



Pneumatic Cylinders I
Catalog No. CB-029S

Cylinder

SCS2-^N_{LN}-FP1 Series

● Bore size: ø125/ø140/ø160/ø180/ø200/ø250



Specifications

Item		SCS2- ^N _{LN}					
Bore size mm		ø125	ø140	ø160	ø180	ø200	ø250
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		-5 to 60(However, no freezing)					
Port size		Rc 1/2	Rc 3/4				Rc 1
Stroke tolerance mm		^{+1.0} ₀ (up to 300), ^{+1.4} ₀ (up to 1000), ^{+1.8} ₀ (up to 1200)					
Working piston speed mm/s		20 to 1000 (Operate within the absorbed energy.)					
Cushion		Air cushion					
Effective air cushion length mm		21.6	21.6	21.6	21.6	26.6	26.6
Lubrication		Not required					
Allowable absorbed energy J	Cushioned	63.5	91.5	116	152	233	362
	Without cushion	0.371	0.386	0.386	0.958	1.08	2.32
		Without a cushion, large energy generated by the external load cannot be absorbed. We recommend using an external shock absorber.					

*1: The specifications on the left are for double acting/single rod. Each item differs depending on variation. For details, refer to Pneumatic Cylinders I (CB-029SA).

Stroke

● Variation: blank, G

Bore size (mm)	Standard stroke (mm)	Max. stroke length(mm)	Available stroke length (mm)	Min.Stroke length (mm)	TrunnionMin. stroke (mm)
ø125	50/75/100 150/200 250/300	800	2000	1	23
ø140					25
ø160					27
ø180		900			28
ø200		1,000			28
ø250		1,200			28

*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.

● Variation: D

Bore size (mm)	Standard stroke (mm)	Max. stroke length(mm)	Min.Stroke length (mm)	TrunnionMin. stroke (mm)
ø125	50/75/100 150/200 250/300	800	1	23
ø140				25
ø160				27
ø180		900		28
ø200		1,000		28
ø250		1,200		28

*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.

For dimensions, refer to the SCS2 Series in "Pneumatic Cylinders I (CB-029SA)".

SCS2-^N_{LN}-FP1 Series

Specifications

How to order

No-lubrication without switch

SCS2-N **G** - **LB** - **125** **B** - **50** ————— **J** **FP1** **Y**

No-lubrication with switch

SCS2-LN **G** - **LB** - **125** **B** - **50** - **T0H** - **R** - **J** **FP1** **Y**

Model No.

B Mounting
*1, *2

A Variation

C Bore size

D Port thread

E Cushion

F Stroke

G Switch model No.

H Switch quantity
*4

I Option
*5

J Accessory
*7

⚠ Precautions for model No. selection

- *1 : Hole type trunnion is available as made to order for ø125 to ø160 only. Contact CKD for details about dimensions.
- *2 : The mounting types CA and CB are unavailable for the variation D.
- *3 : Refer to Pneumatic Cylinders I (CB-029SA) for the min. stroke length with switch.
- *4 : 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.
- *5 : Instantaneous max. temperature is the temperature when sparks or cutting chips, etc., instantaneously contact the bellows.
- *6 : Check below for the cushion needle position indication.
- *7 : "I" "Y" cannot be selected together.

[Example of model No.]

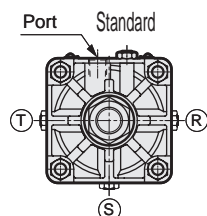
SCS2-LNG-LB-125B-50-T0H-R-JFP1Y

Model: Medium bore size cylinder, double acting/No-lubrication/
Food-grade grease specifications with switch

- A** Variation : Double acting/heavy duty scraper
- B** Mounting : Axial foot
- C** Bore size : ø125 mm
- D** Port thread : Rc thread
- E** Cushion : Both sides cushioned
- F** Stroke : 50 mm
- G** Switch model No. : Reed T0H switch, LeadLine1m
- H** Switch quantity : 1 on rod side
- I** Option : Bellows, max. ambient temperature 60°C, instantaneous max. temperature 100°C
- J** Accessory : Rod clevis

Cushion needle position

(Needle position with the port on the top when viewed from the rod end)



Certification of second class pressure vessel
Stroke length

Bore size	Stroke
ø160	1948 and over
ø180	1526 and over
ø200	946 and over
ø250	752 and over

Code	Description				
A Variation					
Blank	Double acting/single rod				
D	Double acting/double rod				
G	Double acting/heavy duty scraper				
B Mounting					
00	Basic				
LB	Axial foot				
FA	Rod side flange				
FB	Head side 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 (Made-to-order product)				
TD	Rod side hole trunnion (Made-to-order product)				
TE	Head side hole trunnion (Made-to-order product)				
C Bore size (mm)					
125	ø125				
140	ø140				
160	ø160				
180	ø180				
200	ø200				
250	ø250				
D Port thread					
Blank	Rc thread				
N	NPT thread (made to order)				
G	G thread (made-to-order product)				
E Cushion					
B	Both sides cushioned				
R	Rod side cushioned				
H	Head side cushioned				
N	Without cushion				
F Stroke length (mm)					
Refer to the stroke length table on page 55.					
G Switch model No.					
Lead wire Straight	Lead wire L-shaped	Contact	Voltage AC DC	Display	Lead wire
T0H*	T0V*	Reed	● ●	1-color display	2-wire
T5H*	T5V*		● ●	Without indicator lamp	
T8H*	T8V*		● ●	1-color display	
T1H*	T1V*	Proximity	● ●	1-color display	2-wire
T2H*	T2V*		● ●		
T3H*	T3V*		● ●	1-color display (PNP output) (made to order)	3-wire
T3PH*	T3PV*		● ●		
T2WH*	T2WV*		● ●	2-color display	2-wire
T2YH*	T2YV*		● ●		
T3WH*	T3WV*		● ●	2-color display	3-wire
T3YH*	T3YV*		● ●		
T2YD*	-		● ●	AC magnetic field	2-wire
T2YDT*	-		● ●		
T2JH*	T2JV*	● ●	1-color display off-delay	2-wire	
* Lead wire length					
Blank	1 m (standard)				
3	3 m (option)				
5	5 m (option)				
H Switch quantity					
R	1 on rod side				
H	1 on head side				
D	2				
T	3				
4	4				
I Option					
C2	With cushion section check valve				
J	Bellows	Max. ambient temp	Instantaneous max. temp		
K	Bellows	60°C	100°C		
L	Bellows	100°C	200°C		
M	Bellows	250°C	400°C		
M	Piston rod material (Stainless steel)				
Blank	Cushion needle position (standard)		Standard		
R	Cushion needle position R		T		
S	Cushion needle position S		S		
T	Cushion needle position T		R		
J Accessory					
I	Rod eye				
Y	Rod clevis (Pin and snap ring attached)				
B1	Eye bracket				
B2	Clevis bracket (Pin and snap ring attached)				