

Stainless Steel Cylinder: Standard Type Double Acting, Single Rod

CG5-S Series

Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63, Ø 80, Ø 100

How to Order

Stainless steel cylinder

CG5 L N 25 S R - 100 -

With auto switch **CDG5 L N 25 S R - 100 - G5BAL -**

With auto switch
(Built-in magnet)

Mounting type

B	Basic type
L	Axial foot type
F	Rod side flange type
G	Head side flange type
E	Clevis integrated type

Type

N	Rubber bumper
A	Air cushion

Bore size

20	20 mm	50	50 mm
25	25 mm	63	63 mm
32	32 mm	80	80 mm
40	40 mm	100	100 mm

Port thread type

Rubber bumper

—	Rc	Ø 20 to Ø 100
TN	NPT	Ø 20 to Ø 100
TF	M5 x 0.8	Ø 20, Ø 25
	G	Ø 32 to Ø 100

Air cushion

—	M5 x 0.8	Ø 20, Ø 25
	Rc	Ø 32 to Ø 100
TN	M5 x 0.8	Ø 20, Ø 25
	NPT	Ø 32 to Ø 100
TF	M5 x 0.8	Ø 20, Ø 25
	G	Ø 32 to Ø 100

Seal material

R	NBR seals (Nitrile rubber)
V	FKM seals (Fluororubber)

Cylinder stroke [mm]
Refer to "Standard Stroke" on page 8.

Auto switch

—	Without auto switch
G5BAL	D-G5BAL (Water resistant)

Auto switches are available in the band mounting type only.

Number of auto switches

—	2 pcs.
S	1 pc.
n	"n" pcs.

Made to Order
Refer to page 8 for details.

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) CDG5BA40SV-100

Applicable Auto Switches/Refer to website www.smc.eu for further information on auto switches.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model	Lead wire length (m)*		Pre-wired connector	Applicable load
					DC			3 (L)	5 (Z)		
Solid state auto switch	Water resistant (2-colour indicator)	Grommet	Yes	2-wire	24 V	12 V	G5BA	●	○	○	Relay, PLC

* Lead wire length symbols: 3 m.....L (Example) G5BAL
5 m.....Z (Example) G5BAZ

* Solid state auto switches marked with "○" are produced upon receipt of order.

• For details about auto switches with pre-wired connector, refer to website, www.smc.eu.

Mounting Bracket Part No.

Mounting bracket	Min. order	Bore size [mm]								Description
		20	25	32	40	50	63	80	100	
Axial foot	2 (Note)	CG-L020SUS	CG-L025SUS	CG-L032SUS	CG-L040SUS	CG-L050SUS	CG-L063SUS	CG-L080SUS	CG-L100SUS	Foot x 2 Bracket mounting bolt x 4
Flange	1	CG-F020SUS	CG-F025SUS	CG-F032SUS	CG-F040SUS	CG-F050SUS	CG-F063SUS	CG-F080SUS	CG-F100SUS	Flange x 1 Bracket mounting bolt x 4
Pivot bracket	1	CG-E020SUS		CG-E032SUS		CG-E050SUS		CG-E080SUS		Clevis pin x 1 Retaining ring x 2

Note) When ordering the foot bracket, order 2 pcs. per cylinder.

Stainless Steel Cylinder: Standard Type **CG5-S Series**

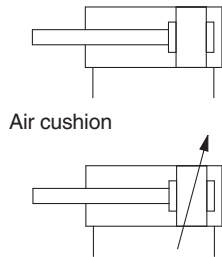
Double Acting, Single Rod

Specifications



Symbol

Double acting,
Single rod, Rubber bumper



Air cushion



Made to Order Specifications

(For details, refer to pages 20 to 22.)

Symbol	Specifications
-XA□	Change of rod end shape
-XB6	Heat resistant cylinder (150 °C)*

* Heat resistant grease (non-food grease) is used.

Bore size [mm]	20	25	32	40	50	63	80	100
Action	Double acting, Single rod							
Fluid	Air							
Proof pressure	1.5 MPa							
Maximum operating pressure	1.0 MPa							
Minimum operating pressure	0.05 MPa							
Ambient and fluid temperature	Without auto switch: -10 to 70 °C With auto switch: -10 to 60 °C							
Cushion	Rubber bumper, Air cushion							
Lubrication	Not required (Non-lube)							
Piston speed	50 to 1000 mm/s						50 to 700 mm/s	
Stroke length tolerance	Up to 1000 ^{st + 1.4} ₀ mm, Up to 1500 ^{st + 1.8} ₀ mm							
Mounting type	Basic type, Axial foot type, Rod side flange type, Head side flange type, Clevis integrated type							

Standard Stroke

[mm]

Bore size	Standard stroke ^{Note 1)}	Maximum manufacturable stroke ^{Note 2)}
20	25, 50, 75, 100, 125, 150, 200	201 to 1500
25	25, 50, 75, 100, 125, 150, 200, 250, 300	301 to 1500
32		
40		
50		
63		
80		
100		

Note 1) Other intermediate strokes can be manufactured upon receipt of order. Manufacture of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

Note 2) The maximum manufacturable stroke shows the long stroke.

Note 3) Applicable strokes should be confirmed according to the usage. For details, refer to "Air Cylinders Model Selection" on front matter pages. In addition, the products that exceed the standard stroke might not be able to fulfill the specifications due to the deflection etc.

Accessory/For details, refer to page 18.

●...Supplied with the product. ○...Please order separately.

Mounting		Basic type	Axial foot type	Rod side flange type	Head side flange type	Clevis integrated type
Standard equipment	Rod end nut	●	●	●	●	●
	Single knuckle joint	○	○	○	○	○
Option	Double knuckle joint (With pin & retaining ring)	○	○	○	○	○
	Pivot bracket (With pin and retaining ring)	—	—	—	—	○

Weight

[kg]

Bore size [mm]		20	25	32	40	50	63	80	100
Basic weight	Basic type	0.34	0.42	0.59	1.03	1.84	2.81	5.27	8.25
	Axial foot type	0.49	0.59	0.77	1.25	2.24	3.35	6.05	9.70
	Flange type	0.44	0.51	0.69	1.16	2.16	3.28	5.86	9.30
	Clevis integrated type	0.40	0.48	0.72	1.21	2.30	3.40	6.83	10.28
Pivot bracket		0.08	0.08	0.18	0.18	0.46	0.46	1.65	1.65
Single knuckle joint		0.04	0.07	0.07	0.11	0.22	0.22	0.53	0.78
Double knuckle joint (with pin)		0.05	0.09	0.09	0.18	0.33	0.33	0.73	1.07
Additional weight per each 50 mm of stroke		0.06	0.08	0.14	0.18	0.27	0.33	0.50	0.73
Additional weight with air cushion		0.02	0.02	0.02	0.02	0.05	0.10	0.22	0.24

Calculation: (Example) **CG5LA 20SR-100**
(Foot type Ø 20, 100 stroke)

• Basic weight..... 0.49 kg (Foot type Ø 20)
• Additional stroke weight 0.06 kg/50 ST
• Air cylinder stroke 100 ST
• Additional air cushion weight 0.02 kg
0.49 + 0.06 x 100/50 + 0.02 = 0.63 kg