

Stainless Steel Cylinder: Standard Type

Double Acting, Double Rod

CG5W-S Series

ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100

How to Order

Stainless steel cylinder

CG5W L N 25 S R -100

With auto switch **CDG5W L N 25 S R -100 - G5BAL**

With auto switch
(Built-in magnet)

Mounting type

B	Basic type
L	Axial foot type
F	Flange 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

Nil	Rc	ø20 to ø100
TN	NPT	ø20 to ø100
TF	M5 x 0.8	ø20, ø25 ø32 to ø100

Air cushion

Nil	M5 x 0.8 Rc	ø20, ø25 ø32 to ø100
TN	M5 x 0.8 NPT	ø20, ø25 ø32 to ø100
TF	M5 x 0.8 G	ø20, ø25 ø32 to ø100

Number of auto switches

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

Auto switch

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

Auto switches are available in the band mounting type only.

Cylinder stroke (mm)
Refer to "Standard Stroke" on page 1071.

Seal material

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

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) CDG5WBA40SV-100

Applicable Auto Switches/Refer to pages 1575 to 1701 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-color 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 pages 1648 and 1649.

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

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

Stainless Steel Cylinder: Standard Type

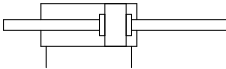
Double Acting, Double Rod **CG5-S Series**

Specifications

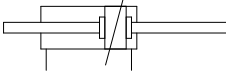


Symbol

Rubber bumper



Air cushion



Bore size (mm)	20	25	32	40	50	63	80	100
Action	Double acting, Double 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, Flange 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 1076.

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

Mounting		Basic type	Axial foot type	Flange type
Standard equipment	Rod end nut	●	●	●
Option	Single knuckle joint	○	○	○
	Double knuckle joint (With pin & retaining ring)	○	○	○

Weight

(kg)

Bore size (mm)		20	25	32	40	50	63	80	100
Basic weight	Basic type	0.39	0.48	0.68	1.18	2.15	3.24	6.03	9.48
	Axial foot type	0.54	0.65	0.86	1.40	2.55	3.78	6.80	10.93
	Flange type	0.49	0.57	0.77	1.32	2.47	3.71	6.62	10.52
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

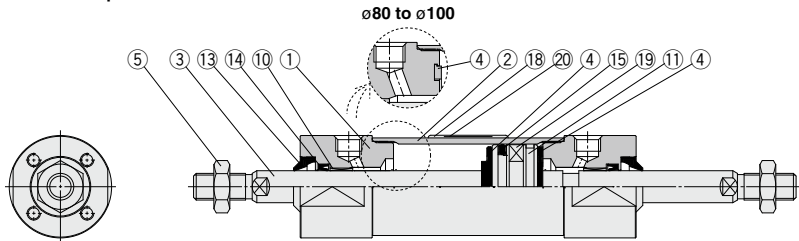
Calculation: (Example) **CG5WLA 20SR-100**
(Foot type ø20, 100 stroke)

- Basic weight..... 0.54 kg (Foot type ø20)
- Additional stroke weight 0.06 kg/50 ST
- Air cylinder stroke 100 ST
- Additional air cushion weight 0.02 kg
- 0.54 + 0.06 x 100/50 + 0.02 = 0.68 kg

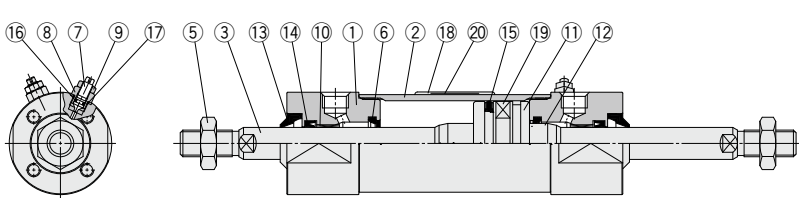
CG5W-S Series

Construction

With rubber bumper



With air cushion



Component Parts

No.	Description	Material	Note
1	Rod cover	Stainless steel	
2	Cylinder tube	Stainless steel	
3	Piston rod	Stainless steel	Hard chrome plated
4	Bumper	Urethane	
5	Rod end nut	Stainless steel	
6	Cushion seal	Urethane	
7	Cushion valve	Stainless steel	
8	Valve retainer	Stainless steel	
9	Lock nut	Stainless steel	
10	Bushing	Bearing alloy	
11	Piston	Aluminum alloy	
12	Cushion ring	Aluminum alloy	

Note 1) Component part material and surface treatment other than listed above are the same as the standard type of the CG1 series.

Note 2) For cylinders with an auto switch, the piston is fixed with a magnet.

No.	Description	Material	
		CG5□□SR	CG5□□SV
13	Water resistant scraper	NBR	FKM
14	Rod seal		
15	Piston seal		
16	Valve seal		
17	Valve retainer gasket		
18	Label protector	PET	
19	Magnet	—	
20	Label	—	

Replacement Parts/Seal Kit

Bore size (mm)	Rubber bumper		Air cushion	
	CG5W□□SR	CG5W□□SV	CG5W□□SR	CG5W□□SV
20	CG5WN20SR-PS	CG5WN20SV-PS	CG5WA20SR-PS	CG5WA20SV-PS
25	CG5WN25SR-PS	CG5WN25SV-PS	CG5WA25SR-PS	CG5WA25SV-PS
32	CG5WN32SR-PS	CG5WN32SV-PS	CG5WA32SR-PS	CG5WA32SV-PS
40	CG5WN40SR-PS	CG5WN40SV-PS	CG5WA40SR-PS	CG5WA40SV-PS
Contents	14 (two), 15 (one) + Grease pack: GR-R-010		14 (two), 15 (one), 16 (two), 17 (two), + Grease pack: GR-R-010	

* As sizes ø50 and larger cannot be disassembled, the seal cannot be replaced. (Refer to page 1080 for details.)

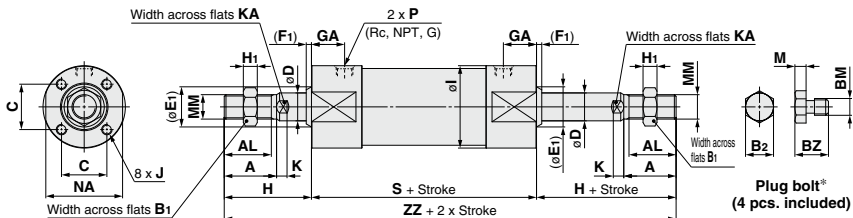
* Seal kit includes a grease pack (10 g).

Order with the following part number when only the grease pack is needed.

Grease pack for stainless steel cylinders/Part no.: GR-R-010 (10 g)

Dimensions

Basic type (B): C□G5WBN□S_V^R : With rubber bumper

CJ5
CG5

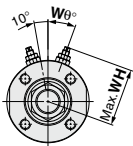
HY□

**Water
Resistant**

(mm)																									
Bore size (mm)	Stroke range (mm) Standard	A	AL	B ₁	B ₂	BM	BZ	C	D	E ₁	F ₁	GA	H	H ₁	I	J	K	KA	M	MM	NA	Rc, NPT		S	ZZ
																						G	X		
20	Up to 1500	18	15.5	13	7	M4 x 0.7	9	16.5	8	15	3	18	35	5	31	M4 x 0.7 depth 7	5	6	3	M8 x 1.25	29	1/8	M5 x 0.8	89	159
25		22	19.5	17	8	M5 x 0.8	9.5	18.5	10	17	3	18	40	6	33	M5 x 0.8 depth 8	5.5	8	3.5	M10 x 1.25	29	1/8	M5 x 0.8	89	169
32		22	19.5	17	8	M5 x 0.8	9.5	20	12	19	3	18	40	6	38	M5 x 0.8 depth 8	5.5	10	3.5	M10 x 1.25	35.5	1/8	1/8	81	171
40		30	27	19	10	M6 x 1.0	12	26	16	23	3	19	50	8	47	M6 x 1.0 depth 12	6	14	4	M14 x 1.5	44	1/8	1/8	99	199
50		35	32	27	13	M8 x 1.25	15.5	32	20	28	3	21	58	11	58	M8 x 1.25 depth 16	7	18	5.5	M18 x 1.5	55	1/4	1/4	116	232
63		35	32	27	17	M10 x 1.5	19	38	20	28	3	21	58	11	72	M10 x 1.5 depth 16	7	18	7	M18 x 1.5	69	1/4	1/4	116	232
80		40	37	32	17	M10 x 1.5	19	50	25	33	3	28	71	13	89	M10 x 1.5 depth 22	10	22	7	M22 x 1.5	80	3/8	3/8	138	280
100		40	37	41	19	M12 x 1.75	24	60	30	38	3	29	71	16	110	M12 x 1.75 depth 23	10	26	8	M26 x 1.5	100	1/2	1/2	140	282

* Install plug bolts, which are included, in any unused mounting holes.

Basic type (B): C□G5WBA□S_V^R: With air cushion



Plug bolt*
(4 pcs. included)

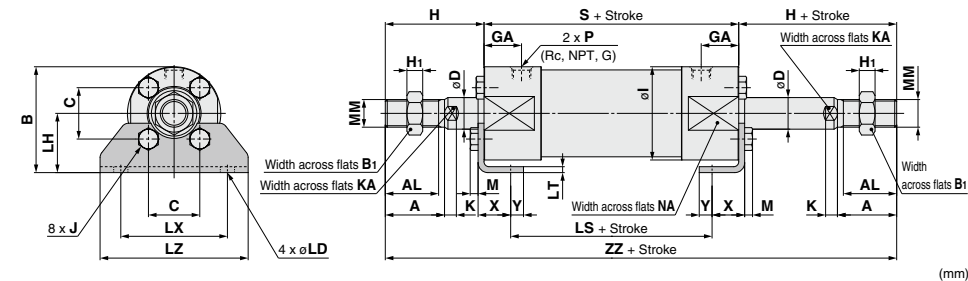
Bore size (mm)	Stroke range (mm)	(mm)			
		P	WA	WH	W0
20	Up to 1500	M5 x 0.8	22	23	30°
25		M5 x 0.8	22	25	30°
32		1/8	22	28.5	25°
40		1/8	24	33	20°
50		1/4	27	40.5	20°
63		1/4	25	47.5	20°
80		3/8	30	60.5	20°
100		1/2	31	71	20°

* Install plug bolts, which are included, in any unused mounting holes.

CG5W-S Series

Dimensions

Axial foot type (L): C□G5WL^N_A□S^R_V

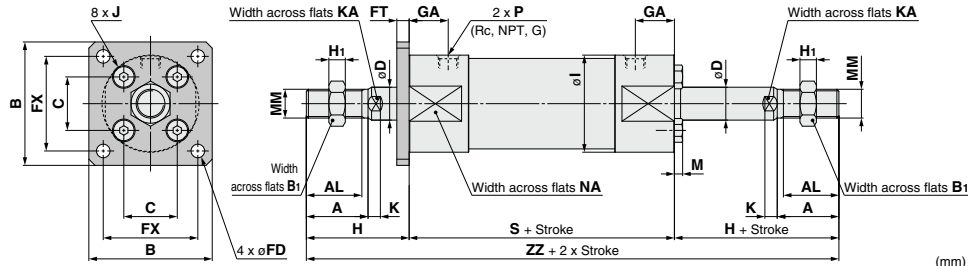


Bore size (mm)	Stroke range (mm) Standard	A	AL	B ₁	B	C	D	GA	H	H ₁	I	J	K	KA	LD	LH	LS	LT	LX	LZ	M	MM	NA
20	Up to 1500	18	15.5	13	37.5	16.5	8	18	35	5	31	M4 x 0.7	5	6	6	22	65	3	40	50	3	M8 x 1.25	29
25		22	19.5	17	41.5	18.5	10	18	40	6	33	M5 x 0.8	5.5	8	6	25	65	3	44	60	3.5	M10 x 1.25	29
32		22	19.5	17	44	20	12	18	40	6	38	M5 x 0.8	5.5	10	7.2	25	65	3	44	60	3.5	M10 x 1.25	35.5
40		30	27	19	53.5	26	16	19	50	8	47	M6 x 1.0	6	14	7.2	30	72	3	54	75	4	M14 x 1.5	44
50		35	32	27	69	32	20	21	58	11	58	M8 x 1.25	7	18	10	40	81	4	66	90	5.5	M18 x 1.5	55
63		35	32	27	81	38	20	21	58	11	72	M10 x 1.5	7	18	12	45	81	4	82	110	7	M18 x 1.5	69
80		40	37	32	99.5	50	25	28	71	13	89	M10 x 1.5	10	22	12	55	90	4	100	130	7	M22 x 1.5	80
100		40	37	41	125	60	30	29	71	16	110	M12 x 1.75	10	26	14	70	92	6	120	160	8	M26 x 1.5	100

* Foot brackets and plug bolts are installed when shipped from factory.
Note 1) ø20 and ø25 cylinders with an air cushion: M5 x 0.8
Note 2) Refer to the basic type (B)/CG5WBACIS* for the dimensions of air cushion needles.

Bore size (mm)	P		S	X	Y	ZZ
	Rc, NPT	G				
20	1/8 (1)	M5 x 0.8	89	15	7	159
25	1/8 (1)	M5 x 0.8	89	15	7	169
32	1/8	1/8	91	16	6	171
40	1/8	1/8	99	16.5	6.5	199
50	1/4	1/4	116	21.5	11.5	232
63	1/4	1/4	116	21.5	11.5	232
80	3/8	3/8	138	28	17	280
100	1/2	1/2	140	30	15	282

Rod side flange type (F): C□G5WF^N_A□S^R_V



Bore size (mm)	Stroke range (mm) Standard	A	AL	B ₁	B	C	D	FX	FD	FT	GA	H	H ₁	I	J	K	KA	M	MM	NA	P		S	ZZ
																					Rc, NPT	G		
20	Up to 1500	18	15.5	13	50	16.5	8	36	5.5	6	18	35	5	31	M4 x 0.7	5	6	3	M8 x 1.25	29	1/8 (1)	M5 x 0.8	89	159
25		22	19.5	17	50	18.5	10	36	5.5	6	18	40	6	33	M5 x 0.8	5.5	8	3.5	M10 x 1.25	29	1/8 (1)	M5 x 0.8	89	169
32		22	19.5	17	50	20	12	38	6.6	6	18	40	6	38	M5 x 0.8	5.5	10	3.5	M10 x 1.25	35.5	1/8	1/8	91	171
40		30	27	19	60	26	16	46	6.6	6	19	50	8	47	M6 x 1.0	6	14	4	M14 x 1.5	44	1/8	1/8	99	199
50		35	32	27	75	32	20	58	9	9	21	58	11	58	M8 x 1.25	7	18	5.5	M18 x 1.5	55	1/4	1/4	116	232
63		35	32	27	90	38	20	70	11	9	21	58	11	72	M10 x 1.5	7	18	7	M18 x 1.5	69	1/4	1/4	116	232
80		40	37	32	100	50	25	82	11	9	28	71	13	89	M10 x 1.5	10	22	7	M22 x 1.5	80	3/8	3/8	138	280
100		40	37	41	125	60	30	100	14	10	29	71	16	110	M12 x 1.75	10	26	8	M26 x 1.5	100	1/2	1/2	140	282

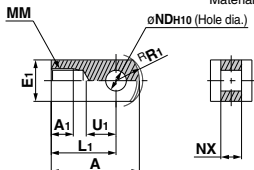
* Flange bracket and plug bolt are installed when shipped from factory.
Note 1) ø20 and ø25 cylinders with an air cushion: M5 x 0.8
Note 2) Refer to the basic type (B)/CG5WBACIS* for the dimensions of air cushion needles.

CG5-S Series

Accessory Dimensions

Single Knuckle Joint

Material: Stainless steel 304

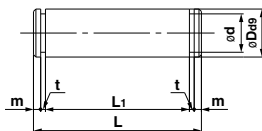


(mm)

Part no.	Applicable bore size (mm)	A	A1	E1	L1	MM	NDH10	NX	R1	U1
I-G02SUS	20	34	8.5	16	25	M8 x 1.25	8 ^{+0.058} ₀	8 ^{-0.2} _{-0.4}	10.3	11.5
I-G03SUS	25, 32	41	10.5	20	30	M10 x 1.25	10 ^{+0.058} ₀	10 ^{-0.2} _{-0.4}	12.8	14
I-G04SUS	40	42	14	22	30	M14 x 1.5	10 ^{+0.058} ₀	18 ^{-0.3} _{-0.5}	12	14
I-G05SUS	50, 63	56	18	28	40	M18 x 1.5	14 ^{+0.070} ₀	22 ^{-0.3} _{-0.5}	16	20
I-G08SUS	80	71	21	38	50	M22 x 1.5	18 ^{+0.070} ₀	28 ^{-0.3} _{-0.5}	21	27
I-G10SUS	100	79	21	45	55	M26 x 1.5	22 ^{+0.084} ₀	32 ^{-0.3} _{-0.5}	24	31

Knuckle Joint Pin

Material: Stainless steel 440 (Pin)
Stainless steel 304 (Retaining ring)



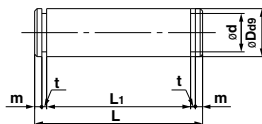
(mm)

Part no.	Applicable bore size (mm)	Dd9	d	L	L1	m	t	Applicable retaining ring
IY-G02SUS	20	8 ^{-0.040} _{-0.078}	7.6	21	16.2	1.5	0.9	Type C 8 for axis
IY-G03SUS	25, 32	10 ^{-0.040} _{-0.078}	9.6	25.6	20.2	1.55	1.15	Type C 10 for axis
IY-G04SUS	40	10 ^{-0.040} _{-0.078}	9.6	41.6	36.2	1.55	1.15	Type C 10 for axis
IY-G05SUS	50, 63	14 ^{-0.050} _{-0.093}	13.4	50.6	44.2	2.05	1.15	Type C 14 for axis
IY-G08SUS	80	18 ^{-0.050} _{-0.093}	17	64	56.2	2.55	1.35	Type C 18 for axis
IY-G10SUS	100	22 ^{-0.065} _{-0.117}	21	72	64.2	2.55	1.35	Type C 22 for axis

* Retaining rings are included.

Clevis Pin

Material: Stainless steel 440 (Pin)
Stainless steel 304 (Retaining ring)



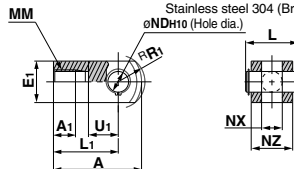
(mm)

Part no.	Applicable bore size (mm)	Dd9	d	L	L1	m	t	Applicable retaining ring
CD-E02SUS	20, 25	ø8 ^{-0.040} _{-0.078}	7.6	27.6	22.8	1.5	0.9	Type C 8 for axis
CD-E03SUS	32, 40	ø10 ^{-0.040} _{-0.078}	9.6	38.4	33	1.55	1.15	Type C 10 for axis
CD-E05SUS	50, 63	ø14 ^{-0.050} _{-0.093}	13.4	59.6	53.2	2.05	1.15	Type C 14 for axis
CD-E08SUS	80, 100	ø22 ^{-0.065} _{-0.117}	21	87.2	79.4	2.55	1.35	Type C 22 for axis

* Retaining rings are included.

Double Knuckle Joint

Material: Stainless steel 440 (Pin)
Stainless steel 304 (Bracket, retaining ring)



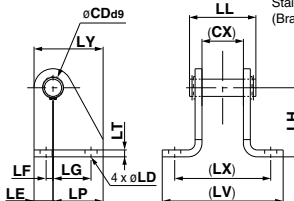
(mm)

Part no.	Applicable bore size (mm)	A	A1	E1	L	L1	MM	NDH10	NX	NZ	R1	U1	Applicable pin no.
Y-G02SUS	20	34	8.5	16	21	25	M8 x 1.25	8 ^{+0.058} ₀	8 ^{+0.4} _{+0.2}	16	10.3	11.5	IY-G02SUS
Y-G03SUS	25, 32	41	10.5	20	26.6	30	M10 x 1.25	10 ^{+0.058} ₀	10 ^{+0.4} _{+0.2}	20	12.8	14	IY-G03SUS
Y-G04SUS	40	42	16	22	41.6	30	M14 x 1.5	10 ^{+0.058} ₀	18 ^{+0.3} _{+0.5}	36	12	14	IY-G04SUS
Y-G05SUS	50, 63	56	20	25	50.6	40	M18 x 1.5	14 ^{+0.070} ₀	22 ^{+0.3} _{+0.5}	44	16	20	IY-G05SUS
Y-G08SUS	80	71	23	35	64	50	M22 x 1.5	18 ^{+0.070} ₀	28 ^{+0.3} _{+0.5}	56	21	27	IY-G08SUS
Y-G10SUS	100	79	24	40	72	55	M26 x 1.5	22 ^{+0.084} ₀	32 ^{+0.3} _{+0.5}	64	24	31	IY-G10SUS

* Knuckle joint pins and retaining rings are included.

Pivot Bracket

Material: Stainless steel 440 (Pin)
Stainless steel 304 (Bracket, retaining ring)



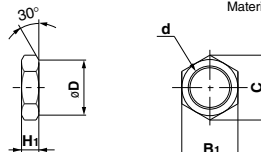
(mm)

Part no.	Applicable bore size (mm)	CD (Retaining ring)	CX	LX	LY	LE	LG	LP	LL	LH	LV	LV	LX	LY
CG-E020SUS	20, 25	8 ^{-0.040} _{-0.078}	16	7	9	2	14	30	27.6	21	3	56.5	42	30
CG-E032SUS	32, 40	10 ^{-0.040} _{-0.078}	24	7	11	4	22	40	38.4	29	4	70.5	56	40
CG-E050SUS	50, 63	14 ^{-0.050} _{-0.093}	40	12	15	5	25	50	59.6	35	6	106.5	84	50
CG-E080SUS	80, 100	22 ^{-0.065} _{-0.117}	60	14	23	6	40	80	87.2	57	9	144.5	120	80

* Clevis pins and retaining rings are included.

Rod End Nut

Material: Stainless steel 304



(mm)

Part no.	Applicable bore size (mm)	B1	C	D	d	H1
NT-02SUS	20	13	(15)	12.5	M8 x 1.25	5
NT-03SUS	25, 32	17	(19.6)	16.5	M10 x 1.25	6
NT-G04SUS	40	19	(21.9)	18	M14 x 1.5	8
NT-05SUS	50, 63	27	(31.2)	26	M18 x 1.5	11
NT-08SUS	80	32	(37.0)	31	M22 x 1.5	13
NT-10SUS	100	41	(47.3)	39	M26 x 1.5	16

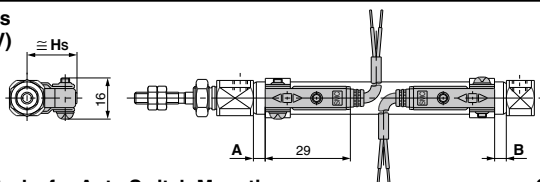
CJ5-S/CG5-S Series Auto Switch Mounting

Proper Auto Switch Mounting Position (Detection at stroke end) and Mounting Height

CJ5-S Series

D-M9□A(V)

D-H7BA



Minimum Stroke for Auto Switch Mounting

Mounting bracket	Basic type, Foot type, Flange type, Clevis type		
Number of auto switches	1 (Rod cover side)	2 (Different sides)	2 (Same side)
Switch mounting side	Port side	Port side	Port side
Switch type			
Minimum stroke (mm)	10	15	60

Auto Switch Mounting Bracket / Part No.

Auto switch model	Bore size (mm)	
	ø10	ø16
D-M9□A D-M9□AV	BJ6-010S (Note 1)	BJ6-016S (Note 1)
D-H7BA	BJ2-010S	BJ2-016S

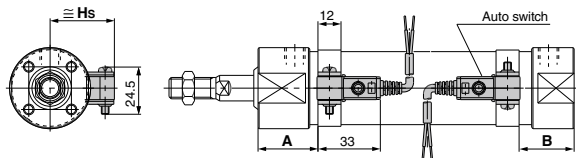
* With stainless steel mounting screws.

Note 1) Set part number which includes the auto switch mounting band (BJ2-□□□S) and the holder kit (BJ4-1/Switch bracket: White).

Note 2) For D-M9□A(V), avoid the indicator LED for mounting the switch bracket.

CG5-S Series

D-G5BA



Minimum Stroke for Auto Switch Mounting

Mounting bracket	Basic type, Foot type, Flange type, Clevis type		
Number of auto switches	1 (Rod cover side)	2 (Different sides)	2 (Same side)
Switch mounting side	Port side	Port side	Port side
Switch type			
Minimum stroke (mm)	10	15	75

Auto Switch Mounting Bracket / Part No.

Auto switch model	Bore size (mm)									
	20	25	32	40	50	63	80	100		
D-G5BA	NBA-088S	NBA-106S	BGS1-032S	BAF-04S	BAF-05S	BAF-06S	BAF-08S	BAF-10S		

* With stainless steel mounting screws.

Operating Range

Auto switch model	Bore size (mm)	
	10	16
D-H7BA	5	5

* Since this is a guideline including hysteresis, not meant to be guaranteed. (Assuming approximately $\pm 30\%$ dispersion) There may be the case to change substantially depending on an ambient environment.

Proper Auto Switch Mounting Position and Its Mounting Height

Applicable bore size (mm)	Auto switch model D-H7BA		
	A	B	Hs
10	0	0	17
16	0.5	0.5	20.5

Note) Adjust the auto switch after confirming the operating condition in the actual setting.

Operating Range

Auto switch model	Bore size (mm)							
	20	25	32	40	50	63	80	100
D-G5BA	5	5	5.5	6	7	7.5	7.5	8

* Since this is a guideline including hysteresis, not meant to be guaranteed. (Assuming approximately $\pm 30\%$ dispersion) There may be the case to change substantially depending on an ambient environment.

Proper Auto Switch Mounting Position and Its Mounting Height

Applicable bore size (mm)	Auto switch model D-G5BA		
	A	B	Hs
20	31.5	26	26
25	31.5	28.5	28.5
32	32.5	33	33
40	37	36.5	36.5
50	45.5	42	42
63	45.5	48.5	48.5
80	56	57.5	57.5
100	57	68	68

Note) Adjust the auto switch after confirming the operating condition in the actual setting.

CJ5

CG5

HY□

Water Resistant

D-□

-X□

Technical Data

Technical Data:

Chemical Resistance Table

⊙ : No influence or almost no influence
 ○ : Some influence, but operational depending on conditions
 △ : Avoid use if possible
 × : Substantial influence, not suitable for use
 — : Not tested

Chemical Resistance Table

Parts		Body		Seal		Water resistant auto switch	
Material		Stainless steel	Aluminum*	Nitrile rubber	Fluororubber	Resin casing	Lead wire
Chemical (Concentration weight %, Temperature °C)		Stainless steel 304	Al	NBR (-10 to 60°C)	FKM (-40 to 150°C)	PBT (-10 to 60°C)	PVC (-10 to 60°C)
	Symbol						
Inorganic salt	1 Hydrochloric acid (20%, Room temperature)	×	×	○	⊙	⊙	○
	2 Chromic acid (25%, 70°C)	○	×	×	⊙	⊙	○
	3 Boric acid	○	×	⊙	⊙	⊙	○
	4 Sulfuric acid (30%, Room temperature)	×	×	⊙	⊙	⊙	○
	5 Phosphoric acid (50%, Room temperature)	○	×	⊙	⊙	⊙	○
Inorganic alkali	6 Ammonium hydroxide (28%)	○	○	○	×	⊙	○
	7 Sodium hydroxide (30%, Room temperature)	⊙	×	⊙	△	⊙	×
	8 Calcium hydroxide	△	×	⊙	⊙	⊙	⊙
	9 Magnesium hydroxide	○	○	⊙	⊙	⊙	⊙
Organic solvent	10 Acetylene	⊙	⊙	⊙	⊙	⊙	⊙
	11 Formic acid (25%, Room temperature)	○	△	×	△	△	△
	12 Citric acid	△	×	⊙	⊙	△	○
	13 Acetic acid (10%, Room temperature)	⊙	△	△	○	⊙	○
	14 Lactic acid (5%, 20°C)	○	×	⊙	⊙	⊙	○
Others (oil, gas, etc.)	15 Linseed oil	⊙	○	⊙	⊙	△	△
	16 Potassium chloride	○	△	⊙	⊙	⊙	⊙
	17 Calcium chloride	○	⊙	⊙	⊙	⊙	⊙
	18 Mineral oil	⊙	⊙	⊙	⊙	⊙	△
	19 Sodium hypochlorite (2%, Room temperature)	○	×	×	⊙	⊙	△
	20 Sodium chloride	○	—	⊙	⊙	⊙	⊙
	21 Carbon dioxide	⊙	⊙	⊙	⊙	⊙	⊙
	22 Natural gas	⊙	⊙	⊙	⊙	⊙	⊙
	23 Boric acid	○	×	⊙	⊙	⊙	○

* Unless noted otherwise, the solution concentration is in a saturated state.

* Chemical resistance is a guide that applies only to the stainless steel cylinder parts, and does not guarantee the performance of air cylinders (auto switches).
 Be sure to perform a verification test before operating.

*) Reference data