

How to order

No switch (built-in magnet for switch)

SCG - **LB** - **40** - **B** - **100** - **J** - **I**

With switch (built-in magnet for switch)

SCG - **LB** - **40** - **B** - **100** - **T2H** - **R** - **J** - **I**

Model No.

A Mounting
*1

B Bore size

C Port thread

D Cushion

E Stroke

F Switch model No.

G Switch quantity
*3

H Option
*4

I Accessory
*5

⚠ Precautions for model No. selection

*1 : Mounting bracket will be shipped with the product.
(If the product is the trunnion (TA, TB or TC) with bellows and the mounting bracket is LB or FA, it will be attached with the product.)

*2 : Refer to pages 358 and 359 for the min. stroke with switch.

*3 : When selecting TA or TB as mounting, the number of switches is limited to "H" (1 on head side) for TA, and "R" (1 on rod side) for TB.

*4 : The instantaneous max. temperature is the temperature when sparks and cutting chips, etc., instantaneously contact the bellows.

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

[Example of model No.]

SCG-LB-40B-100-T2H-D-JI

Model: Tie rod cylinder, double acting/single rod

- A** Mounting : Axial foot
- B** Bore size : ø40 mm
- C** Port thread : Rc thread
- D** Cushion : With two-sided air cushion
- E** Stroke : 100 mm
- F** Switch model No. : Proximity T2H switch, lead wire 1 m
- G** Switch quantity : 2
- H** Option : With bellows
- I** Accessory : Rod eye (included product)

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 included)
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 Port thread	
Blank	Rc thread
N	NPT thread (made-to-order product)
G	G thread (made-to-order product)

D Cushion	
B	Two-sided air cushion (basic)
D	Two-sided rubber cushion

Note: The rubber cushion has a longer total length than the air cushion.

E Stroke (mm)			
Bore size	Stroke *2	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	

F Switch model No.						
Axial lead wire	Radial lead wire	Contact	Voltage		Indicator	Lead wire
			AC	DC		
TOH*	T0V*	Reed	●	●	1-color LED	2-wire
T5H*	T5V*		●	●	No indicator lamp	
T8H*	T8V*		●	●	1-color LED	
T1H*	T1V*	Proximity	●		1-color LED	2-wire
T2H*	T2V*			●		
T3H*	T3V*			●	1-color LED	3-wire
T3PH*	T3PV*			●		
T2WH*	T2WV*			●	2-color LED	2-wire
T2YH*	T2YV*			●		
T3WH*	T3WV*			●		3-wire
T3YH*	T3YV*			●		
T2YD*	-			●	2-color LED for AC magnetic field	2-wire
T2YDT*	-			●		
T2JH*	T2JV*			●	1-color LED off-delay	2-wire

* 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			
		Max. ambient temp.	Instantaneous ambient temp
J	Bellows	100°C	200°C
M	Piston rod material (stainless steel)		
P6	Copper and PTFE free		

I Accessory	
I	Rod eye
Y	Rod clevis (pin and split pin included)
B1	Eye bracket
B2	Clevis bracket (pin and split pin included)
B3	Eye bracket
B4	Trunnion No. 2 bracket (2 pcs./set)

How to order switch

- Switch body + mounting bracket set

SCG - T0H - 40

Switch model No.
(Item ⑤ on page 360)

Bore size
(Item ⑥ on page 360)

- Switch body only

SW - T0H

Switch model No.
(Item ⑤ on page 360)

- Switch mounting bracket set

SCG - T - 40

Mounting
bracket

Bore size
(Item ⑥ on page 360)

Note: Contact CKD when using
an environment-friendly
T-switch.

How to order mounting bracket

Bore size (mm)	ø32	ø40	ø50	ø63	ø80	ø100
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	SCG-CB-40	SCG-CB-50	SCG-CB-63	SCG-CB-80	SCG-CB-100

*1: Specify the flange (FA) with bellows as "SCG-FA-(bore size)-J".

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

*3: All mounting brackets are supplied with mounting bolts.

Specifications for rechargeable battery

(Catalog No. CC-1226A)

- Design is compatible with rechargeable battery manufacturing process.

SCG -...- **P4***

* Contact CKD for details.

Theoretical thrust table

(Unit: N)

Bore size (mm)	Operating direction	Working pressure MPa											
		0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
ø32	Push	40.2	80.4	1.21x10 ²	1.61x10 ²	2.41x10 ²	3.22x10 ²	4.02x10 ²	4.83x10 ²	5.63x10 ²	6.43x10 ²	7.24x10 ²	8.04x10 ²
	Pull	34.6	69.1	1.04x10 ²	1.38x10 ²	2.07x10 ²	2.76x10 ²	3.46x10 ²	4.15x10 ²	4.84x10 ²	5.53x10 ²	6.22x10 ²	6.91x10 ²
ø40	Push	62.8	1.26x10 ²	1.88x10 ²	2.51x10 ²	3.77x10 ²	5.03x10 ²	6.28x10 ²	7.54x10 ²	8.80x10 ²	1.01x10 ³	1.13x10 ³	1.26x10 ³
	Pull	52.8	1.06x10 ²	1.58x10 ²	2.11x10 ²	3.17x10 ²	4.22x10 ²	5.28x10 ²	6.33x10 ²	7.39x10 ²	8.44x10 ²	9.50x10 ²	1.06x10 ³
ø50	Push	98.2	1.96x10 ²	2.95x10 ²	3.93x10 ²	5.89x10 ²	7.85x10 ²	9.82x10 ²	1.18x10 ³	1.37x10 ³	1.57x10 ³	1.77x10 ³	1.96x10 ³
	Pull	82.5	1.65x10 ²	2.47x10 ²	3.30x10 ²	4.95x10 ²	6.60x10 ²	8.25x10 ²	9.90x10 ²	1.15x10 ³	1.32x10 ³	1.48x10 ³	1.65x10 ³
ø63	Push	1.56x10 ²	3.12x10 ²	4.68x10 ²	6.23x10 ²	9.35x10 ²	1.25x10 ³	1.56x10 ³	1.87x10 ³	2.18x10 ³	2.49x10 ³	2.81x10 ³	3.12x10 ³
	Pull	1.40x10 ²	2.80x10 ²	4.20x10 ²	5.61x10 ²	8.41x10 ²	1.12x10 ³	1.40x10 ³	1.68x10 ³	1.96x10 ³	2.24x10 ³	2.52x10 ³	2.80x10 ³
ø80	Push	2.51x10 ²	5.03x10 ²	7.54x10 ²	1.01x10 ³	1.51x10 ³	2.01x10 ³	2.51x10 ³	3.02x10 ³	3.52x10 ³	4.02x10 ³	4.52x10 ³	5.03x10 ³
	Pull	2.27x10 ²	4.54x10 ²	6.80x10 ²	9.07x10 ²	1.36x10 ³	1.81x10 ³	2.27x10 ³	2.72x10 ³	3.17x10 ³	3.63x10 ³	4.08x10 ³	4.54x10 ³
ø100	Push	3.93x10 ²	7.85x10 ²	1.18x10 ³	1.57x10 ³	2.36x10 ³	3.14x10 ³	3.93x10 ³	4.71x10 ³	5.50x10 ³	6.28x10 ³	7.07x10 ³	7.85x10 ³
	Pull	3.57x10 ²	7.15x10 ²	1.07x10 ³	1.43x10 ³	2.14x10 ³	2.86x10 ³	3.57x10 ³	4.29x10 ³	5.00x10 ³	5.72x10 ³	6.43x10 ³	7.15x10 ³