



3-way jaw thin chuck double acting/single acting

CKA Series

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



Specifications

Descriptions	CKA							
Size	15CS	20CS	25CS	30CS	40CS	50CS	60CS	70CS
Cylinder bore size mm	φ 16	φ 25	φ 32	φ 40	φ 50	φ 63	φ 80	φ 100
Operating method	Double acting/single acting							
Working fluid	Compressed air							
Max. working pressure MPa	0.7							
Min. working pressure MPa	0.3							
Ambient temperature °C	5 to 60							
Port size	M5					Rc1/8		
Operational stroke length mm	6	5	7	9	20	25	30	38
Rod diameter mm	φ 9	φ 10	φ 14	φ 18	φ 20		φ 24	φ 28
Capacity of reciprocating cm ³	1.0	2.2	5.1	10.1	36.1	76.9	148.8	294.0
Repeatability mm	± 0.03							
Product 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 for lubrication)							

Switch specifications

Descriptions	Proximity 2 wire	Proximity 3 wire
	T2H/V	T3H/V
Applications	Programmable controller	Programmable controller, relay
Output method	-	NPN output
Power voltage	-	10 to 28 VDC
Load voltage/current	10 to 30 VDC, 5 to 20mA (Note 1)	30 VDC or less, 100mA or less
Light	LED (ON lighting)	
Leakage current	1mA or less	10μA or less

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

Note 1: The maximum load current above is the value at 25°C.

(Note) Refer to Ending 1 for the specifications details of the switch.

RRC
GRC
RV3*
NHS
HR
LN
FH100
HAP
BSA2
BHA/
BHG
LHA
LHAG
HKP
HLA/
HLB
HLAG/
HLBG
HEP
HCP
HMF
HMFb
HFP
HLC
HGP
FH500
HBL
HDL
HMD
HJL
BHE
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2
-*HC
CKH2
CKLB2
NCK/
SCK/FCK
FJ
FK
Ending

How to order

Without switch

CKA - **15CS** - **○**

With switch

CKA - **15CS** - **○** - **T2H** - **R**

A Size

B Option
Note 1, Note 2

C Switch model no.
Note 3
* indicates lead wire length.

D Switch quantity

⚠ Note on model no. selection

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

Note 2: Refer to pages 494 to 497 for the dimensions and applicable model of the small jaw. When ordering as option, 3 pieces are provided.

Note 3: Switches other than **○** switch model no. are available. (Custom order) Refer to Ending 1 for details.

Symbol	Descriptions				
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	Indicator	Lead wire	
T2H*	T2V*	Proximity	1 color indicator type	2-wire	
T3H*	T3V*			3-wire	
*Lead wire length					
Blank	1m (standard)				
3	3m (option)				
5	5m (option)				
D Switch quantity					
R	One on open side				
H	One on closed side				
D	Two				

RRC
GRC
RV3*
NHS
HR
LN
FH100
HAP
BSA2
BHA/BHG
LHA
LHAG
HKP
HLA/HLB
HLAG/HLBG
HEP
HCP
HMF
HMFB
HFP
HLC
HGP
FH500
HLB
HDL
HMD
HJL
BHE
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2*-HC
CKH2
CKLB2
NCK/SCK/FCK
FJ
FK
Ending

<Example of model number>

CKA-15CS-O-T2H-R

Model: Thin chuck

- A** Size : 15CS
- B** Option : Single acting, normally open type
- C** Switch model no. : Proximity T2H switch, lead wire 1m
- D** Switch quantity : One on open side

How to order switch

(T type switch)

SW - **T2H**

Switch model no.
(Item above **○**)

CKA-40CS to 70CS

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

CKA - **T2H**

Switch model no.
(Item above **○**)

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

CKA - **T2V** - *

Switch model no.
(Item above **○**)

CKA-40CS to 70CS

- Mounting bracket

CKA - **T**

- Mounting bracket

CKA - **TV** - *

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

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

3-way jaw thin chuck
Chuck

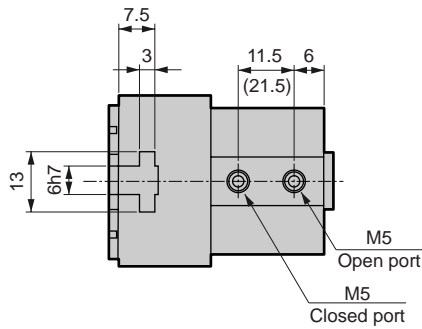


Dimensions

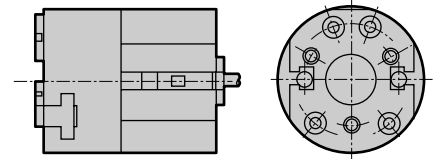
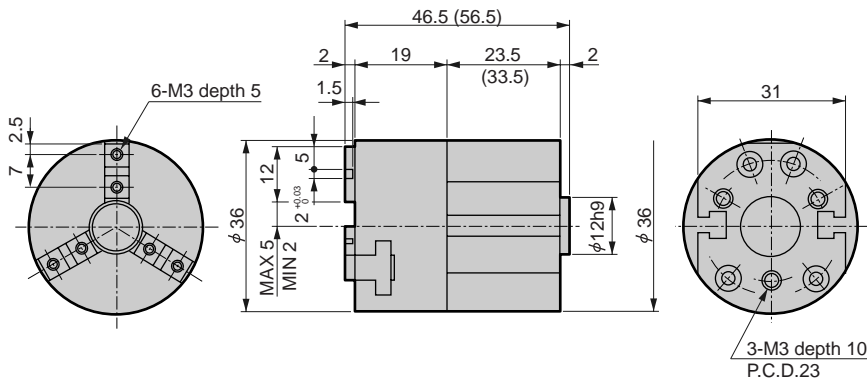
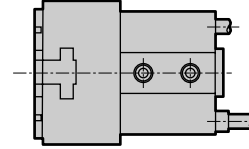
RRC
GRC
RV3*
NHS
HR
LN
FH100
HAP
BSA2
BHA/BHG
LHA
LHAG
HKP
HLA/HLB
HLAG/HLBG
HEP
HCP
HMF
HMFB
HFP
HLC
HGP
FH500
HBL
HDL
HMD
HJL
BHE
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2 *-HC
CKH2
CKLB2
NCK/SCK/FCK
FJ
FK
Ending

● CKA-15CS standard/O/C

● Dimension in () for O [normally open] and C [normally closed] specifications

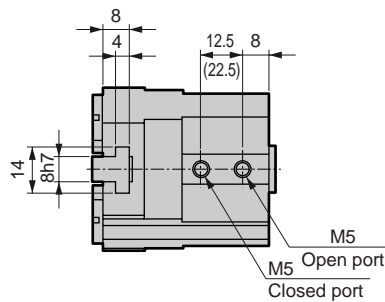


● With switch

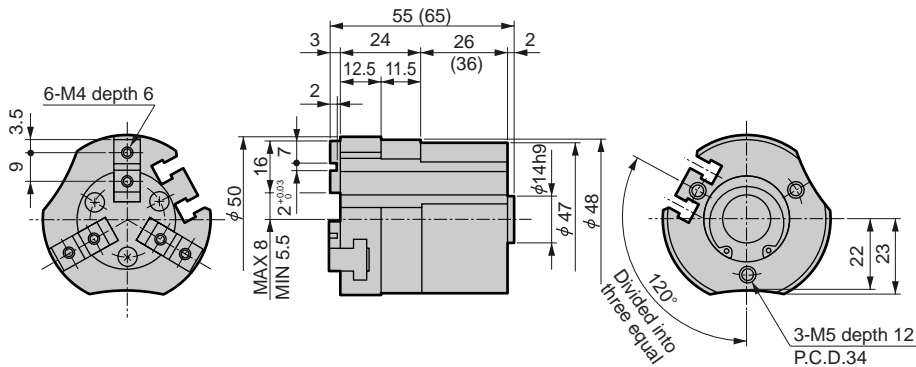
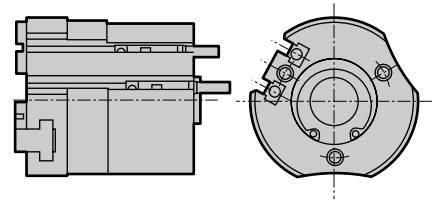


● CKA-20CS standard/O/C

● Dimension in () for O [normally open] and C [normally closed] specifications



● With switch

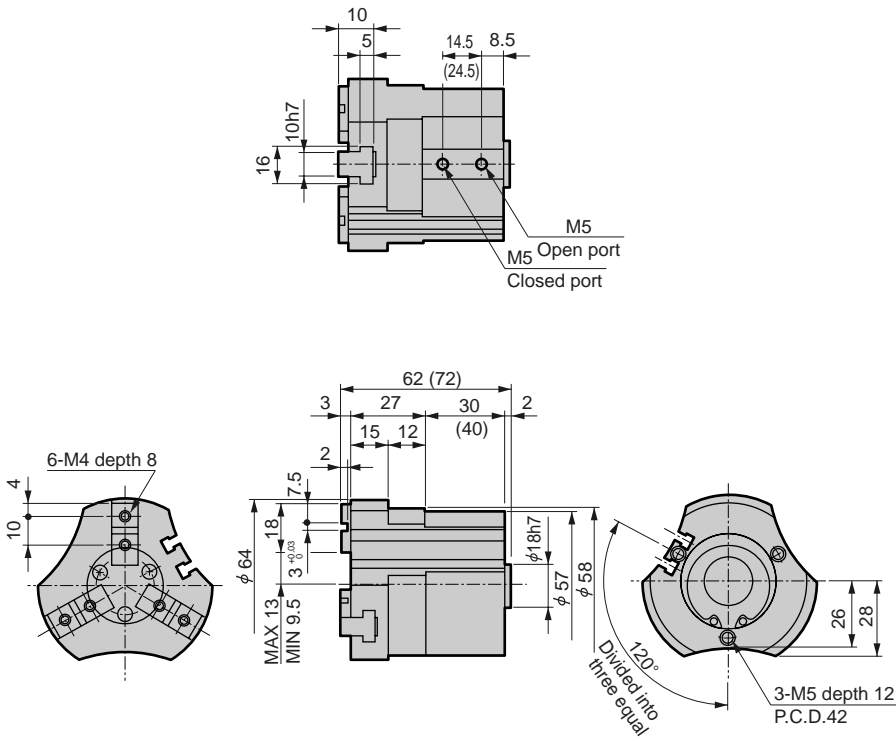


Dimensions

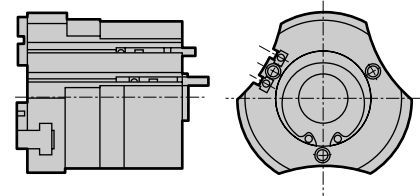


● CKA-25CS standard/O/C

- Dimension in () for O [normally open] and C [normally closed] specifications

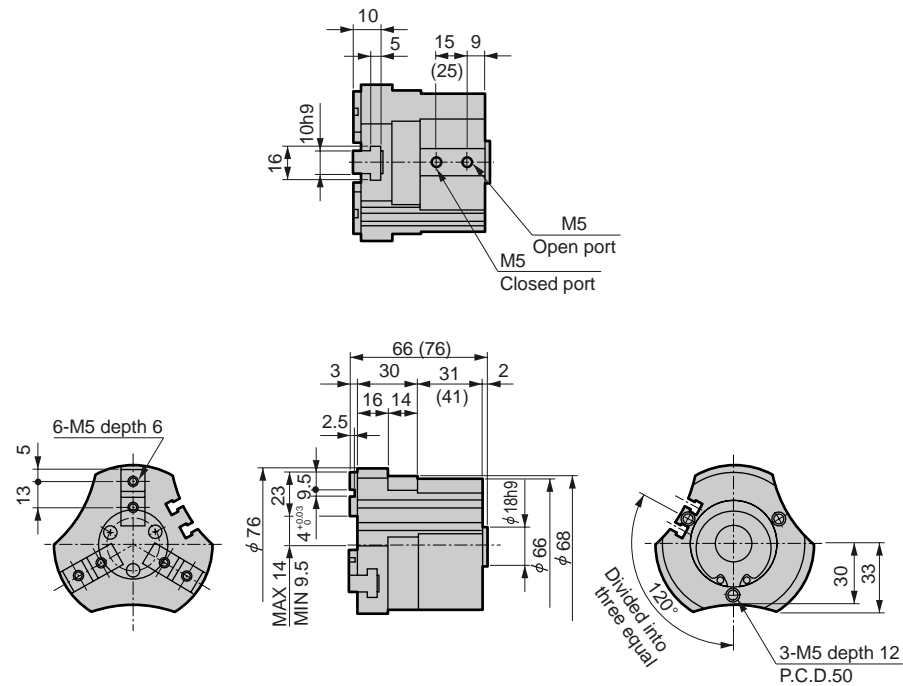


- With switch

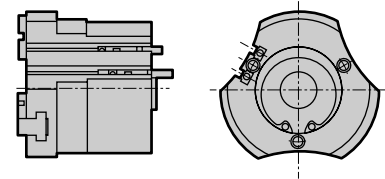


● CKA-30CS standard/O/C

- Dimension in () for O [normally open] and C [normally closed] specifications



- With switch



RRC
GRC
RV3*
NHS
HR
LN
FH100
HAP
BSA2
BHA/ BHG
LHA
LHAG
HKP
HLA/ HLB
HLAG/ HLBG
HEP
HCP
HMF
HMFB
HFP
HLC
HGP
FH500
HBL
HDL
HMD
HJL
BHE
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2 *-HC
CKH2
CKLB2
NCK/ SCK/FCK
FJ
FK
Ending

3-way jaw thin chuck
Chuck

Dimensions

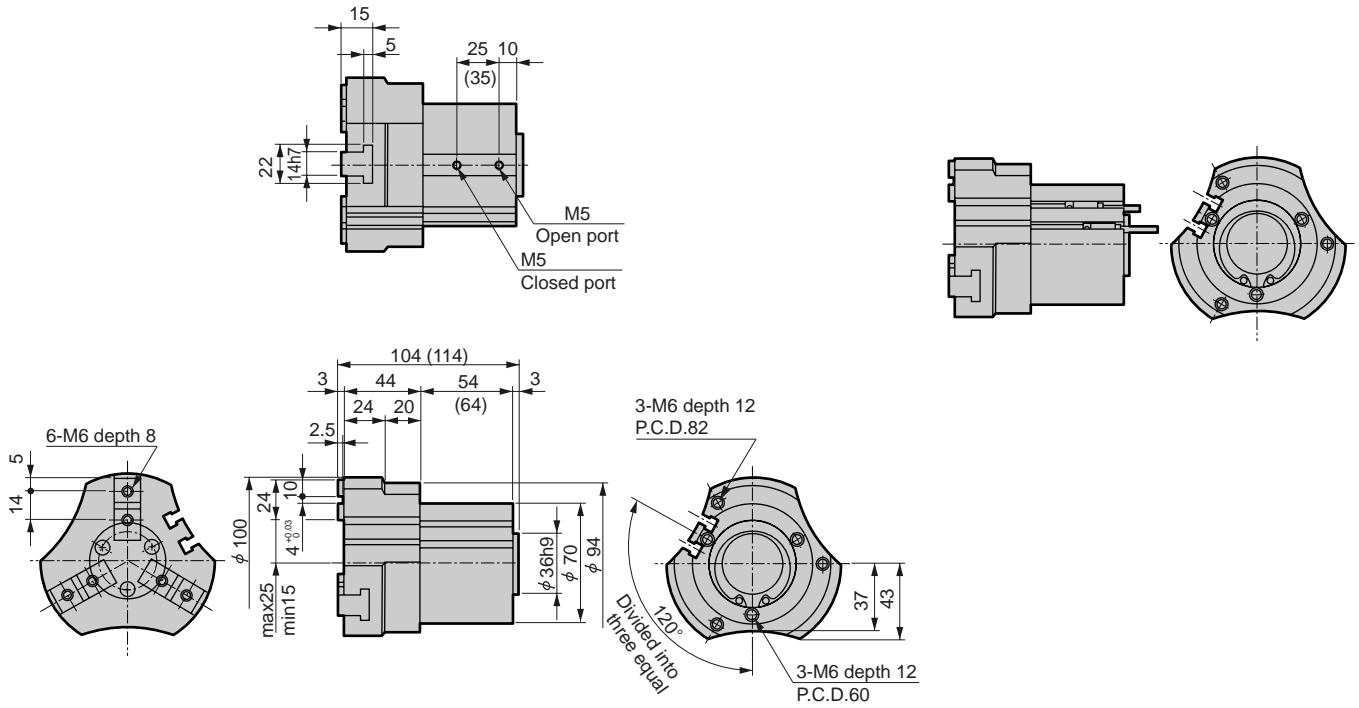


RRC
GRC
RV3*
NHS
HR
LN
FH100
HAP
BSA2
BHA/BHG
LHA
LHAG
HKP
HLA/HLB
HLAG/HLBG
HEP
HCP
HMF
HMFB
HFP
HLC
HGP
FH500
HBL
HDL
HMD
HJL
BHE
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2 *-HC
CKH2
CKLB2
NCK/SCK/FCK
FJ
FK
Ending

● CKA-40CS standard/O/C

● Dimension in () for O [normally open] and C [normally closed] specifications

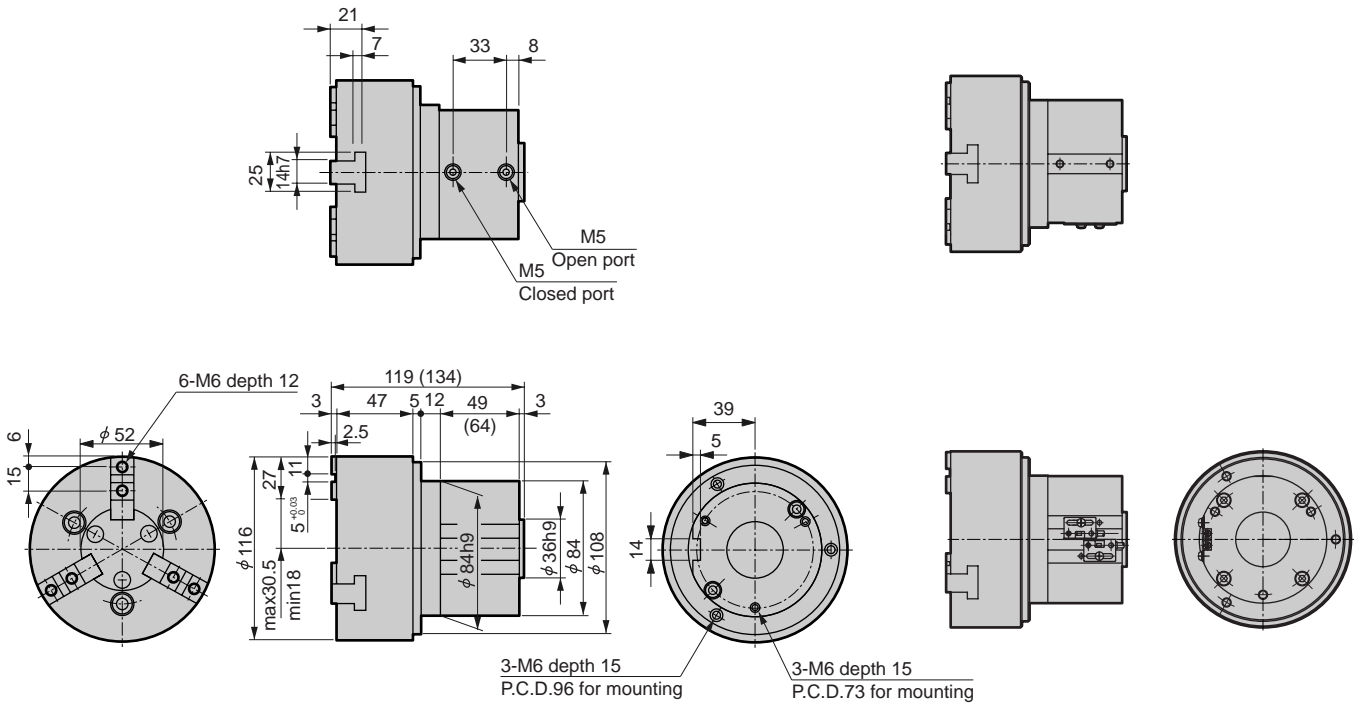
● With switch



● CKA-50CS standard/O/C

● Dimension in () for [normally closed] specifications

● With switch

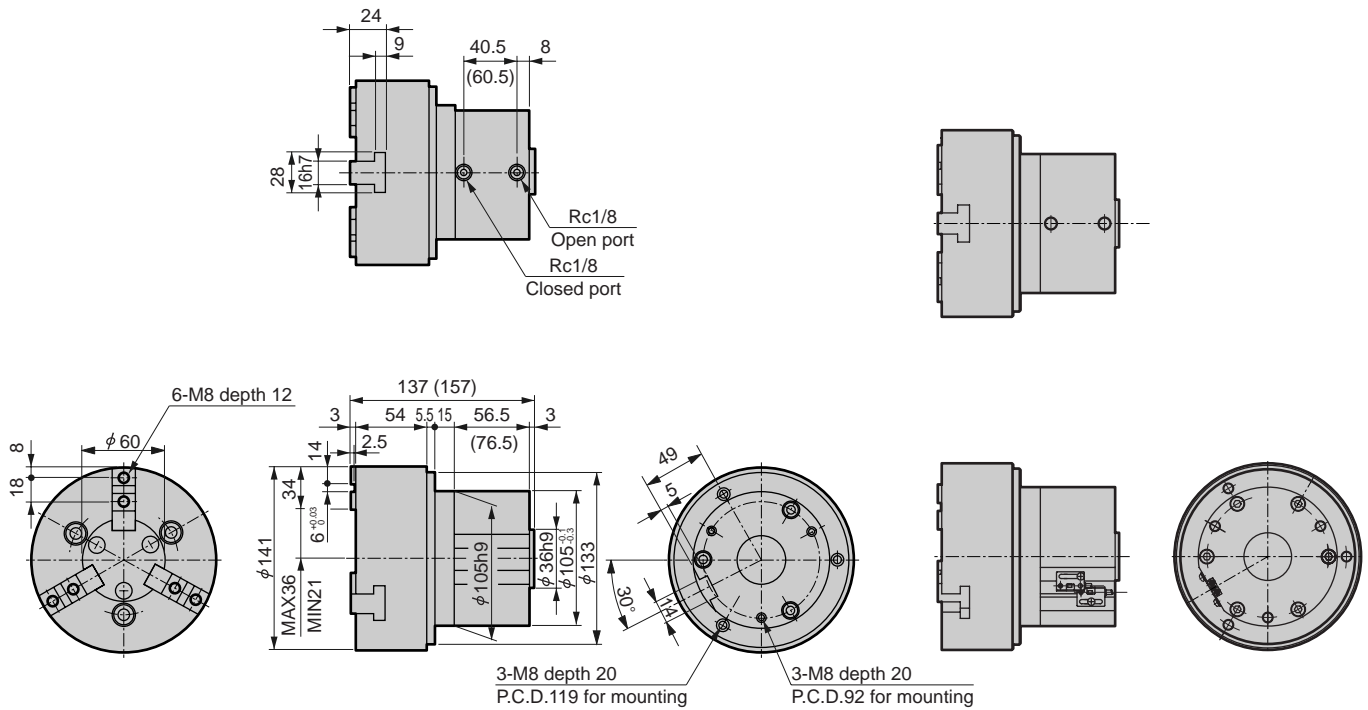


Dimensions

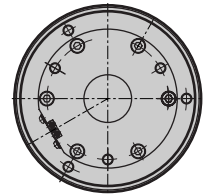
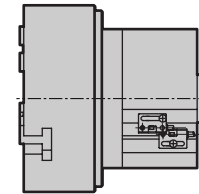
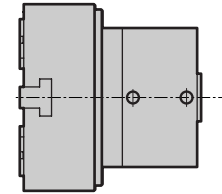


● CKA-60CS standard/O/C

- Dimension in () for C [normally closed] specifications

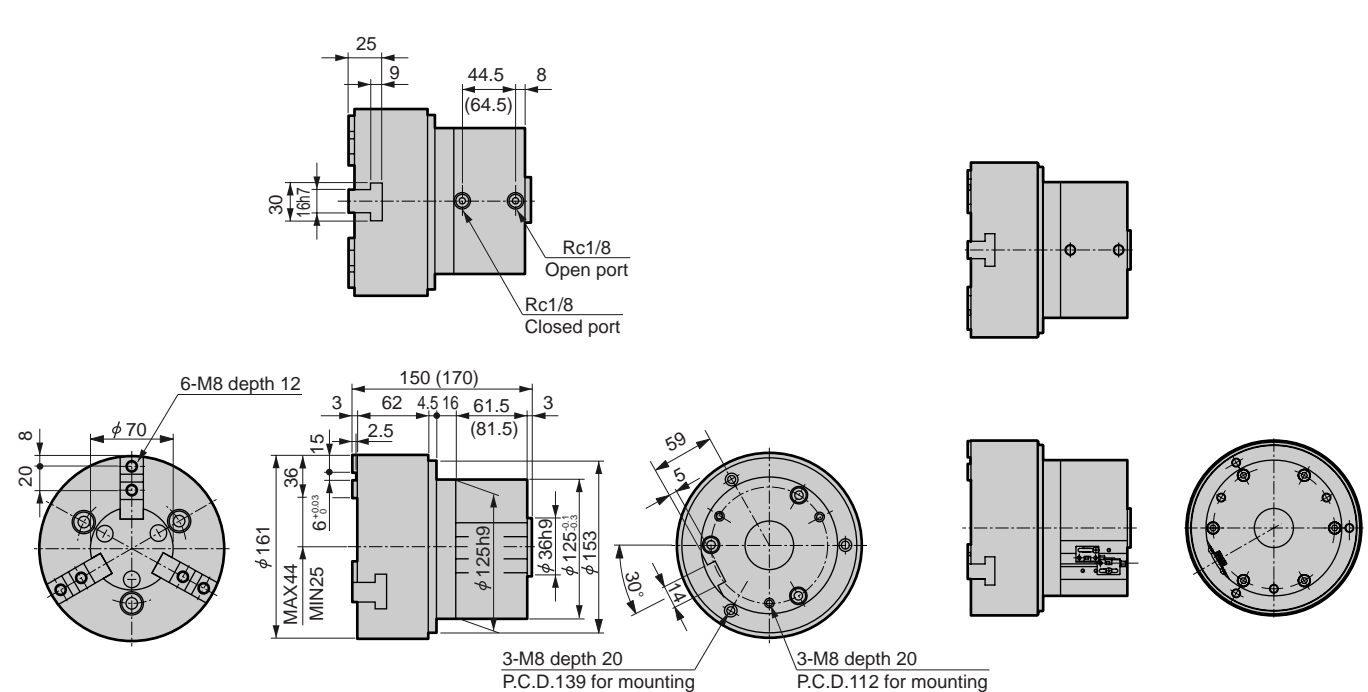


● With switch

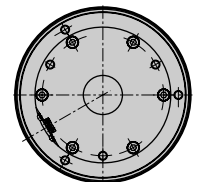
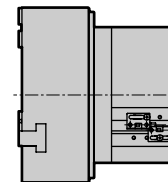
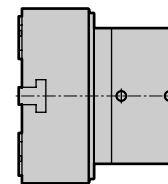


● CKA-70CS standard/O/C

- Dimension in () for C [normally closed] specifications



● With switch



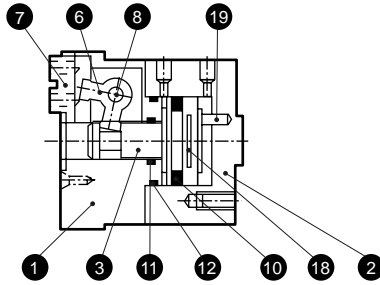
RRC
GRC
RV3*
NHS
HR
LN
FH100
HAP
BSA2
BHA/ BHG
LHA
LHAG
HKP
HLA/ HLB
HLAG/ HLBG
HEP
HCP
HMF
HMFB
HFP
HLC
HGP
FH500
HL
HDL
HMD
HJL
BHE
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2 *-HC
CKH2
CKLB2
NCK/ SCK/FCK
FJ
FK
Ending

3-way jaw thin chuck
Chuck

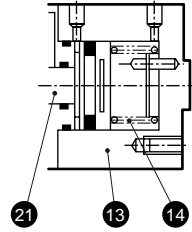
Internal structure and parts list

● CKA-15CS

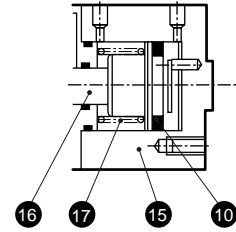
Standard (double acting) type



O (normally open) type

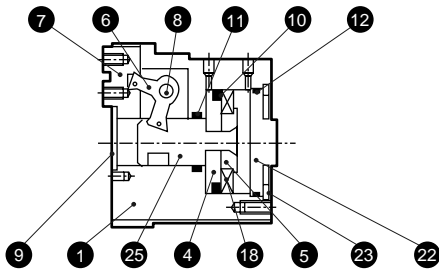


C (normally closed) type

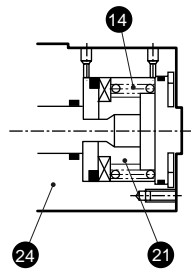


● CKA-20CS to 40CS

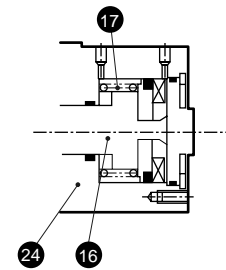
Standard (double acting) type



O (normally open) type

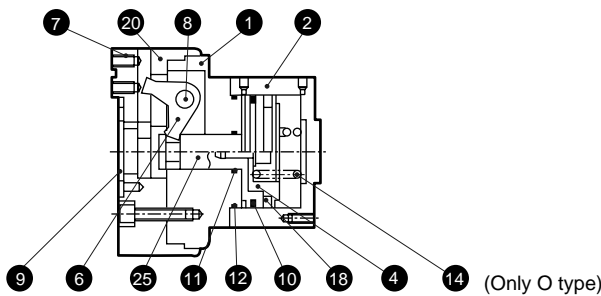


C (normally closed) type

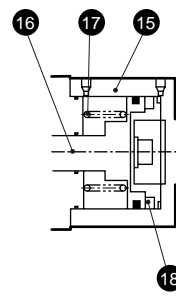


● CKA-50CS to 70CS

Standard (double acting) / O (normally open) type



C (normally closed) type



No.	Parts name	Material	No.	Parts name	Material	No.	Parts name	Material	No.	Parts 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 seal	Nitrile rubber	17	C spring	Steel	24	O, C body	Aluminum alloy
4	Piston B	Aluminum alloy	11	Rod packing seal	Nitrile rubber	18	Magnet	Plastic magnet	25	Piston	Aluminum alloy
5	Piston C	Aluminum alloy	12	Cylinder gasket	Nitrile rubber	19	Stopper pin	Stainless steel			
6	Arm	Steel	13	O cylinder	Aluminum alloy	20	Chuck guard	Aluminum alloy			
7	Master key	Steel	14	O spring	Steel	21	O piston B	Stainless steel			

Note) Structures are slightly different depending on the model.

- RRC
- GRC
- RV3*
- NHS
- HR
- LN
- FH100
- HAP
- BSA2
- BHA/BHG
- LHA
- LHAG
- HKP
- HLA/HLB
- HLAG/HLBG
- HEP
- HCP
- HMF
- HMFB
- HFP
- HLC
- HGP
- FH500
- HBL
- HDL
- HMD
- HJL
- BHE
- CKG
- CK
- CKA**
- CKS
- CKF
- CKJ
- CKL2
- CKL2-*.HC
- CKH2
- CKLB2
- NCK/SCK/FCK
- FJ
- FK
- Ending