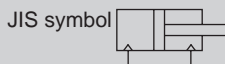




Round shaped cylinder  
Double acting/Single rod/rubber scraper

# SCM-G-FP1-HP1 Series

● Bore size:  $\phi 20/\phi 25/\phi 32/\phi 40/\phi 50/\phi 63/\phi 80/\phi 100$



## Specifications

Item		SCM-G-FP1-HP1								
Bore size		mm	ø20	ø25	ø32	ø40	ø50	ø63	ø80	ø100
Actuation			Double acting							
Working fluid			Compressed air							
Max. working pressure		MPa	1.0							
Min. working pressure		MPa	0.1		0.15		0.1			
Proof pressure		MPa	1.6							
Ambient temperature		°C	-10 to 60 (no freezing)							
Port size	With rubber cushion	Rc1/8				Rc1/4		Rc3/8	Rc1/2	
	With air cushion	M5		Rc1/8		Rc1/4		Rc3/8	Rc1/2	
Stroke tolerance mm	With rubber cushion	+1.4 0 (up to 1000)			+1.4 0 (up to 1500)	+2.3 0 (up to 1000),		+2.7 0 (1001 to 1500)		
	With air cushion	+1.4 0 (up to 1000)			+1.4 0 (up to 1500)	+1.4 0 (up to 1000),		+1.8 0 (1001 to 1500)		
Working piston speed		mm/s	30 to 1000 (Operate within the allowable absorbed energy.)							
Cushion			Either rubber cushion or air cushion can be selected.							
Effective air cushion length		mm	8.1	8.1	8.6	8.6	13.4	13.4	15.4	15.4
Lubrication			Not required							
Allowable absorbed energy	With rubber cushion	J	0.1	0.2	0.5	0.9	1.6	1.6	3.3	5.8
	With air cushion	J	0.8	1.2	2.5	3.7	8.0	14.4	25.4	45.6
	Without cushion	J	-	-	-	-	0.057	0.057	0.112	0.153

\*1: The values of allowable absorbed energy for "No cushion" are the non-specified side when an air cushion is selected for the other side ("R" → Head side, "H" → Rod side) is the allowable absorbed energy.

\*2: Without a cushion, large energy generated by the external load cannot be absorbed. Please provide an external shock absorber.

## Stroke

Bore size (mm)	Standard stroke (mm)	Max. stroke (mm)	Min. stroke (mm)
ø 20	25, 50, 75, 100, 125, 150, 200, 250, 300	1000	10
ø 25			
ø 32			
ø 40		1500	
ø 50			
ø 63			
ø 80			
ø100			

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

## How to order mounting brackets

Bore size (mm)	$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$	$\phi 50$	$\phi 63$	$\phi 80$	$\phi 100$
Mounting bracket								
Foot (LB)	SCM-LB-20-HP1	SCM-LB-25-HP1	SCM-LB-32-HP1	SCM-LB-40-HP1	SCM-LB-50-HP1	SCM-LB-63-HP1	SCM-LB-80-HP1	SCM-LB-100-HP1
Flange (FA/FB)	SCM-FA-20-HP1	SCM-FA-25-HP1	SCM-FA-32-HP1	SCM-FA-40-HP1	SCM-FA-50-HP1	SCM-FA-63-HP1	SCM-FA-80-HP1	SCM-FA-100-HP1
Eye bracket (CA)	SCM-CA-20	SCM-CA-25	SCM-CA-32	SCM-CA-40	SCM-CA-50	SCM-CA-63	-	-
Clevis bracket (CB)	-	-	-	-	-	-	SCM-CB-80-FP1	SCM-CB-100-FP1
Trunnion (TA/TB)	SCM-TA-20-FP1	SCM-TA-25-FP1	SCM-TA-32-FP1	SCM-TA-40-FP1	SCM-TA-50-FP1	SCM-TA-63-FP1	-	-

\*1: All mounting brackets are supplied with mounting bolts.

\*2: The foot mounting bracket is provided as 2 pcs./set.

Refer to the SCM-G-HP1 Series on pages 59 to 61 for dimensions.

## How to order

Without switch(built-in magnet for switch)

SCM-G-LB-40B-100-MFP1I-HP1

With switch(built-in magnet for switch)

SCM-G-LB-40B-100-T2H-D-MFP1I-HP1

A Mounting  
\*1

B Bore size

C Port thread

D Cushion

E Stroke

F Switch model No.

\*3

\*4

H Switch mounting

G Switch quantity

I Option

\*6

J Accessory  
\*7

## ⚠ Precautions for model No. selection

\*1: Mounting bracket will be shipped with the product. However, mounting types: LB and FA are assembled at shipment. In addition, when the mounting type is 00, it cannot be installed on the rod side.

\*2: Refer to SCM-G-HP1 Series on page 56 for the min. stroke with switch.

\*3: Switches other than F Switch model No. are also available. (Made to order) For details, refer to "Pneumatic Cylinders I (No. CB-029SA)".

\*4: T8H/V switches cannot be mounted when the bore size is ø20 to ø40 and switch mounting is the rail type.

\*5: Refer to "Pneumatic Cylinders I (Catalog No. CB-029SA)" for made-to-order specifications of rod end form.

\*6: "Q" (switch rail attached at shipment) is not available for "Z" switch mounting.

\*7: "I" and "Y" cannot be selected together.

\*8: Switches are shipped with the product. Contact CKD if assembling before shipment is necessary.

[Example of model No.]

SCM-G-LB-40B-100-T2H-D-MFP1I-HP1

Model: Round shaped cylinder Food-grade grease specifications

- 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 pcs. included  
 H Switch mounting : Rail  
 I Option : Piston rod material (stainless steel)  
 J Accessory : Rod eye

Code	Description	20	25	32	40	50	63	80	100
<b>A Mounting</b>									
00	Basic	●	●	●	●	●	●	●	●
LB	Axial foot	●	●	●	●	●	●	●	●
FA	Rod side flange	●	●	●	●	●	●	●	●
FB	Head side flange	●	●	●	●	●	●	●	●
CA	Eye bracket	●	●	●	●	●	●	●	●
CB	Clevis bracket (pin and snap ring attached)							●	●
TA	Rod side trunnion	●	●	●	●	●	●		
TB	Head side trunnion	●	●	●	●	●	●		

<b>B Bore size (mm)</b>	
20	ø20
25	ø25
32	ø32
40	ø40
50	ø50
63	ø63
80	ø80
100	ø100

<b>C Port thread</b>	
Blank	Rc thread
N	NPT thread (made to order) With air cushion: ø32 and over
G	G thread (made to order) With air cushion: ø32 and over

<b>D Cushion</b>	
B	With two-sided air cushion
R	Rod side air cushioned
H	Head side air cushioned
D	With two-sided rubber cushion

<b>E Stroke (mm)</b>		
Bore size	Stroke *2	Custom stroke
ø20 to ø32	10 to 1000	In 1 mm increments
ø40 to ø100	10 to 1500	

<b>F Switch model No.</b>					
Lead wire	Lead wire	Contact	Voltage		Indicator
Straight	L-shaped		AC	DC	
T0H*	T0V*	Reed	●	●	1-color LED
T5H*	T5V*		●	●	No LED
T8H*	T8V*		●	●	1-color LED
T1H*	T1V*		●	●	1-color LED
T2H*	T2V*	Proximity	●	●	1-color LED
T3H*	T3V*		●	●	1-color LED
T2HR3	T2VR3		●	●	1-color LED
T3PH*	T3PV*		●	●	Bending resistant lead wire
T2WH*	T2WV*		●	●	1-color LED (made to order)
T3WH*	T3WV*		●	●	2-color LED
T2YD*	-		●	●	2-color LED
T2YDT*	-		●	●	2-color LED
T2JH*	T2JV*		●	●	1-color LED off-delay

<b>* Lead wire length</b>	
Blank	1 m (standard)
3	3 m (option)
5	5 m (option)

<b>G Switch quantity</b>	
R	1 on rod side
H	1 on head side
D	2
T	3
4	4 pcs. Included (when there are more than 4 switches, indicate switch quantity.)

<b>H Switch mounting</b>	
Blank	Rail method
Z	Band method

<b>I Option</b>	
Q	Switch rail attached at shipment
M	Piston rod material (stainless steel)

<b>J Accessory</b>									
Bore size (ø)		20	25	32	40	50	63	80	100
I	Rod eye	●	●	●	●	●	●	●	●
Y	Rod clevis (pin and snap ring attached)	●	●	●	●	●	●	●	●
B1	Eye bracket							●	●
B2	Clevis bracket	●	●	●	●	●	●		

SCPD3	Long service life cylinder	Environment-resistant cylinder	Linear Slide Hand	Low-profile long stroke hand	Wide Parallel Hand	Chuck	Air Booster	Compatible with rechargeable batteries	Supports food mfg. processes			
CMK2												
SCM				SCG	SSD2	SMG	LCR			STG	STM	LCG
SSD2				SSD2	SMG	LCR	STG			STS	STL	LSH
MDC2				SCG	SSD2	SMG	LCR			STG	LSHL	LSHM
MSD				SSD2	SMG	LCR	STG			LST	LSTM	HMC
MSDG-L				SMG	LCR	STG	HMC			CKW	ABP2	SCPD3
SMG				LCR	STG	STM	CKW			ABP2	SCPD3	CMK2
LCR				STG	STS	STL	ABP2			SCPD3	CMK2	SCM
LCG				STM	LSH	LSHL	SCPD3			CMK2	SCM	SCG
STM	STR2	LSHM	LST	HMC	CKW	ABP2	SSD2					
STG	SCPD3	LSH	LSTM	CKW	ABP2	SCPD3	MSD					
STR2	CMK2	LSHL	HMC	ABP2	SCPD3	CMK2	MSDG-L					
	SCM	LST	CKW	SCPD3	CMK2	SCM	SMG					
	SCG	LSTM	ABP2	SCPD3	CMK2	SCM	STG					
	SSD2		SCPD3	CMK2	SCM	SCG	STM					
	SMG		CMK2	SCM	SCG	SSD2	LCG					
	LCR		ABP2	SCPD3	CMK2	SCM	STR2					
	STG		SCPD3	CMK2	SCM	SCG	LSH					
	STM		CMK2	SCM	SCG	SSD2	LSHL					
	LCG		ABP2	SCPD3	CMK2	SCM	SCPD3					
	STR2		SCPD3	CMK2	SCM	SCG	CMK2					
	LSH		CMK2	SCM	SCG	SSD2	SCM					
	LSHL		ABP2	SCPD3	CMK2	SCM	SCG					
			SCPD3	CMK2	SCM	SCG	SSD2					
			CMK2	SCM	SCG	SSD2	SMG					
			ABP2	SCPD3	CMK2	SCM	LCR					
			SCPD3	CMK2	SCM	SCG	STG					
			CMK2	SCM	SCG	SSD2	STM					
			ABP2	SCPD3	CMK2	SCM	LCG					
			SCPD3	CMK2	SCM	SCG	STR2					
			CMK2	SCM	SCG	SSD2	LSH					
			ABP2	SCPD3	CMK2	SCM	LSHL					
			SCPD3	CMK2	SCM	SCG	SCPD3					
			CMK2	SCM	SCG	SSD2	CMK2					
			ABP2	SCPD3	CMK2	SCM	SCM					
			SCPD3	CMK2	SCM	SCG	SCG					
			CMK2	SCM	SCG	SSD2	SSD2					
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			SCPD3	CMK2	SCM	SCG	LCG					
			CMK2	SCM	SCG	SSD2	STR2					
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			SCPD3	CMK2	SCM	SCG	LSHL					
			CMK2	SCM	SCG	SSD2	SCPD3					
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			SCPD3	CMK2	SCM	SCG	SCM					
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			CMK2	SCM	SCG	SSD2	LCR					
			ABP2	SCPD3	CMK2	SCM	STG					
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			CMK2	SCM	SCG	SSD2	LSHL					
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			SCPD3	CMK2	SCM	SCG	STR2					
			CMK2	SCM	SCG	SSD2	LSH					
			ABP2	SCPD3	CMK2	SCM	LSHL					
			SCPD3	CMK2	SCM	SCG	SCPD3					
			CMK2	SCM	SCG	SSD2	CMK2					
			ABP2	SCPD3	CMK2	SCM	SCM					
			SCPD3	CMK2	SCM	SCG	SCG					
			CMK2	SCM	SCG	SSD2	SSD2					
			ABP2	SCPD3	CMK2	SCM	SMG					
			SCPD3	CMK2	SCM	SCG	LCR					
			CMK2	SCM	SCG	SSD2	STG					
			ABP2	SCPD3	CMK2	SCM	STM					
			SCPD3	CMK2	SCM	SCG	LCG					
			CMK2	SCM	SCG	SSD2	STR2					
			ABP2	SCPD3	CMK2	SCM	LSH					
			SCPD3	CMK2	SCM	SCG	LSHL					
			CMK2	SCM	SCG	SSD2	SCPD3					
			ABP2	SCPD3	CMK2	SCM	CMK2					
			SCPD3	CMK2	SCM	SCG	SCM					
			CMK2	SCM	SCG	SSD2	SCG					
			ABP2	SCPD3	CMK2	SCM	SSD2					
			SCPD3	CMK2	SCM	SCG	SMG					
			CMK2	SCM	SCG	SSD2	LCR					
			ABP2	SCPD3	CMK2	SCM	STG					
			SCPD3	CMK2	SCM	SCG	STM					
			CMK2	SCM	SCG	SSD2	LCG					
			ABP2	SCPD3	CMK2	SCM	STR2					
			SCPD3	CMK2	SCM	SCG	LSH					
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			CMK2	SCM	SCG	SSD2	SCM					
			ABP2	SCPD3	CMK2	SCM	SCG					
			SCPD3	CMK2	SCM	SCG	SSD2					
			CMK2	SCM	SCG	SSD2	SMG					
			ABP2	SCPD3	CMK2	SCM	LCR					
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			SCPD3	CMK2	SCM	SCG	STR2					
			CMK2	SCM	SCG	SSD2	LSH					
			ABP2	SCPD3	CMK2	SCM	LSHL					
			SCPD3	CMK2	SCM	SCG	SCPD3					
			CMK2	SCM	SCG	SSD2	CMK2					
			ABP2	SCPD3	CMK2	SCM	SCM					
			SCPD3	CMK2	SCM	SCG	SCG					
			CMK2	SCM	SCG	SSD2	SSD2					
			ABP2	SCPD3	CMK2	SCM	SMG					
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			CMK2	SCM	SCG	SSD2	STR2					
			ABP2	SCPD3	CMK2	SCM	LSH					
			SCPD3	CMK2	SCM	SCG	LSHL					
			CMK2	SCM	SCG	SSD2	SCPD3					
			ABP2	SCPD3	CMK2	SCM	CMK2					
			SCPD3	CMK2	SCM	SCG	SCM					
			CMK2	SCM	SCG	SSD2	SCG					
			ABP2	SCPD3	CMK2	SCM	SSD2					
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			CMK2	SCM	SCG	SSD2	LSHL					
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			SCPD3	CMK2	SCM	SCG	SSD2					
			CMK2	SCM	SCG	SSD2	SMG					
			ABP2	SCPD3	CMK2	SCM	LCR					
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			ABP2	SCPD3	CMK2	SCM	LCG					
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			CMK2	SCM	SCG	SSD2	LSH					
			ABP2	SCPD3	CMK2	SCM	LSHL					
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			ABP2	SCPD3	CMK2	SCM	SCM					
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			CMK2	SCM	SCG	SSD2	SSD2					
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			SCPD3	CMK2	SCM	SCG	CMK2					
			CMK2	SCM	SCG	SSD2	SCM					
			ABP2	SCPD3	CMK2	SCM	SCG					
			SCPD3	CMK2	SCM	SCG	SSD2					
			CMK2	SCM	SCG	SSD2	SMG					
			ABP2	SCPD3	CMK2	SCM	LCR					
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			CMK2	SCM	SCG	SSD2	LSH					
			ABP2	SCPD3	CMK2	SCM	LSHL					
			SCPD3	CMK2	SCM	SCG	SCPD3					
			CMK2	SCM	SCG	SSD2	CMK2					
			ABP2	SCPD3	CMK2	SCM	SCM					
			SCPD3	CMK2	SCM	SCG	SCG					
			CMK2	SCM	SCG	SSD2	SSD2					
			ABP2	SCPD3	CMK2	SCM	SMG					
			SCPD3	CMK2	SCM	SCG	LCR					
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			SCPD3	CMK2	SCM	SCG	LSHL					
			CMK2	SCM	SCG	SSD2	SCPD3					
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			CMK2	SCM	SCG	SSD2	SCG					
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			CMK2	SCM	SCG	SSD2	LCG					
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			SCPD3	CMK2	SCM	SCG	LSH					
			CMK2	SCM	SCG	SSD2	LSHL					
			ABP2	SCPD3	CMK2	SCM	SCPD3					
			SCPD3	CMK2	SCM	SCG	CMK2					
			CMK2	SCM	SCG	SSD2	SCM					
			ABP2	SCPD3	CMK2	SCM	SCG					
			SCPD3	CMK2	SCM	SCG	SSD2					
			CMK2	SCM	SCG	SSD2	SMG					
			ABP2	SCPD3	CMK2	SCM	LCR					
			SCPD3	CMK2	SCM	SCG	STG					
			CMK2	SCM	SCG	SSD2	STM					
			ABP2	SCPD3	CMK2	SCM	LCG					
			SCPD3	CMK2	SCM	SCG	STR2					
			CMK2	SCM	SCG	SSD2	LSH					
			ABP2	SCPD3	CMK2	SCM	LSHL					
			SCPD3	CMK2	SCM	SCG						