



Pneumatic Cylinders I
Catalog No. CB-029SA

Small bore size cylinder
Double acting/ Single rod

CMK2 Series

● Bore size: $\phi 20/\phi 25/\phi 32/\phi 40$

JIS symbol ● Double acting cylinder single rod



Specifications

Descriptions	CMK2			
Bore size mm	$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$
Actuation	Double acting			
Working fluid	Compressed air			
Max. working pressure MPa	1.0			
Min. working pressure MPa	0.1			
Proof pressure MPa	1.6			
Ambient temperature °C	-10 to 60 (no freezing)			
Port size	Rc1/8			
Stroke tolerance mm	$^{+2.0}_{-0}$ (up to 200), $^{+2.4}_{-0}$ (over 200)			
Working piston speed mm/s	50 to 500			
Cushion	Rubber cushion			
Lubrication	Not available			
Allowable absorbed energy J	0.166	0.308	0.424	0.639

Stroke

Bore size(mm)	Standard Stroke (mm)	Max. Stroke (mm)	Min. Stroke (mm)
$\phi 20$	25/50/75/100/ 150/200/250/ 300	750	5
$\phi 25$			
$\phi 32$			
$\phi 40$			

*1: The custom Stroke is available in 1mm increments.

*2: One side foot (LS) has the max. stroke length of 50mm.

How to order switch mounting bracket

P4	CMK2-T-[Bore size]
P40	CMK2-T-[Bore size]-P40

How to order mounting bracket P4

Bore size (mm)	$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$
Mounting bracket				
Axial foot (LB/LS)	M1-LB-20	M1-LB-30	M1-LB-30	M1-LB-30
Flange (FA/FB)	M1-FA-20	M1-FA-30	M1-FA-30	M1-FA-30
Trunnion (TA/TB)	M1-TA-20	M1-TA-30	M1-TA-30	M1-TA-40
Eye bracket (CA)	M1-CA-20	M1-CA-30	M1-CA-30	M1-CA-30
Clevis bracket (CB)	M1-CB-20	M1-CB-30	M1-CB-30	M1-CB-30

*1: Regarding mounting brackets, mounting nuts and toothed washers are attached with the axial foot type and flange type. Trunnions are supplied with mounting nuts.

*2: For axial foot types (two-sided), 2 sets of "M1-LB0** or [Bore size]" in the table above are required.

How to order mounting bracket P40

Bore size (mm)	$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$
Mounting bracket				
Axial foot (LB/LS)	M1-LB-20-P40	M1-LB-25-P40	M1-LB-30-P40	M1-LB-30-P40
Flange (FA/FB)	M1-FA-20-P40	M1-FA-25-P40	M1-FA-30-P40	M1-FA-30-P40
Trunnion (TA/TB)	M1-TA-20-P40	M1-TA-25-P40	M1-TA-30-P40	M1-TA-30-P40
Eye bracket (CA)	M1-CA-20-P40	M1-CA-25-P40	M1-CA-30-P40	M1-CA-30-P40
Clevis bracket (CB)	M1-CB-20-P40	M1-CB-25-P40	M1-CB-30-P40	M1-CB-30-P40

*1: For axial foot types (two-sided), 2 sets of "M1-LB-** or [Bore size]-P40" in the table above are required.

*2: Regarding mounting brackets, mounting nuts are attached with the axial foot type, flange type and trunnion type.

Compatibility table by variation

Applicable bore size		Double acting/ single rod	Double acting/ position locking	Single acting/ push	Single acting/ pull	Double acting/ double rod	Double acting/ back to back	Stroke adjustable (push)	Stroke adjustable (pull)	Double acting/ fine speed	Double acting/ heat resistance	Double acting/ rubber-air cushioned	Double acting/ with speed controller	Double acting/ rotation-stop	Double acting/ coolant proof	Double acting/ low hydraulic	Double acting/ air cushion
			Q	S	SR	D	B	P	R	F	T	*C	Z	M	G2/G3	H	C
ø20 to 40	P4	●	●	○	○	○	○	○	○			○	○	▲			○
	P40	●	●	○	○	○	○	○	○*1			○	▲	▲			○*2
	P42																

*1: Zinc plating is used for the sealing washer.

*2: Zinc plating is used for the cushion packing.

●: Applicable models
○: Semi-applicable models
▲: Contact CKD for details.
□: Not applicable

How to order

Without switch (built-in magnet for switch)

CMK2 - 00 - 20 - 100 - P4 P40 Y

With switch (built-in magnet for switch)

CMK2 - 00 - 20 - 100 - SW11 - R - M P4 P40 Y

A Mounting
*1

B Bore size

C Stroke

D Switch model No.

E Switch quantity
*4

F Option

G Accessory
*2

⚠ Precautions for model No. selection

*1: One side foot (LS) has the max. stroke length of 50mm.


*2: "I" and "Y" cannot be selected together.

*3: Refer to "Pneumatic Cylinders I (Catalog No.CB-029SA)" for made-to-order specifications of rod end form.

*4: Up to three switches can be installed. If four or more switches are required, switch mounting brackets for the extra switches must be prepared separately.

*5: For 20 or 25 bore size, the rod material is stainless steel as standard and the rod nut is zinc chromate. If a stainless steel rod nut is necessary, select the "M" option code.

Related products

Speed controller					
Model No.	Appearance	Port size (Rc or R)	Compatible tube O.D.		
		1/8	4(ø4)	6(ø6)	8(ø8)
SC3W-6- *P4		●	●	●	●
					530

Specify the compatible tube O.D. code for *.

Code	Description	
A Mounting		
00	Basic	
LB	Axial foot (both sides)	
LS	Axial foot (one side)	
FA	Rod side flange	
FB	Head side flange	
CA	Eye bracket	
CC	Eye bracket integrated	
CB	Clevis Bracket (pin and split washer pin included)	
TA	Rod side trunnion	
TB	Head side trunnion	
B Bore size (mm)		
20	ø20	*5
25	ø25	*5
32	ø32	
40	ø40	
C Stroke (mm)		
Bore size	Stroke	Custom Stroke
ø20	5 to 750	In 1 mm increments
ø25	5 to 750	
ø32	5 to 750	
ø40	5 to 750	
D Switch model No.		
Refer to the compatibility table on Intro Pages 23 to 26 for switch model No.		
E Switch quantity		
R	1 on rod side	
H	1 on head side	
D	2	
T	3	
F Option		
M	Piston rod, rod nut material (stainless steel) *5	
V	Boss cutoff	
G Accessory		
I	Rod eye	
Y	Rod clevis (pin and split washer pin attached)	
B2	Clevis bracket (pin and snap ring included)	

P4 Series

Pneumatic actuator

Pneumatic cylinders

Vacuum components

Pneumatic valves

Pneumatic auxiliary components

Gas generator

Fluid control components

Electric actuator

Motor specification

Motorless specifications