



Compact cylinder Double acting/Single rod

Long service life cylinder

# SSD2-P4/P40-HP1 Series

● Bore size:  $\phi 12/\phi 16/\phi 20/\phi 25/\phi 32/\phi 40$ 

JIS symbol



## Specifications

Item		SSD2-P4/P40-HP1 SSD2-L-P4/P40-HP1 (with switch)					
Bore size mm		ø12	ø16	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		M5				Rc1/8 *1	
Stroke tolerance mm		+1.0 0					
Working piston speed mm/s		50 to 500					
Cushion		No					
Lubrication		Not available					
Allowable absorbed Energy J	Without cushion	0.004	0.01	0.016	0.021	0.025	0.092

\*1: The  $\phi 32$  bore size with a 5 mm stroke and without a switch has a port size of M5.

## Stroke

Bore size (mm)	Standard stroke (mm)	Max. stroke (mm)	Min. stroke (mm)
ø12	5/10/15/20	30	1
ø16	25/30		
ø20	5/10/15/20/25	50	
ø25	30/35/40/45/50		
ø32	5/10/15/20/25/30/	100	
ø40	35/40/45/50/75/100		

## [Stroke table]

Stroke (mm)		Applicable bore size					
		12	16	20	25	32	40
Standard stroke	5	●	●	●	●	●	●
	10	●	●	●	●	●	●
	15	●	●	●	●	●	●
	20	●	●	●	●	●	●
	25	●	●	●	●	●	●
	30	●	●	●	●	●	●
	35			●	●	●	●
	40			●	●	●	●
	45			●	●	●	●
	50			●	●	●	●
	75					●	●
100					●	●	
Min. stroke (mm) *1		1					
Max. stroke (mm)		30		50		100	
Custom Stroke *2		In 1 mm increments					

\*1: Less than 5 mm with 1-color LED switch and less than 10 mm with the 2-color LED, off-delay, AC magnetic field proof, T1\* or T8\* switch are not available. Refer to "Pneumatic Cylinders I (Catalog No. CB-029SA)" for the min. stroke with switch.

\*2: The dimensions of the total length with the custom stroke are handled the same as the next longer standard stroke.

Refer to the SSD2 Series in "Pneumatic Cylinders I (No. CB-029SA)" for dimensions.

### How to order

Without switch (without magnet for switch)

**SSD2** - 12 - 5 - N **P4** - LB - I - HP1

With switch (built-in magnet for switch)

**SSD2-L** - 12 - 10 - SW11 - R - N **P4** - LB - I - HP1

**A** Model No.

**B** Bore size

**C** Stroke

**D** Switch model No.

\*1  
\*2  
\*3  
\*8  
\*9

**E** Switch quantity

**F** Option\*4


**G** Mounting bracket  
\*5  
\*6

**H** Accessory\*7

### ⚠ Precautions for model No. selection

- \*1: The T2YD\* switch cannot be mounted on the  $\phi 12$  and  $\phi 16$  bore sizes.
- \*2: T8\* switch cannot be installed on  $\phi 12$  to  $\phi 32$ .
- \*3: The F type switch can only be mounted on the piping port surface of bore sizes  $\phi 20$  and  $\phi 25$ .
- \*4: Piston rod of  $\phi 12$  to  $\phi 25$  is stainless steel as standard. C-snap ring will be stainless steel, not steel. The rod end male thread nut is stainless steel.
- \*5: The mounting bracket is attached at shipment.
- \*6: The projection dimension of piston rod WF when LB or FA is selected is different from that of the standard. Refer to "Pneumatic Cylinders I (Catalog No. CB-029SA)" for details. The number of the specified protruding dimension will be added at the end of the model No. printed on the metal plate on the body.
- \*7: "I" and "Y" cannot be selected together.
- \*8: The F-switch with L-type lead wire on  $\phi 20$  models cannot be selected on strokes of 15 mm or under.
- \*9: Switches are shipped with the product. Contact CKD if assembling before shipment is necessary.
- \*10: 5 m lead wire for the F switch is made to order.

### Related products

Speed controller							
Model No.	Appearance	Port size (Rc or R)			Applicable tube bore		
		M5	1/8	1/4	4 ( $\phi 4$ )	6 ( $\phi 6$ )	8 ( $\phi 8$ ) 10 ( $\phi 10$ )
SC3W-M5- *-P4		●			●	●	
SC3W-6- *-P4			●		●	●	
SC3W-8- *-P4				●	●	●	●

Specify the compatible tube O.D. code for \*. Refer to "rechargeable battery compatible Component P4\* Series" (No.CC-1226A) for details.

Code	Description						
A Model No.							
SSD2	Double acting/Single rod						
SSD2-L	Double acting/Single rod with switch						
B Bore size (mm)							
12	ø12						
16	ø16						
20	ø20						
25	ø25						
32	ø32						
40	ø40						
C Stroke (mm)							
Refer to the stroke table on page 176.							
D Switch model No.							
Refer to the switch model No.							
Refer to the compatibility table on pages 210 to 213.							
E Switch quantity							
R	1 on rod side						
H	1 on head side						
D	2						
F Option							
	Bore size (mm)	12	16	20	25	32	40
Blank	Rod end female thread	●	●	●	●	●	●
N	Rod end male thread	●	●	●	●	●	●
M *4	Piston rod material (stainless steel)	●	●	●	●	●	●
		●	●	●	●	●	●
		●	●	●	●	●	●
G Mounting bracket							
Blank	Without mounting bracket						
LB	Axial foot						
CB	Clevis bracket (pin and snap ring attached)						
FA	Rod side flange						
FB	Head side flange						
H Accessory (available when rod end male thread "N" is selected)							
I	Rod eye						
Y	Rod clevis (pin and snap ring attached)						

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	Linear Slide Hand
STL	
LSH	
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	