

Mechanical Chuck

Overview

The CKL2-FC series mechanical chuck differs from conventional air-powered chucks by performing opening/closing operations mechanically. Ideal for systems requiring opening/ closing operations at the end, such as shuttle movers (SM-25 series).

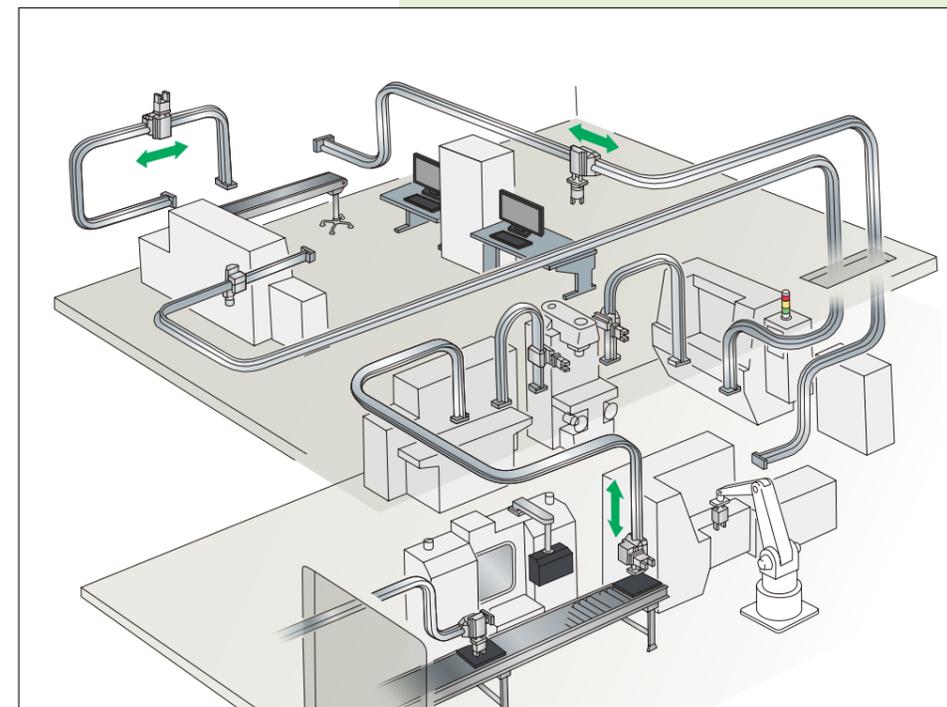
Main features

- Ideal for index tables where air piping cannot be used.
- Closed direction has higher gripping force due to springs (CKL2 type: 20 N to 150 N)
- Opening direction is driven by external force, enabling high-speed operation in combination with cams, etc.



C O N T E N T S

- Mechanical Chuck (CKL2-FC) 496



⚠ To use this product safely, read the general precautions for cylinders on Intro 39 and for chucks on P. 490 before use.



Mechanical Chuck

CKL2-FC Series

● Operating stroke: 5, 6, 8, 10 mm

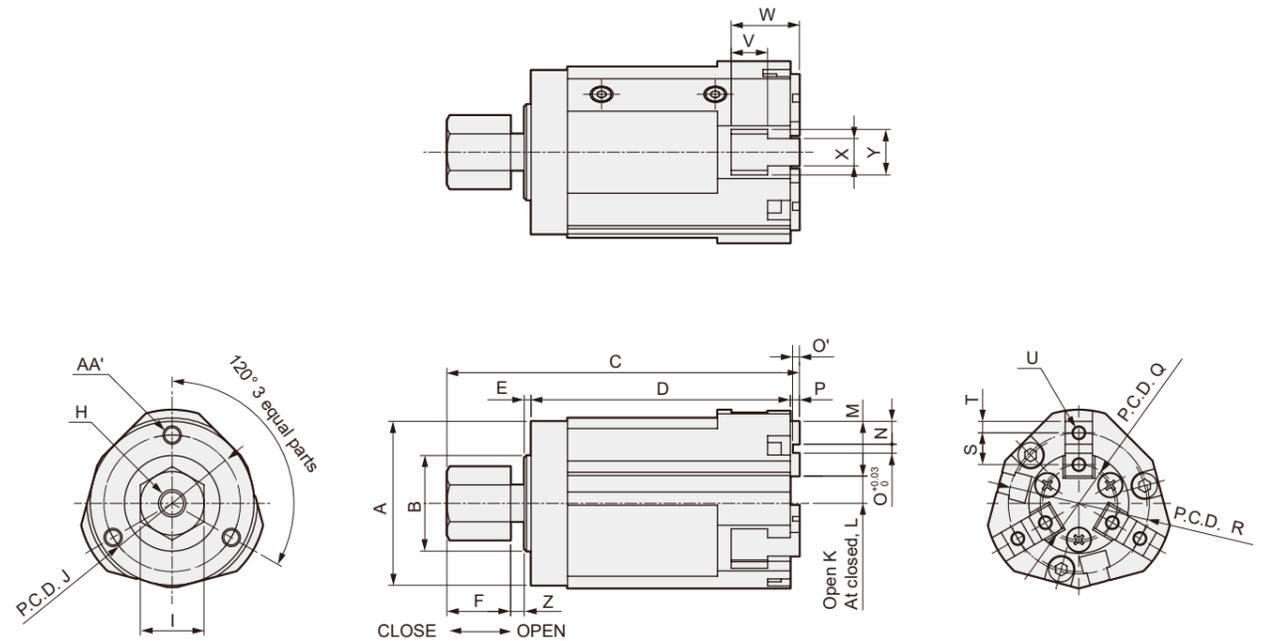


CKL2-FC Series

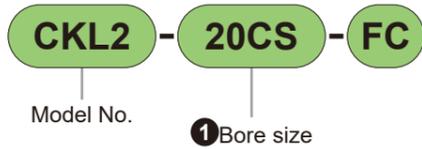
Outline Dimension Drawing

Outline Dimension Drawing

● CKL2-FC



Model No. Notation Method



① Bore Size (mm)

Code	Content
20CS	ø20
25CS	ø25
32CS	ø32
40CS	ø40

Specifications

Item	CKL2-FC			
	20CS	25CS	32CS	40CS
Size	20CS	25CS	32CS	40CS
Cylinder bore	mm ø20	mm ø25	mm ø32	mm ø40
Rod diameter	mm ø6	mm ø8	mm ø10	mm ø12
Ambient Temperature	°C 5 to 60			
Operating stroke	mm 5	mm 6	mm 8	mm 10
Repeatability	mm ±0.01			
Opening side external force	N 165 to 250	N 280 to 420	N 485 to 730	N 710 to 1050
Gripping force *2	N 20 to 33	N 33 to 53	N 50 to 105	N 83 to 150
Product Weight	g 202	g 320	g 433	g 834

*1: Use in the opening direction will damage the hand. Never use it in this way.

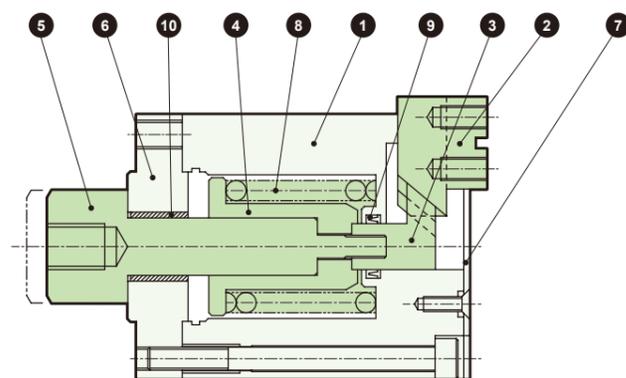
*2: Gripping force changes according to stroke position.

Code	A	AA'	B	C		D	E	F	H	I	J	K	L
				MAX	MIN								
CKL2-20CS-FC	ø36	3-M4 x 0.7, Depth 8	ø21 ⁰ _{-0.052}	77.5	74.5	57	1.5	14	M6 x 1.0 Depth 9	14	30	8.5	6
CKL2-25CS-FC	ø46	3-M5 x 0.8, Depth 8	ø26 ⁰ _{-0.052}	80.1	76.5	58	1.5	14	M8 x 1.25 Depth 10	17	39	10	7
CKL2-32CS-FC	ø52	3-M5 x 0.8, Depth 10	ø34 ⁰ _{-0.062}	93	88	67	2	16	M8 x 1.25 Depth 12	19	44	12	8
CKL2-40CS-FC	ø62	3-M6 x 1.0, Depth 12	ø42 ⁰ _{-0.062}	118	111.5	90.5	2	16	M10 x 1.5 Depth 15	24	53	15	10

Code	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	O'
CKL2-20CS-FC	12	5	2	2	17	31	7	2.5	3 x 2-M3 x 0.5 Depth 6	8	15	6 ⁰ _{-0.012}	10	3	1.5
CKL2-25CS-FC	16	7	2	3	21	39	9	3.5	3 x 2-M4 x 0.7 Depth 8	8.5	15.5	7 ⁰ _{-0.015}	12	3.6	2
CKL2-32CS-FC	18	7.5	3	3	24	44	10	4	3 x 2-M4 x 0.7 Depth 8	4	14.5	8 ⁰ _{-0.015}	14	5	2
CKL2-40CS-FC	21	9	3	3	29	53	12	4.5	3 x 2-M5 x 0.8 Depth 10	5	15	8 ⁰ _{-0.015}	16	6.5	2.5

Internal Structure Diagram/Material

● CKL2-FC



Do not disassemble

Part No.	Part Name	Material	Part No.	Part Name	Material
1	Body	Aluminum Alloy	6	Cover	Aluminum Alloy
2	Finger	Steel	7	Center cover	Stainless Steel
3	Piston A	20CS to 32CS: Stainless Steel 40CS : Steel	8	Spring	Stainless Steel
4	Piston	Aluminum Alloy	9	Rod seal	Nitrile Rubber
5	Stopper rod	Stainless Steel	10	Bushing	Oil-Impregnated Bearing Alloy

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