

CKJ Series Thin Long Stroke Chuck

Long Stroke and Thin Body Gripper

Key Features

■ Thin body design

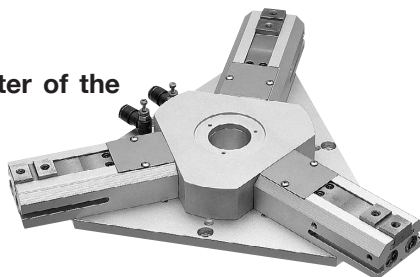
Low profile design and high grip force

■ Long stroke

For handling large diameter workpieces

■ Hollow body (dia.30mm hole in the center of the body) for pusher

The center hole for mounting sensors, pushers, or camera, etc.



CKJ-16AS

How To Order

Standard ----- **CKJ-16AS**

Option ----- **CKJ - 16AS - S1 - ET3S2** ----- Short stroke type CKJ-16AS with 2 of ET3 non-contact reed switches

Model	
Symbol	Name
CKJ	3-Jaw
CKJB	2-Jaw
CKJ-□□-S1 ^{*1}	Short Stroke

Size	
Symbol	Name
16AS	16AS
40AS	40AS
63AS	63AS
100AS ^{*2}	100AS

Stroke	
Symbol	Name
No Symbol	Normal
S1 ^{*1}	Short Stroke Type

Sensor, Quantity			
Symbol	Name	Symbol	Name
ET3	Non-Contact 3-Lead	E24L	Contact 2-Lead
ET3L	Non-Contact 3-Lead	E25	Contact 2-Lead
ET2	Non-Contact 2-Lead	E25L	Contact 2-Lead
ET2L	Non-Contact 2-Lead	S1	1 Sensor
E24	Contact 2-Lead	S2	2 Sensors

^{*1} Please be careful when ordering S1 of --AS-S1 (=Short Stroke) not to get confused with S1 of ET3S1 (means ET3 x 1)

^{*2} CKJB only

For sensor detail

▶277P

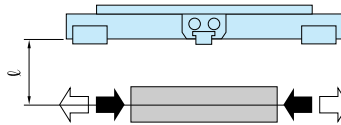
Specification

Model	CKJ-16AS <small>For Layout Drawing ▶203P</small>	CKJ-40AS <small>For Layout Drawing ▶205P</small>	CKJ-63AS <small>For Layout Drawing ▶207P</small>	CKJ-16AS-S1 <small>For Layout Drawing ▶204P</small>	CKJ-40AS-S1 <small>For Layout Drawing ▶206P</small>	CKJ-63AS-S1 <small>For Layout Drawing ▶207P</small>	CKJB-100AS <small>For Layout Drawing ▶208P</small>
Working Pressure	Pneumatic: 0.3 to 0.7MPa						
Lubrication	Not Required or Turbine Oil Class 1 (ISOVG32)						
Ambient Temperature (°C)	5 to 60						
Total Jaw Stroke (mm)	80	80	130	40	40	65	130
Cylinder Diameter (mm)	dia.12×6	dia.32×6	dia.50×6	dia.12×6	dia.32×6	dia.50×6	Equivalent to dia.100
Rod Diameter (mm)	dia.6×6	dia.12×6	dia.14×6	dia.6×6	dia.12×6	dia.14×6	dia.24
Internal Volume [Reciprocation] (cm ³ /time)	47.5	358.8	1471	23.8	179.4	735.5	2336
Repeatability (mm)	±0.1						
Weight (kg)	2.38	5.6	18.5	1.35	4.2	13	17.4

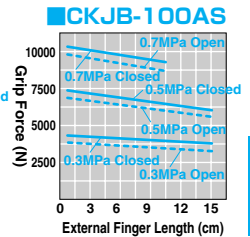
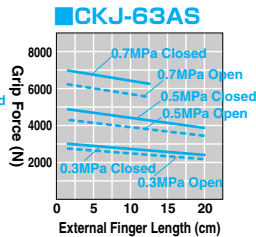
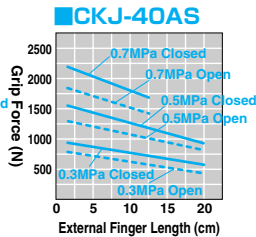
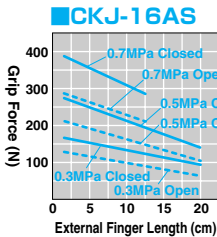
Performance Data

■ Grip Force

The graph shows grip force in opening and closing with effective external finger lengths l from gripper cover surface under different air pressure (MPa)



Open (⇐) - - - - -
Closed (➡) ————

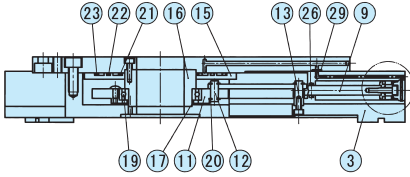


*Grip force of CKJB (16, 40, 63AS) is 2 / 3 of that of CKJ

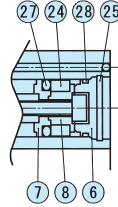
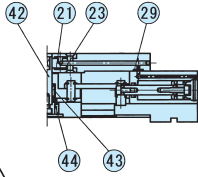
CKJ Series Thin Long Stroke Chuck

Internal Structure / Parts & Seals

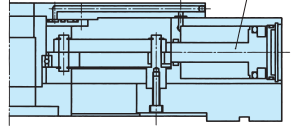
■CKJ-16AS



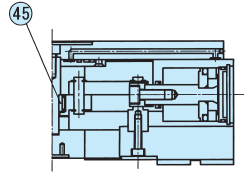
■CKJ-16AS-S1



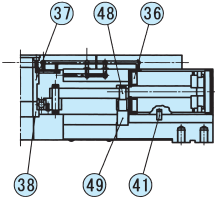
■CKJ-40AS



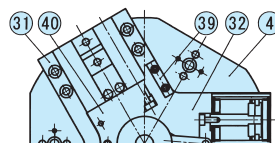
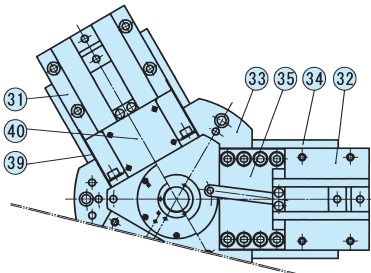
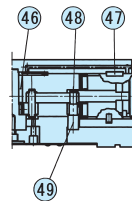
■CKJ-40AS-S1



■CKJ-63AS



■CKJ-63AS-S1



Chuck
(233-Jaw)

CKJ-16AS/16AS-S1/40AS/40AS-S1/63AS/63AS-S1 CKJB-16AS/40AS/63AS/100AS

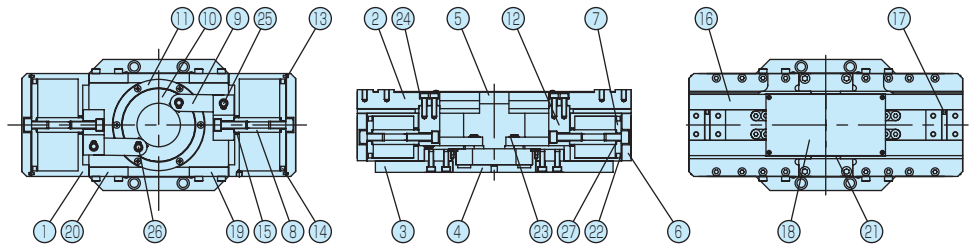
Parts List

No.	Name	Material	No.	Name	Material	No.	Name	Material
1	Cylinder Body A	Aluminum	18	Cover	Stainless Steel	35	Base (3)	Aluminum
2	Cylinder Body B	Aluminum	19	Bearing	Stainless Steel	36	Rod Cover	Aluminum
3	Master(Base) Jaw	Carbon Steel	20	E-Type Snap Ring		37	Hollow Ring (1)	Aluminum
4	Base	Aluminum	21	O-Ring		38	Hollow Ring (2)	Aluminum
5	Center Block	Aluminum	22	O-Ring		39	Side Cover	Stainless Steel
6	Cylinder Cover	Resin	23	O-Ring		40	Front Cover	Stainless Steel
7	Piston A	Aluminum	24	Magnet		41	Parallel Pin	Stainless Steel
8	Piston B	Aluminum	25	C-Type Snap Ring		42	Shaft	Carbon Steel
9	Piston Rod	Stainless Steel	26	Rod Seal		43	Needle Roller Bearing	
10	Link	Stainless Steel	27	Piston Seal		44	Washer	
11	Link Ring	Aluminum	28	Cylinder Seal		45	Inner Ring	
12	Fulcrum Shaft	Stainless Steel	29	O-Ring		46	Collar	
13	Operating Pin	Stainless Steel	30	Piston	Aluminum & Stainless Steel	47	Key with Round Sides	
14	Connecting Block	Stainless Steel	31	Body	Aluminum	48	Operating Pin	Steel Material
15	Pipe Plate	Aluminum	32	Cylinder	Aluminum	49	Operating Pin Block	Carbon Steel
16	Hollow Ring	Aluminum	33	Base (1)	Aluminum			
17	Collar	Steel Material	34	Base (2)	Aluminum			

Seals List

No.	CKJ-16AS	CKJ-40AS	CKJ-63AS	CKJ-16AS-S1	CKJ-40AS-S1	CKJ-63AS-S1
21	S-48	S-48	S-48	S-9	S-14	S-25
22	S-63	S-63	S-63	—	S-30	S-48
23	S-80	S-80	S-80	S-22	S-48	S-71
26	MYA-6	MYA-12	MYA-14	MYA-6	MYA-12	MYA-14
27	PSD-12	PSD-32	PSD-50	PSD-12	PSD-32	PSD-50
28	dia.10Xdia.1	S-30	S-46	dia.10Xdia.1	S-30	S-46
29	S-4	S-5	S-5	S-4	S-4	S-5

CKJB-100AS



Parts List

No.	Name	Material	No.	Name	Material	No.	Name	Material
1	Cylinder	Aluminum	10	Link Ring	Aluminum	19	Reinforced Plate A	Aluminum
2	Master(Base) Jaw	Aluminum	11	Link Ring Holder	Stainless Steel	20	Reinforced Plate B	Aluminum
3	Cylinder Base	Aluminum	12	Connecting Block	Aluminum	21	Side Cover	Stainless Steel
4	Center Base	Aluminum	13	Cylinder Seal	Nitrile Rubber	22	Spacer	Stainless Steel
5	Center Block	Aluminum	14	Piston Seal	Nitrile Rubber	23	E-Type Snap Ring	Stainless Steel
6	Cylinder Cover	Aluminum	15	Rod Seal	Nitrile Rubber	24	Small Round Flat Washer	
7	Piston	Aluminum	16	Guide	Aluminum	25	Operating Shaft	Bearing Steel
8	Piston Rod	Stainless Steel	17	Magnet		26	Fulcrum Shaft	Bearing Steel
9	Link	Carbon Steel	18	Center Cover	Stainless Steel	27	O-Ring	

Seals List

No.	CKJB-100AS
13	Grid-Surface Gasket
14	Oval Seal
15	MYA-24
27	S-16

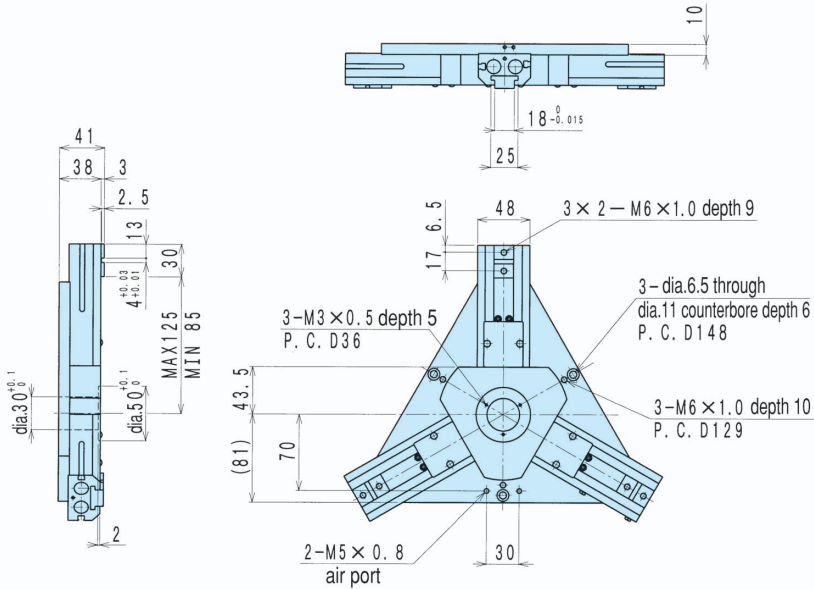
Chuck
(2&3-Jaw)

CKJ Series Thin Long Stroke Chuck

Layout Drawing

■ **CKJ-16AS** (Optimal Grip Force 100N to 250N)

CKJ-16AS Standard



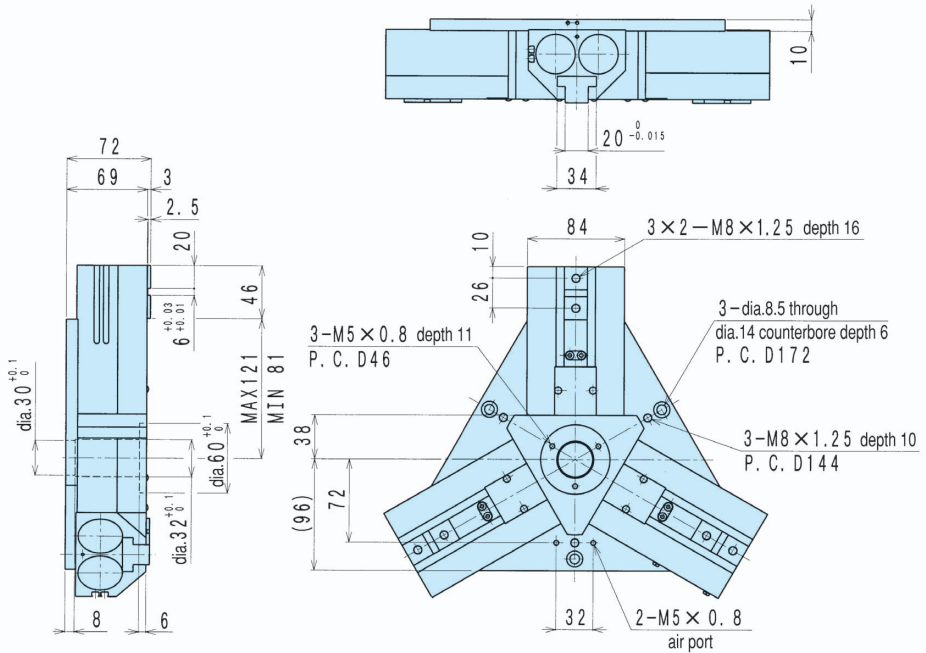
Chuck
(283-Jaw)

CKJ Series Thin Long Stroke Chuck

Layout Drawing

■ **CKJ-40AS** (Optimal Grip Force 700N to 1500N)

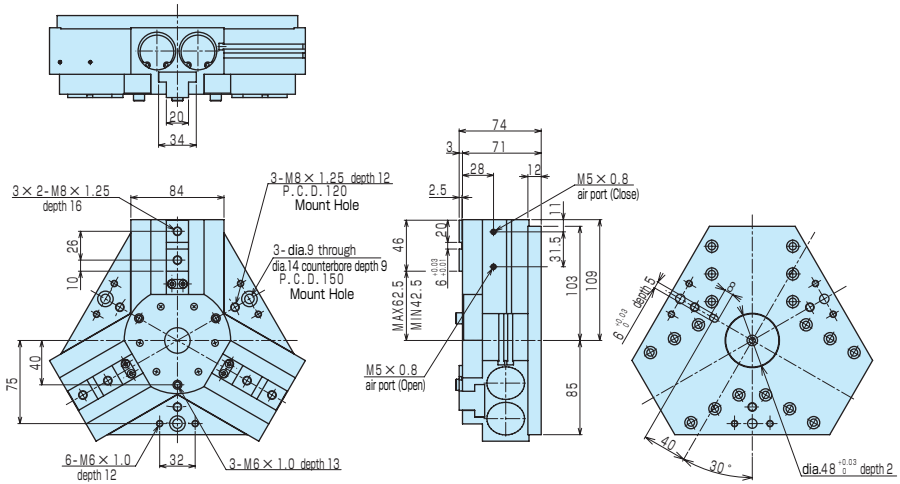
CKJ-40AS Standard



CKJ-16AS/16AS-S1/40AS/40AS-S1/63AS/63AS-S1 CKJB-16AS/40AS/63AS/100AS

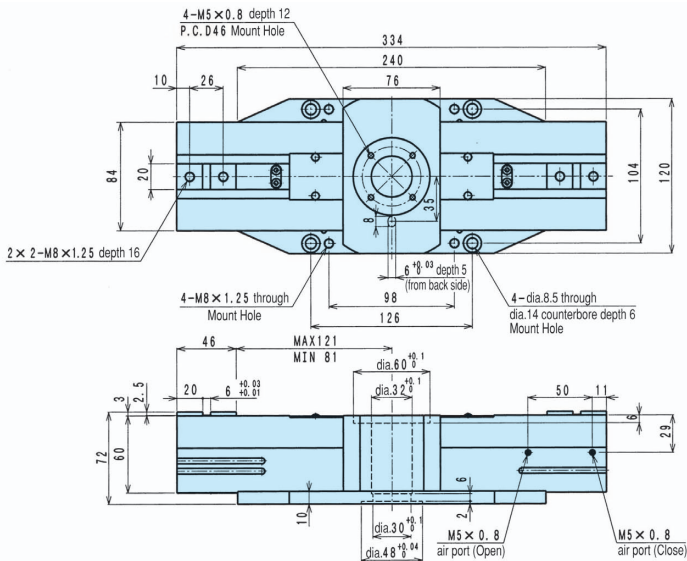
For CAD data, please go to **▶518P**

CKJ-40AS-S1



Chuck
(2&3-Jaw)

CKJB-40AS

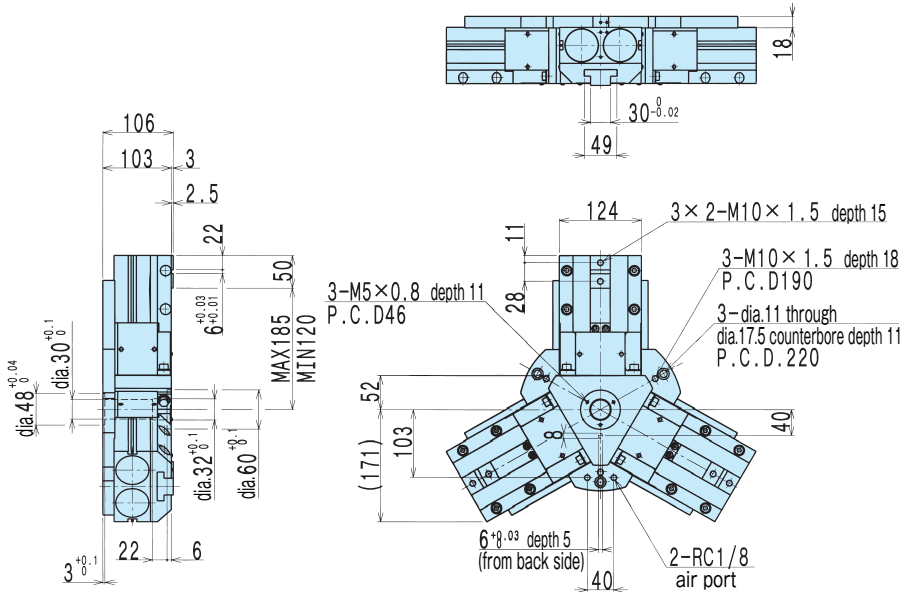


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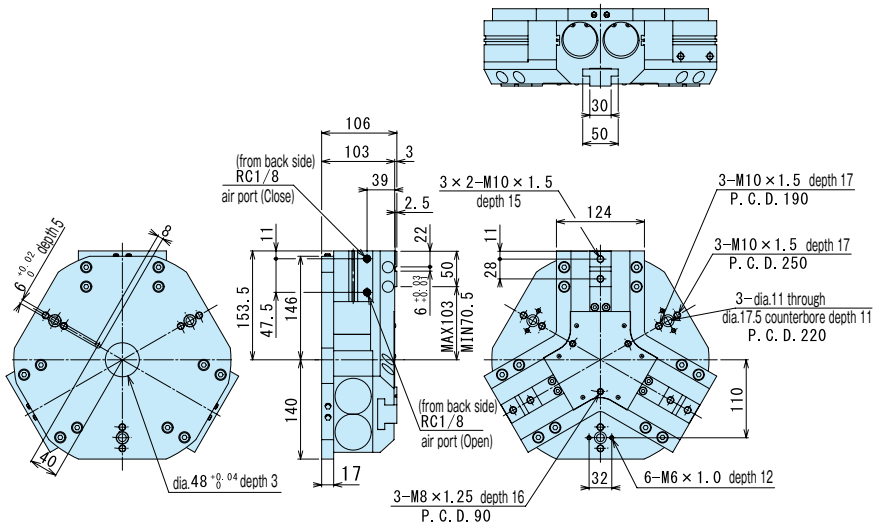
Layout Drawing

CKJ-63AS (Optimal Grip Force 2500N to 5000N)

CKJ-63AS Standard



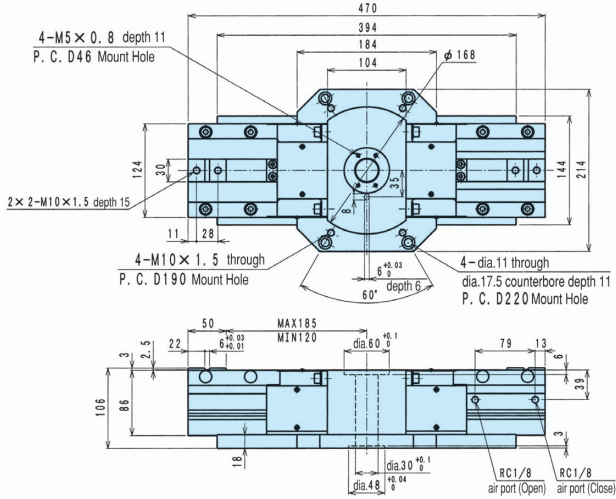
CKJ-63AS-S1



CKJ-16AS/16AS-S1/40AS/40AS-S1/63AS/63AS-S1 CKJB-16AS/40AS/63AS/100AS

For CAD data, please go to **▶518P**

CKJB-63AS



Chuck
(2&3-Jaw)

CKJB-100AS (Optimal Grip Force 5000N to 10000N)

CKJB-100AS

