

Stainless Steel Cylinder

Series CG5-S

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

How to Order

Without Auto Switch

CG5 L N 25 TF S R 100

With Auto Switch

CDG5 L N 25 TF S R 100 G5BAL

With auto switch
(built-in magnet)

Mounting

B	Basic type
L	Axial foot type
F	Front flange type
G	Rear flange type
E	Integral clevis type

Type

N	Non-lube, rubber bumper
A	Non-lube, air cushion

Bore size

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

Port thread type

-	Rc
TN	NPT
TF	G

Bore size-∅ 20-25mm available in port thread M only for air cushion execution.

Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

Auto switch type/Band mount type

Nil	Without auto switch (built-in magnet)
G5BAL	D-G5BAL (water resistant)

Auto switches are available in the band mount type only.

Cylinder stroke (mm)

Refer to the standard stroke table on page 8.

Seal material

R	NBR
V	FKM

Stainless steel cylinder

Mounting bracket part numbers

Mounting bracket	Bore size (mm)							
	20	25	32	40	50	63	80	100
Axial foot <small>Note 1)</small>	CG-L020SUS	CG-L025SUS	CG-L032SUS	CG-L040SUS	CG-L050SUS	CG-L063SUS	CG-L080SUS	CG-L100SUS
Flange	CG-F020SUS	CG-F025SUS	CG-F032SUS	CG-F040SUS	CG-F050SUS	CG-F063SUS	CG-F080SUS	CG-F100SUS
Trunnion bracket <small>Note 2)</small>	CG-E020SUS		CG-E032SUS		CG-E050SUS		CG-E080SUS	

Note 1) Order two foot brackets for each cylinder.

Note 2) Includes clevis pin and snap ring.

Auto switch mounting bracket part numbers (band mount type)

Auto switch model	Bore size (mm)							
	20	25	32	40	50	63	80	100
D-G5BAL	NBA-088S	NBA-106S	BGS1-032S	BAF-04S	BAF-05S	BAF-06S	BAF-08S	BAF-10S


* Includes stainless steel mounting screws.

Grease pack for stainless steel cylinders/Part number: GR-R-010 (10g)

Auto switch specifications

Refer to pages 15 through 17 for auto switch related items.

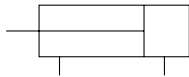
D-G5BAL (With indicator light)/Band mount type	
Auto switch model	D-G5BAL
Wiring type	2 wire
Output type	—
Applicable load	24VDC relay, PLC
Power supply voltage	—
Current consumption	—
Load voltage	24VDC (10 to 28VDC)
Load current	5 to 40mA
Internal voltage drop	4V or less
Leakage current	0.8mA or less at 24VDC
Indicator light	Actuated position Red LED lights up Optimum operating position ... Green LED lights up

 Use caution during operation as residue may collect on auto switches.

Specifications



JIS symbol
Double acting/Single rod



Minimum stroke for mounting auto switches

Model	Number of auto switches	
	2 pcs.	1 pc.
D-G5BAL	15mm	10mm

Refer to page 15 for details.

Action	Double acting single rod	
Fluid	Air	
Proof pressure	1.5MPa	
Maximum operating pressure	1.0MPa	
Minimum operating pressure	0.05MPa	
Ambient and fluid temperature	Without auto switch: -10 to 70°C, With auto switch: -10 to 60°C	
Cushion	Rubber bumper, Air cushion	
Piston speed	ø20 to ø63	50 to 1000mm/s
	ø80, ø100	50 to 700mm/s
Thread tolerance	JIS class 2	
Stroke length tolerance	ø20 to ø63	to 1000 ^{+1.4} ₀ mm, to 1200 ^{+1.5} ₀ mm
	ø80, ø100	to 1000 ^{+1.4} ₀ mm, to 1500 ^{+1.5} ₀ mm
Mounting	Basic type, Axial foot type, Front flange type, Rear flange type, Integral clevis type	

Standard Strokes

(mm)

Bore size	Standard stroke ^{Note 1)}	Long stroke
20	25, 50, 75, 100, 125, 150, 200	201 to 350
25	25, 50, 75, 100, 125, 150, 200, 250, 300	301 to 400
32		301 to 450
40		301 to 800
50, 63		301 to 1200
80		301 to 1400
100		301 to 1500

Note 1) All non-standard strokes are produced upon receipt of order. (Spacers are not used on intermediate strokes.)

Accessories

Mounting		Basic type	Axial foot type	Front flange type	Rear flange type	Integral clevis type
Standard	Rod end nut	●	●	●	●	●
Optional	Single knuckle joint	●	●	●	●	●
	Double knuckle joint (with pin & snap ring)	●	●	●	●	●
	Trunnion bracket (with pin & snap ring)	—	—	—	—	●

Weights

(kg)

Bore size		20	25	32	40	50	63	80	100
Standard weight	Basic type	0.32	0.42	0.61	0.97	1.78	2.73	5.20	8.13
	Axial foot type	0.40	0.53	0.72	1.13	2.12	3.19	5.91	9.50
	Flange type	0.43	0.53	0.71	1.12	2.04	3.25	5.86	9.29
	Integral clevis type	0.37	0.48	0.72	1.12	2.17	3.26	6.48	9.94
Trunnion 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 50mm 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	0.03	0.02	0.06	0.07	0.14	0.16

Calculation (Example) CG5LA 20SR-100

(Foot type ø20, 100mm stroke)

- Basic weight 0.40kg (Foot type ø20)
 - Additional stroke weight 0.06kg/50mm stroke
 - Air cylinder stroke 100mm
 - Additional air cushion weight 0.02kg
- 0.40 + 0.06 x 100/50 + 0.02 = 0.54kg