



Small bore size cylinder  
Double acting/Single rod/Rubber scraper

# CMK2-G-FP1-HP1 Series

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



## Specifications

Item		CMK2-G-FP1-HP1			
Bore size	mm	ø20	ø25	ø32	ø40
Actuation		Double acting			
Working fluid		Compressed air			
Max. working pressure	MPa	1.0			
Min. working pressure	MPa	0.15			
Proof pressure	MPa	1.6			
Ambient temperature	°C	-10 to 60 (no freezing)			
Port size		Rc1/8			
Stroke tolerance	mm	<sup>+2.0</sup> <sub>0</sub> (up to 200), <sup>+2.4</sup> <sub>0</sub> (More than 200)			
Working piston speed	mm/s	50 to 500			
Cushion		With rubber cushion			
Lubrication		Not required			
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 1 mm increments.

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

## How to order mounting brackets

Bore size (mm)	$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$ *1
Mounting bracket *2				
Basic (00) *4	M1- 00 -20	M1- 00 -30	M1- 00 -30	M1- 00-30 (for head side)
Axial foot (LB/LS) *3	M1-LB-20	M1-LB-30	M1-LB-30	M1-LB-30(For head side) CMK2-G2-40-LS (LS, LB rod side)
Flange (FA/FB)	M1-FA-20	M1-FA-30	M1-FA-30	CMK2-G2-40-FA(FA) M1-FA-30(FB)
Trunnion (TA/TB)	M1-TA-20	M1-TA-30	M1-TA-30	CMK2-G2-40-TA(TA) M1-TA-40(TB)
Eye bracket (CA)	M1-CA-20-FP1	M1-CA-30-FP1	M1-CA-30-FP1	M1-CA-30-FP1
Clevis bracket (CB)	M1-CB-20-FP1	M1-CB-30-FP1	M1-CB-30-FP1	M1-CB-30-FP1

\*1: The rod cover nut, LS bracket (LB rod side), FA bracket and TA bracket for  $\phi 40$  bore size are not the standard.

\*2: Mounting nuts and toothed washers are included with the axial foot type and flange type. The trunnion type includes mounting nuts. However, toothed washers are not included with  $\phi 40, 00$ , LB (rod side), LS and FA.

\*3: For axial foot types (two-sided), 2 sets of the "M1-LB-\*1" in the table above are required. For  $\phi 40$ , the brackets used on the rod side and head side are different. Refer to the table above for details.

\*4: Mounting nut, toothed washer only. Although 1 set is included with the basic product (00) (only mounting nuts are included with the  $\phi 40$ ), use them when needed.

Refer to the CMK2-G-HP1 Series on page 55 for dimensions.

### How to order

Without switch (built-in magnet for switch)

CMK2-G - 00 - 20 - 100 - FP1 Y - HP1

With switch (built-in magnet for switch)

CMK2-G - 00 - 20 - 100 - T0H - R - V FP1 Y - HP1

A Mounting

\*1

B Bore size

C Port thread

D Stroke

E Switch model No.

F Switch quantity

\*5

G Option

H Accessory

\*3

Code	Description
<b>A Mounting</b>	
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
CC1	Eye bracket, bush pressfit
CB	Clevis Bracket (pin and split washer pin included)
TA	Rod side trunnion
TB	Head side trunnion

<b>B Bore size (mm)</b>	
20	ø20
25	ø25
32	ø32
40	ø40

<b>C Port thread</b>	
Blank	Rc thread
NN	NPT thread (made to order)
GN	G thread (made-to-order product)

<b>D Stroke (mm)</b>	
Stroke *2	Custom stroke
5 to 750	In 1 mm increments

<b>E Switch model No.</b>						
Lead wire	Lead wire	Contact	Voltage		Indicator	Lead Line
Straight	L-shaped		AC	DC		
T0H*	T0V*	Reed	●	●	1-color LED	2-wire
T5H*	T5V*		●	●	No LED	
T8H*	T8V*		●	●	1-color LED	
T1H*	T1V*		●	●	1-color LED	
T2H*	T2V*	Proximity	●	●	1-color LED	2-wire
T3H*	T3V*		●	●	1-color LED	3-wire
T2HR3	T2VR3		●	●	1-color LED	2-wire
T3PH*	T3PV*		●	●	Bending resistant lead wire	2-wire
T2WH*	T2WV*		●	●	1-color LED (made to order)	3-wire
T3WH*	T3WV*		●	●	2-color LED	2-wire
T2JH*	T2JV*		●	●	1-color LED Off-delay	2-wire

<b>* Lead wire length</b>	
Blank	1 m (standard)
3	3 m (option)
5	5 m (option)

<b>F Switch quantity</b>	
R	1 on rod side
H	1 on head side
D	2
T	3

<b>G Option</b>	
M	Piston rod material (stainless steel) *6
V	Boss cutoff

<b>H Accessory</b>	
I	Rod eye
Y	Rod clevis (pin and split washer pin attached)
B2	Clevis bracket (pin and snap ring included)

### ⚠ Precautions for model No. selection

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

\*2: Refer to CMK2-G-HP1 Series on page 52 for the min. stroke with switch.

\*3: "I" and "Y" cannot be selected together.

\*4: Refer to "Pneumatic Cylinders I (Catalog No. CB-029SA)" for made-to-order specifications of rod end form.

\*5: 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.

\*6: 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.

[Model No. example]

CMK2-G-00-20-100-T0H-R-VFP1Y-HP1

Model: Small bore cylinder Food-grade grease specifications

- A Mounting : Basic
- B Bore size : ø20 mm
- C Port thread : Rc thread
- D Stroke : 100 mm
- E Switch model No. : Reed T0H switch, lead wire 1m
- F Switch quantity : 1 on rod side
- G Option : Boss cutoff
- H Accessory : Rod clevis

SCPD3	Long service life cylinder
CMK2	
SCM	
SSD2	
MDC2	
MSD	
MSDG-L	
SMG	
LCR	
LCG	
STM	
STG	
STR2	
SCPD3	Environment-resistant cylinder
CMK2	
SCM	
SCG	
SSD2	
SMG	
LCR	
STG	
STS	
STL	
LSH	Linear Slide Hand
LSHL	
LSHM	
LST	Low-profile long stroke hand
LSTM	
HMC	Wide Parallel Hand
CKW	Chuck
ABP2	Air Booster
SCPD3	Compatible with rechargeable batteries
CMK2	
SCM	
SSD2	
MSD	
MSDG-L	
SMG	
STG	
STM	
LCR	
LCG	
STR2	
LSH	
LSHL	
SCPD3	Supports food mfg. processes
CMK2	
SCM	
SCG	
SSD2	
STG	