



Pneumatic Cylinders II
Catalog No. CB-030SA

Guided cylinder

STG-M_B-FP1 Series

● Bore size: $\phi 12/\phi 16/\phi 20/\phi 25/\phi 32/\phi 40$
 $\phi 50/\phi 63/\phi 80/\phi 100$

JIS Code



Specifications

Item	STG-M _B -FP1									
Bore size mm	ø12	ø16	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	0.15				0.1					
Proof pressure MPa	1.6									
Ambient temperature °C	-10 to 60 (no freezing)									
Port size	M5		Rc1/8				Rc1/4		Rc3/8	
Stroke tolerance mm	+2.0 0									
Working piston speed mm/s	50 to 500							50 to 300		
Cushion	With rubber cushion									
Lubrication	Not required									
Allowable absorbed energy J	0.056	0.088	0.157	0.157	0.401	0.627	0.980	1.560	2.510	3.92

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

Stroke

● Variation: blank

Bore size	Standard stroke (mm)	Max. stroke (mm)	Min.Stroke (mm)	Min. stroke with switch(mm)
ø12	10, 20, 30, 40, 50, 75, 100	250	5	5(10) *2
ø16	125, 150, 175, 200, 250			
ø20	20, 30, 40, 50, 75, 100, 125	400		
ø25	150, 175, 200, 250, 300, 350, 400			
ø32	25, 50, 75, 100 125, 150, 175 200, 250, 300 350, 400			
ø40				
ø50				
ø63				
ø80				
ø100				

*1: The custom stroke length is available in 5 mm increments. However, the total dimensions are the same as the longer standard stroke length. A dedicated body with dimensions matched to the stroke length is available. Contact CKD for details.

*2: For types with one or two switches. The value in () is the min. stroke for switches of the 2-color display and AC magnetic field proof.

● With rubber-air cushion (*C)

Bore size	Standard stroke (mm)	Max. stroke (mm)	Min. stroke (mm)	Min. stroke with switch (mm)
$\phi 32$	25, 50, 75, 100	400	5	5(10) *2
$\phi 40$	125, 150, 175		10	10
$\phi 50$	200, 250, 300			
$\phi 63$	350, 400			

*1: The custom stroke length is available in 5 mm increments. However, the total dimensions are the same as the longer standard stroke length.

*2: For types with one or two switches. The value in () is the min. stroke for switches of the 2-color display and AC magnetic field proof.

● Variation: C

Bore size	Standard stroke (mm)	Max. stroke (mm)	Min. stroke (mm)	Min. stroke with switch (mm)
ø16	25, 50, 75, 100, 125, 150, 175, 200, 250	250	15 *2	15
ø20	25, 50, 75, 100 125, 150, 175 200, 250, 300 350, 400	400		
ø25				
ø32				
ø40				
ø50				
ø63				

*1: The custom stroke length is available in 1 mm increments. However, the total dimensions are the same as the longer standard stroke. (Made to order)

*2: For min. stroke length and below, select the basic type since there is no cushion effect.

● Variation: G

Bore size	Standard stroke (mm)	Max. stroke (mm)	Min. stroke (mm)	Min. stroke with switch (mm)
$\phi 20$	20, 30, 40, 50, 75, 100, 125	400	5	5(10) *2
$\phi 25$	150, 175, 200, 250, 300, 350, 400			
$\phi 32$	25, 50, 75, 100			
$\phi 40$	125, 150, 175			
$\phi 50$	200, 250, 300			
$\phi 63$	350, 400			

*1: The custom stroke length is available in 5 mm increments. However, the total length is the same as that of the next longer standard stroke length.

*2: For types with one or two switches. The value in () is the min. stroke length for switches of the 2-color display and AC magnetic field proof.

● Variation: G2, G3

Bore size	Standard stroke (mm)	Max. stroke (mm)	Min. stroke (mm)	Min. stroke with switch (mm)
$\phi 20$	20, 30, 40, 50, 75, 100, 125	400	5	10 *2
$\phi 25$	150, 175, 200, 250, 300, 350, 400			
$\phi 32$	25, 50, 75, 100			
$\phi 40$	125, 150, 175			
$\phi 50$	200, 250, 300			
$\phi 63$	350, 400			

*1: The custom stroke length is available in 5 mm increments. However, the total length is the same as that of the next longer standard stroke length.

*2: For types with one or two switches.

● Variation: G5

Bore size	Standard stroke (mm)	Max. stroke (mm)	Min. stroke (mm)	Min. stroke with switch (mm)
ø20	20, 30, 40, 50, 75, 100, 125, 150,	400	5	5(10) *2
ø25	175, 200, 250, 300, 350, 400			
ø32	25, 50, 75, 100 125, 150, 175 200, 250, 300 350, 400			
ø40				
ø50				
ø63				
ø80				
ø100				

*1: The custom stroke length is available in 5 mm increments. However, the total dimensions are the same as the longer standard stroke.

*2: For types with one or two switches. The value in () is the min. stroke length for switches of the 2-color display and AC magnetic field proof.

How to order (Variation: blank, C, G, G2, G3, G5)

Without switch

STG - **M** **C** - **32** - **25** - **FP1**

With switch

STG - **M** **C** - **32** - **25** - **T2H** - **R** - **FP1**

Model No.

A Bearing

B Variation

C Bore size

D Port thread

E Stroke

F Switch model No.

G Switch quantity

Code	Description
A Bearing	
M	Metal bush bearing
B	Ball bearing
B Variation	
Blank	Double acting/single rod
C	Double acting/air cushioned
G	Double acting/heavy duty scraper
G2	Double acting/coolant proof (packing NBR)
G3	Double acting/coolant proof (packing FKM)
G5	Double acting/environmentally-resistant scraper
C Bore size (mm)	
12	ø12
16	ø16
20	ø20
25	ø25
32	ø32
40	ø40
50	ø50
63	ø63
80	ø80
100	ø100
D Port thread	
Blank	M5 (ø12 to ø16) Rc thread (ø20 to ø100)
NN	NPT thread (ø20 or more) (made to order)
GN	G thread (ø20 or more) (made to order)
E Stroke length (mm)	
Refer to the stroke length table on page 63	
F Switch model No.	
Refer to the switch model No. on page 66	
G Switch quantity	
R	1 on rod side
H	1 on head side
D	2
T	3

[Model No. example]

STG-MC-40-75-T0H-D-FP1

Model: Guided cylinder Food-grade grease specifications

- A** Bearing :Metal bushBearing
- B** Variation :With air cushion
- C** Bore size :ø40 mm
- D** Port thread :Rc thread
- E** Stroke :75 mm
- F** Switch model No. :Reed T0H switch, lead wire length 1m
- G** Switch quantity :2

Electric actuator
Pneumatic cylinders
Assistive device
Pneumatic valves
FRL/Auxiliary Components
Electronic Component
Vacuum components
Main line components
Fluid control valves
Main line components
Anti-bacterial/bacteria-removing filter
Vacuum components
Fluid control valves

FP1

FP2

STG-M^B-FP1 Series

How to order (Variation: *C)

Without switch

STG - **M** - **32** - **C** - **25** ————— **FP1**

With switch

STG - **M** - **32** - **C** - **25** - **T2H** - **R** - **FP1**

Model No.

A Bearing

B Bore size

C Port thread

Rubber air-cushioned

D Stroke

E Switch model No.
*1, *2

F Switch quantity

⚠ Precautions for model No. selection

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

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

[Example of model No.]

STG-M-32C-50-T0H-R-FP1

Model: Guided cylinder/rubber-air cushioned Food-grade grease specifications

- A** Bearing : Metal bush bearing
- B** Bore size : ø32 mm
- C** Port thread : Rc thread
- D** Stroke length : 50mm
- E** Switch model No. : Reed T0H switch, lead wire length 1 m
- F** Switch quantity : 1 on rod side

Code		Description					
A Bearing							
M	Metal bush bearing						
B	Ball bearing						
B Bore size (mm)							
32	ø32						
40	ø40						
50	ø50						
63	ø63						
C Port thread							
Blank	Rc thread						
N	NPT thread (made to order)						
G	G thread (made to order)						
D Stroke length (mm)							
Refer to the stroke length table on page 63.							
E Switch model No.							
Lead wire Straight	Lead wire L-shaped	Contact	Voltage		Display	Lead wire	
			AC	DC			
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*			●			3-wire
T3H*	T3V*			●	1-color display (made to order)	3-wire	
T3PH*	T3PV*			●	2-color display	2-wire	
T2WH*	T2WV*			●		3-wire	
T2YH*	T2YV*			●			
T3WH*	T3WV*			●			
T3YH*	T3YV*			●	1-color display off-delay	2-wire	
T2JH*	T2JV*			●		2-color display for AC magnetic field	2-wire
T2YD*	-			●	2-wire		
T2YDT*	-			●			
* Lead wire length							
Blank	1 m (standard)						
3	3 m (option)						
5	5 m (option)						
F Switch quantity							
R	1 on rod side						
H	1 on head side						
D	2						
T	3						

Switch model No.

● Variation: blank, C, G, G5

Switch model No.						
Lead wire Straight	Lead wire L-shaped	Contact	Voltage		Display	Lead wire
			AC	DC		
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*			●		3-wire
T3H*	T3V*			●		
T2WH*	T2WV*			●	2-color display	2-wire
T2YH*	T2YV*			●		3-wire
T3WH*	T3WV*			●		
T3YH*	T3YV*			●		
T3PH*	T3PV*			●		1-color display (Made to order)
T2YD*	-			●	2-color display AC magnetic field	2-wire
T2YDT*	-			●		
* Lead wire length						
Blank	1m (standard)					
3	3 m (option)					
5	5 m (option)					

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

● Variation: G2, G3

Switch model No.						
Lead wire Straight	Lead wire L-shaped	Contact	Voltage		Display	Lead wire
			AC	DC		
T2YLH*	T2YLV*	Proximity		●	2-color display	2-wire
T3YLH*	T3YLV*			●		3-wire
* Lead wire length						
Blank	1m (standard)					
3	3m (option)					
5	5m (option)					

For dimensions, refer to the STG Series in "Pneumatic Cylinders II (CB-030SA)".

Electric actuator	Pneumatic cylinders	Assistive device	Pneumatic valves	Fluid/Auxiliary Components Electronic Component	Vacuum components	Main line components	Fluid control valves	Main line components	Anti-bacterial/bacteria-removing filter	Vacuum components	Fluid control valves
FP 1											
FP 2											