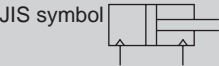


Small bore size cylinder  
Double acting/Single rod

Long service life cylinder

# CMK2-HP1 Series

● Bore size:ø20/ø25/ø32/ø40



## Specifications

Item	CMK2-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	0.1			
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 150)			
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)
ø20	25/50/75/100/150	150	5
ø25			
ø32			
ø40			

\*1: The custom stroke is available in 1 mm increments.

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

## Min. stroke with switch

(Unit: mm)

Switch quantity	1					2					3				
	Proximity			Reed		Proximity			Reed		Proximity			Reed	
Bore size (mm)	T2,T3	T2W, T3W	T1	T0,T5	T8	T2,T3	T2W, T3W	T1	T0,T5	T8	T2,T3	T2W, T3W	T1	T0,T5	T8
ø20	10					25	30	35	25	35	50	55	55	50	55
ø25	10					25	30	35	25	35	50	55	55	50	55
ø32	10					25	30	35	25	35	50	55	55	50	55
ø40	10					25	30	35	25	35	50	55	55	50	55

\*1: Up to 3 switches can be mounted.

For dimensions, refer to the CMK2 Series in "Pneumatic Cylinders I (CB-029SA)".

### How to order

Without switch (built-in magnet for switch)

CMK2 - 00 - 20 - 30 - Y - HP1

With switch (built-in magnet for switch)

CMK2 - 00 - 20 - 30 - T0H - R - M Y - HP1

A Mounting  
\*1

B Bore size

C Port thread

D Stroke

E Switch model No.

F Switch quantity  
\*4

G Option  
\*5

H Accessory  
\*3

### ! Precautions for model No. selection

- \*1: One side foot (LS) has maximum stroke of 50 mm.
- \*2: Refer to page 4 for the minimum stroke with switch.
- \*3: "I" and "Y" cannot be selected together.
- \*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 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]

CMK2-00-20-30-T0H-R-MY-HP1

Model: Small bore size cylinder double acting/standard

- A Mounting : Basic
- B Bore size :  $\phi 20$  mm
- C Port thread : Rc thread
- D Stroke : 30 mm
- E Switch model No. : Reed T0H switch, lead wire 1 m
- F Switch quantity : 1 on rod side
- G Option : Piston rod material (stainless steel)
- H Accessory : Rod clevis

### How to order switch

- Switch body + mounting bracket set

CMK2 - T0H - 20

B Bore size

E Switch model No.

- Switch body only

SW - T0H

E Switch model No.

- Mounting bracket set

CMK2 - T - 20

B Bore size

Mounting bracket

### How to order mounting brackets

Bore size (mm)	$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$
Mounting bracket				
Basic (00)	M1-00-20	M1-00-30	M1-00-30	M1-00-30
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

\*6: Regarding mounting brackets, mounting nuts and toothed washers are included with the axial foot type and flange type. The trunnion type includes mounting nuts.

\*7: For axial foot types (two-sided), 2 sets of the "M1-LB-\*1" in the table above are required.

\*8: Mounting nut, toothed washer only. Although 1 set is included with the basic product (00), use this when needed.

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	$\phi 20$	32	$\phi 32$
25	$\phi 25$	40	$\phi 40$

<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>		
Bore size	Stroke	*2 Custom stroke
$\phi 20$	5 to 150	In 1 mm increments
$\phi 25$		
$\phi 32$		
$\phi 40$		

<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	
T2HR3	T2VR3		●	●	1-color LED	2-wire
T3PH*	T3PV*		●	●	Bending resistant lead wire	
T2WH*	T2WV*		●	●	1-color LED (made to order)	3-wire
T3WH*	T3WV*		●	●	2-color LED	
T2JH*	T2JV*		●	●	1-color LED off-delay	2-wire
			●	●	1-color LED off-delay	

<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)

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