



Pneumatic Cylinders I
Catalog No. CB-029SA

Medium bore size cylinder
Double acting/ Single rod/with switch

SCA2 Series

● Bore size: ø40/ø50/ø63/ø80/ø100

JIS symbol



Specifications

Descriptions		SCA2				
Tubel.D. mm		ø40	ø50	ø63	ø80	ø100
Actuation		Double acting				
Working fluid		Compressed air				
Max. working pressure MPa		1.0				
Min. working pressure MPa		0.05				
Proof pressure MPa		1.6				
Ambient temperature °C		-10 to 60 (whereand, no freezing)				
Port size		Rc 1/4	Rc 3/8		Rc 1/2	
Stroke tolerance mm		^{+0.9} ₀ (up to 360), ^{+1.4} ₀ (up to 800)				
Working piston speed mm/s		50 to 1000 (Use within the allowable absorbed energy.)				
Cushion		Air cushion				
Effective air cushion length		14.6	16.6	16.6	20.6	23.6
Lubrication		Not available				
Allowable absorbed energy J	Cushioned	4.29	8.37	15.8	27.9	49.8
	Without cushion	0.067	0.079	0.079	0.201	0.301
		Without a cushion, large energy generated by the external load cannot be absorbed. We recommend using an external shock absorber.				

Stroke

Bore size (mm)	Standard Stroke (mm)	Max. Stroke (mm)	Available Stroke (mm)	Min.Stroke (mm)
ø40	25/50/75/100/150/ 200/250/300/350/ 400/450/500	600	1600	1
ø50			2000	
ø63		2500		
ø80				
ø100				

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

*2: If the max. stroke length is exceeded, product specifications may not be met, depending on operating conditions. Contact CKD in this case.

Compatibility table by variation

Applicable bore size	Double acting/ single rod	
	P4	▲
ø40 to ø100	P40	▲*

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

*: Zinc plating is used for the cushion packing.

How to order

Without switch (built-in magnet for switch)

SCA2 - LB - 40 - B - 100 - S - P4 P40 I

With switch (built-in magnet for switch)

SCA2 - LB - 40 - B - 100 - SW11 - R - S - P4 P40 I

A Mounting
*1

B Bore size

C Port thread

D Cushion

E Stroke

F Switch Model No.
*2

G Switch quantity
*3

H Option
*4

I Accessory
*5

⚠ Precautions for model No. selection

- *1: Mounting bracket will be shipped with the product. (Trunnion types are assembled at shipment.)
- *2: Switches are shipped with the product.
- *3: When selecting TA, TD, TB or TE mounting, the switch quantity is limited to "H" (1 on head side) for TA and TD, and "R" (1 on rod side) for TB and TE.
- *4: When selecting TA, TD, TB or TE mounting form, the cushion needle position is blank and fixed at S, and cannot be selected.
- *5: "I" and "Y" cannot be selected together.
- *6: Made to order. Contact CKD Sales for details.

Related products

Speed controller											
Model No.	Appearance	Port size (Rc or R)				Compatible tube O.D.					Page
		1/8	1/4	3/8	1/2	4(ø4)	6(ø6)	8(ø8)	10(ø10)	12(ø12)	
SC3W-6-*-P4		●				●	●	●			
SC3W-8-*-P4			●				●		●		
SC3W-10-*-P4				●				●	●	●	
SC3W-15-*-P4					●				●	●	

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

Code	Description		
A Mounting			
00	Basic		
LB	Axial foot		
FA	Rod side flange		
FB	Head side flange		
FC	Head side special flange		
CA	Eye bracket		
CB	Clevis bracket (pin and snap ring attached)		
TC	Intermediate trunnion		
TA	Rod side trunnion		
TB	Head side trunnion		
TF	Intermediate hole trunnion(ø40 cannot be selected)		
TD	Rod side hole trunnion(ø40 cannot be selected)		
TE	Head side hole trunnion(ø40 cannot be selected)		
B Bore size (mm)			
40	ø40		
50	ø50		
63	ø63		
80	ø80		
100	ø100		
C Port thread			
Blank	RcNe#		
N	NPTNe#		
G	GNe#		
D Cushion			
B	Both sides cushioned		
R	Rod side cushioned		
H	Head side cushioned		
N	Without cushion		
E Stroke (mm)			
Bore size	Stroke	Available Stroke	Custom Stroke
ø40	1 to 600	1600	In 1 mm increments
ø50	1 to 600	2000	
ø63	1 to 600	2500	
ø80	1 to 700	2500	
ø100	1 to 800	2500	
F Switch model No.			
Refer to the compatibility table on Intro Pages 23 to 26 for switch model No.			
* Lead wire length			
Blank	1 m (standard)		
3	3 m (option)		
5	5 m (option)		
G Switch quantity			
R	1 on rod side		
H	1 on head side		
D	2		
T	3		
H Option			
M	Piston rod material (stainless steel)		
Blank	Cushion needle position R (standard)		
S	Cushion needle position S		
T	Cushion needle position T		
I Accessory			
I	Rod eye		
Y	Rod clevis (pin and snap ring attached)		
B1	Eye bracket		
B2	Clevis bracket (pin and snap ring attached)		
B3	Eye bracket		
B4	Trunnion No. 2 bracket (2 pcs./set)		

P4 Series

Pneumatic actuator
Pneumatic cylinders
Hand/Chuck
Related products
Cylinder Switch

Vacuum components

Pneumatic valves
Clean air components
Air controller

Pneumatic auxiliary components
Speed controller
Fitting
Auxiliary valve
Silencer
Tube

Gas generator

Fluid control components

Electric actuator
Motor specification
Motorless