small jaw No.	
810	CKLB2-20CS
820	CKLB2-25CS
830	CKL2-32CS,CKLB2-32CS
840	CKL2-40CS,CKLB2-40CS
850	CKL2-50CS,CKH2-50CS,CKLB2-50CS
860	CKL2-63CS,CKH2-63CS,CKLB2-63CS
870	CKL2-80CS,CKH2-80CS,CKLB2-80CS
880	CKL2-100CS,CKH2-100CS,CKLB2-100CS

Dimensions



Code Small jaw No.	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
															Y1	Y2
810	29.5	29	3.5	2.5	2	23	6.5	10	6	12	7	3.5	1	13	64	10
820	34.5	33.5	4.5	3.5	2	24	8	10	7	12.5	9	4.5	1.5	16.5	86	13
830	39.5	33.5	4.5	3.5	3	24	8	12	8	14	10	4.5	1.5	19	118	18
840	49.5	39	6	4.5	3	31	9	12	8	18.5	12	5.5	2	23.5	171	26
850	54.5	44	6	5	4	33	11	14	10	18.5	14	6.5	2	27	250	37
860	69.5	49	8	5.5	5	38	11	16	12	24.5	16	6.5	2	34.5	408	61
870	84.5	59	10	6	6	47	14	18	14	28	18	9	2	44.5	676	101
880	99.5	64	10	7	6	52	14	20	16	31.5	20	9	2	55	962	144

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKS - **Y1** - **910**

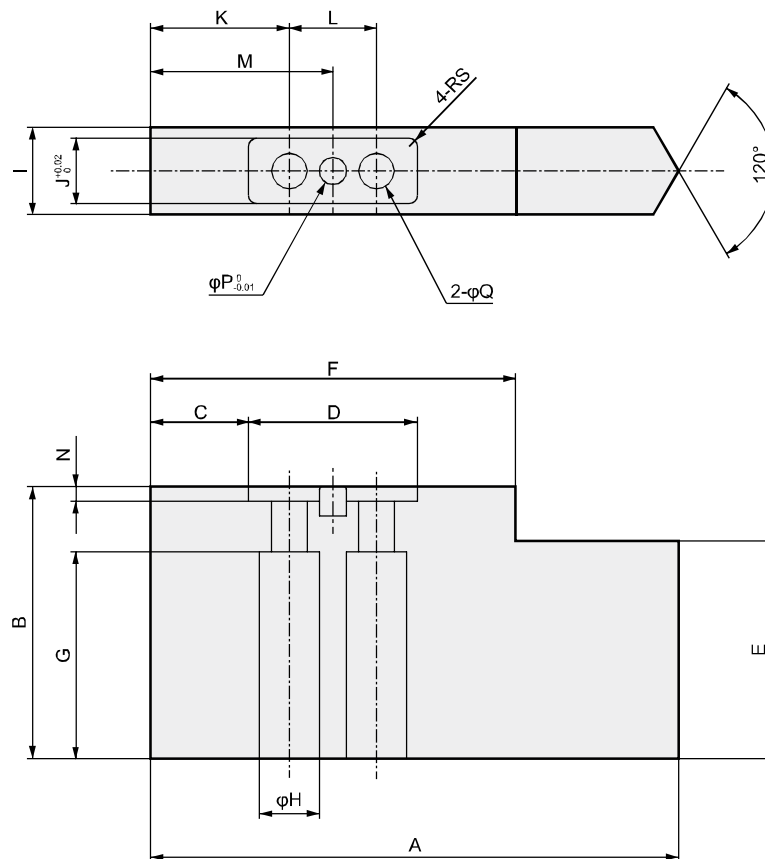
Model

A Material

B Small jaw No.

Code	Content
A Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
B Small jaw No.	
910	CKS-08CS
920	CKS-12CS
930	CKS-16CS
940	CKS-20CS
950	CKS-25CS
960	CKS-32CS

Dimensions



Code	Small jaw No. Compatible models	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	S	Weight (g)	
																			Y1	Y2
910	CKS-08CS	42.5	30	6.5	15	20	27.5	23	6.5	10	6	10.5	7	14	1.7	2	3.5	1	74	12
920	CKS-12CS	48	35	7.5	19	25	34	27	8	11	7	12.5	9	17	2.7	2	4.5	1	108	17
930	CKS-16CS	56.5	35	9.5	21	25	40.5	27	8	12	8	15	10	20	2.7	3	4.5	1	145	23
940	CKS-20CS	66.5	40	11	25	30	48	32	9.5	12	8	17.5	12	23.5	2.7	3	5.5	1.5	192	31
950	CKS-25CS	85.5	45	16	28	35	60	33	11	14	10	23	14	30	2.7	4	6.5	1.5	335	53
960	CKS-32CS	97	50	18	31	40	67	38	11	16	12	25.5	16	33.5	2.7	5	6.5	1.5	500	79

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MecHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC



Ultra long stroke chuck Double acting
(standard/short stroke)

CKJ Series

● Operational stroke length: Standard 80, 130 mm
Short stroke 40, 65 mm

Double acting



Specifications

Descriptions	CKJ					
	16CS		40CS		63CS	
Size	Standard	S1	Standard	S1	Standard	S1
Bore size mm	φ12×6		φ32×6		φ50×6	
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	80	40	80	40	130	65
Rod diameter mm	φ6		φ12		φ14	
Volumetric capacity (reciprocating) cm ³	47.4	24.0	358.8	179.4	1471.2	735.6
Repeatability mm	±0.1					
Weight kg	2.38	1.35	5.6	4.2	18.5	13
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)

CKJ - 16CS - S1

With switch (built-in magnet for switch)

CKJ - 16CS - S1 - T2H - R

A Size

B Option

C Switch model No.
* indicates the lead wire length.

D Switch quantity

Code	Content					
A Size						
16CS						
40CS						
63CS						
B Option						
Blank	Standard					
S1	Short stroke					
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					

[Example of model No.]

CKJ-16CS-S1-T2H-R

Model: Ultra long stroke chuck

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

How to order switch

SW - T2H

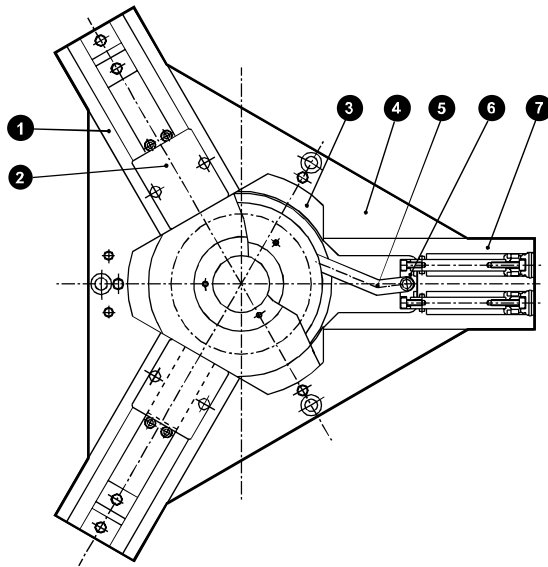
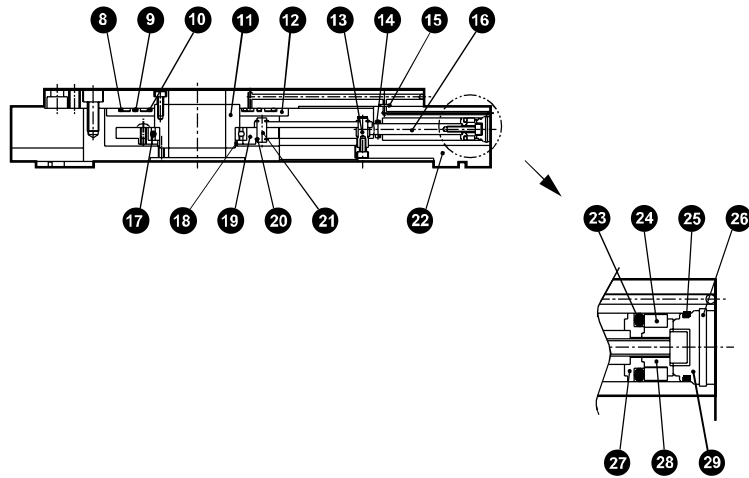
Switch model No.
(Item **C** above)

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
Chuck
MecHnd/Chuck
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*+HC
CKH2
CKLB2
CHC

Internal structure and parts list

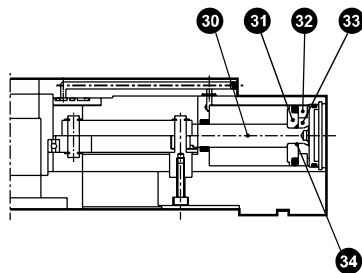
LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuk
MecHnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending

● CKJ-16CS



● CKJ-40CS

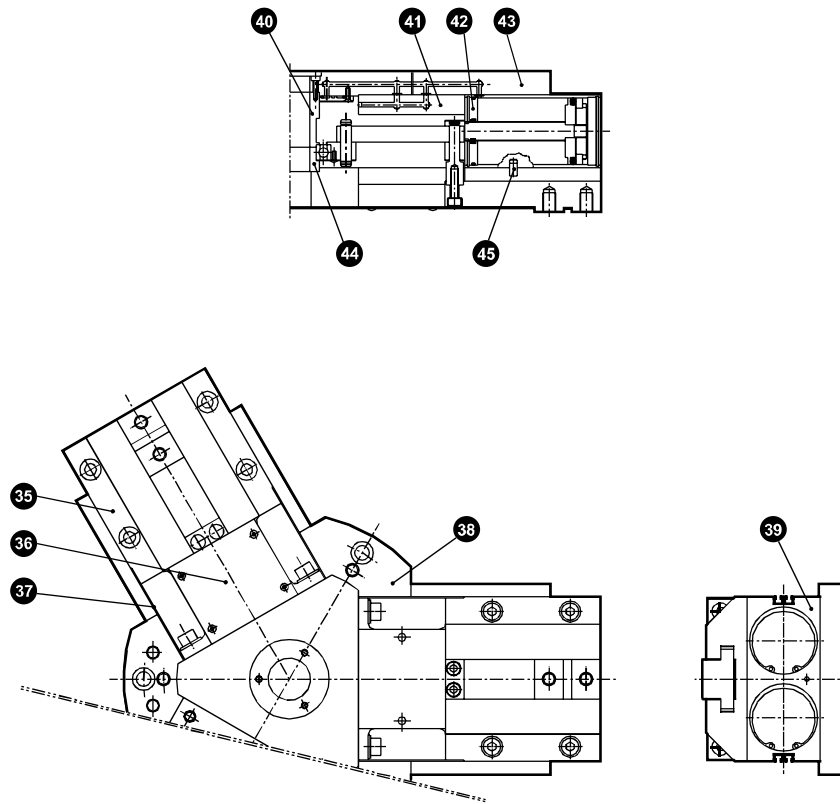
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC



Cannot be disassembled

Internal structure and parts list

● CKJ-63CS



Cannot be disassembled

Parts list

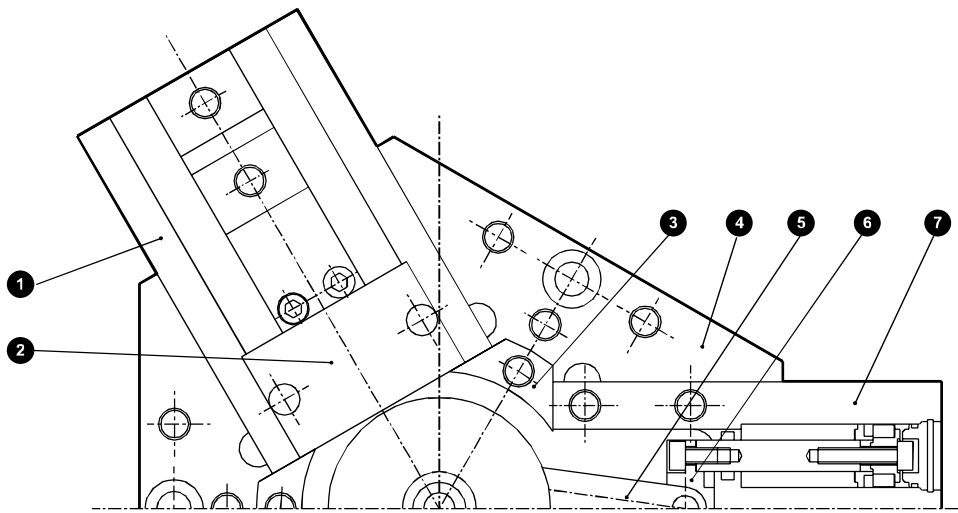
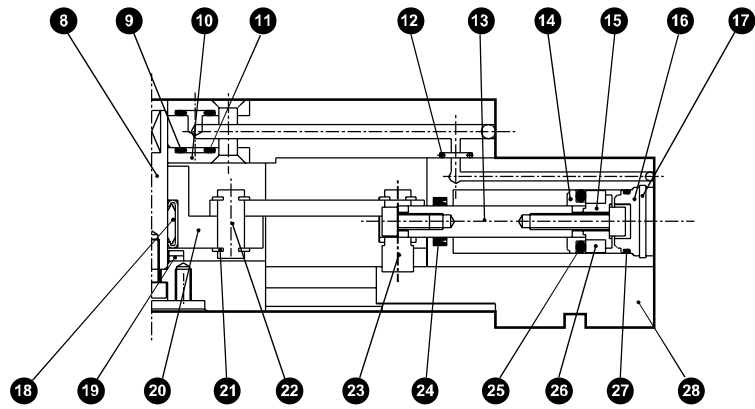
No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Cylinder body B	Aluminum alloy		24	Magnet		
2	Cover	Stainless steel		25	Cylinder sealant	Nitrile rubber	
3	Center block	Aluminum alloy		26	C type snap ring	Carbon steel	
4	Base	Aluminum alloy		27	Piston A	Aluminum alloy	
5	Link	Stainless steel	63CS is carbon steel	28	Piston B	Aluminum alloy	63CS is stainless steel
6	Connection block	Stainless steel	63CS is carbon steel	29	Cylinder guard	Acetal resin	63CS is aluminum alloy
7	Cylinder body A	Aluminum alloy		30	Piston rod	Stainless steel	
8	O-ring	Nitrile rubber		31	Piston A	Aluminum alloy	
9	O-ring	Nitrile rubber		32	Magnet		
10	O-ring	Nitrile rubber		33	Piston B	Aluminum alloy	
11	Hollow ring	Aluminum alloy		34	O-ring	Nitrile rubber	
12	Piping plate	Aluminum alloy		35	Body	Aluminum alloy	
13	Operation pin	Stainless steel	63CS is carbon steel	36	Front cover	Stainless steel	
14	Rod sealant	Nitrile rubber		37	Side cover	Stainless steel	
15	O-ring	Nitrile rubber		38	Base 1	Aluminum alloy	
16	Piston rod	Stainless steel		39	Cylinder	Aluminum alloy	
17	Bearing			40	Hollow ring 1	Aluminum alloy	
18	Collar	Carbon steel		41	Base 3	Aluminum alloy	
19	Link ring	Aluminum alloy		42	Rod cover	Aluminum alloy	
20	E type snap ring	Carbon steel		43	Base 2	Aluminum alloy	
21	Fulcrum axis	Stainless steel	63CS is carbon steel	44	Hollow ring 2	Aluminum alloy	
22	Master key	Carbon steel		45	Parallel pin	Stainless steel	
23	Piston seal	Nitrile rubber					

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

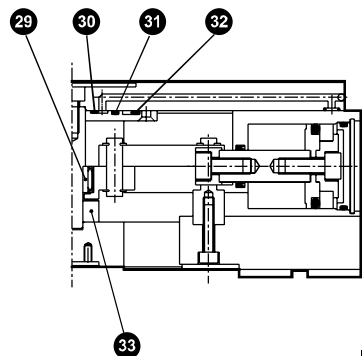
Internal structure and parts list

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending

● CKJ-16CS-S1



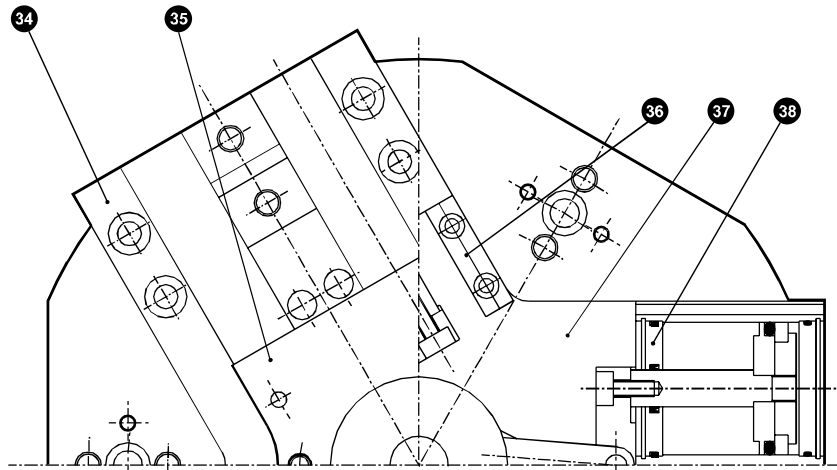
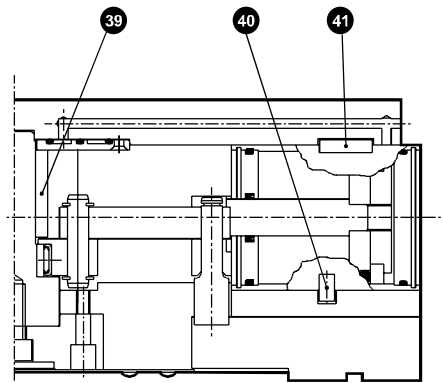
● CKJ-40CS-S1



Cannot be disassembled

Internal structure and parts list

● CKJ-63CS-S1



Cannot be disassembled



Parts list

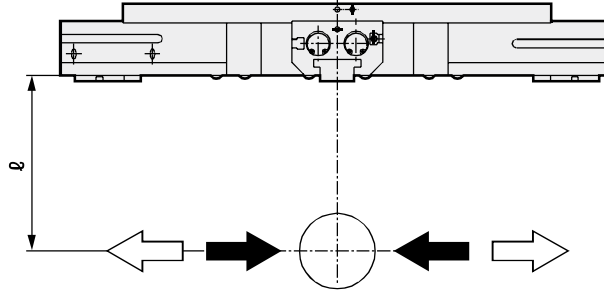
No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Cylinder body B	Aluminum alloy		22	Fulcrum axis	Stainless steel	63CS is carbon steel
2	Cover	Stainless steel		23	Operation pin	Stainless steel	63CS is carbon steel
3	Center block	Aluminum alloy	63CS is carbon steel	24	Rod sealant	Nitrile rubber	
4	Base	Aluminum alloy		25	Piston seal	Nitrile rubber	
5	Link	Stainless steel	63CS is carbon steel	26	Magnet		
6	Connection block	Stainless steel	63CS is carbon steel	27	Cylinder sealant	Nitrile rubber	
7	Cylinder body A	Aluminum alloy		28	Master key	Carbon steel	
8	Shaft	Carbon steel	63CS is aluminum alloy	29	Inner ring		
9	O-ring	Nitrile rubber		30	O-ring	Nitrile rubber	
10	Piping plate	Aluminum alloy		31	O-ring	Nitrile rubber	
11	O-ring	Nitrile rubber		32	O-ring	Nitrile rubber	
12	O-ring	Nitrile rubber		33	Collar	Acetal resin	
13	Piston rod	Stainless steel		34	Body	Aluminum alloy	
14	Piston A	Aluminum alloy		35	Front cover	Stainless steel	
15	Piston B	Aluminum alloy	63CS is stainless steel	36	Side cover	Aluminum alloy	
16	Cylinder guard	Acetal resin	63CS is aluminum alloy	37	Cylinder	Aluminum alloy	
17	C type snap ring	Carbon steel		38	Rod cover	Aluminum alloy	
18	Needle rolling bearing			39	Metal collar	Carbon steel	
19	Washer			40	Parallel pin	Stainless steel	
20	Link ring	Aluminum alloy		41	Double round key	Carbon steel	
21	E type snap ring	Carbon steel					

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MecHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ**
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

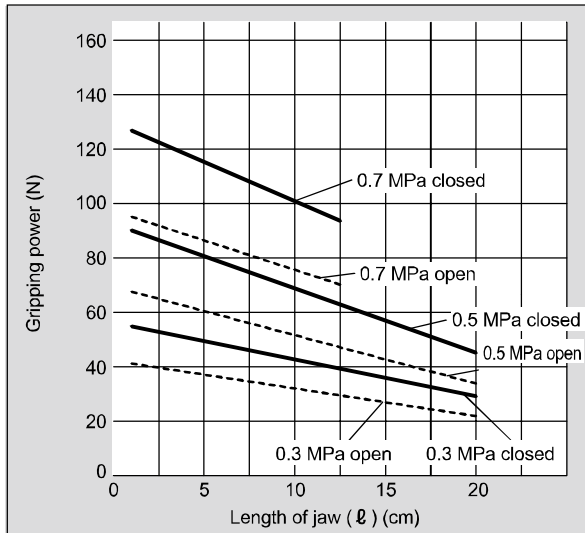
Gripping power performance data

The gripping power at a supply pressure 0.3, 0.5, and 0.7 MPa with jaw length ℓ of hand is shown.

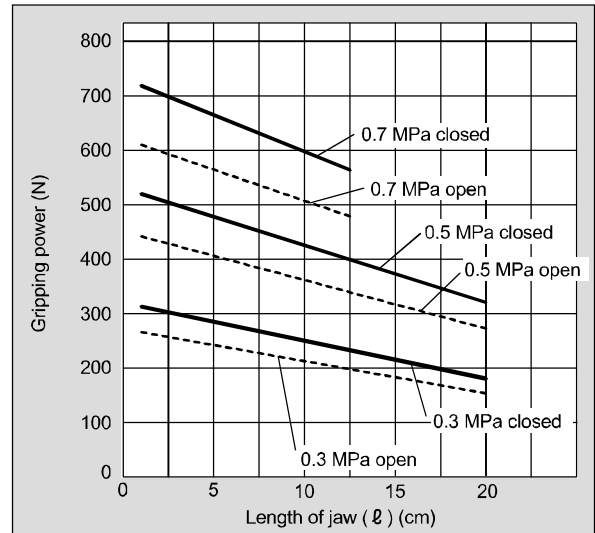
- Open direction ()----- (shown with broken line)
- Closed direction ()————— (shown with continuous line)



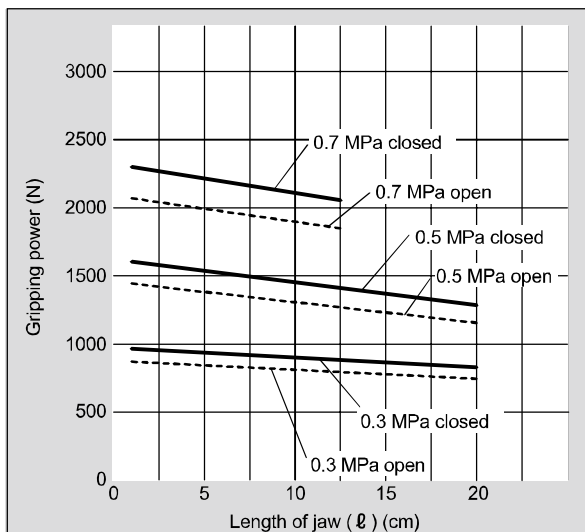
● CKJ-16CS



● CKJ-40CS



● CKJ-63CS



(Note) When making a selection, read the precautions for design and selection on page 1722.

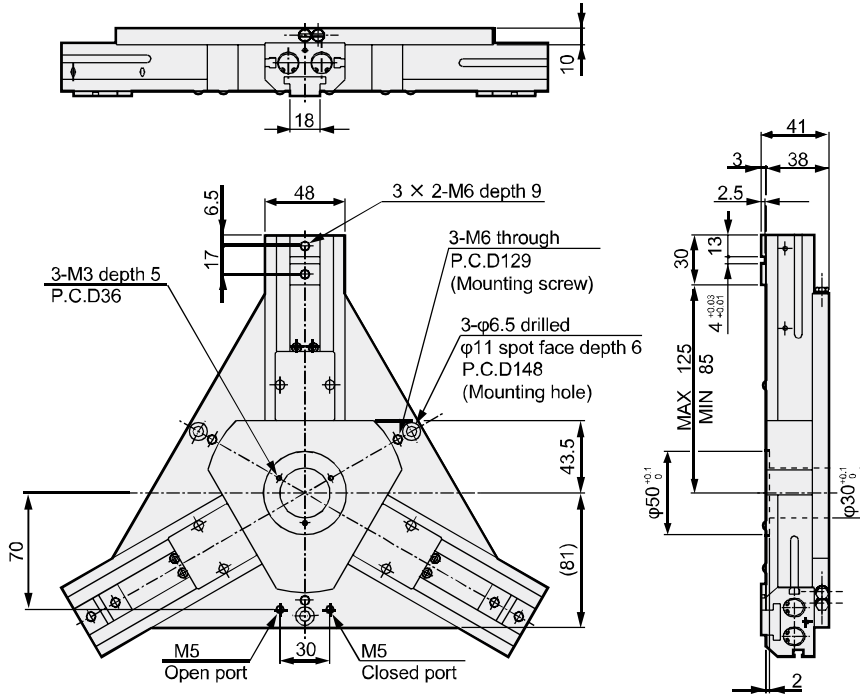
LCW
LCR
LCC
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuk
MecHnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending

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

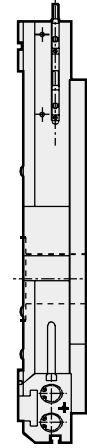
Dimensions



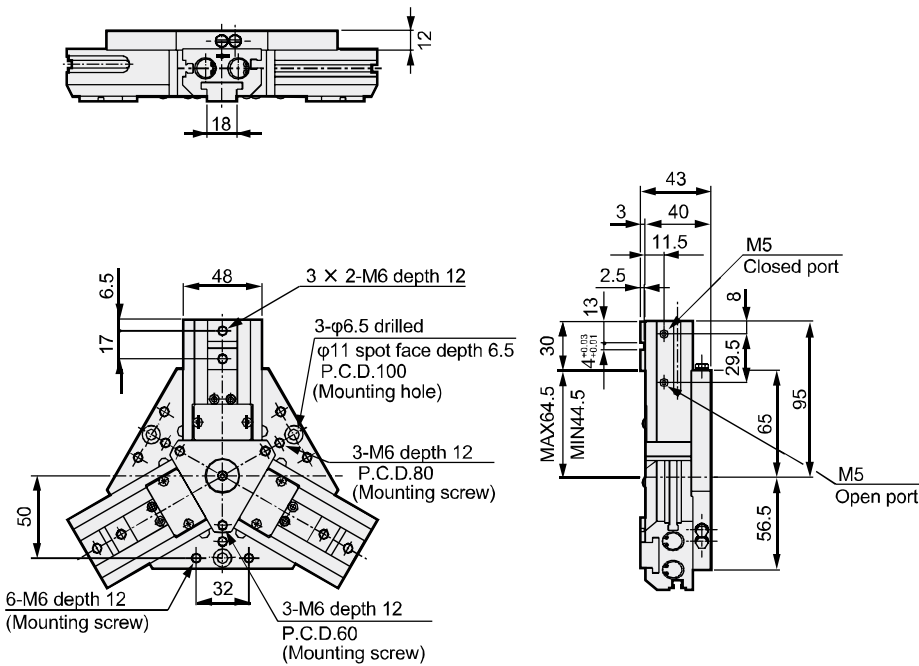
● CKJ-16CS standard



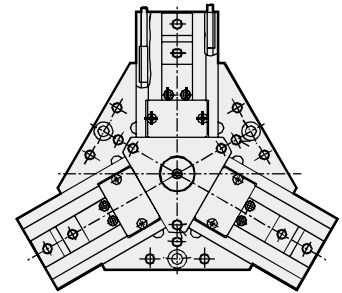
● With switch



● CKJ-16CS-S1



● With switch

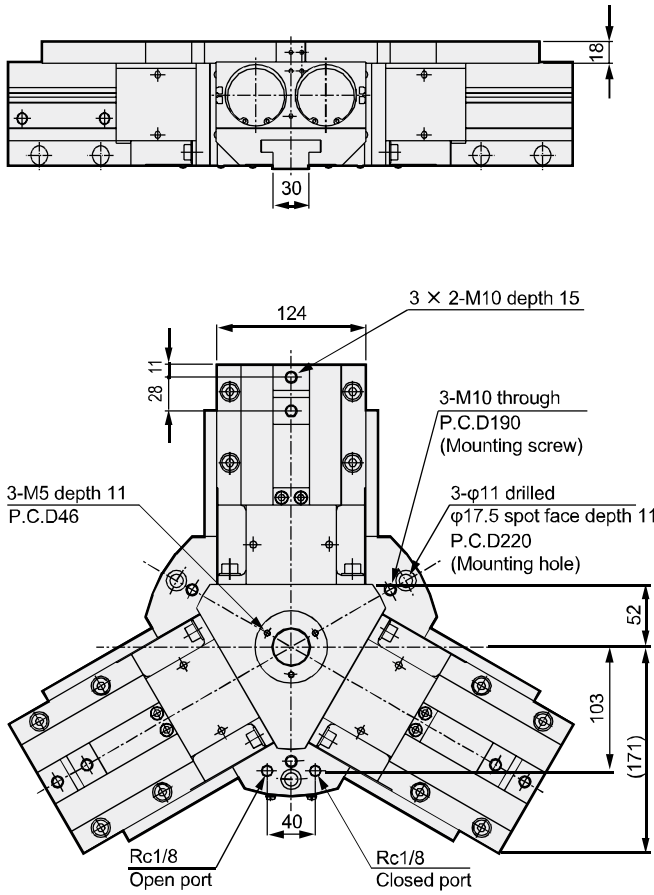


LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LM
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuck
MechHnd/Chuck
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

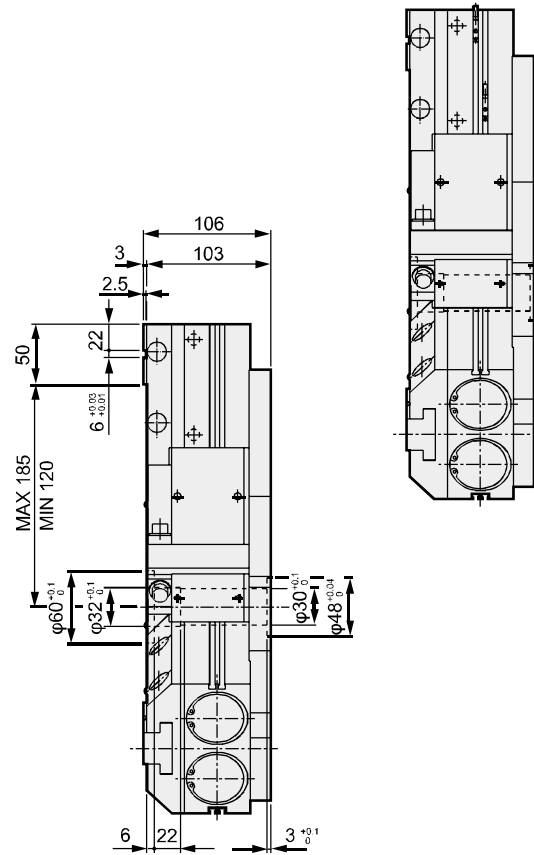
Dimensions



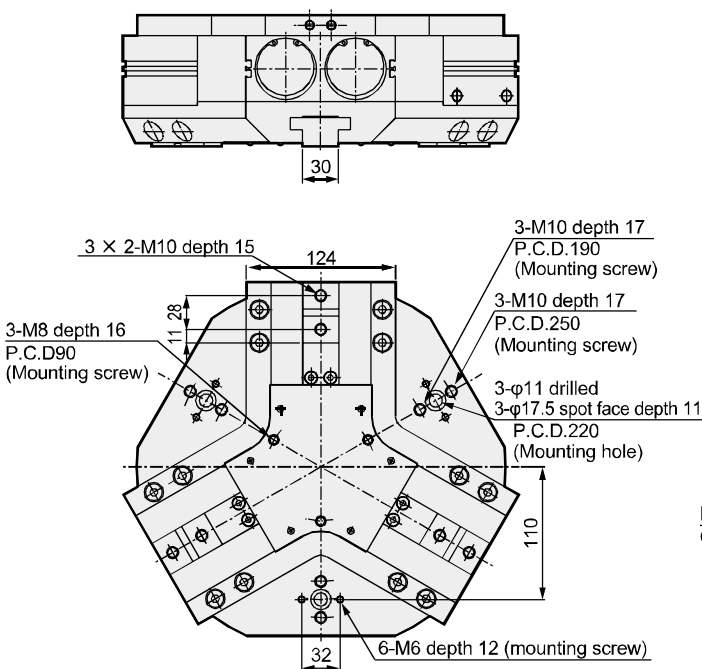
● CKJ-63CS standard



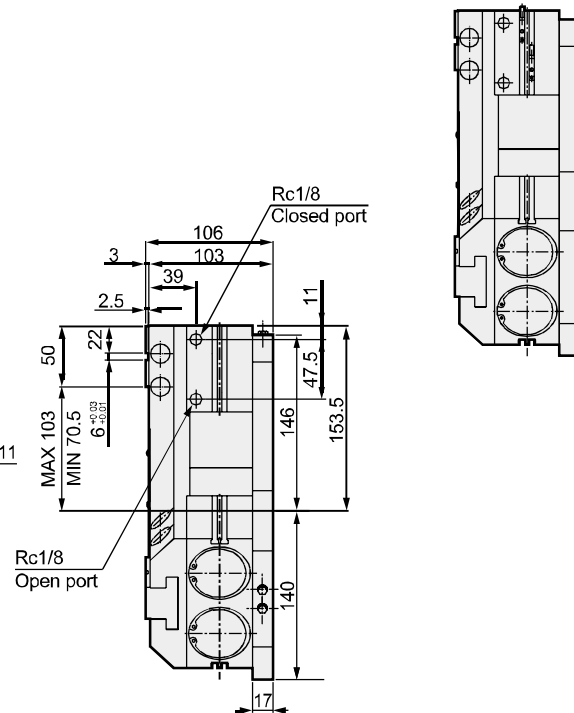
● With switch



● CKJ-63CS-S1



● With switch



LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
Chuck
MechHnd/Chuck
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC



Small jaw

● Material: Iron, engineering plastic



Features

A variety of small jaws (soft jaw) is available to match user machining needs.

● Spigot section machined

Troublesome reference section (spigot section) machined.

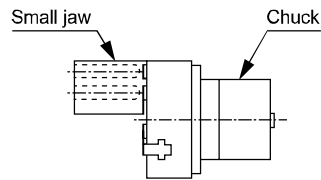
Wide series variation to select according to workpiece shape and dimension.

● 2 types of material for small jaw

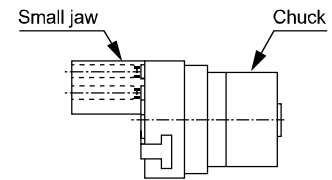
Iron (S50C) and engineering plastic (MC nylon) are available for optimum selection according to material and working condition of workpiece.

Compatible model for standard small jaw

CK type



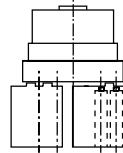
CKA/CKG type



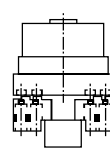
Small jaw applications

Chuck applications

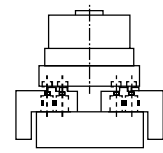
Soft jaw



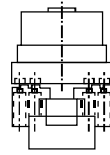
Compact workpiece



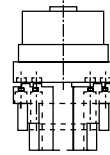
Large workpiece



For large and small workpieces



For inner tensive large and small workpieces



How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKA - **Y1** - **610**

A Model **B** Material **C** Small jaw No.

A Model		B Material		C Small jaw No.	
Code	Content	Code	Content	Code	Compatibility
CKG	3-way jaw bearing chuck	Y1	Material S50C	510	CKG-16S,CKA-15CS,CKF-15CS
CK	3-way jaw long stroke chuck	Y2	Material MC nylon	520	CKG-25S,CKA-20CS,CKF-20CS
CKA	3-way jaw thin chuck			530	CKG-32CS,CKA-25CS,CKF-25CS
CKF	Hollow chuck			540	CKG-40CS,CKA-30CS,CKF-30CS
				610	CKG-25S,CKA-20CS,CKF-20CS
				620	CKG-32CS,CKA-25CS,CKF-25CS
				630	CKG-40CS,CKA-30CS,CKF-30CS
				710	CKG-50CS,CKA-40CS,CKF-40CS
				720	CK-1CS
				730	CK-1.5CS
				740	CK-2CS
				750	CKA-50CS
				760	CKA-60CS
				770	CKA-70CS

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STR/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SrdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

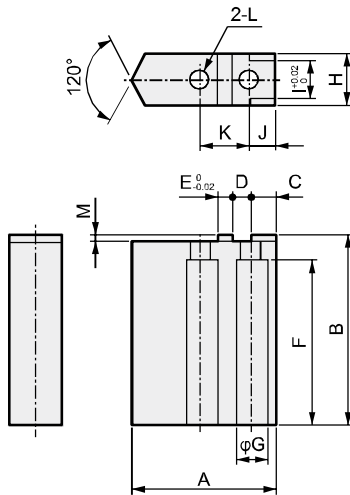
Small jaw

Dimensions

Dimensions



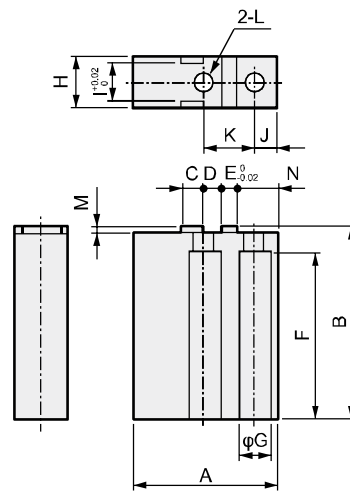
● 510 to 540



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
			Y1*1	Y2*2													
510	CKA-15CS CKG-16CS CKF-15CS		17.5	25	3.5	2.5	2	20	6	8	6	3.5	7	3.5	1	17	5
520	CKA-20CS CKG-25CS CKF-20CS		24	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	45	11
530	CKA-25CS CKG-32CS CKF-25CS		31	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	103	21
540	CKA-30CS CKG-40CS CKF-30CS		37	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	136	30

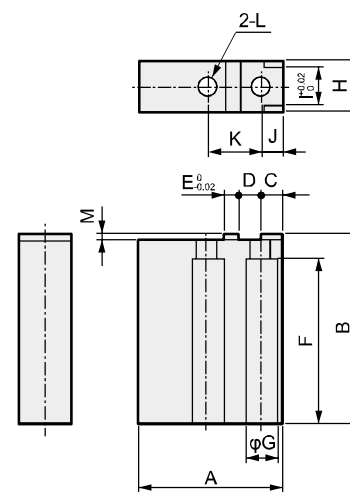
● 610 to 630



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
			Y1*1	Y2*2														
610	CKA-20CS CKG-25CS CKF-20CS		30	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	8	65	10
620	CKA-25CS CKG-32CS CKF-25CS		35	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	8	126	19
630	CKA-30CS CKG-40CS CKF-30CS		45	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	10.5	188	28

● 710 to 770



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
			Y1*1	Y2*2													
710	CKA-40CS CKG-50CS CKF-40CS		44.5	60	6	5	4	52	11	18	14	6	14	6.5	2	285	43
720	CK-1CS		33.5	50	6	5	4	43	9.5	14	10	6	14	5.5	2	128	19
730	CK-1.5CS		43.5	65	7	6.5	5	56	11	18	14	7	18	6.5	2	302	45
740	CK-2CS		55.5	80	8	7	6	71	14	19	14	8	20	8.5	2	471	70
750	CKA-50CS		51.5	70	6	5	5	58	11	18	14	6	15	6.5	2	402	62
760	CKA-60CS		64	80	8	6	6	68	14	20	16	8	18	9	2	608	94
770	CKA-70CS		74	100	8	7	6	88	14	20	16	8	20	9	2	913	140

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Small jaw

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKL2 - Y1 - 810

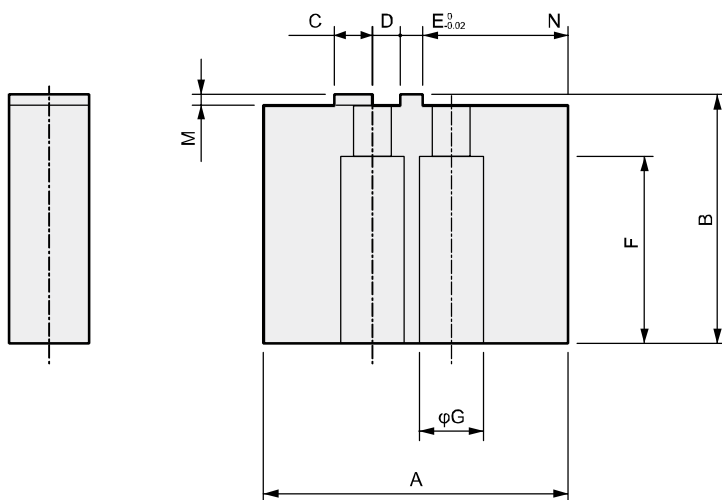
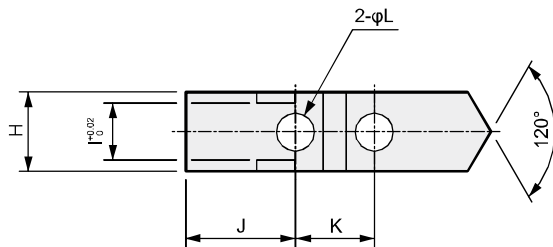
A Model

B Material

C Small jaw No.

Code	Content
A Model	
CKL2	Powerful chuck with high gripping power
CKH2	Powerful chuck with high gripping power
CKLB2	Bi-directional powerful chuck
B Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
C Small jaw No.	
810	CKLB2-20CS
820	CKLB2-25CS
830	CKL2-32CS,CKLB2-32CS
840	CKL2-40CS,CKLB2-40CS
850	CKL2-50CS,CKH2-50CS,CKLB2-50CS
860	CKL2-63CS,CKH2-63CS,CKLB2-63CS
870	CKL2-80CS,CKH2-80CS,CKLB2-80CS
880	CKL2-100CS,CKH2-100CS,CKLB2-100CS

Dimensions



Code Small jaw No.	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
															Y1	Y2
810	29.5	29	3.5	2.5	2	23	6.5	10	6	12	7	3.5	1	13	64	10
820	34.5	33.5	4.5	3.5	2	24	8	10	7	12.5	9	4.5	1.5	16.5	86	13
830	39.5	33.5	4.5	3.5	3	24	8	12	8	14	10	4.5	1.5	19	118	18
840	49.5	39	6	4.5	3	31	9	12	8	18.5	12	5.5	2	23.5	171	26
850	54.5	44	6	5	4	33	11	14	10	18.5	14	6.5	2	27	250	37
860	69.5	49	8	5.5	5	38	11	16	12	24.5	16	6.5	2	34.5	408	61
870	84.5	59	10	6	6	47	14	18	14	28	18	9	2	44.5	676	101
880	99.5	64	10	7	6	52	14	20	16	31.5	20	9	2	55	962	144

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKS - **Y1** - **910**

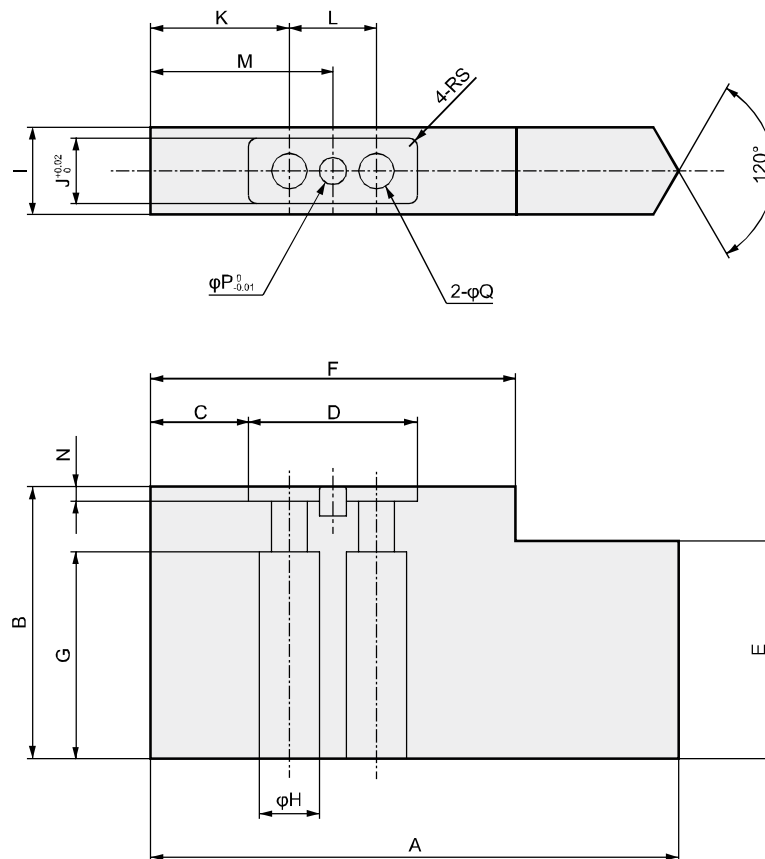
Model

A Material

B Small jaw No.

Code	Content
A Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
B Small jaw No.	
910	CKS-08CS
920	CKS-12CS
930	CKS-16CS
940	CKS-20CS
950	CKS-25CS
960	CKS-32CS

Dimensions



Code	Small jaw No. Compatible models	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	S	Weight (g)	
																			Y1	Y2
910	CKS-08CS	42.5	30	6.5	15	20	27.5	23	6.5	10	6	10.5	7	14	1.7	2	3.5	1	74	12
920	CKS-12CS	48	35	7.5	19	25	34	27	8	11	7	12.5	9	17	2.7	2	4.5	1	108	17
930	CKS-16CS	56.5	35	9.5	21	25	40.5	27	8	12	8	15	10	20	2.7	3	4.5	1	145	23
940	CKS-20CS	66.5	40	11	25	30	48	32	9.5	12	8	17.5	12	23.5	2.7	3	5.5	1.5	192	31
950	CKS-25CS	85.5	45	16	28	35	60	33	11	14	10	23	14	30	2.7	4	6.5	1.5	335	53
960	CKS-32CS	97	50	18	31	40	67	38	11	16	12	25.5	16	33.5	2.7	5	6.5	1.5	500	79

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MecHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC



Powerful chuck

CKL2 Series

- Operational stroke length: 5, 6, 8, 10, 12, 16, 20, 23 mm

Double acting



Single acting (normally open)



Single acting (normally closed)



Specifications

Descriptions	CKL2							
	20CS	25CS	32CS	40CS	50CS	63CS	80CS	100CS
Size	20CS	25CS	32CS	40CS	50CS	63CS	80CS	100CS
Bore size mm	φ20	φ25	φ32	φ40	φ50	φ63	φ80	φ100
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	5	6	8	10	12	16	20	23
Rod diameter mm	φ6	φ8	φ10	φ12	φ14	φ16		φ20
Volumetric capacity (reciprocating) cm ³	1.8	3.3	7.7	15.6	28.3	60.3	118.2	215.5
Repeatability mm	±0.01							
Weight kg	0.12	0.19	0.26	0.38	0.59	1.02	2.02	3.45
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 (*2)	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.

- LCW
- LCR
- LCC
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SsdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2**
- CKL2*-HC
- CKH2
- CKLB2
- CHC

How to order

Without switch (built-in magnet for switch)

CKL2 - **20CS** - **O**

With switch (built-in magnet for switch)

CKL2 - **20CS** - **O** - **T2H** - **R**

A Size

B Option
*1, *2

C Switch model No.
*3

D Switch quantity

⚠ Precautions for model No. selection

- *1 : Small jaw is commonly used for inner and outer chuck.
- *2 : 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.

[Example of model No.]
CKL2-20CS-O-T2H-R

Model: Powerful chuck

- A** Size : 20CS
- 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

SW - **T2H**

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

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.

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

CKL2 - ... - **P4*** ● Design compatible with rechargeable battery manufacturing process.

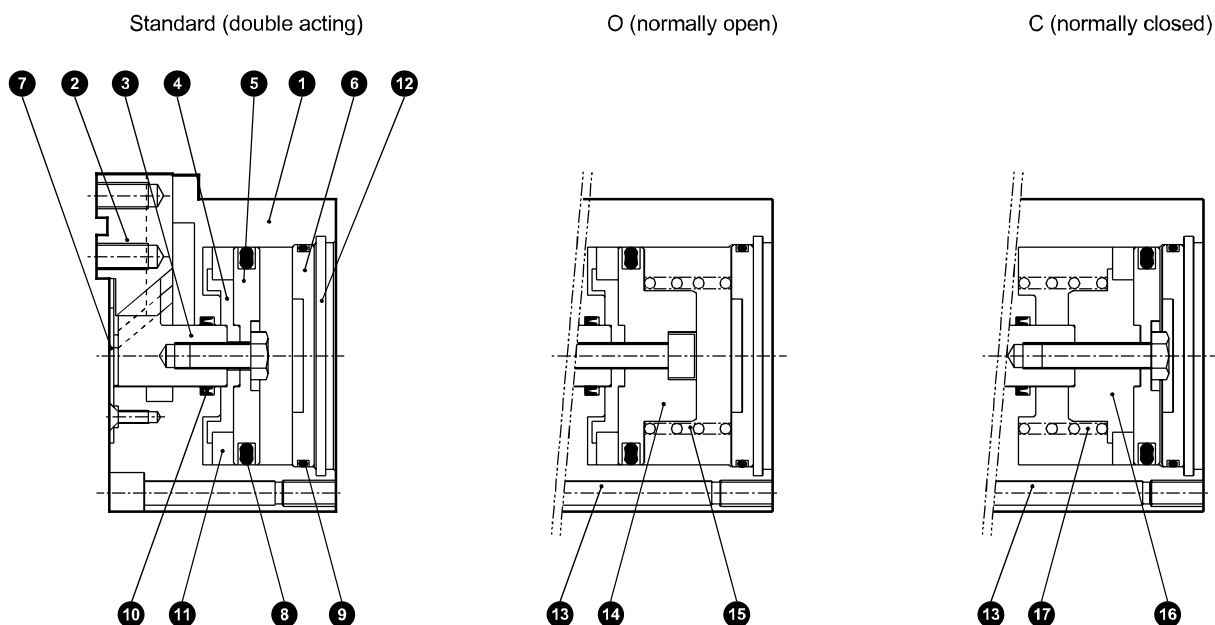
* Contact CKD for details.

Code	Content				
A Size					
20CS					
25CS					
32CS					
40CS					
50CS					
63CS					
80CS					
100CS					
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	Proximity Contact	Voltage	Display	Lead wire
			AC		
T2H*	T2V*		●	1-color display	2-wire
T3H*	T3V*		●		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				

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
Chuck
MecHnd/Chuck
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Internal structure and parts list

● CKL2-20CS to 100CS





Cannot be disassembled

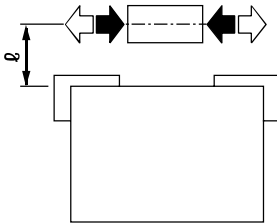
Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Body	Aluminum alloy		10	Rod packing	Nitrile rubber	
2	Master key	Steel		11	Magnet		
3	Piston A	Stainless steel (20 to 32CS), steel (40 to 100 CS)		12	Snap ring	Stainless steel	Steel (80, 100CS)
4	Piston B	Aluminum alloy		13	O, C body	Aluminum alloy	
5	Piston C	Aluminum alloy		14	O Piston C	Aluminum alloy	
6	Cylinder guard	Aluminum alloy		15	O spring	Stainless steel	
7	Center guard	Stainless steel		16	C Piston B	Aluminum alloy	
8	Piston packing	Nitrile rubber		17	C spring	Stainless steel	
9	Cylinder gasket	Nitrile rubber					

Gripping power performance data

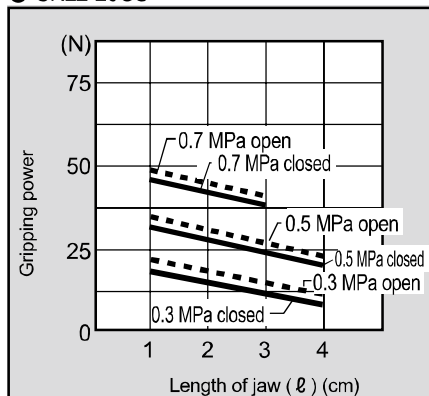
The gripping power in the opening/closing directions with jaw length ℓ of hand with a supply pressure of 0.3, 0.5 and 0.7 MPa is shown.

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

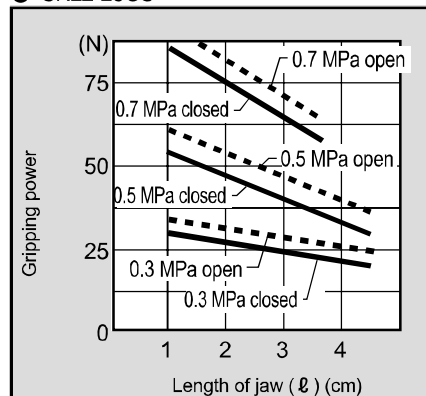


(Note) O type gripping power decreases approximately 20 to 30% in the closed direction compared to double acting.
 C type gripping power decreases approximately 10 to 20% in the open direction compared to the double acting.
 When making a selection, read the precautions for design and selection on page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

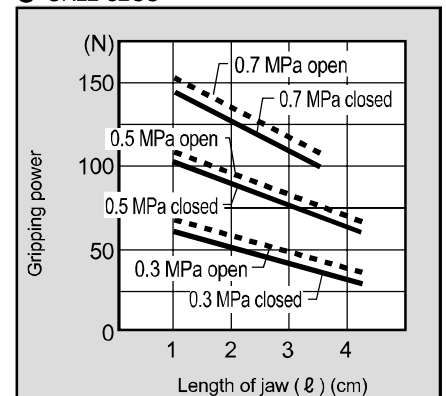
● CKL2-20CS



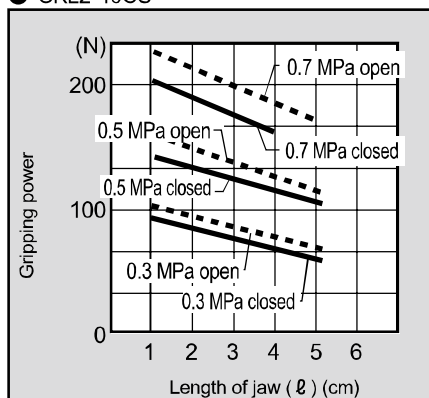
● CKL2-25CS



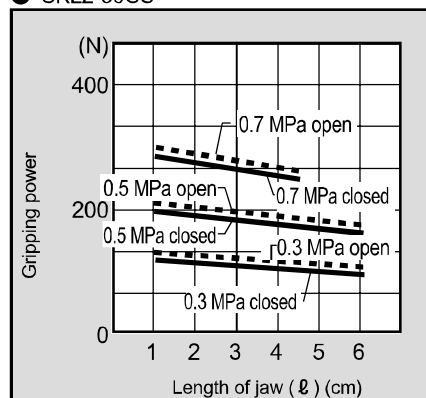
● CKL2-32CS



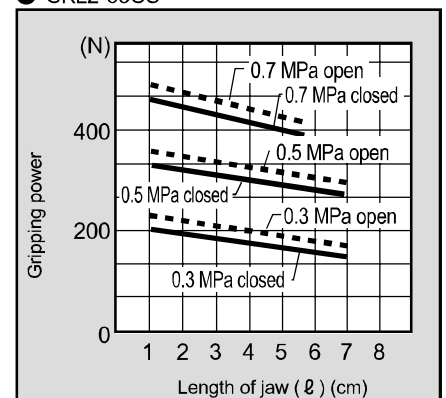
● CKL2-40CS



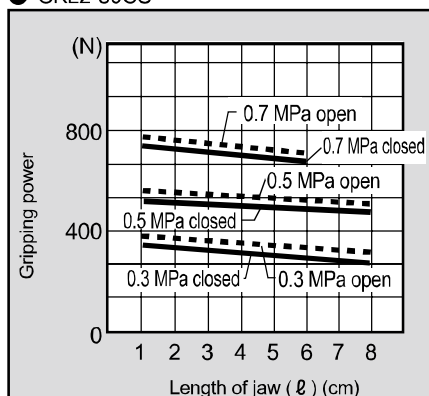
● CKL2-50CS



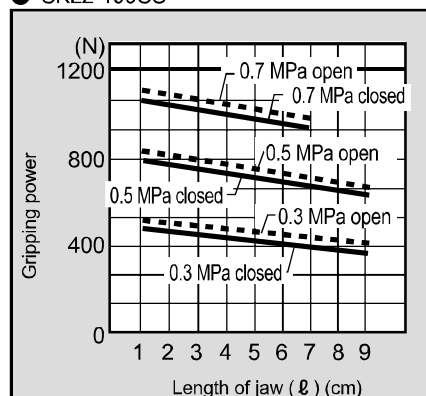
● CKL2-63CS



● CKL2-80CS



● CKL2-100CS



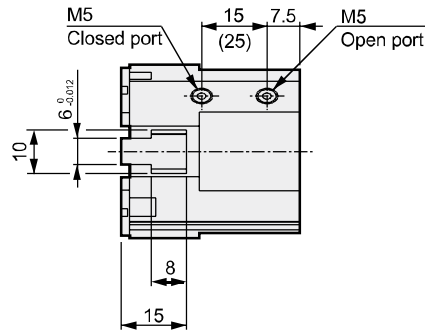
LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Dimensions

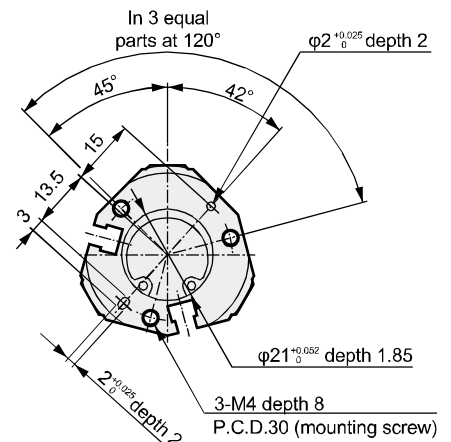
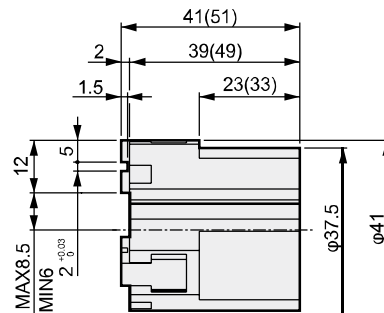
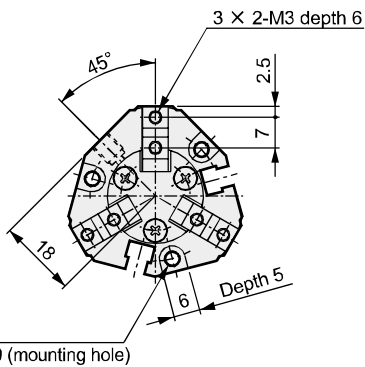
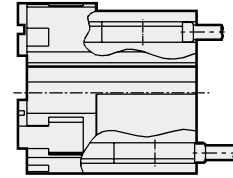


● CKL2-20CS standard/O/C

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

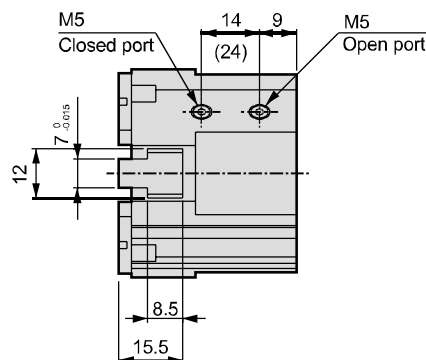


● With switch

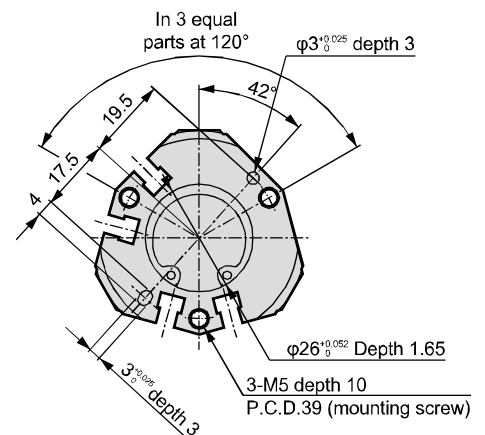
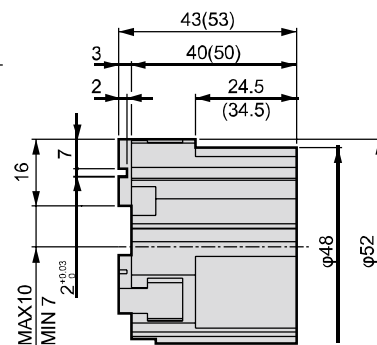
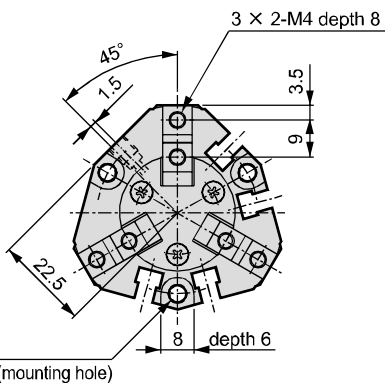
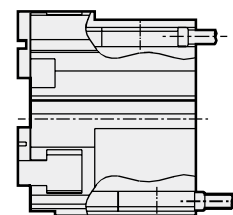


● CKL2-25CS standard/O/C

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



● With switch



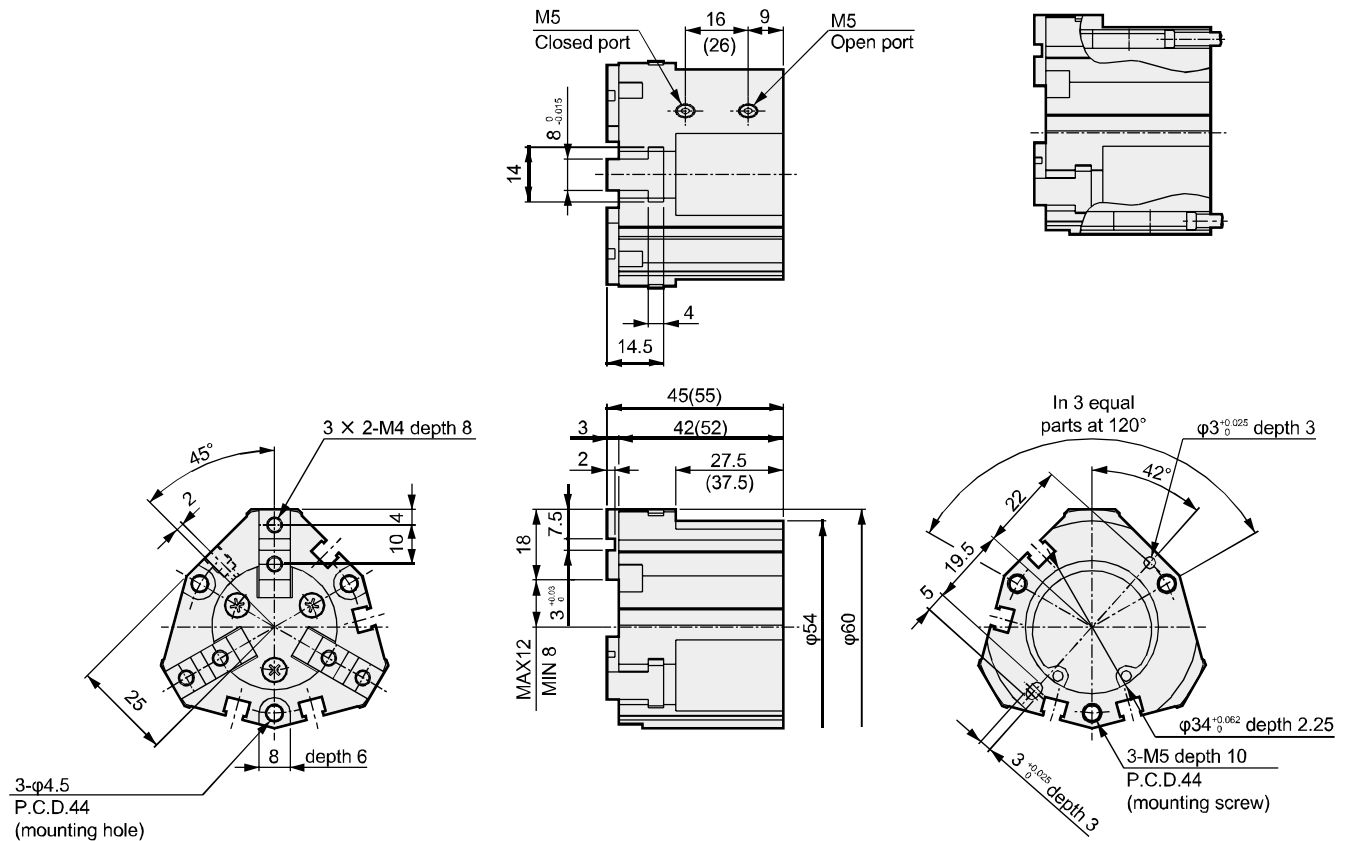
LCW
LCR
LCG
LCX
LCM
STM
STG
ST5/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Dimensions



● CKL2-32CS standard/O/C

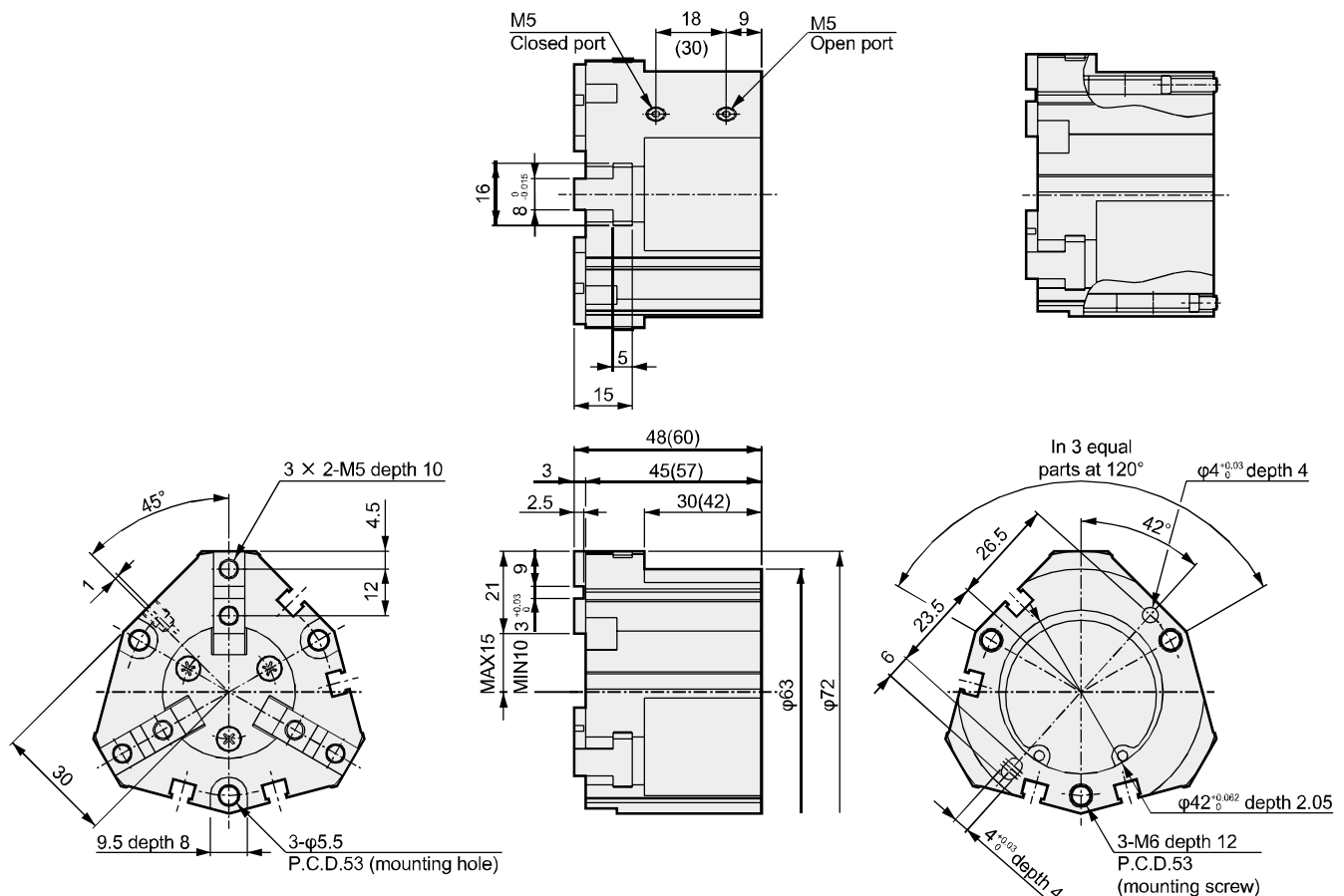
· Dimensions in () are for O [normally open] and C [normally closed] specifications.



● With switch

● CKL2-40CS standard/O/C

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



● With switch

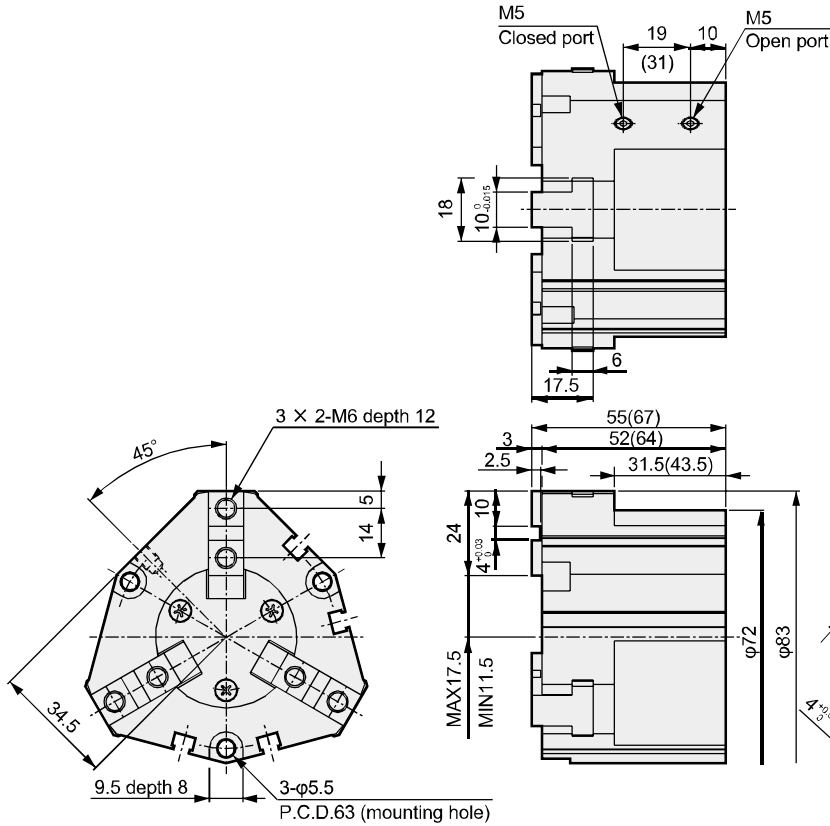
LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuck
MechHndlChuck
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2-+HC
CKH2
CKLB2
CHC

Dimensions

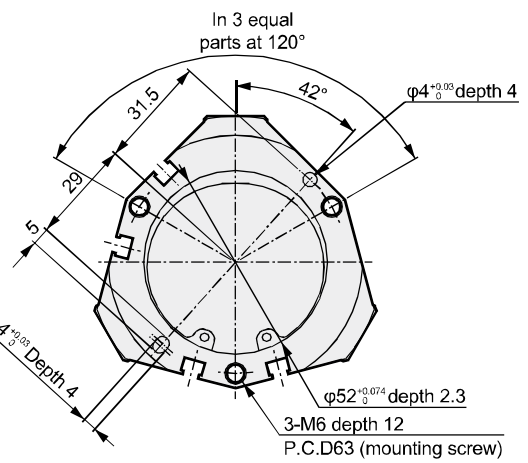


● CKL2-50CS standard/O/C

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

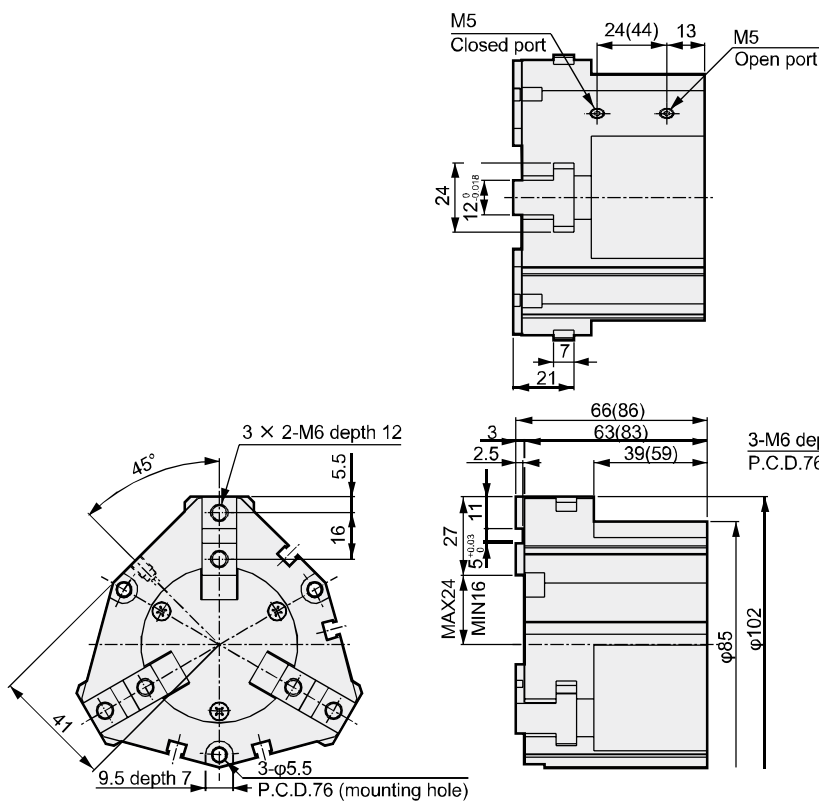


● With switch

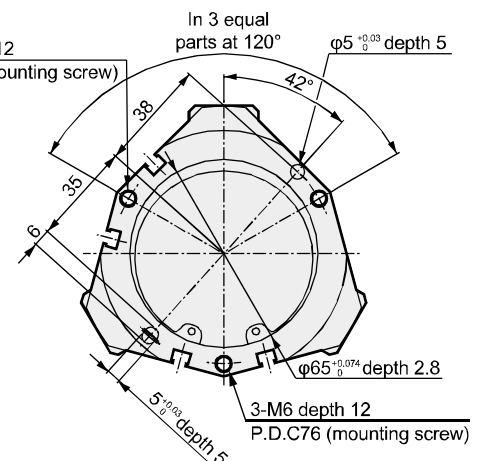
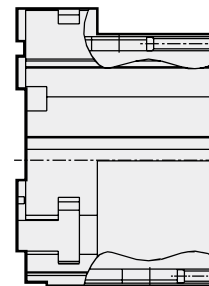


● CKL2-63CS standard/O/C

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



● With switch

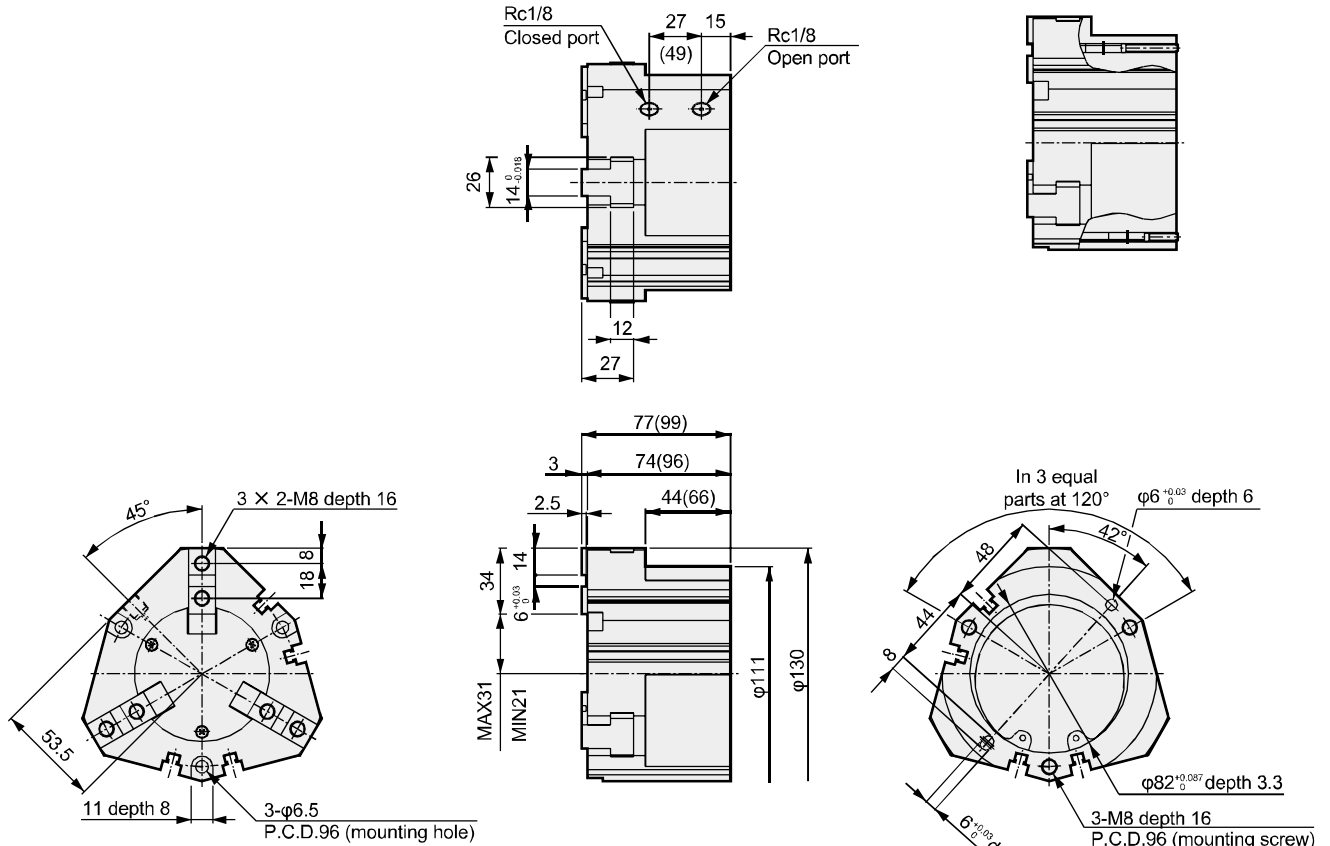


- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCC2
- RCS
- PCC
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HR
- LN
- Hand
- Chuk**
- MechHnd/Chuk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

Dimensions

● CKL2-80CS standard/O/C

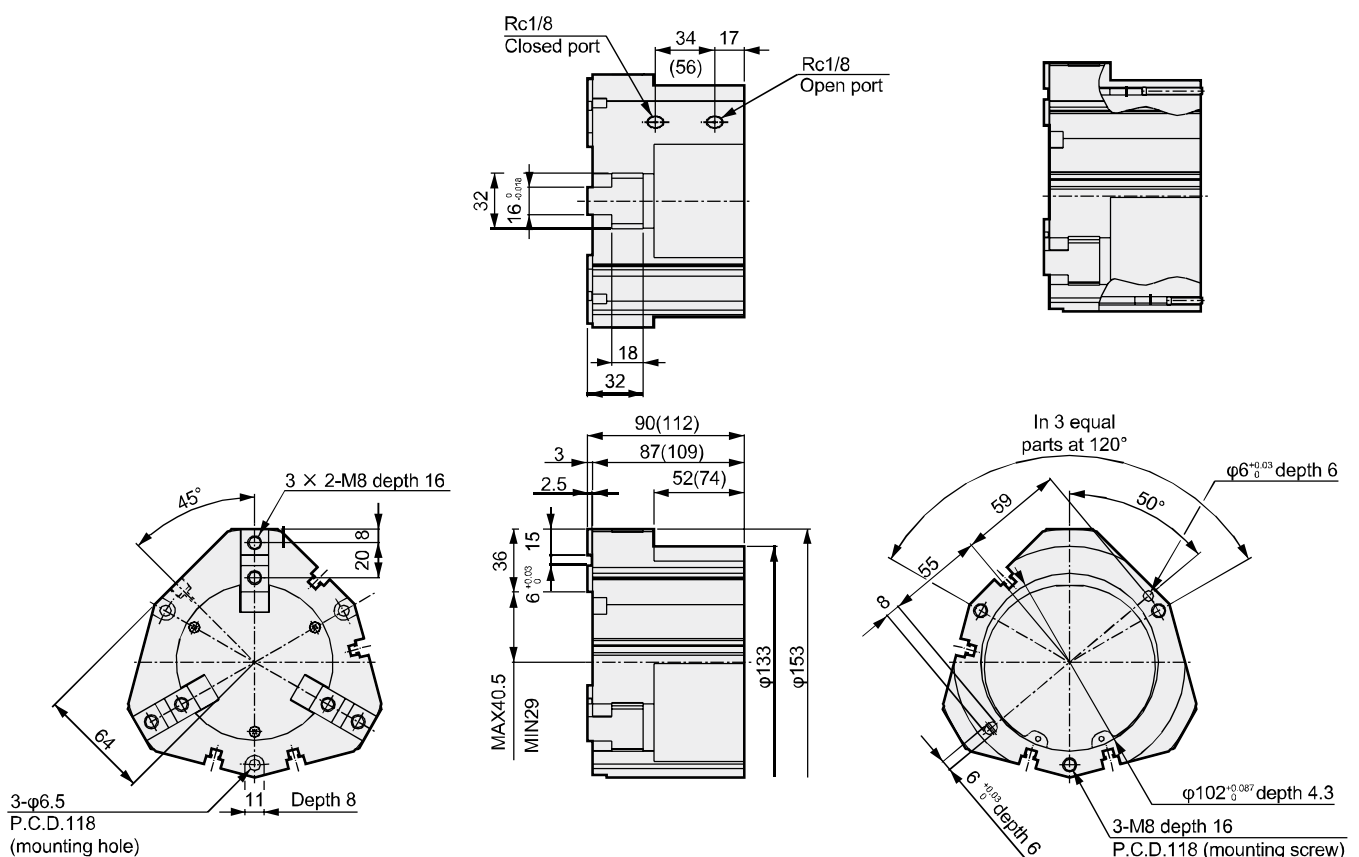
· Dimensions in () are for O [normally open] and C [normally closed] specifications.



● With switch

● CKL2-100CS standard/O/C

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



● With switch

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
Chuck
MechHnd/Chuck
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2-+HC
CKH2
CKLB2
CHC



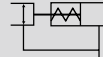
Position locking powerful chuck

CKL2-* -HC Series

● Operating stroke length: 8, 10, 12, 16, 20 mm

Double acting

Single acting (normally closed)



Specifications

Descriptions	CKL2-32CS-HC	CKL2-40CS-HC	CKL2-50CS-HC	CKL2-63CS-HC	CKL2-80CS-HC
Bore size mm	φ32	φ40	φ50	φ63	φ80
Working fluid	Compressed air				
Max. working pressure MPa	0.7 (≈100 psi, 7 bar)				
Min. working pressure MPa	0.4 (≈58 psi, 4 bar)				
Ambient temperature °C	5 (41°F) to 60 (140°F)				
Port size	M5				Rc1/8
Operating stroke length mm	8	10	12	16	20
Rod diameter mm	φ10	φ12	φ14	φ16	φ16
Volumetric capacity (reciprocating) cm ³	7.7	15.6	28.3	60.3	118.2
Repeatability mm	±0.01				
Weight kg	0.42	0.60	0.82	1.66	3.20
Lubrication	Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)				

*1 : Use open port only, since spring clamp method is used.

Do not supply compressed air from the closed port. It may cause damage.

*2 : Do not plug closed port.

*3 : When using in a poor environment, contaminants inhaled from the closed port may cause air leakage. In that case, use a filter to prevent contaminants from entering.

*4 : Since gripping power differs depending on clamp position (open end, intermediate position or closed end) and clamp distance (jaw length), consider safety factors carefully for selection.

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.

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending

How to order

Without switch (built-in magnet for switch)

CKL2 - **32CS** - **HC** - **Y1**

With switch (built-in magnet for switch)

CKL2 - **32CS** - **HC** - **Y1** - **T2H** - **R**

A Size

B Option

C Switch model No.

D Switch quantity

Code	Content				
A Size					
32CS					
40CS					
50CS					
63CS					
80CS					
B Option					
Y1	With small jaw Material: S45C				
Y2	With small jaw Material: MC nylon				
C Switch model No.					
Axial lead wire	Radial lead wire	Proximity Contact	Voltage	Display	Lead wire
			AC	DC	
T2H*	T2V*	Proximity		●	1-color
T3H*	T3V*			●	display
* 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 : Small jaw is commonly used for inner and outer chuck.

*2 : 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.

[Example of model No.]

CKL2-32CS-HC-Y1-T2H-R

- A** Size : 32CS
- B** Option : With small jaw Material: S45C
- C** Switch model No.: Proximity T2H switch, lead wire 1 m
- D** Switch quantity : 1 on open side

How to order switch

SW - **T2H**

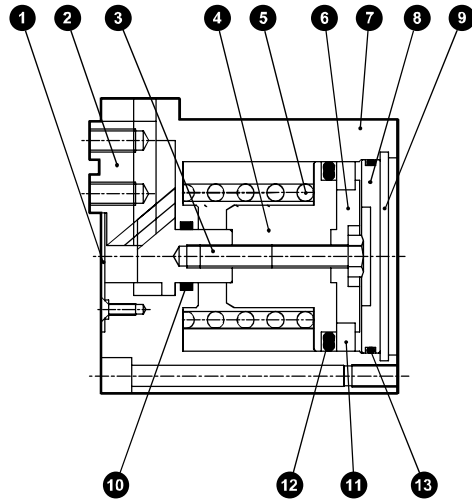
Switch model No.
(Item **C** above)

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

CKL2-* -HC Series

Internal structure and parts list

● CKL2-32CS to 80CS-HC



Cannot be disassembled

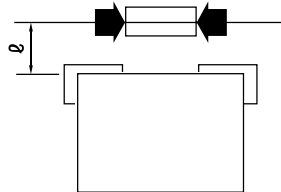
Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Center guard	Stainless steel		7	Body	Aluminum alloy	
2	Master key	Carbon steel		8	Cylinder guard	Aluminum alloy	
3	Piston A	32CS: Stainless steel 40CS to 80CS: Carbon steel		9	Snap ring	Stainless steel	Steel (40, 80CS)
4	Piston B	Aluminum alloy		10	Rod packing	Nitrile rubber	
5	Spring	Stainless steel		11	Magnet		
6	Piston C	Aluminum alloy		12	Piston packing	Nitrile rubber	
				13	Cylinder gasket	Nitrile rubber	

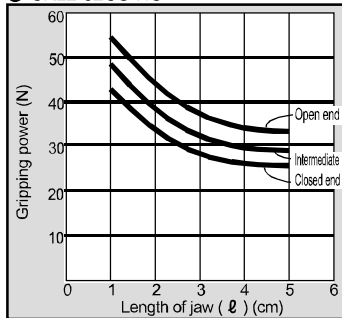
Gripping power performance data

The gripping power in the closing direction with jaw length ℓ of hand is shown.

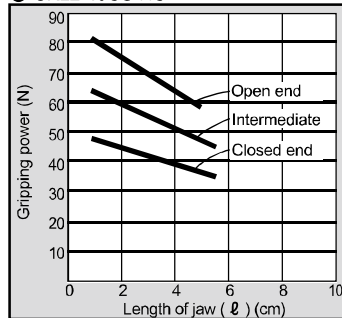
·Closed direction () (shown with continuous line)



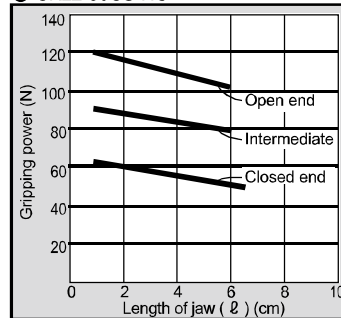
● CKL2-32CS-HC



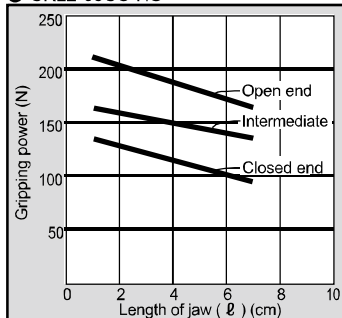
● CKL2-40CS-HC



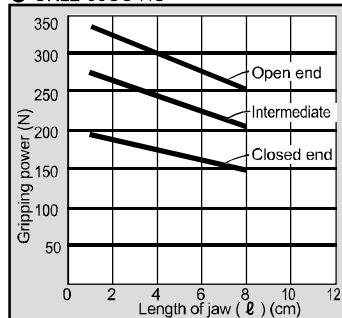
● CKL2-50CS-HC



● CKL2-63CS-HC



● CKL2-80CS-HC



(Note) When making a selection, read the precautions for design and selection on page 1722.

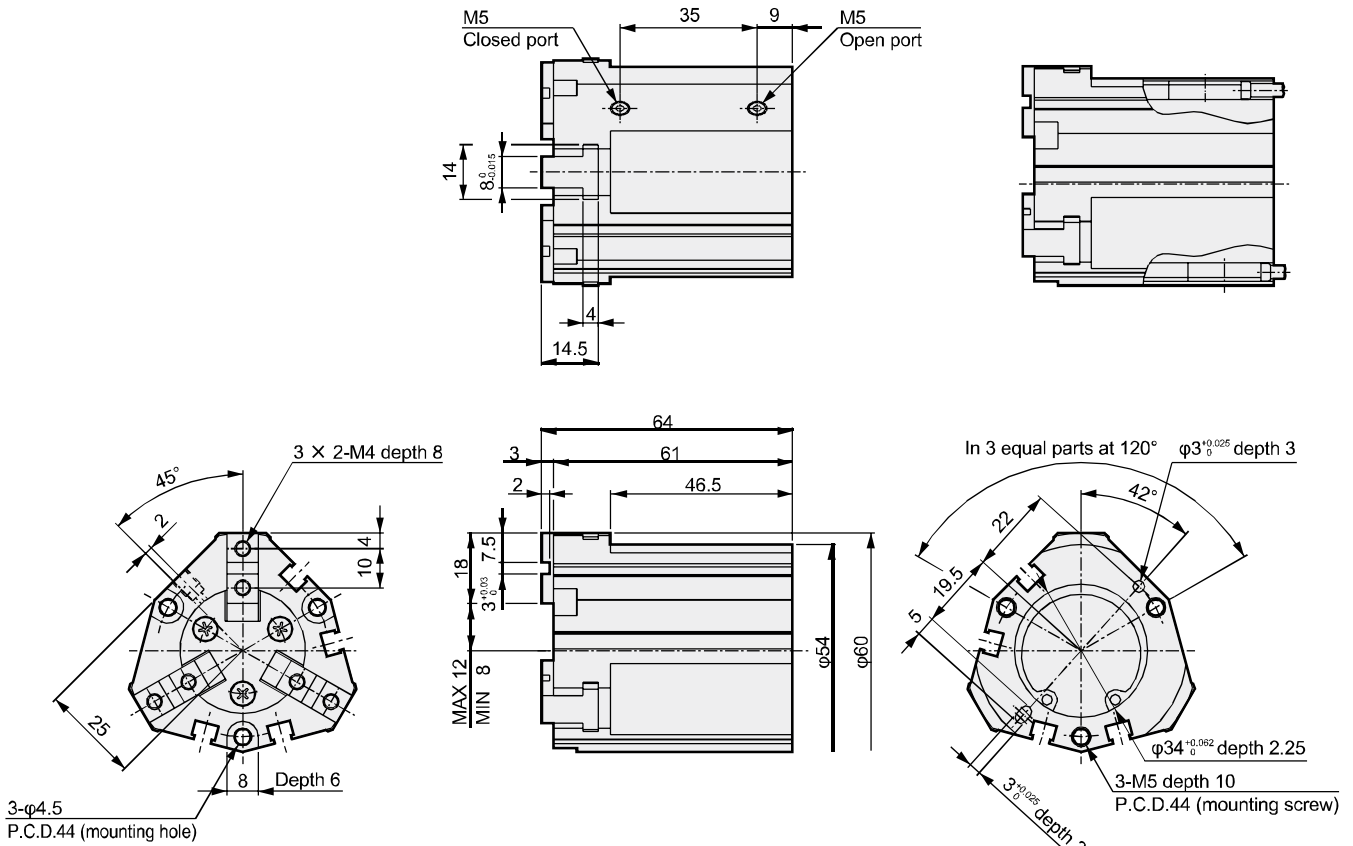
CKL2-* -HC Series

Position locking powerful chuck

Dimensions

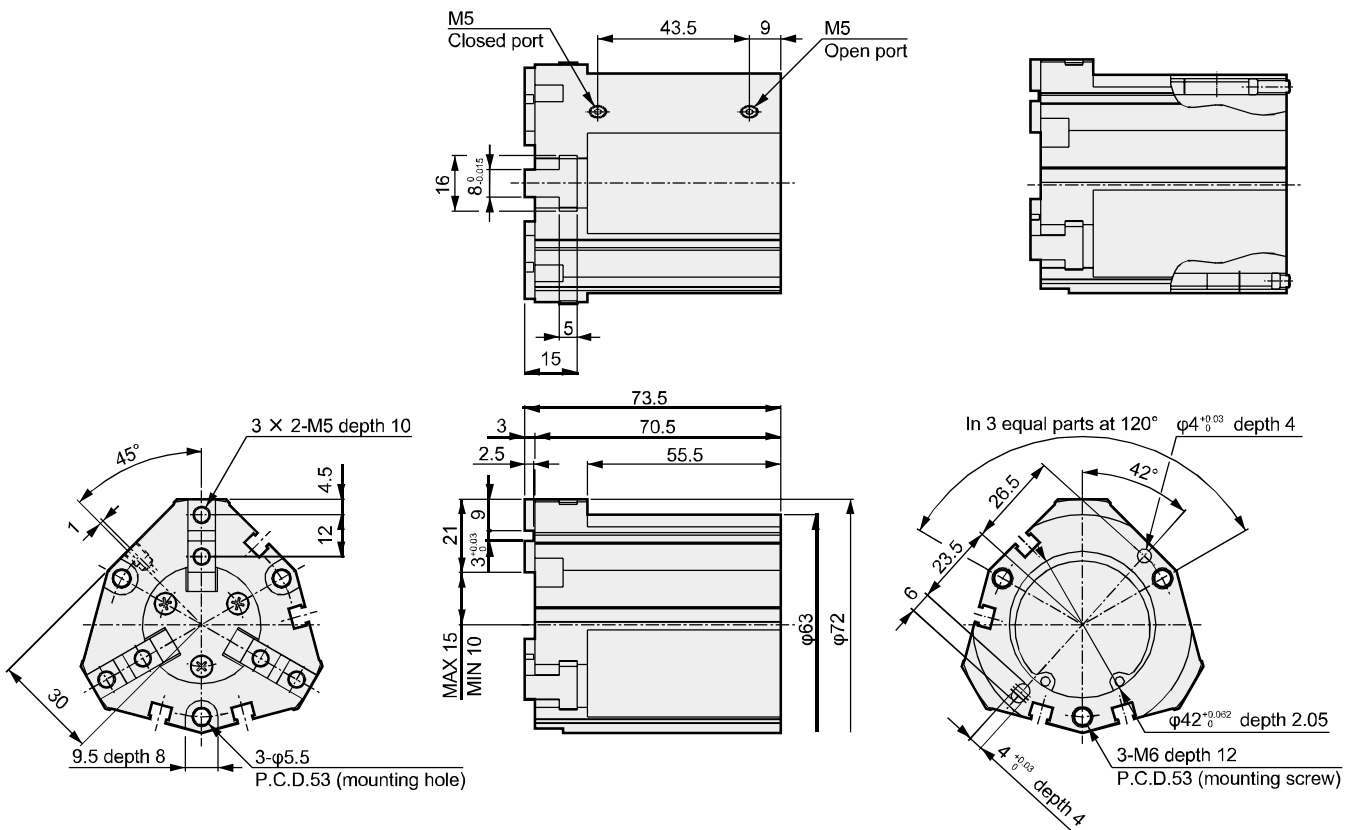
● CKL2-32CS-HC standard

● With switch



● CKL2-40CS-HC standard

● With switch



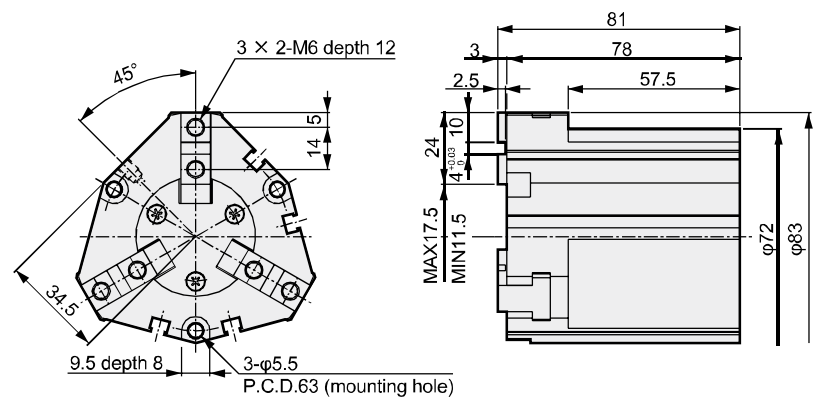
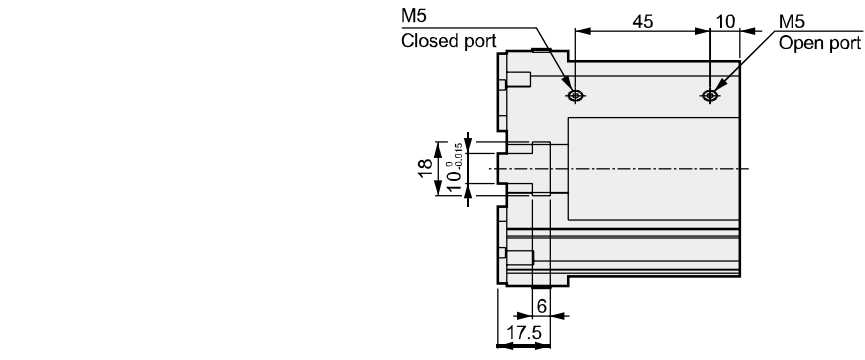
LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2-* -HC
CKH2
CKLB2
CHC

CKL2-* -HC Series

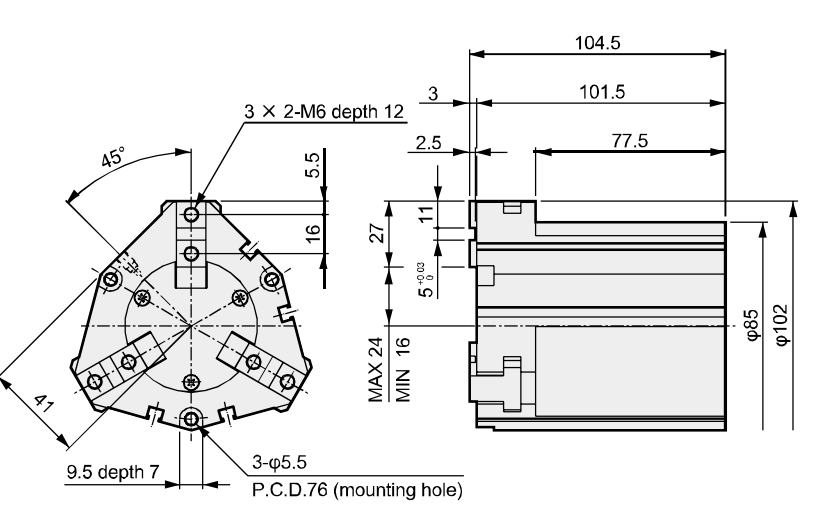
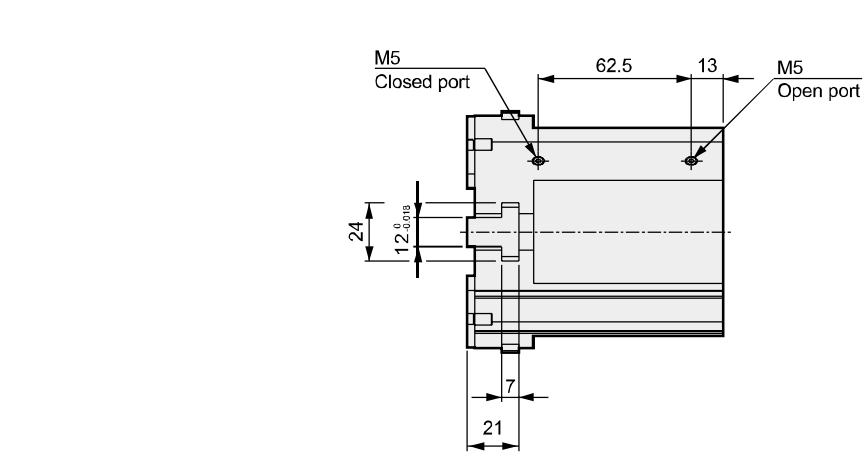
Dimensions

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MechHnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

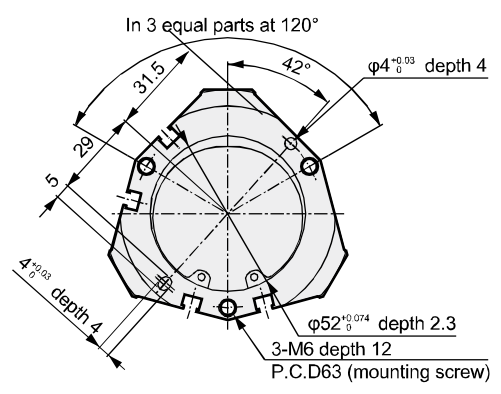
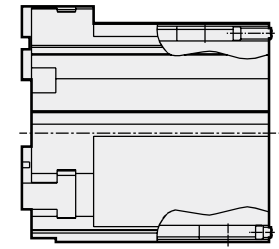
● CKL2-50CS-HC standard



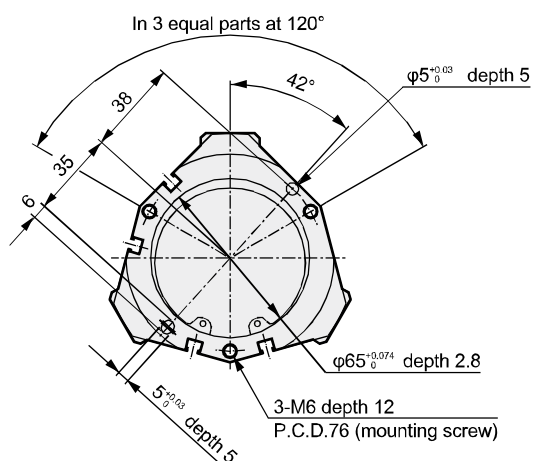
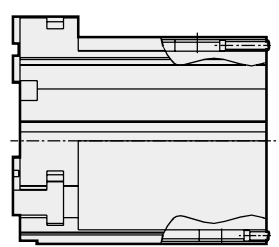
● CKL2-63CS-HC standard



● With switch



● With switch



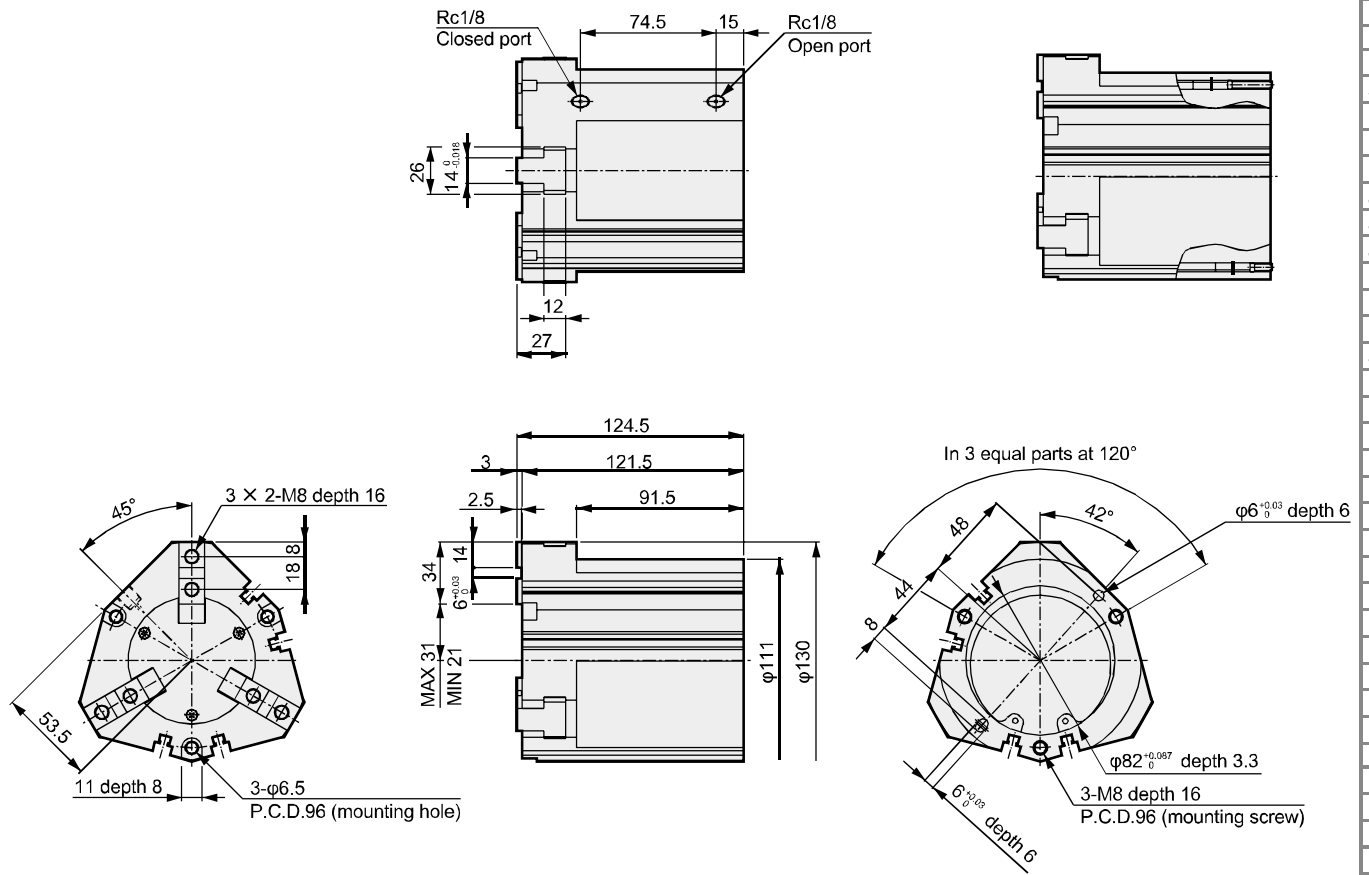
CKL2-* -HC Series

Position locking powerful chuck

Dimensions

● CKL2-80CS-HC standard

● With switch



LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHand/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC



Small jaw

● Material: Iron, engineering plastic



Features

A variety of small jaws (soft jaw) is available to match user machining needs.

● Spigot section machined

Troublesome reference section (spigot section) machined.

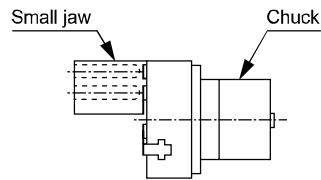
Wide series variation to select according to workpiece shape and dimension.

● 2 types of material for small jaw

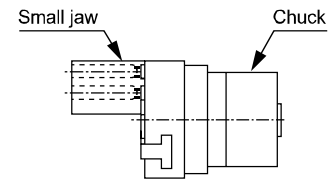
Iron (S50C) and engineering plastic (MC nylon) are available for optimum selection according to material and working condition of workpiece.

Compatible model for standard small jaw

CK type



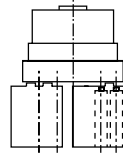
CKA/CKG type



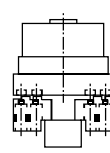
Small jaw applications

Chuck applications

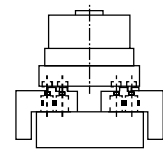
Soft jaw



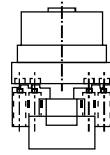
Compact workpiece



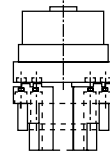
Large workpiece



For large and small workpieces



For inner tensive large and small workpieces



How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKA - **Y1** - **610**

A Model **B** Material **C** Small jaw No.

A Model		B Material		C Small jaw No.	
Code	Content	Code	Content	Code	Compatibility
CKG	3-way jaw bearing chuck	Y1	Material S50C	510	CKG-16S,CKA-15CS,CKF-15CS
CK	3-way jaw long stroke chuck	Y2	Material MC nylon	520	CKG-25S,CKA-20CS,CKF-20CS
CKA	3-way jaw thin chuck			530	CKG-32CS,CKA-25CS,CKF-25CS
CKF	Hollow chuck			540	CKG-40CS,CKA-30CS,CKF-30CS
				610	CKG-25S,CKA-20CS,CKF-20CS
				620	CKG-32CS,CKA-25CS,CKF-25CS
				630	CKG-40CS,CKA-30CS,CKF-30CS
				710	CKG-50CS,CKA-40CS,CKF-40CS
				720	CK-1CS
				730	CK-1.5CS
				740	CK-2CS
				750	CKA-50CS
				760	CKA-60CS
				770	CKA-70CS

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STR/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SrdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

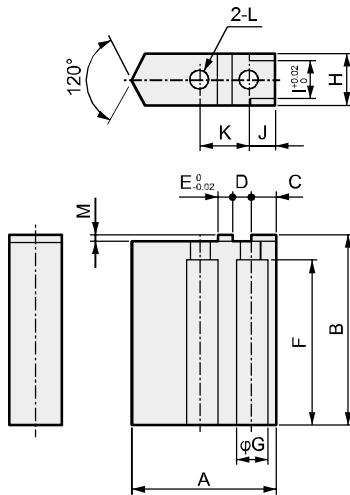
Small jaw

Dimensions

Dimensions



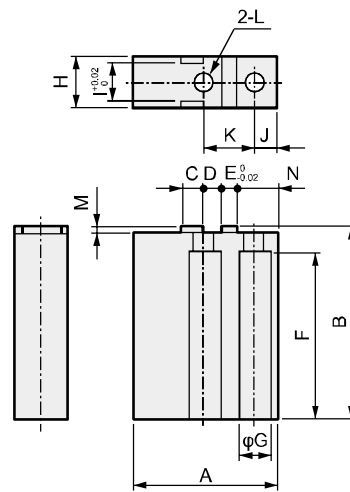
● 510 to 540



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
			Y1*1	Y2*2													
510	CKA-15CS CKG-16CS CKF-15CS		17.5	25	3.5	2.5	2	20	6	8	6	3.5	7	3.5	1	17	5
520	CKA-20CS CKG-25CS CKF-20CS		24	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	45	11
530	CKA-25CS CKG-32CS CKF-25CS		31	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	103	21
540	CKA-30CS CKG-40CS CKF-30CS		37	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	136	30

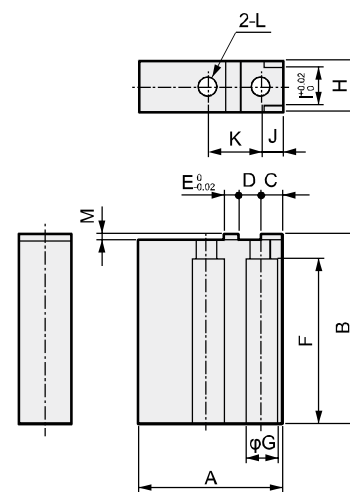
● 610 to 630



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
			Y1*1	Y2*2														
610	CKA-20CS CKG-25CS CKF-20CS		30	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	8	65	10
620	CKA-25CS CKG-32CS CKF-25CS		35	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	8	126	19
630	CKA-30CS CKG-40CS CKF-30CS		45	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	10.5	188	28

● 710 to 770



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
			Y1*1	Y2*2													
710	CKA-40CS CKG-50CS CKF-40CS		44.5	60	6	5	4	52	11	18	14	6	14	6.5	2	285	43
720	CK-1CS		33.5	50	6	5	4	43	9.5	14	10	6	14	5.5	2	128	19
730	CK-1.5CS		43.5	65	7	6.5	5	56	11	18	14	7	18	6.5	2	302	45
740	CK-2CS		55.5	80	8	7	6	71	14	19	14	8	20	8.5	2	471	70
750	CKA-50CS		51.5	70	6	5	5	58	11	18	14	6	15	6.5	2	402	62
760	CKA-60CS		64	80	8	6	6	68	14	20	16	8	18	9	2	608	94
770	CKA-70CS		74	100	8	7	6	88	14	20	16	8	20	9	2	913	140

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MecHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

Small jaw

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKL2 - Y1 - 810

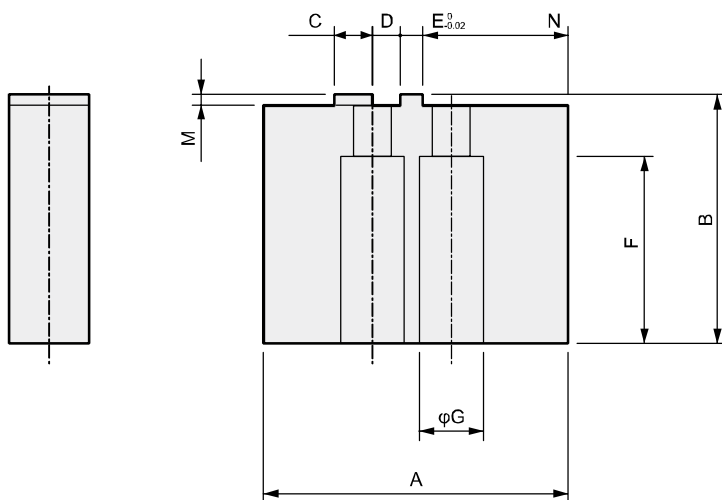
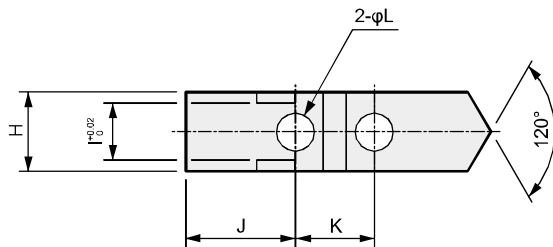
A Model

B Material

C Small jaw No.

Code	Content
A Model	
CKL2	Powerful chuck with high gripping power
CKH2	Powerful chuck with high gripping power
CKLB2	Bi-directional powerful chuck
B Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
C Small jaw No.	
810	CKLB2-20CS
820	CKLB2-25CS
830	CKL2-32CS,CKLB2-32CS
840	CKL2-40CS,CKLB2-40CS
850	CKL2-50CS,CKH2-50CS,CKLB2-50CS
860	CKL2-63CS,CKH2-63CS,CKLB2-63CS
870	CKL2-80CS,CKH2-80CS,CKLB2-80CS
880	CKL2-100CS,CKH2-100CS,CKLB2-100CS

Dimensions



Code Small jaw No.	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
															Y1	Y2
810	29.5	29	3.5	2.5	2	23	6.5	10	6	12	7	3.5	1	13	64	10
820	34.5	33.5	4.5	3.5	2	24	8	10	7	12.5	9	4.5	1.5	16.5	86	13
830	39.5	33.5	4.5	3.5	3	24	8	12	8	14	10	4.5	1.5	19	118	18
840	49.5	39	6	4.5	3	31	9	12	8	18.5	12	5.5	2	23.5	171	26
850	54.5	44	6	5	4	33	11	14	10	18.5	14	6.5	2	27	250	37
860	69.5	49	8	5.5	5	38	11	16	12	24.5	16	6.5	2	34.5	408	61
870	84.5	59	10	6	6	47	14	18	14	28	18	9	2	44.5	676	101
880	99.5	64	10	7	6	52	14	20	16	31.5	20	9	2	55	962	144

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKS - **Y1** - **910**

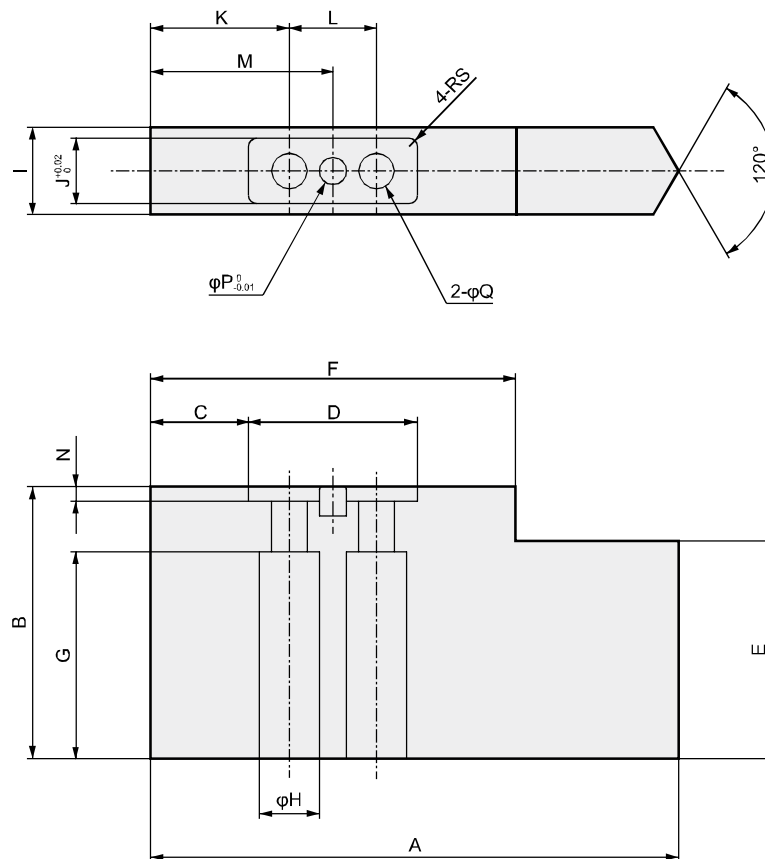
Model

A Material

B Small jaw No.

Code	Content
A Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
B Small jaw No.	
910	CKS-08CS
920	CKS-12CS
930	CKS-16CS
940	CKS-20CS
950	CKS-25CS
960	CKS-32CS

Dimensions



Code		A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	S	Weight (g)	
Small jaw No.	Compatible models																		Y1	Y2
910	CKS-08CS	42.5	30	6.5	15	20	27.5	23	6.5	10	6	10.5	7	14	1.7	2	3.5	1	74	12
920	CKS-12CS	48	35	7.5	19	25	34	27	8	11	7	12.5	9	17	2.7	2	4.5	1	108	17
930	CKS-16CS	56.5	35	9.5	21	25	40.5	27	8	12	8	15	10	20	2.7	3	4.5	1	145	23
940	CKS-20CS	66.5	40	11	25	30	48	32	9.5	12	8	17.5	12	23.5	2.7	3	5.5	1.5	192	31
950	CKS-25CS	85.5	45	16	28	35	60	33	11	14	10	23	14	30	2.7	4	6.5	1.5	335	53
960	CKS-32CS	97	50	18	31	40	67	38	11	16	12	25.5	16	33.5	2.7	5	6.5	1.5	500	79

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

LCW
 LCR
 LCG
 LCX
 LCM
 STM
 STG
 STS/STL
 STR2
 UCA2
 ULK*
 JSK/M2
 JSG
 JSC3/JSC4
 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
 MecHnd/Chuk
 ShkAbs
 FJ
 FK
 SpdContr
 Ending
 CKG
 CK
 CKA
 CKS
 CKF
 CKJ
 CKL2
 CKL2*-HC
CKH2
 CKLB2
 CHC



Powerful chuck with high gripping power

CKH2 Series

- Operating stroke length: 6, 8, 10, 12 mm

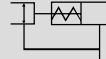
Double acting



Single acting (normally open)



Single acting (normally closed)



Specifications

Descriptions	CKH2-50CS	CKH2-63CS	CKH2-80CS	CKH2-100CS
Bore size mm	φ50	φ63	φ80	φ100
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	6	8	10	12
Rod diameter mm	φ14	φ16	φ16	φ20
Volumetric capacity (reciprocating) cm ³	28.3	60.3	118.2	215.5
Repeatability mm	±0.01			
Weight kg	0.59	1.02	2.02	3.45
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)

CKH2 - **50CS** - **O**

With switch (built-in magnet for switch)

CKH2 - **50CS** - **O** - **T2H** - **R**

A Size

B Option

C Switch model No.

D Switch quantity

Code	Content				
A Size					
50CS					
63CS					
80CS					
100CS					
B Option					
Blank	Standard (double acting)				
O	Single acting (normally open)				
C	Single acting (normally closed)				
Y1	With small jaw Material: S45C				
Y2	With small jaw Material: MC nylon				
C Switch model No.					
Axial lead wire	Radial lead wire	Contact	Voltage	Display	Lead wire
			AC	DC	
T2H*	T2V*	Proximity		●	1-color display
T3H*	T3V*			●	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 : Small jaw is not available for inner diameter chuck.

*2 : 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.

[Example of model No.]

CKH2-50CS-O-T2H-R

- A** Size : 50CS
- B** Option : Single acting (normally open)
- C** Switch model No. : Proximity T2H switch, lead wire 1 m
- D** Switch quantity : 1 on open side

How to order switch

SW - **T2H**

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

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*+HC
CKH2
CKLB2
CHC

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.

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- ST5/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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
- MecHnd/Chuk
- ShkAbs
- FJ
- FK
- SsdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

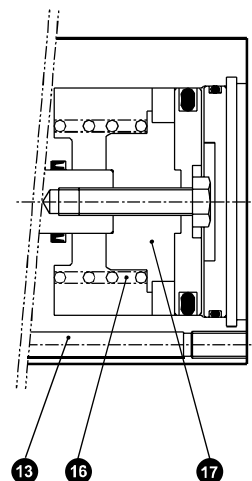
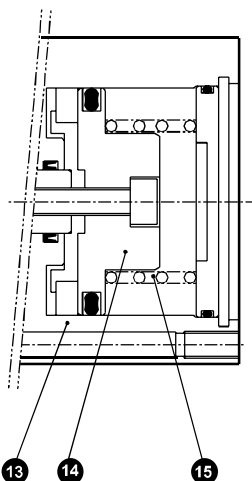
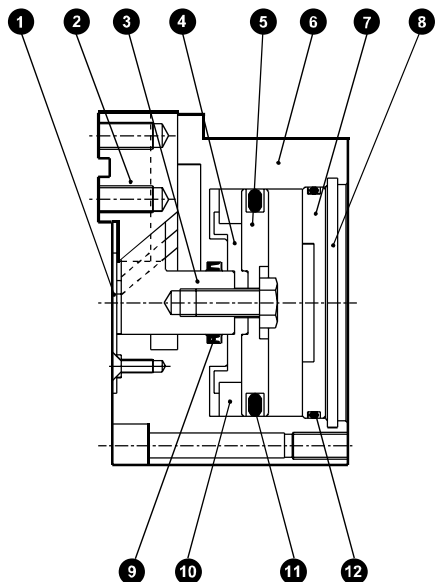
Internal structure and parts list

● CKH2-50CS to 100CS

Standard (double acting)

O (normally open)

C (normally closed)



Cannot be disassembled

Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Center guard	Stainless steel		9	Lot sealant	Nitrile rubber	
2	Master key	Carbon steel		10	Magnet		
3	Piston A	Carbon steel		11	Piston seal	Nitrile rubber	
4	Piston B	Aluminum alloy		12	Cylinder sealant	Nitrile rubber	
5	Piston C	Aluminum alloy		13	C, O Body	Aluminum alloy	
6	Body	Aluminum alloy		14	O Piston C	Aluminum alloy	
7	Cylinder guard	Aluminum alloy		15	O Spring	Stainless steel	
8	C type snap ring	Stainless steel (50/60CS) Steel (80CS/100CS)		16	C Spring	Stainless steel	
				17	C Piston B	Aluminum alloy	

Gripping power performance data

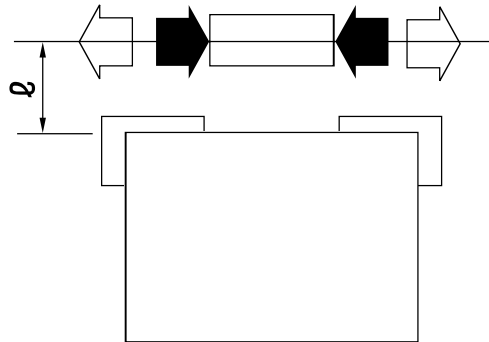
The gripping power in the opening/closing directions with jaw length ℓ of hand with a supply pressure of 0.3, 0.5 and 0.7 MPa is shown.

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

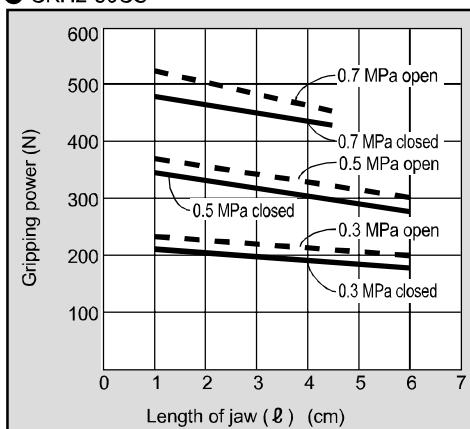
(Note) O type gripping power decreases approximately 20 to 30% in the closed direction compared to double acting.

C type gripping power decreases approximately 10 to 20% in the open direction compared to the double acting.

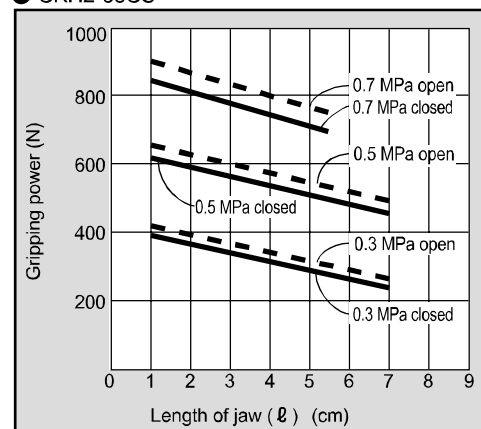
When making a selection, read the precautions for design and selection on page 1722.



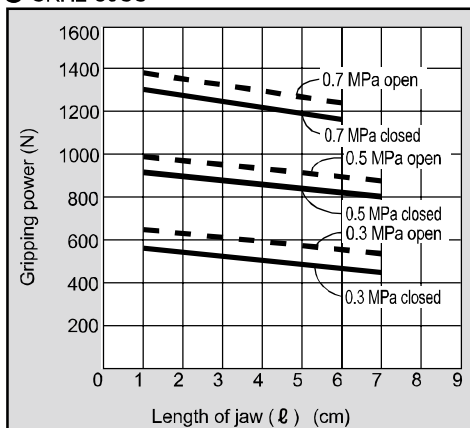
● CKH2-50CS



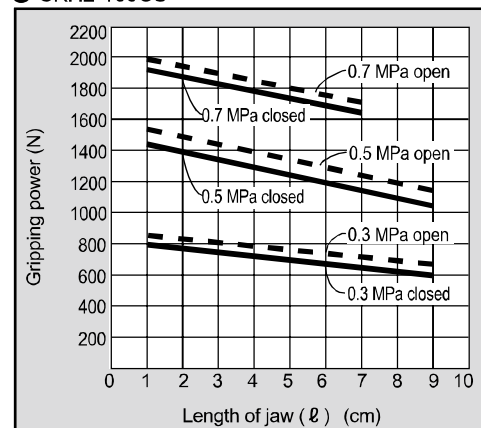
● CKH2-63CS



● CKH2-80CS



● CKH2-100CS



LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MechHand/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

CKH2 Series

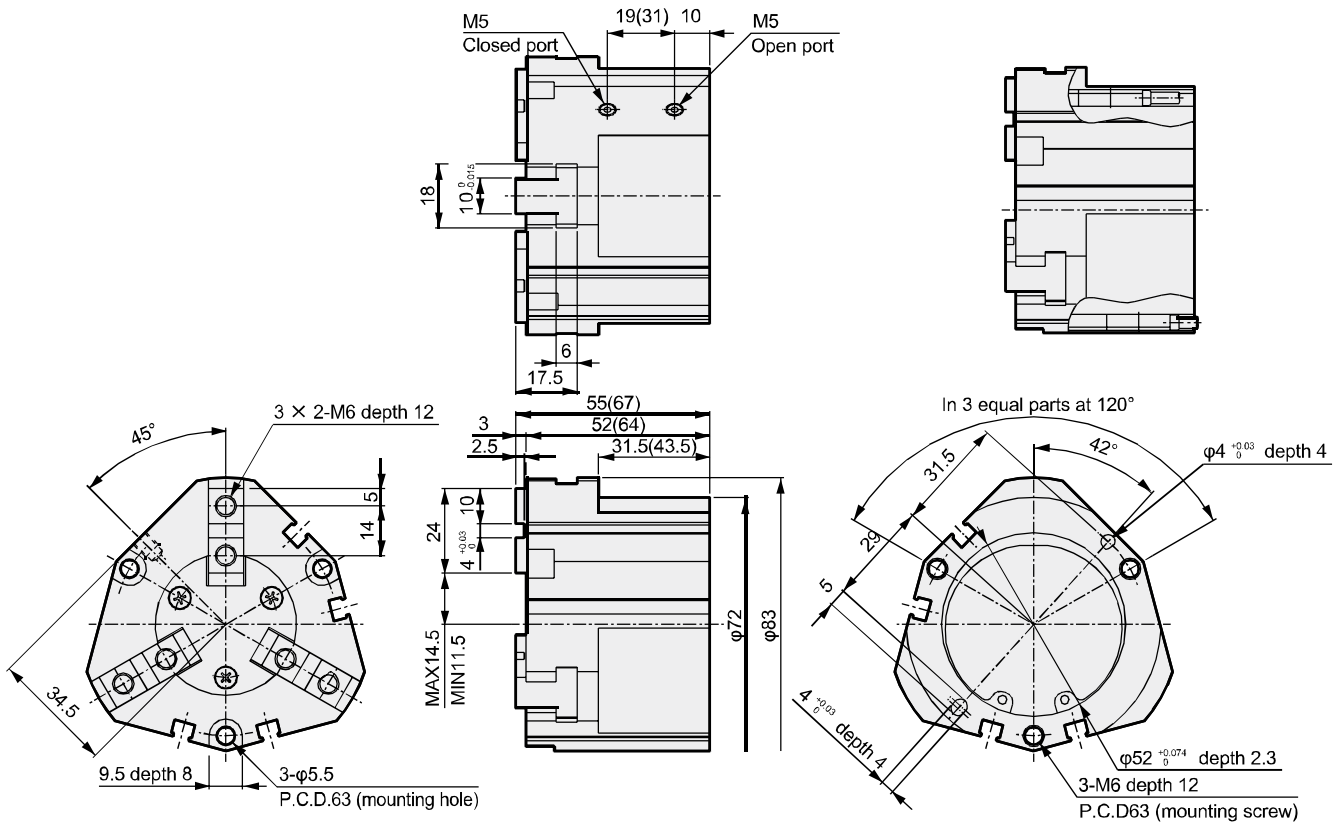
Dimensions



● CKH2-50CS standard/O/C

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

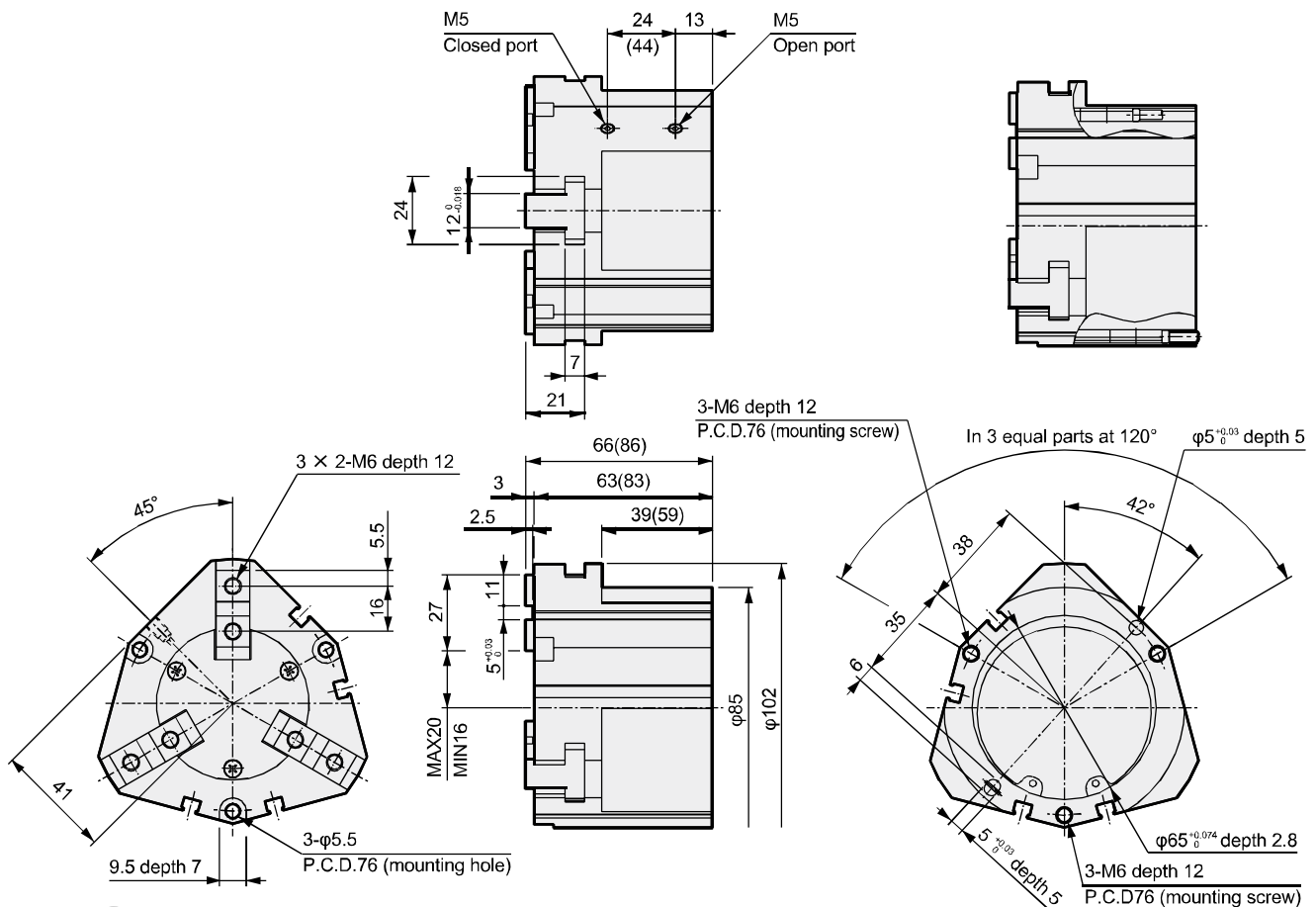
● With switch



● CKH2-63CS standard/O/C

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

● With switch



LCW
LCR
LCC
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MechHnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC



Small jaw

● Material: Iron, engineering plastic



Features

A variety of small jaws (soft jaw) is available to match user machining needs.

● Spigot section machined

Troublesome reference section (spigot section) machined.

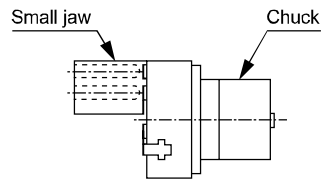
Wide series variation to select according to workpiece shape and dimension.

● 2 types of material for small jaw

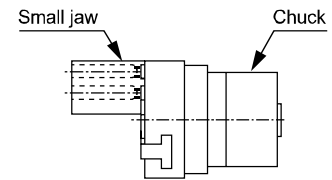
Iron (S50C) and engineering plastic (MC nylon) are available for optimum selection according to material and working condition of workpiece.

Compatible model for standard small jaw

CK type



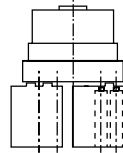
CKA/CKG type



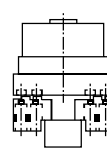
Small jaw applications

Chuck applications

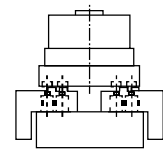
Soft jaw



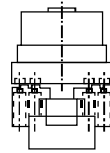
Compact workpiece



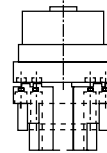
Large workpiece



For large and small workpieces



For inner tensive large and small workpieces



How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKA - **Y1** - **610**

A Model **B** Material **C** Small jaw No.

A Model		B Material		C Small jaw No.	
Code	Content	Code	Content	Code	Compatibility
CKG	3-way jaw bearing chuck	Y1	Material S50C	510	CKG-16S,CKA-15CS,CKF-15CS
CK	3-way jaw long stroke chuck	Y2	Material MC nylon	520	CKG-25S,CKA-20CS,CKF-20CS
CKA	3-way jaw thin chuck			530	CKG-32CS,CKA-25CS,CKF-25CS
CKF	Hollow chuck			540	CKG-40CS,CKA-30CS,CKF-30CS
				610	CKG-25S,CKA-20CS,CKF-20CS
				620	CKG-32CS,CKA-25CS,CKF-25CS
				630	CKG-40CS,CKA-30CS,CKF-30CS
				710	CKG-50CS,CKA-40CS,CKF-40CS
				720	CK-1CS
				730	CK-1.5CS
				740	CK-2CS
				750	CKA-50CS
				760	CKA-60CS
				770	CKA-70CS

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STR/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SrdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

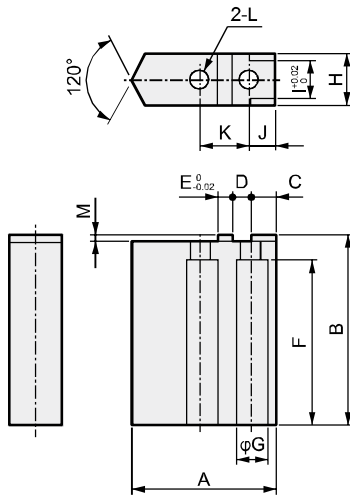
Small jaw

Dimensions

Dimensions



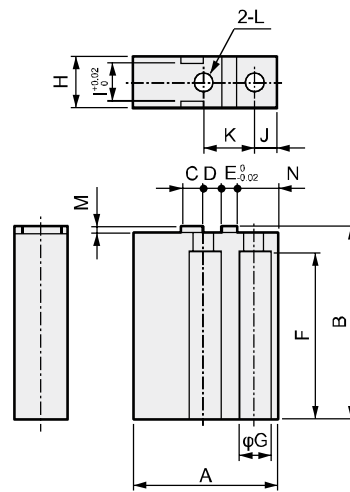
● 510 to 540



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
			Y1*1	Y2*2													
510	CKA-15CS CKG-16CS CKF-15CS		17.5	25	3.5	2.5	2	20	6	8	6	3.5	7	3.5	1	17	5
520	CKA-20CS CKG-25CS CKF-20CS		24	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	45	11
530	CKA-25CS CKG-32CS CKF-25CS		31	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	103	21
540	CKA-30CS CKG-40CS CKF-30CS		37	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	136	30

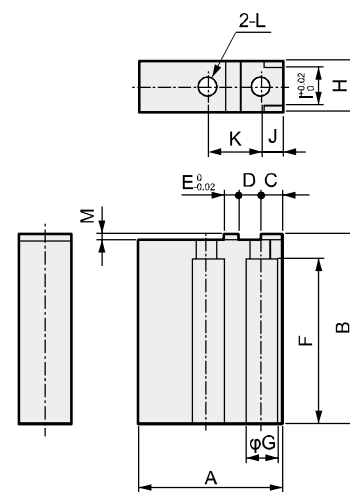
● 610 to 630



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
			Y1*1	Y2*2														
610	CKA-20CS CKG-25CS CKF-20CS		30	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	8	65	10
620	CKA-25CS CKG-32CS CKF-25CS		35	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	8	126	19
630	CKA-30CS CKG-40CS CKF-30CS		45	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	10.5	188	28

● 710 to 770



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
			Y1*1	Y2*2													
710	CKA-40CS CKG-50CS CKF-40CS		44.5	60	6	5	4	52	11	18	14	6	14	6.5	2	285	43
720	CK-1CS		33.5	50	6	5	4	43	9.5	14	10	6	14	5.5	2	128	19
730	CK-1.5CS		43.5	65	7	6.5	5	56	11	18	14	7	18	6.5	2	302	45
740	CK-2CS		55.5	80	8	7	6	71	14	19	14	8	20	8.5	2	471	70
750	CKA-50CS		51.5	70	6	5	5	58	11	18	14	6	15	6.5	2	402	62
760	CKA-60CS		64	80	8	6	6	68	14	20	16	8	18	9	2	608	94
770	CKA-70CS		74	100	8	7	6	88	14	20	16	8	20	9	2	913	140

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Small jaw

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKL2 - Y1 - 810

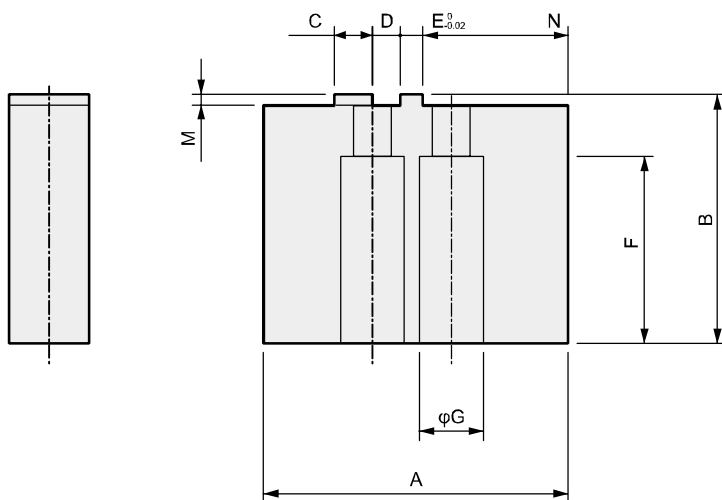
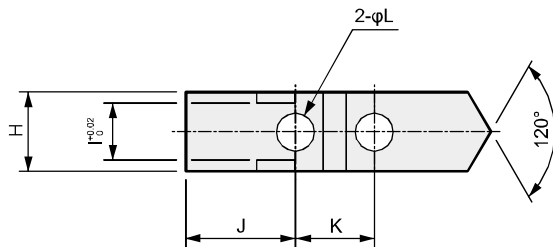
A Model

B Material

C Small jaw No.

Code	Content
A Model	
CKL2	Powerful chuck with high gripping power
CKH2	Powerful chuck with high gripping power
CKLB2	Bi-directional powerful chuck
B Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
C Small jaw No.	
810	CKLB2-20CS
820	CKLB2-25CS
830	CKL2-32CS,CKLB2-32CS
840	CKL2-40CS,CKLB2-40CS
850	CKL2-50CS,CKH2-50CS,CKLB2-50CS
860	CKL2-63CS,CKH2-63CS,CKLB2-63CS
870	CKL2-80CS,CKH2-80CS,CKLB2-80CS
880	CKL2-100CS,CKH2-100CS,CKLB2-100CS

Dimensions



Code Small jaw No.	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
															Y1	Y2
810	29.5	29	3.5	2.5	2	23	6.5	10	6	12	7	3.5	1	13	64	10
820	34.5	33.5	4.5	3.5	2	24	8	10	7	12.5	9	4.5	1.5	16.5	86	13
830	39.5	33.5	4.5	3.5	3	24	8	12	8	14	10	4.5	1.5	19	118	18
840	49.5	39	6	4.5	3	31	9	12	8	18.5	12	5.5	2	23.5	171	26
850	54.5	44	6	5	4	33	11	14	10	18.5	14	6.5	2	27	250	37
860	69.5	49	8	5.5	5	38	11	16	12	24.5	16	6.5	2	34.5	408	61
870	84.5	59	10	6	6	47	14	18	14	28	18	9	2	44.5	676	101
880	99.5	64	10	7	6	52	14	20	16	31.5	20	9	2	55	962	144

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKS - **Y1** - **910**

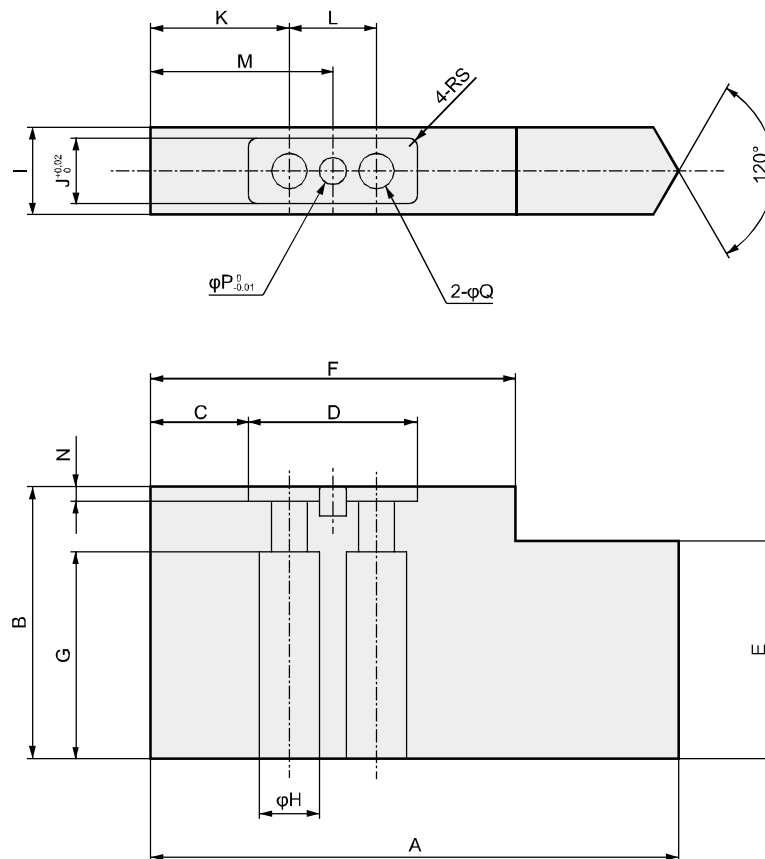
Model

A Material

B Small jaw No.

Code	Content
A Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
B Small jaw No.	
910	CKS-08CS
920	CKS-12CS
930	CKS-16CS
940	CKS-20CS
950	CKS-25CS
960	CKS-32CS

Dimensions



Code	Small jaw No. / Compatible models	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	S	Weight (g)	
																			Y1	Y2
910	CKS-08CS	42.5	30	6.5	15	20	27.5	23	6.5	10	6	10.5	7	14	1.7	2	3.5	1	74	12
920	CKS-12CS	48	35	7.5	19	25	34	27	8	11	7	12.5	9	17	2.7	2	4.5	1	108	17
930	CKS-16CS	56.5	35	9.5	21	25	40.5	27	8	12	8	15	10	20	2.7	3	4.5	1	145	23
940	CKS-20CS	66.5	40	11	25	30	48	32	9.5	12	8	17.5	12	23.5	2.7	3	5.5	1.5	192	31
950	CKS-25CS	85.5	45	16	28	35	60	33	11	14	10	23	14	30	2.7	4	6.5	1.5	335	53
960	CKS-32CS	97	50	18	31	40	67	38	11	16	12	25.5	16	33.5	2.7	5	6.5	1.5	500	79

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MecHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC



2-way powerful chuck

CKLB2 Series

- Operational stroke length: 5, 6, 8, 10, 12, 16, 20, 23mm

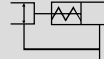
Double acting



Single acting (normally open)



Single acting (normally closed)



Specifications

Descriptions	CKLB2-20CS	CKLB2-25CS	CKLB2-32CS	CKLB2-40CS	CKLB2-50CS	CKLB2-63CS	CKLB2-80CS	CKLB2-100CS
Bore size mm	φ20	φ25	φ32	φ40	φ50	φ63	φ80	φ100
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	5	6	8	10	12	16	20	23
Rod diameter mm	φ6	φ8	φ10	φ12	φ14	φ16	φ16	φ20
Volumetric capacity (reciprocating) cm ³	1.8	3.3	7.7	15.6	28.3	60.3	118.2	215.5
Repeatability mm	±0.01							
Weight kg	0.13	0.20	0.32	0.38	0.58	1.00	2.00	3.53
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.

- LCW
- LCR
- LCC
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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
- MecHnd/Chuk
- ShkAbs
- FJ
- FK
- SsdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

How to order

Without switch (built-in magnet for switch)

CKLB2 - **20CS** - **O**

With switch (built-in magnet for switch)

CKLB2 - **20CS** - **O** - **T2H** - **R**

A Size

B Option

C Switch model No.

D Switch quantity

Code	Content					
A Size						
20CS						
25CS						
32CS						
40CS						
50CS						
63CS						
80CS						
100CS						
B Option						
Blank	Standard (double acting)					
O	Single acting (normally open)					
C	Single acting (normally closed)					
Y1	With small jaw Material: S45C					
Y2	With small jaw Material: MC nylon					
C Switch model No.						
Axial lead wire	Radial lead wire	Contact	Voltage		Display	Lead wire
			AC	DC		
T2H*	T2V*	Proximity		●	1-color display	2-wire
T3H*	T3V*			●		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 : Small jaw is commonly used for inner and outer mount chuck.

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

[Example of model No.]

CKLB2-20CS-0-T2H-R

- A** Size : 20CS
- B** Option : Single acting (normally open)
- C** Switch model No.: Proximity T2H switch, lead wire 1 m
- D** Switch quantity : 1 on open side

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

CKLB2 - ... - **P4*** ● Design compatible with rechargeable battery manufacturing process.

* Contact CKD for details.

How to order switch

SW - **T2H**

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

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.

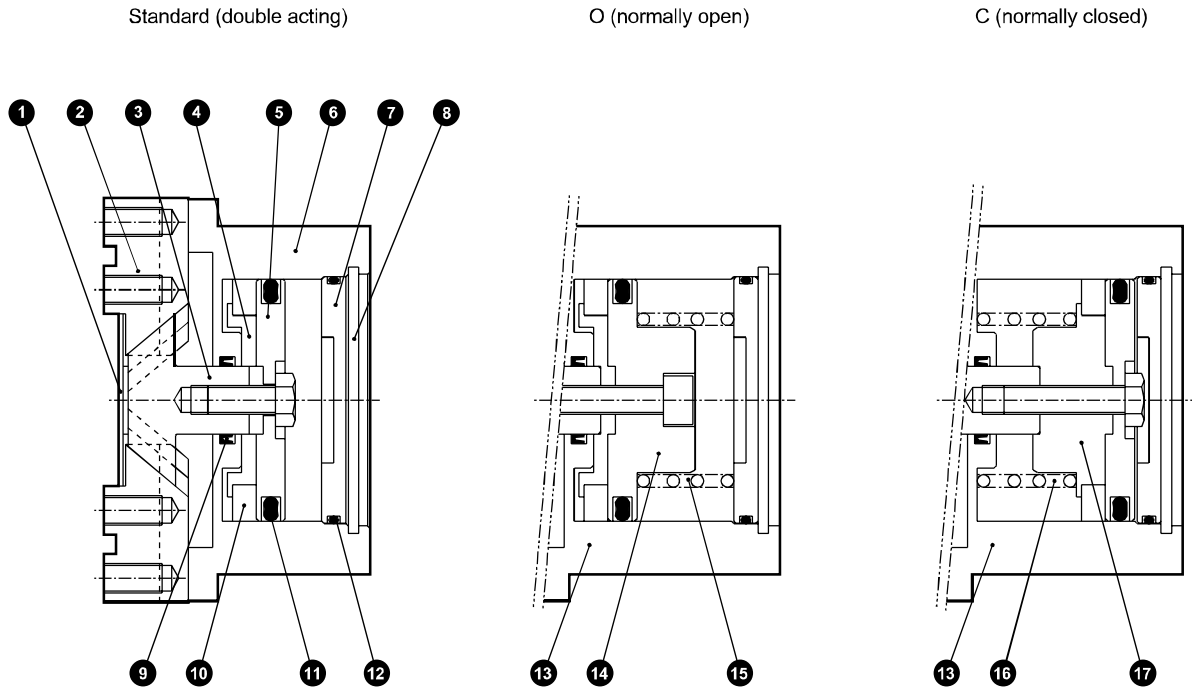
LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuck
MecHnd/Chuck
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

CKLB2 Series

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MecHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2**
- CHC

Internal structure and parts list

● CKLB2-20CS to 100CS



Cannot be disassembled

Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Center guard	Stainless steel		9	Rod packing	Nitrile rubber	
2	Master key	Carbon steel		10	Magnet		
3	Piston A	20CS to 32CS: Stainless steel 40CS to 100CS: Carbon steel		11	Piston packing	Nitrile rubber	
4	Piston B	Aluminum alloy		12	Cylinder gasket	Nitrile rubber	
5	Piston C	Aluminum alloy		13	O, C body	Aluminum alloy	
6	Body	Aluminum alloy		14	O Piston C	Aluminum alloy	
7	Cylinder guard	Aluminum alloy		15	O spring	Stainless steel	
8	Snap ring	Stainless steel	Steel (80, 100CS)	16	C spring	Stainless steel	
				17	C Piston B	Aluminum alloy	

Note) *1 Stainless steel for 20CS to 32CS and carbon steel for 40CS to 100CS

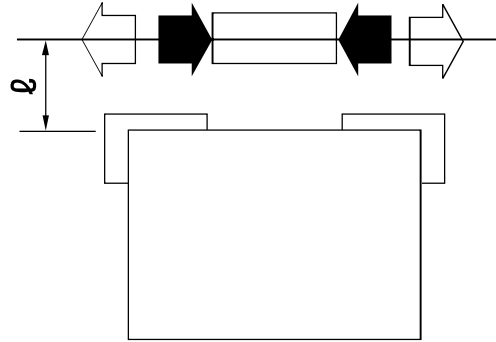
Gripping power performance data

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.

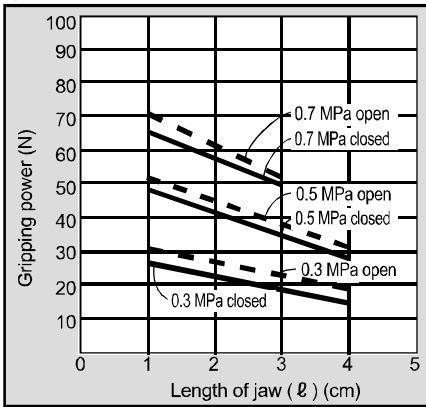
- Open direction (←) - - - - (shown with broken line)
- Closed direction (→) ——— (shown with continuous line)

(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.

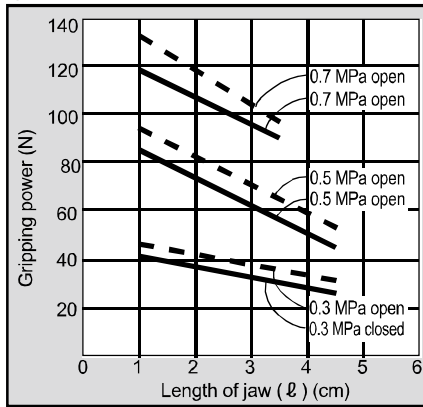
When making a selection, read the precautions for design and selection on page 1722.



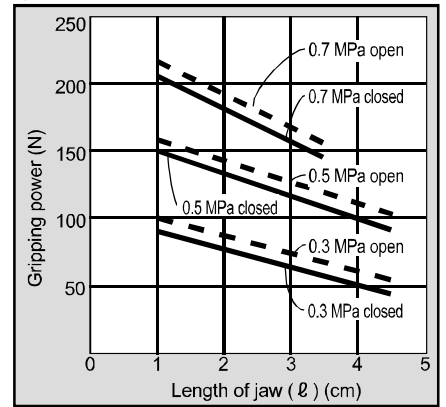
● CKLB2-20CS



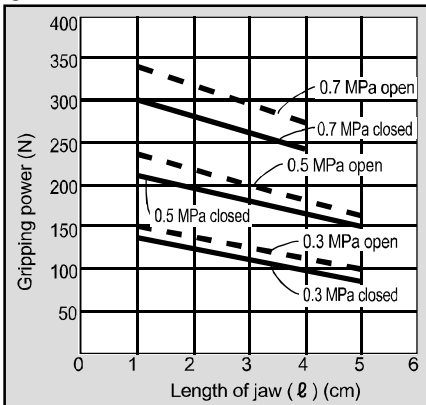
● CKLB2-25CS



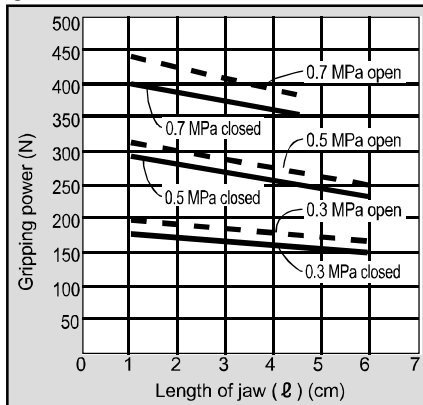
● CKLB2-32CS



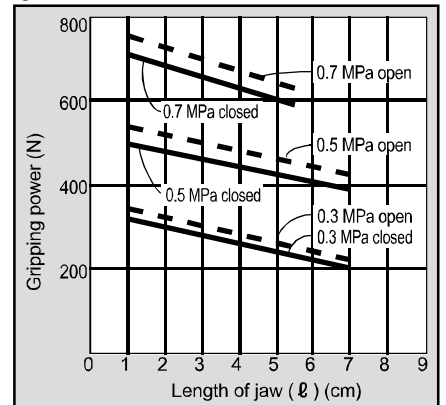
● CKLB2-40CS



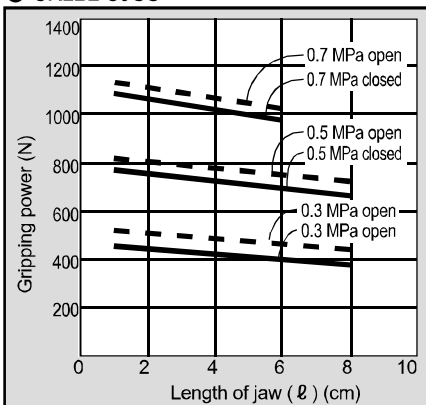
● CKLB2-50CS



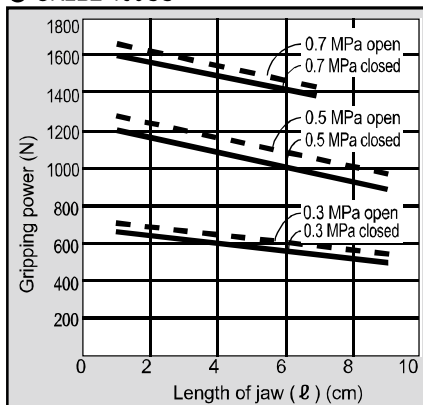
● CKLB2-63CS



● CKLB2-80CS



● CKLB2-100CS



LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

CKLB2 Series

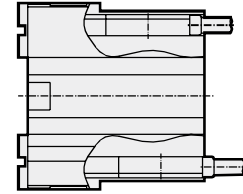
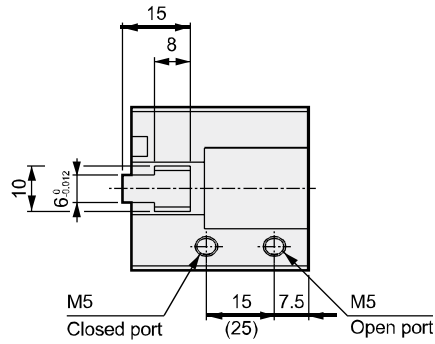
Dimensions



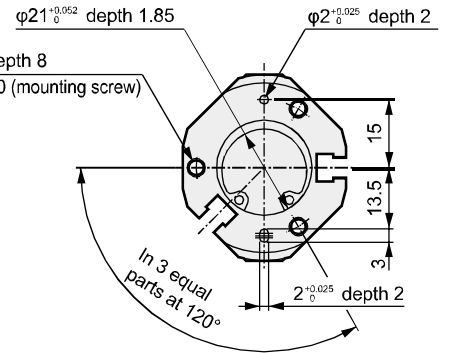
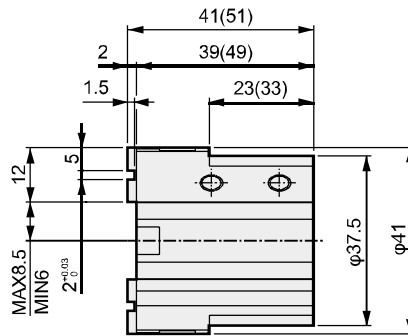
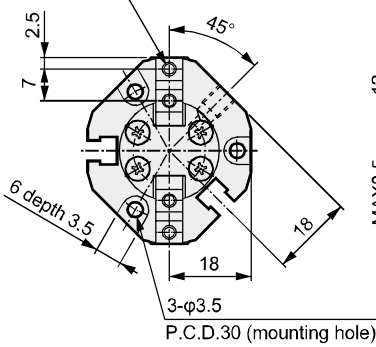
● CKLB2-20CS standard/O/C

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

● With switch



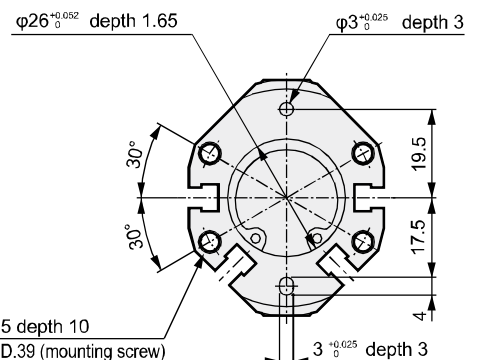
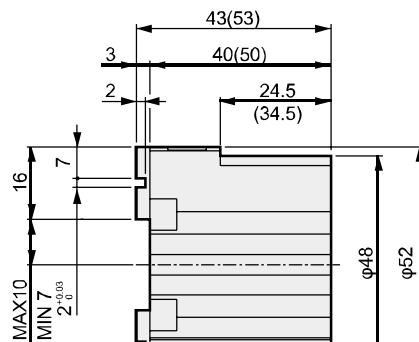
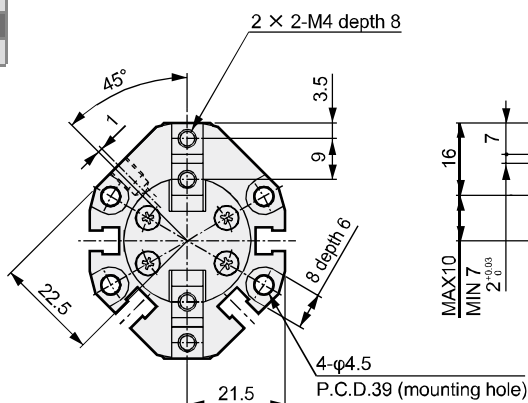
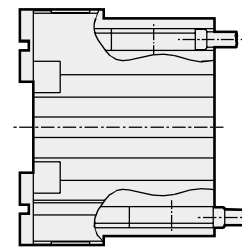
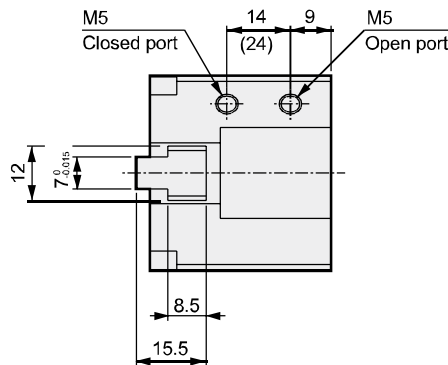
2 × 2-M3 depth 6



● CKLB2-25CS standard/O/C

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

● With switch



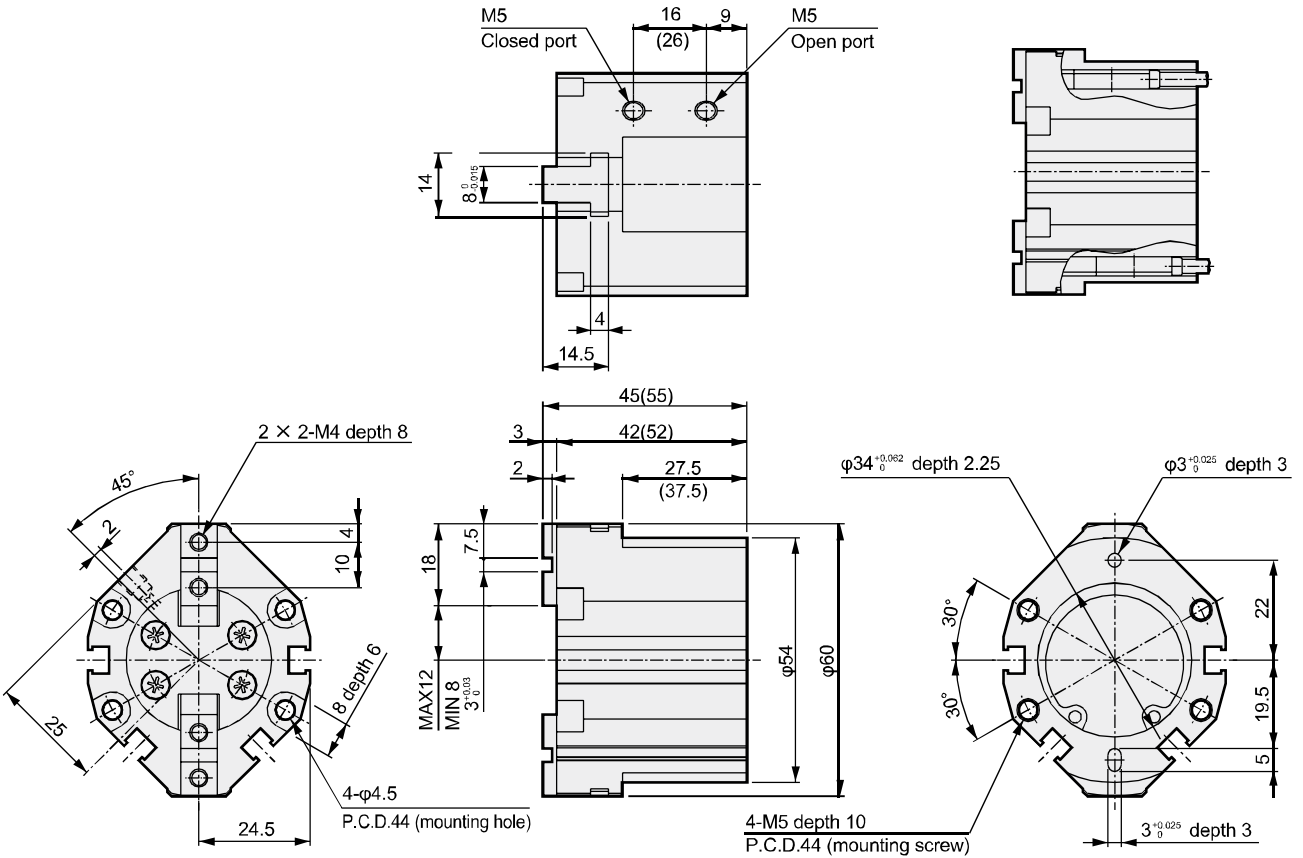
LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Dimensions

● CKLB2-32CS standard/O/C

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

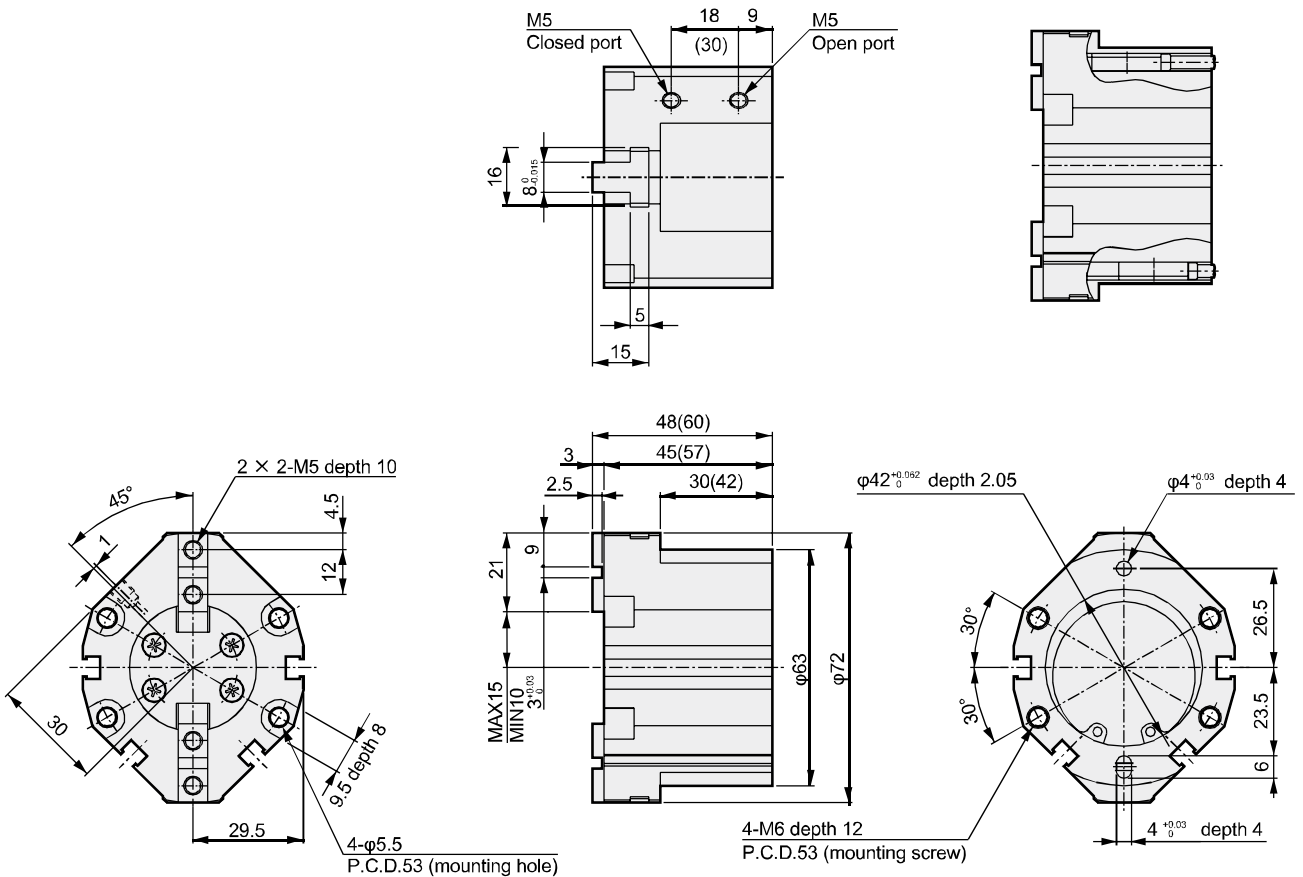
● With switch



● CKLB2-40CS standard/O/C

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

● With switch



LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

CKLB2 Series

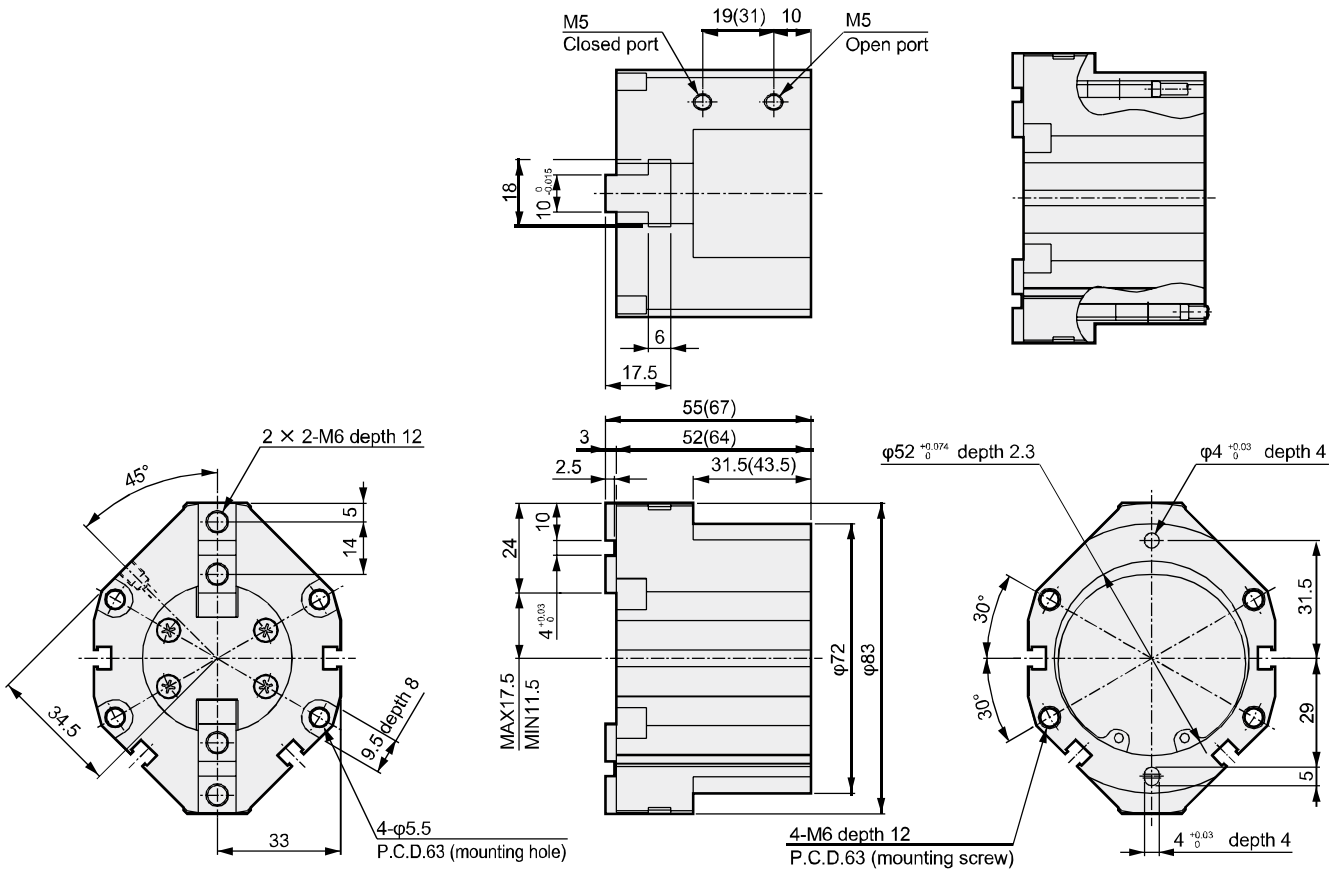
Dimensions



● CKLB2-50CS standard/O/C

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

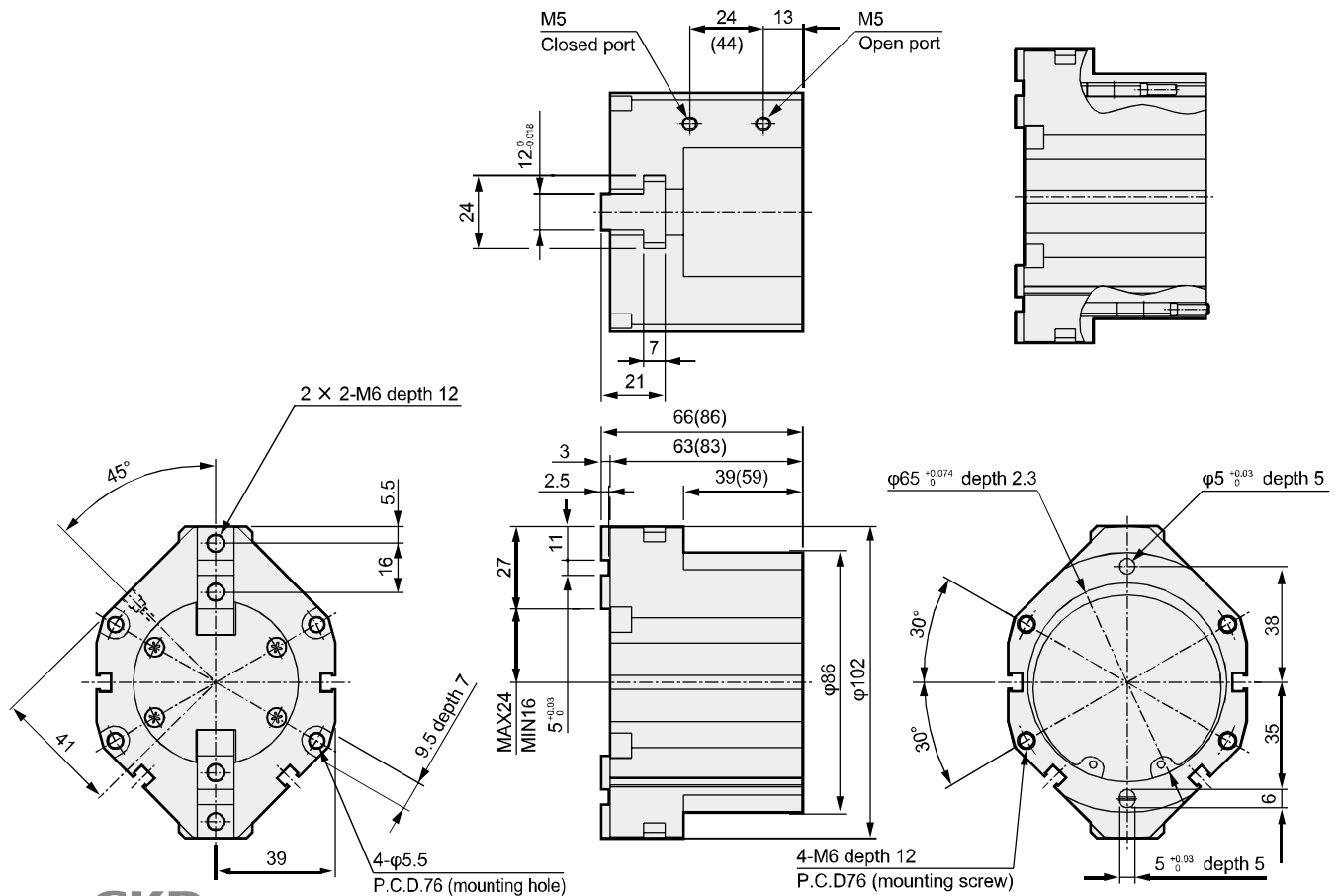
● With switch



● CKLB2-63CS standard/O/C

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

● With switch



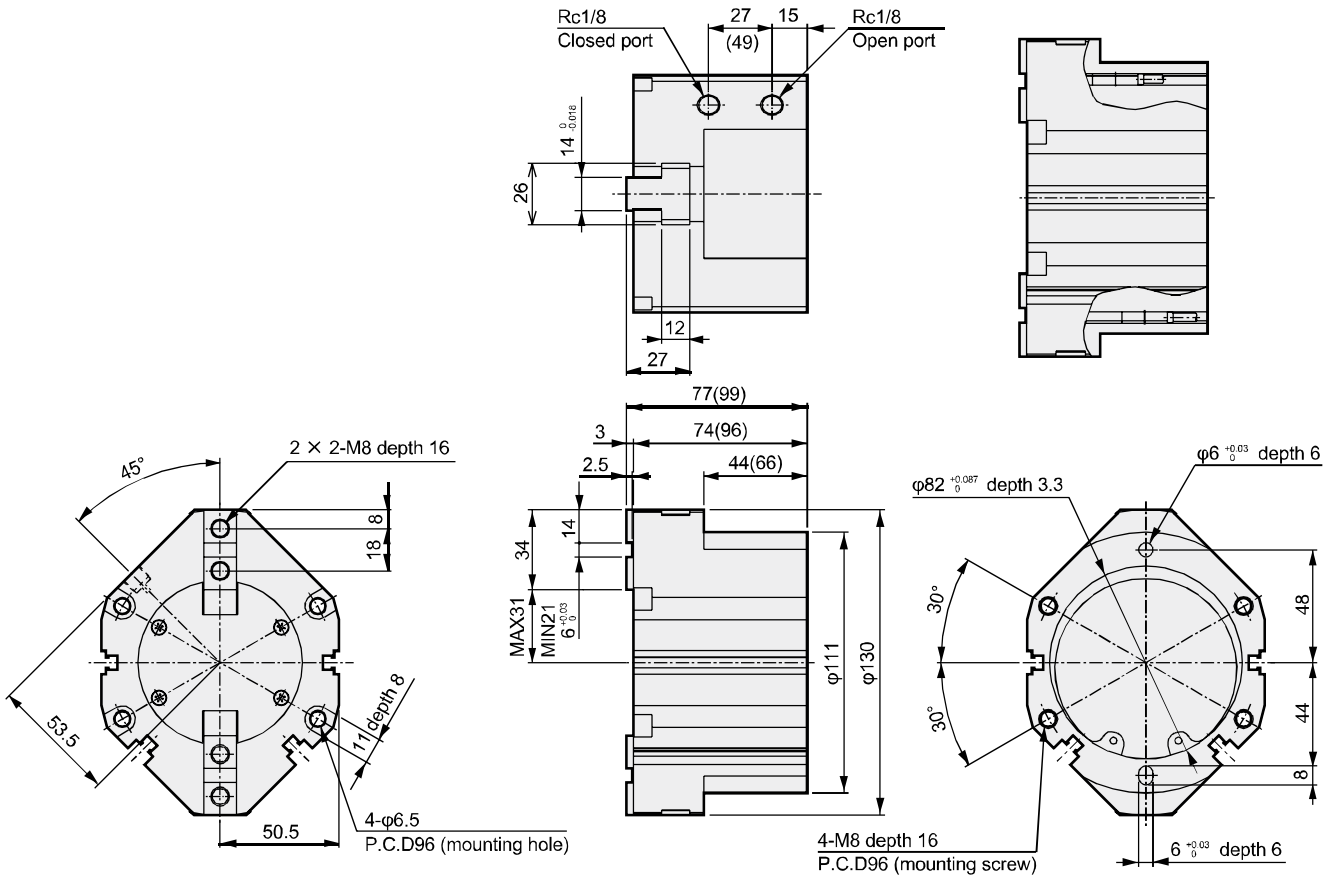
LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCC2
RCS
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HR
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Dimensions

● CKLB2-80CS standard/O/C

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

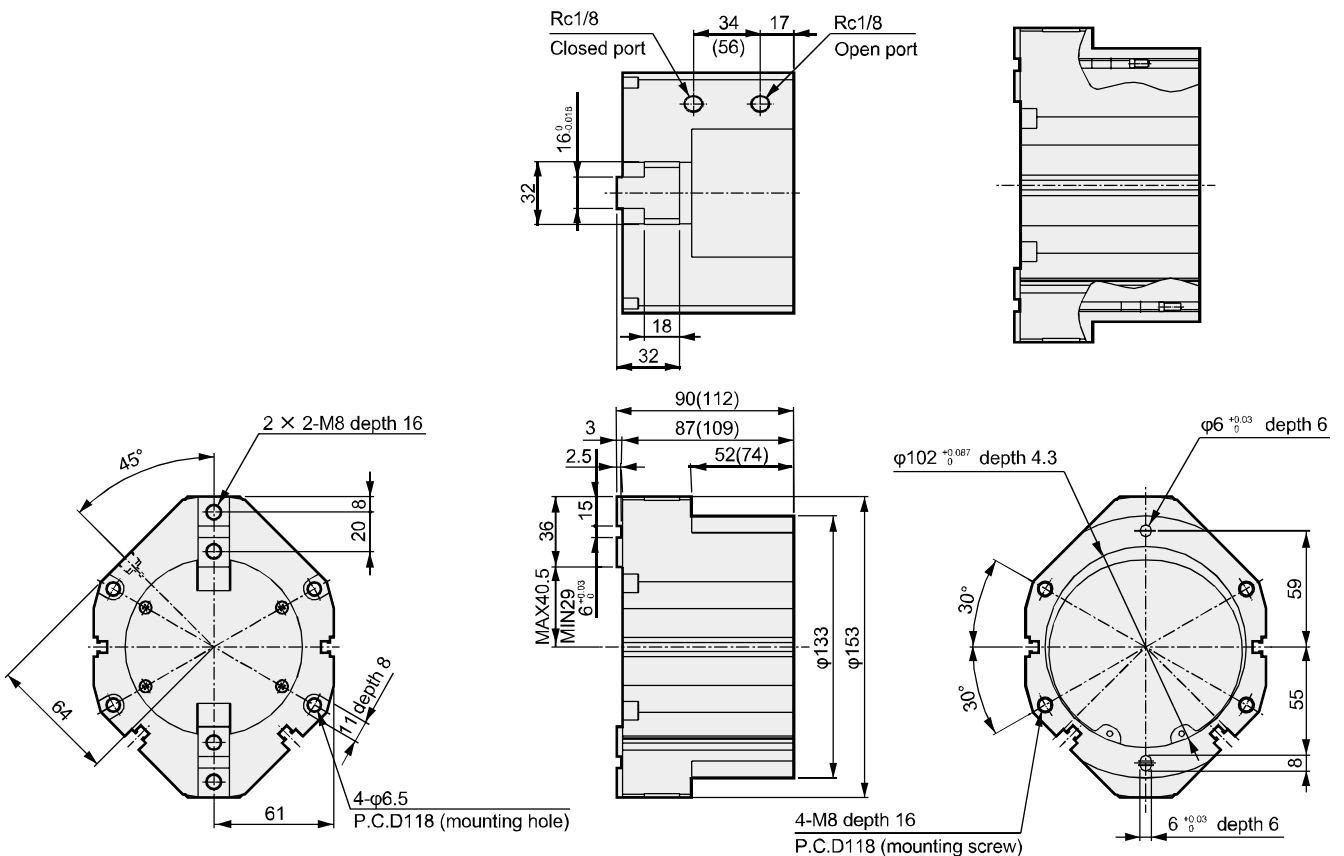
● With switch



● CKLB2-100CS standard/O/C

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

● With switch



LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
Chuck
MechHnd/Chuck
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC



Small jaw

● Material: Iron, engineering plastic



Features

A variety of small jaws (soft jaw) is available to match user machining needs.

● Spigot section machined

Troublesome reference section (spigot section) machined.

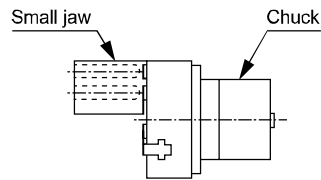
Wide series variation to select according to workpiece shape and dimension.

● 2 types of material for small jaw

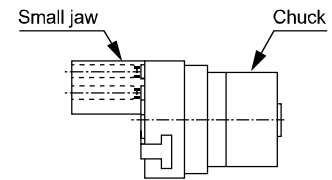
Iron (S50C) and engineering plastic (MC nylon) are available for optimum selection according to material and working condition of workpiece.

Compatible model for standard small jaw

CK type



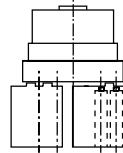
CKA/CKG type



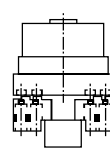
Small jaw applications

Chuck applications

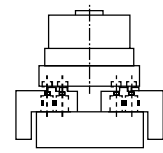
Soft jaw



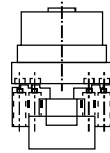
Compact workpiece



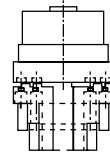
Large workpiece



For large and small workpieces



For inner tensive large and small workpieces



How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKA - **Y1** - **610**

A Model **B** Material **C** Small jaw No.

A Model		B Material		C Small jaw No.	
Code	Content	Code	Content	Code	Compatibility
CKG	3-way jaw bearing chuck	Y1	Material S50C	510	CKG-16S,CKA-15CS,CKF-15CS
CK	3-way jaw long stroke chuck	Y2	Material MC nylon	520	CKG-25S,CKA-20CS,CKF-20CS
CKA	3-way jaw thin chuck			530	CKG-32CS,CKA-25CS,CKF-25CS
CKF	Hollow chuck			540	CKG-40CS,CKA-30CS,CKF-30CS
				610	CKG-25S,CKA-20CS,CKF-20CS
				620	CKG-32CS,CKA-25CS,CKF-25CS
				630	CKG-40CS,CKA-30CS,CKF-30CS
				710	CKG-50CS,CKA-40CS,CKF-40CS
				720	CK-1CS
				730	CK-1.5CS
				740	CK-2CS
				750	CKA-50CS
				760	CKA-60CS
				770	CKA-70CS

- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STR/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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**
- MechHnd/Chuk
- ShkAbs
- FJ
- FK
- SrdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*-HC
- CKH2
- CKLB2
- CHC

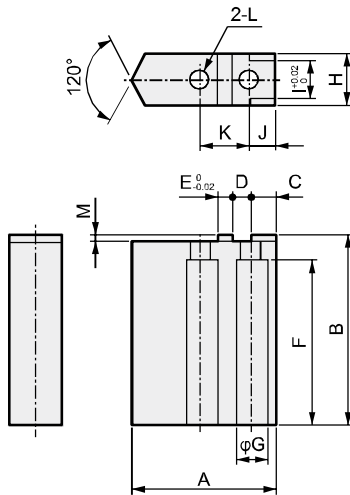
Small jaw

Dimensions

Dimensions



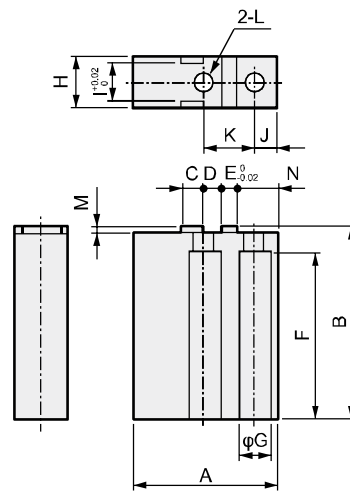
● 510 to 540



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
			Y1*1	Y2*2													
510	CKA-15CS CKG-16CS CKF-15CS		17.5	25	3.5	2.5	2	20	6	8	6	3.5	7	3.5	1	17	5
520	CKA-20CS CKG-25CS CKF-20CS		24	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	45	11
530	CKA-25CS CKG-32CS CKF-25CS		31	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	103	21
540	CKA-30CS CKG-40CS CKF-30CS		37	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	136	30

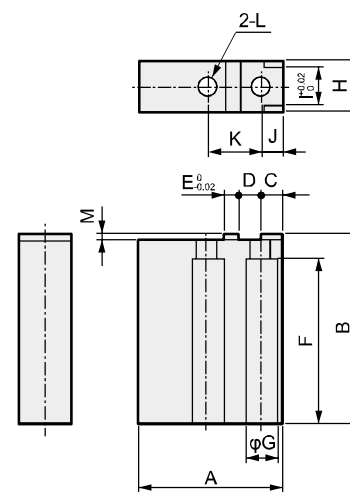
● 610 to 630



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
			Y1*1	Y2*2														
610	CKA-20CS CKG-25CS CKF-20CS		30	30	4.5	3.5	2	24.5	8	12	8	4.5	9	4.5	1.5	8	65	10
620	CKA-25CS CKG-32CS CKF-25CS		35	40	4.5	3.5	3	34.5	8	14	10	4.5	10	4.5	1.5	8	126	19
630	CKA-30CS CKG-40CS CKF-30CS		45	50	6	4.5	4	43	9.5	14	10	6	13	5.5	2	10.5	188	28

● 710 to 770



*1 Y1: Material S50C
*2 Y2: Material MC nylon

Code	Small jaw No.	Compatibility	A	B	C	D	E	F	φG	H	I	J	K	φL	M	Weight (g)	
			Y1*1	Y2*2													
710	CKA-40CS CKG-50CS CKF-40CS		44.5	60	6	5	4	52	11	18	14	6	14	6.5	2	285	43
720	CK-1CS		33.5	50	6	5	4	43	9.5	14	10	6	14	5.5	2	128	19
730	CK-1.5CS		43.5	65	7	6.5	5	56	11	18	14	7	18	6.5	2	302	45
740	CK-2CS		55.5	80	8	7	6	71	14	19	14	8	20	8.5	2	471	70
750	CKA-50CS		51.5	70	6	5	5	58	11	18	14	6	15	6.5	2	402	62
760	CKA-60CS		64	80	8	6	6	68	14	20	16	8	18	9	2	608	94
770	CKA-70CS		74	100	8	7	6	88	14	20	16	8	20	9	2	913	140

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

Small jaw

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKL2 - Y1 - 810

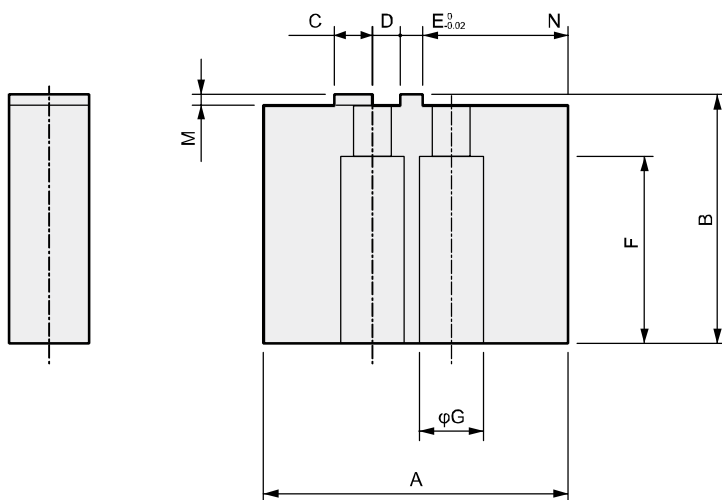
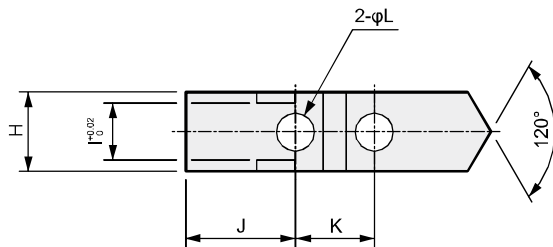
A Model

B Material

C Small jaw No.

Code	Content
A Model	
CKL2	Powerful chuck with high gripping power
CKH2	Powerful chuck with high gripping power
CKLB2	Bi-directional powerful chuck
B Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
C Small jaw No.	
810	CKLB2-20CS
820	CKLB2-25CS
830	CKL2-32CS,CKLB2-32CS
840	CKL2-40CS,CKLB2-40CS
850	CKL2-50CS,CKH2-50CS,CKLB2-50CS
860	CKL2-63CS,CKH2-63CS,CKLB2-63CS
870	CKL2-80CS,CKH2-80CS,CKLB2-80CS
880	CKL2-100CS,CKH2-100CS,CKLB2-100CS

Dimensions



Code Small jaw No.	A	B	C	D	E	F	φG	H	I	J	K	φL	M	N	Weight (g)	
															Y1	Y2
810	29.5	29	3.5	2.5	2	23	6.5	10	6	12	7	3.5	1	13	64	10
820	34.5	33.5	4.5	3.5	2	24	8	10	7	12.5	9	4.5	1.5	16.5	86	13
830	39.5	33.5	4.5	3.5	3	24	8	12	8	14	10	4.5	1.5	19	118	18
840	49.5	39	6	4.5	3	31	9	12	8	18.5	12	5.5	2	23.5	171	26
850	54.5	44	6	5	4	33	11	14	10	18.5	14	6.5	2	27	250	37
860	69.5	49	8	5.5	5	38	11	16	12	24.5	16	6.5	2	34.5	408	61
870	84.5	59	10	6	6	47	14	18	14	28	18	9	2	44.5	676	101
880	99.5	64	10	7	6	52	14	20	16	31.5	20	9	2	55	962	144

How to order small jaw and dimensions

How to order (Note: When ordering repair parts, 1 pc. is provided.)

CKS - **Y1** - **910**

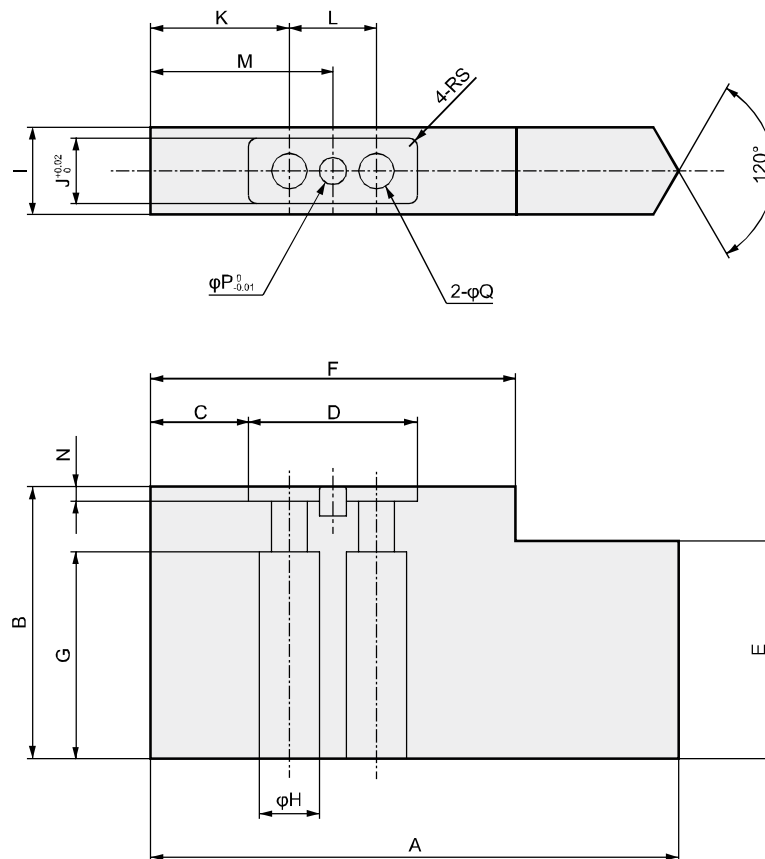
Model

A Material

B Small jaw No.

Code	Content
A Material	
Y1	Material S50C
Y2	Material MC nylon
Code	Compatibility
B Small jaw No.	
910	CKS-08CS
920	CKS-12CS
930	CKS-16CS
940	CKS-20CS
950	CKS-25CS
960	CKS-32CS

Dimensions



Code		A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	S	Weight (g)	
Small jaw No.	Compatible models																		Y1	Y2
910	CKS-08CS	42.5	30	6.5	15	20	27.5	23	6.5	10	6	10.5	7	14	1.7	2	3.5	1	74	12
920	CKS-12CS	48	35	7.5	19	25	34	27	8	11	7	12.5	9	17	2.7	2	4.5	1	108	17
930	CKS-16CS	56.5	35	9.5	21	25	40.5	27	8	12	8	15	10	20	2.7	3	4.5	1	145	23
940	CKS-20CS	66.5	40	11	25	30	48	32	9.5	12	8	17.5	12	23.5	2.7	3	5.5	1.5	192	31
950	CKS-25CS	85.5	45	16	28	35	60	33	11	14	10	23	14	30	2.7	4	6.5	1.5	335	53
960	CKS-32CS	97	50	18	31	40	67	38	11	16	12	25.5	16	33.5	2.7	5	6.5	1.5	500	79

LCW
LCR
LCG
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC



Safety Precautions

Be sure to read this section before use.

Refer to Intro Page 73 for general information of the cylinder, and to Ending Page 80 for general information of the cylinder switch.

Product-specific cautions: Chuck

Design/selection

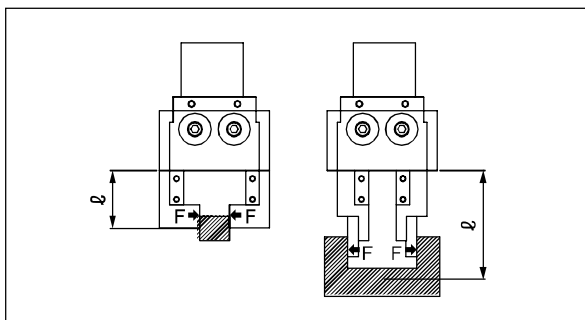
WARNING

- If the moving workpiece poses a possible risk to personnel or if fingers could be caught in the master key, etc., install a protective cover, etc.
- If the circuit pressure drops due to power failure or air source trouble, the gripping power may decrease and the workpiece may fall. Provide position locking measures, etc., so that personnel are not injured or machines damaged.

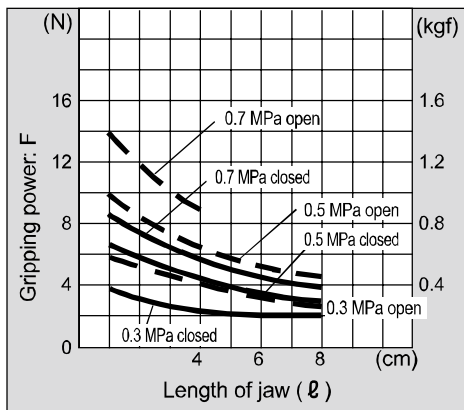
CAUTION

Precautions for gripping power

- Gripping power represents the force holding the workpiece, as shown in the figure below.



- Performance data indicates the gripping power at hand jaw length l at a supply pressure of 0.15 to 0.7 MPa.



- To find the gripping power from performance data, if the distance from the small jaw to the workpiece center of gravity when manufactured is l , gripping power F is
 When $l = l_1$ $F = F_1$
 When $l = l_2$ $F = F_2$ Refer to the upper right figure expressed as above.

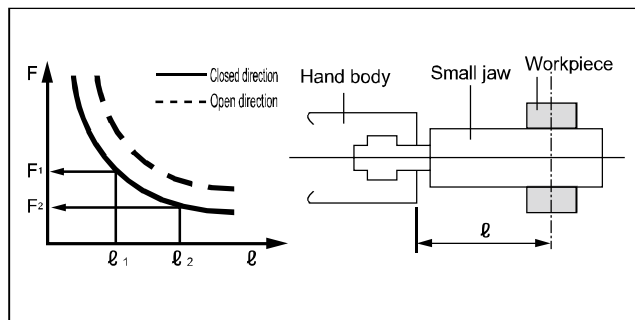
- When mounting an L-shaped jaw, select length as shown below.
 Example: If the L-shape is 30 mm in the master key direction and 30 mm at a 90° angle, assume the small jaw length is 60 mm.
- Length of jaw should be within the numerical value given in the gripping power performance data table of each model.
- Max. working length of jaw should be within the performance data.
- When transferring a workpiece (weight W_L), the reference is as below.

$$W_L \times 9.8 \times 5 < (F \times N) \text{ [holding only]}$$

$$W_L \times 9.8 \times 10 < (F \times N) \text{ [normal transport]}$$

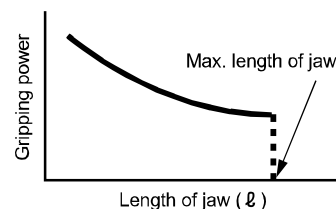
$$W_L \times 9.8 \times 20 < (F \times N) \text{ [sudden accelerated transport]}$$

W_L : Weight of workpiece [kg]
 F : Gripping power [N]
 N : Number of jaws [pcs.]



- Use small jaws as short and lightweight as possible. If the small jaw is long and heavy, inertia increases when opening and closing. This may cause play in the master key, and adversely affect durability.

- Length of small jaw should be within the numerical value of performance data.
- The weight of the small jaw affects durability, so check that the weight is less than the following value.
 $W < 1/4 H$ (1 pc.) W : Weight of small jaw
 H : Product weight of Hand



LCW
LCR
LCC
LCX
LCM
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
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
MechHnd/Chuk
ShkAbs
FJ
FK
SsdContr
Ending
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
CHC

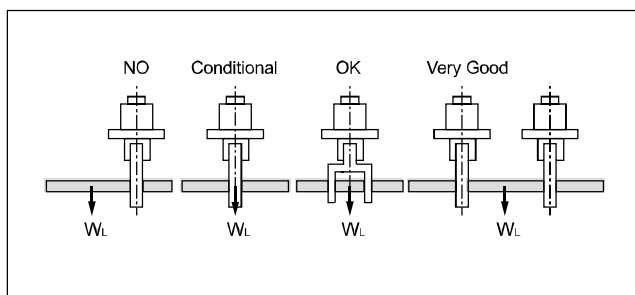
■ Working environment

At cutting, casting, or welding plants, there is a risk of foreign matter, such as cutting fluid, chips, powder and dust, entering the equipment. Use covers and such to prevent this as much as possible.

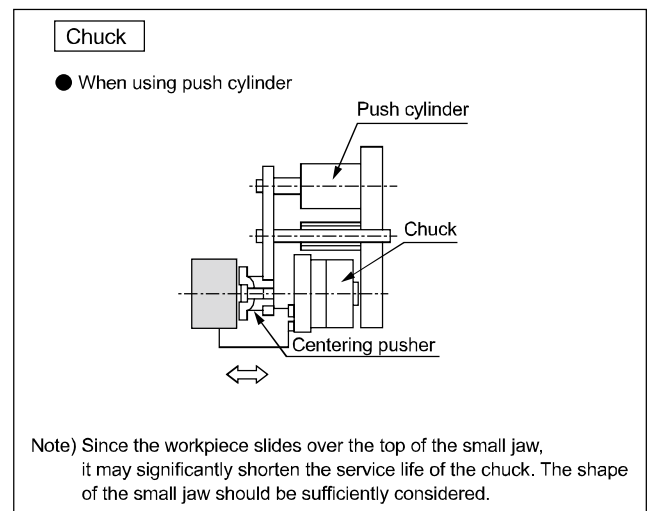
Do not use the equipment under the following environments.

- Exposed to cutting oil (because the sliding section is abraded by abrasive or polishing debris in the liquid)
- When the atmosphere contains organic solvents, chemicals, acids, alkalis, kerosene, etc.
- Exposed to water

- When gripping long or large workpieces, stable gripping requires a grip on the center of gravity. Stability is a must when using larger or multiple workpieces as well.



- Select a model that has sufficient power to grip the workpiece weight.
- Select a model that has sufficient opening/closing width for the workpiece size.
- If directly installing the workpiece into the jig with a chuck, consider clearance during design. The hand could be damaged.



- LCW
- LCR
- LCG
- LCX
- LCM
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- 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
- Chuck**
- MechHandChuck
- ShkAbs
- FJ
- FK
- SpdContr
- Ending
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2*+HC
- CKH2
- CKLB2
- CHC

Mounting, installation and adjustment

⚠ CAUTION

- If a lateral load or a load with large impact is applied to the master key, play or damage could occur. Adjust and check that external force is not applied to the master key.
- Clamping operation is accurate when performed as softly as possible at a low speed. Repeatability is also stable.
- Regularly grease the sliding section of the master key. Regular replenishment can extend service life further.

- When installing the small jaw, check that a lateral load is not applied to the master key.
- Tighten with the following tightening torque when mounting.

Thread nominal	M3	M4	M5	M6	M8
Recommended tightening torque (N·m)	0.59	1.4	2.8	4.8	12.0

Use/maintenance

⚠ CAUTION

- Do not disassemble or modify the body.