



Pneumatic Cylinders I
Catalog No. CB-029SA

Tie rod cylinder Double acting/ Single rod

SCG Series

● Bore size: $\varnothing 32/\varnothing 40/\varnothing 50/\varnothing 63/\varnothing 80/\varnothing 100$

JIS symbol



Specifications

Descriptions		SCG					
Bore size mm		ø32	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 (no freezing)					
Port size		Rc1/8	Rc1/4		Rc3/8		Rc1/2
Stroke tolerance mm	With rubber cushion	$^{+1.4}_0$ (up to 1000), $^{+1.8}_0$ (1001 to 1500)					
	With air cushion	$^{+1.0}_0$ (up to 360), $^{+1.4}_0$ (361 to 1000), $^{+1.8}_0$ (1001 to 1500)					
Working piston speed mm/s		30 to 1000 (Operate within the allowable absorbed energy.)					
Cushion		Either air cushion or rubber cushion can be selected					
Effective air cushion length mm		8.6	8.6	13.4	13.4	15.4	15.4
Lubrication		Not available					
Allowable absorbed energy J	With rubber cushion	0.5	0.9	1.6	1.6	3.3	5.8
	With air cushion	2.5	3.7	8.0	14.4	25.4	45.6

Stroke

Bore size(mm)	Standard Stroke(mm)	Max. Stroke(mm)	Available stroke length	Min. Stroke(mm)
$\varnothing 32$	25/50/75/100	600	700	1
$\varnothing 40$			800	
$\varnothing 50$			1200	
$\varnothing 63$			1200	
$\varnothing 80$	450/500	700	1400	
$\varnothing 100$		800	1500	

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

*2: If the max. Stroke is exceeded, product specifications may not be met, depending on operating conditions, Contact CKD for details.

How to order switch mounting bracket

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

How to order mounting bracket P4

Bore size (mm)	$\varnothing 32$	$\varnothing 40$	$\varnothing 50$	$\varnothing 63$	$\varnothing 80$	$\varnothing 100$
Mounting bracket						
Foot (LB)	SCG-LB-32	SCG-LB-40	SCG-LB-50	SCG-LB-63	SCG-LB-80	SCG-LB-100
Flange (FA) (FB) *1	SCG-FA-32	SCG-FA-40	SCG-FA-50	SCG-FA-63	SCG-FA-80	SCG-FA-100
Eye bracket (CA)	SCG-CA-32	SCG-CA-40	SCG-CA-50	SCG-CA-63	SCG-CA-80	SCG-CA-100
Clevis bracket (CB)	SCG-CB-32-P4	SCG-CB-40-P4	SCG-CB-50-P4	SCG-CB-63-P4	SCG-CB-80-P4	SCG-CB-100-P4

How to order mounting bracket P40

Bore size (mm)	$\varnothing 32$	$\varnothing 40$	$\varnothing 50$	$\varnothing 63$	$\varnothing 80$	$\varnothing 100$
Mounting bracket						
Foot (LB)	SCG-LB-32-P40	SCG-LB-40-P40	SCG-LB-50-P40	SCG-LB-63-P40	SCG-LB-80-P40	SCG-LB-100-P40
Flange (FA) (FB) *1	SCG-FA-32-P40	SCG-FA-40-P40	SCG-FA-50-P40	SCG-FA-63-P40	SCG-FA-80-P40	SCG-FA-100-P40
Eye bracket (CA)	SCG-CA-32-P40	SCG-CA-40-P40	SCG-CA-50-P40	SCG-CA-63-P40	SCG-CA-80-P40	SCG-CA-100-P40
Clevis bracket (CB)	SCG-CB-32-P40	SCG-CB-40-P40	SCG-CB-50-P40	SCG-CB-63-P40	SCG-CB-80-P40	SCG-CB-100-P40

Note: The foot mounting bracket (LB) is provided as 2 pcs./set.

Compatibility table by variation

Applicable bore size		Double acting/ single rod	Double acting/ position locking	Double acting/ double rod	Double acting/ low speed	Double acting/ low friction	Double acting/ rubber scraper	Double acting/ rotation-stop	Double acting/ coolant proof	Double acting/ anti-spatter adherence
ø32 to 100	P4	●	●	○			○			
	P40	●*	●*	○*			○*			

*: Zinc plating is used for the cushion packing.

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

How to order

Without switch

SCG - LB - 40 B - 100 - M P4 P40 I

With switch

SCG - LB - 40 B - 100 - SW11 - R - M P4 P40 I

Model No.

A Mounting
*1

B Bore size

C Cushion

D Stroke

E Switch model No.

F Switch quantity
*2

G Option

H Accessory
*3

⚠ Precautions for model No. selection

*1: Mounting bracket will be shipped with the product. Trunnion types (TA, TB, TC) are assembled at shipment.

*2: When selecting TA or TB mounting, the switch quantity is limited to "H" (1 on head side) for TA, and "R" (1 on rod side) for TB.

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

Related products

Speed controller									
Model No.	Appearance	Port size (Rc or R)					Compatible tube O.D.		
		1/8	1/4	3/8	1/2	4(ø4)	6(ø6)	8(ø8)	10(ø10)
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		
CA	Eye bracket		
CB	Clevis bracket (pin and split pin attached)		
TA	Rod side trunnion		
TB	Head side trunnion		
TC	Intermediate trunnion		
B Bore size (mm)			
32	ø32		
40	ø40		
50	ø50		
63	ø63		
80	ø80		
100	ø100		
C Cushion			
B	Two-sided air cushion (basic)		
D	Two-sided rubber cushion		
Note: The rubber cushioned type has a longer total length than the air cushioned type.			
D Stroke (mm)			
Bore size	Stroke	Available Stroke	Custom Stroke
ø32	1 to 600	700	In 1 mm increments
ø40		800	
ø50		1200	
ø63			
ø80	1 to 700	1400	
ø100	1 to 800	1500	
E Switch model No.			
Refer to the compatibility table on Intro Pages 23 to 26 for switch model No.			
F Switch quantity			
R	1 on rod side		
H	1 on head side		
D	2		
T	3		
G Option			
M	Piston rod, rod nut material (stainless steel)		
H Accessory			
I	Rod eye		
Y	Rod clevis (pin and split pin attached)		
B1	Eye bracket		
B2	Clevis bracket (pin and split pin attached)		
B3	Eye bracket		
B4	Trunnion No. 2 bracket (2 pcs./set)		

P4 Series

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Auxiliary valve
Silencer
Tube

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Electric actuator
Motor specification