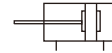


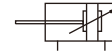


Symbol

Rubber bumper



Air cushion



Product feature

1. Female rod end available as standard.
2. Easy fine adjustment of auto switch position.
3. No trunnion mounting female thread added to basic type variation.
4. Part numbers with rod end bracket and/or pivot bracket available.
5. Various mounting bracket options.
6. The cylinder body has stainless steel pipes with high precision to produce high strength and corrosion resistance.

Specification

Bore size(mm)			20	25	32	40	50	63	80	100
Action			Double acting, Single rod							
Lubricant			Not required (Non-lube)							
Fluid			Air(to be filtered by 40μm filter element)							
Proof pressure			1.5MPa							
Maximum operating pressure			1.0 MPa							
Minimum operating pressure			0.05 MPa							
Ambient and fluid temperature			Without auto switch: -10°C to 70°C (No freezing)							
			With auto switch : -10°C to 60°C (No freezing)							
Piston speed			50 to 1000 mm/s							50 to 1000 mm/s
Stroke length tolerance			0~100 ^{+1.0} ₀ >100 ^{+1.5} ₀							
Cushion			Rubber bumper, Air cushion							
Mounting**			Basic, Basic (without trunnion mounting female thread), Axial foot, Rod flange, Head flange, Rod trunnion, Head trunnion, Clevis							
Allowable kinetic energy (J)	Rubber bumper	Male rod end	0.28	0.41	0.66	1.20	2.00	3.40	5.90	9.90
		Female rod end	0.11	0.18	0.29	0.52	0.91	1.54	2.71	4.54
	Air cushion	Male rod end	R: 0.35/H: 0.42	R: 0.56/H: 0.65	0.91	1.80	3.40	4.90	11.80	16.70
		Female rod end	0.11	0.18	0.29	0.52	0.91	1.54	2.71	4.54

* R: Rod side, H: Head side

** Cylinder sizes 80 and 100 do not have basic (without trunnion mounting female thread), rod trunnion and head trunnion types.

Foot, flange and clevis types of cylinder sizes from 20 to 63 do not have trunnion mounting female thread.

Operate the cylinder within the allowable kinetic energy.

Standard Stroke

Bore size(mm)	Standard stroke Note1)	Manufacturable stroke
20	25, 50, 75, 100, 125, 150, 200	1 to 1500
25	25, 50, 75, 100, 125, 150, 200, 250, 300	1 to 1500
32	25, 50, 75, 100, 125, 150, 200, 250, 300	1 to 1500
40	25, 50, 75, 100, 125, 150, 200, 250, 300	1 to 1500
50,63	25, 50, 75, 100, 125, 150, 200, 250, 300	1 to 1500
80	25, 50, 75, 100, 125, 150, 200, 250, 300	1 to 1500
100	25, 50, 75, 100, 125, 150, 200, 250, 300	1 to 1500

Note 1) Intermediate strokes not listed above are produced upon receipt of order. Manufacture of intermediate strokes at 1 mm intervals is possible. (Spacers are not used.)

Ordering code

CG1 B N 20 □ -100 □ □ Z - □ □											
C	D	G	1	B	N	20	□	-	100	□	□
1	2	3	4	5	6	7	8	9	10	11	12

⑤ Port thread type

Rubber bumper			Air cushion		
Nil	Rc	20 to 100	Nil	M5 x 0.8	20, 25
TN	NPT	20 to 100		Rc	32 to 100
TF	M5 x 0.8	20, 25	TN	NPT*	32 to 100
	G	32 to 100	TF	G	32 to 100

⑥ Cylinder stroke (mm)

Refer to “Standard Strokes”

⑦ Rod end thread

Nil	Male rod end
F	Female rod end

⑧ Suffix for cylinder (Rod boot)

Nil	Without rod boot
J	Nylon tarpaulin
K	Heat resistant tarpaulin

⑨ Pivot bracket

Nil	None
N	Pivot bracket is shipped together with the product, but not assembled

⑩ Rod end bracket

Nil	None
V	Single knuckle joint
W	Double knuckle joint

* Only for D, U, T mounting types

① With auto switch

(Built-in magnet)

② Mounting

B	Basic
Z*	Basic (without trunnion mounting female thread)
L	Axial foot
F	Rod flange
G	Head flange
U*	Rod trunnion
T*	Head trunnion
D	Clevis

* Not available for 80 and 100.

* Mounting bracket is shipped together with the product, but not assembled.

* The cylinder for F, G, L, D mounting types is Z: Basic (without trunnion mounting female thread).

③ Type

N	Rubber bumper
A	Air cushion

④ Bore size

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

(11) Auto switch

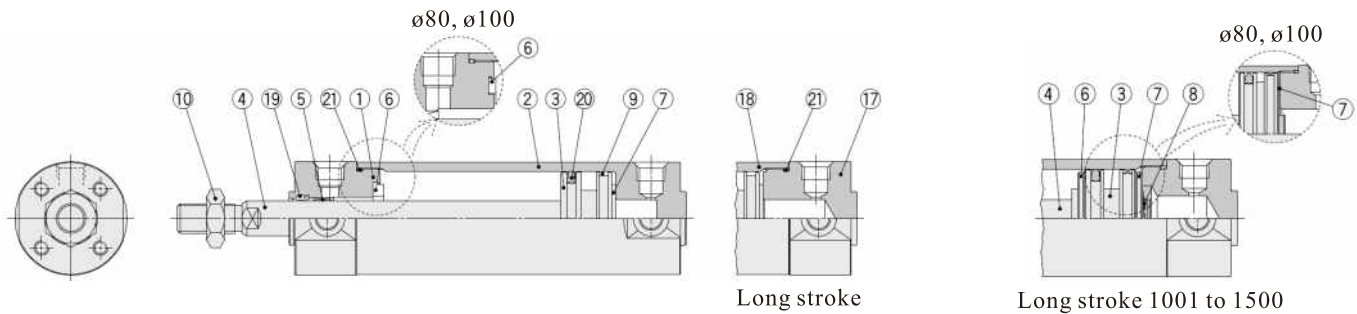
Nil	Without auto switch
-----	---------------------

(12) Number of auto switches

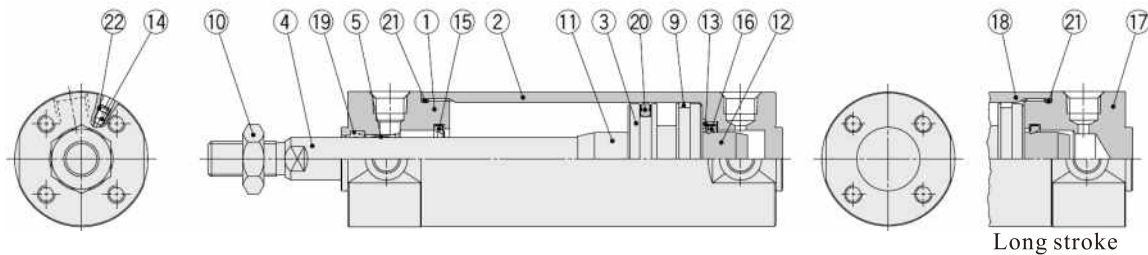
Nil	2 pcs.
S	1 pc.
n	“n” pcs.

Inner structure and material of major parts

With rubber bumper



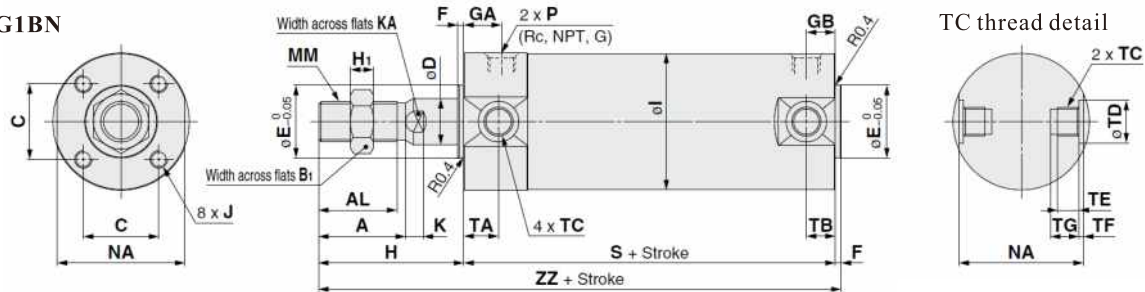
With air cushion



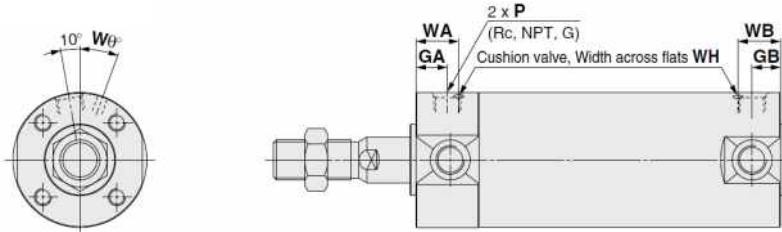
NO.	Description	Material	Note	NO.	Description	Material	Note
1	Rod cover	Aluminum alloy	Anodized	15	Cushion seal A	Urethane	32 or larger is common
2	Tube cover	Aluminum alloy	Hard anodized	16	Cushion seal B	Urethane	32 or larger is common
3	Piston	Aluminum alloy		17	Head cover	Aluminum alloy	Anodized
4	Piston rod	Stainless steel	For 20 or 25 with built-in magnet	18	Cylinder tube	Aluminum alloy	Hard anodized
		Carbon steel*	Hard chrome plating*	19	Rod seal	NBR	
5	Bushing	Bearing alloy		20	Piston seal	NBR	
6	Bumper	Resin	32 or larger is common	21	Tube gasket	NBR	
7	Bumper	Resin	32 or larger is common	22	Valve seal	NBR	
8	Retaining ring	Stainless steel	Except 80 and 100	Note) For cylinders with auto switches, the magnet is installed in the piston.			* The material for 20, 25 cylinders with auto switches is made of stainless steel.
9	Wear ring	Resin					
10	Rod end nut	Carbon steel	Zinc chromated				
11	Cushion ring A	Aluminum alloy					
12	Cushion ring B	Aluminum alloy					
13	Seal retainer	Rolled steel	Zinc chromated				
14	Cushion valve	40 or maller 50 or larger	Carbon steel Steel wire				
			Electroless nickel plating Zinc chromated				

Dimensions

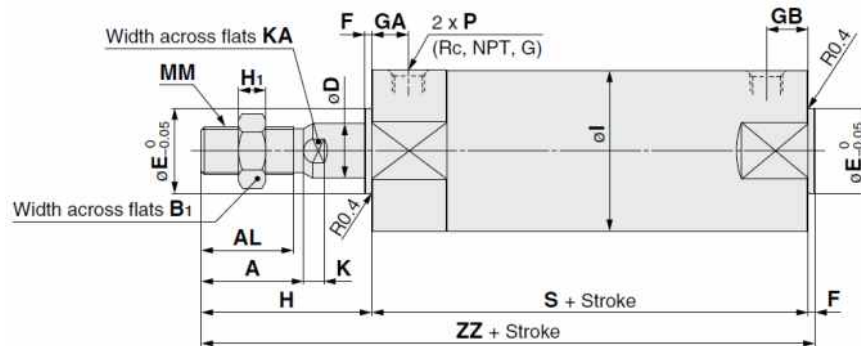
Basic: CG1BN



With air cushion



Basic (Without trunnion mounting female thread): CG1ZN



Bore size	Stroke		Rc, NPT port			G port			A	AL	B1	C	D	E	F	H	H1	I	J	K	KA	MM
	Standard	Long stroke	GA	GB	P	GA	GB	P														
20	Up to 200	201~1500	12	10(12)	1/8	12	10(12)	M5X0.8	18	15.5	13	14	8	12	2	35	5	26	M4 x 0.7 depth 7	5	6	M8X1.25
25	Up to 300	301~1500	12	10(12)	1/8	12.5	10(12.5)	M5X0.8	22	19.5	17	16.5	10	14	2	40	6	31	M5 x 0.8 depth 7.5	5.5	8	M10X1.25
32	Up to 300	301~1500	12	10(12)	1/8	10.5	10(10.5)	1/8	22	19.5	17	20	12	18	2	40	6	38	M5 x 0.8 depth 8	5.5	10	M10X1.25
40	Up to 300	301~1500	13	10(13)	1/8	13	10(10)	1/8	30	27	19	26	16	25	2	50	8	47	M6 x 1 depth 12	6	14	M14X1.5
50	Up to 300	301~1500	14	12(14)	1/4	14	12(14)	1/4	35	32	27	32	20	30	2	58	11	58	M8 x 1.25 depth 16	7	18	M18X1.5
63	Up to 300	301~1500	14	12(14)	1/4	14	12(14)	1/4	35	32	27	38	20	32	2	58	11	72	M10 x 1.5 depth 16	7	18	M18X1.5
80	Up to 300	301~1500	20	16(20)	3/8	17.5	16(17.5)	3/8	40	37	32	50	25	40	3	71	13	89	M10 x 1.5 depth 22	10	22	M22X1.5
100	Up to 300	301~1500	20	16(20)	1/2	17.5	16(17.5)	1/2	40	37	41	60	30	50	3	71	16	110	M12 x 1.75 depth 22	10	26	M26X1.5

Bore size	NA	S	TA	TB	ZZ
20	24	69 (77)	11	11	106 (114)
25	29	69 (77)	11	11	111 (119)
32	35.5	71 (79)	11	10 (11)	113 (121)
40	44	78 (87)	12	10 (12)	130 (139)
50	55	90 (102)	13	12 (13)	150 (162)
63	69	90 (102)	13	12 (13)	150 (162)
80	86	108 (122)	-	-	182 (196)
100	106	108 (122)	-	-	182 (196)

With Air Cushion

Bore size	Rc, NPT port			WA	WB	Wθ	WH
	GA	GB	P				
20	12	10(12)	M5 x 0.8	16	15 (16)	25°	1.5
25	12.5	10(12.5)	M5 x 0.8	16	14.5 (16)	25°	1.5
32	12	10(12)	1/8	16	14(16)	25°	1.5
40	13	10(13)	1/8	17	15 (17)	20°	1.5
50	14	12(14)	1/4	18	16 (18)	20°	3
63	14	12(14)	1/4	18	17 (18)	20°	3
80	20	16(20)	3/8	24	20 (24)	20°	4
100	20	16(20)	1/2	24	20 (24)	20°	4

TC Thread

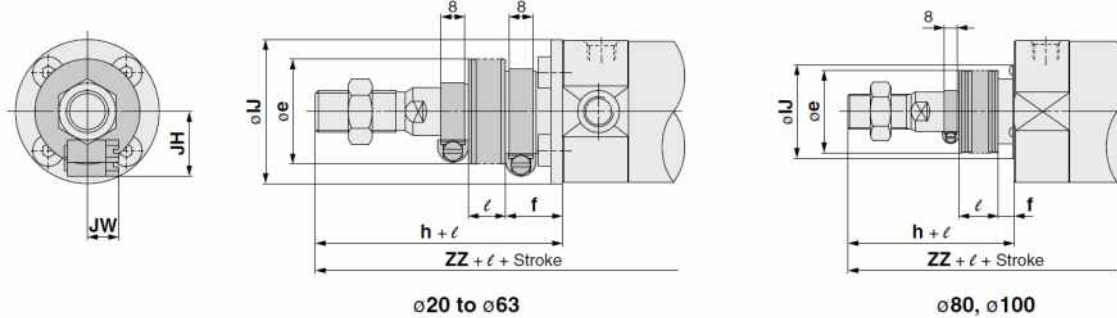
Bore size	TC	TD	TE	TF	TG
20	M5 x 0.8	8 ^{+0.08} ₀	4	0.5	5.5
25	M6 x 0.75	10 ^{+0.08} ₀	5	1	6.5
32	M8 x 1.0	12 ^{+0.08} ₀	5.5	1	7.5
40	M10 x 1.25	14 ^{+0.08} ₀	6	1.25	8.5
50	M12 x 1.25	16 ^{+0.08} ₀	7.5	2	10
63	M14 x 1.5	18 ^{+0.08} ₀	11.5	3	14.5
80	-	-	-	-	-
100	-	-	-	-	-

Note) (): Denotes the dimensions for long stroke.

* Cylinder sizes 80 and 100 do not have trunnion mounting female thread on the width across flats NA.

Basic: CG1BN

With rod boot

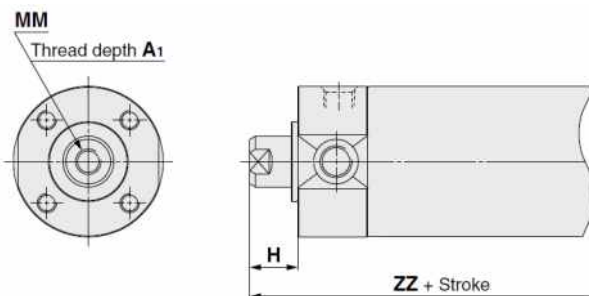


With Rod Boot

Bore size	e	f	h	IJ	JH	JW	ℓ	ZZ
20	30	18	55	27	15.5	10.5	1/4 stroke	126 (134)
25	30	19	62	32	16.5	10.5		133 (141)
32	35	19	62	38	18.5	10.5		135 (143)
40	35	19	70	48	21.5	10.5		150 (159)
50	40	19	78	59	24	10.5		170 (182)
63	40	20	78	72	24	10.5		170 (182)
80	52	10	80	59	-	-		191 (205)
100	62	7	80	71	-	-		191 (205)

* The minimum stroke with rod boot is 20 mm.

Female rod end

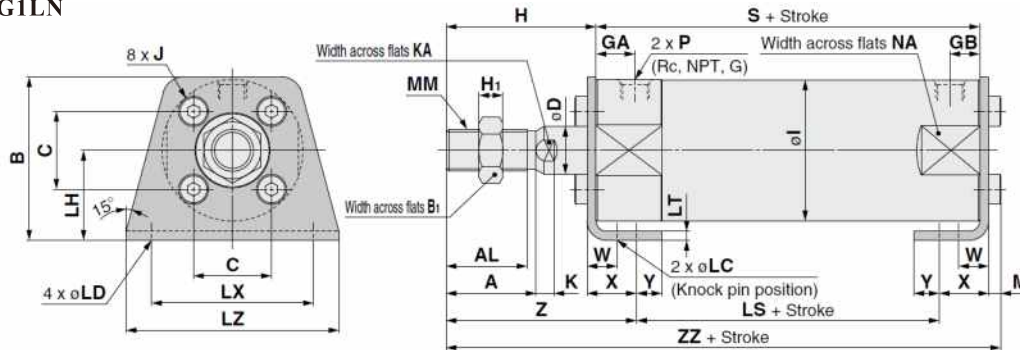


Female Rod End

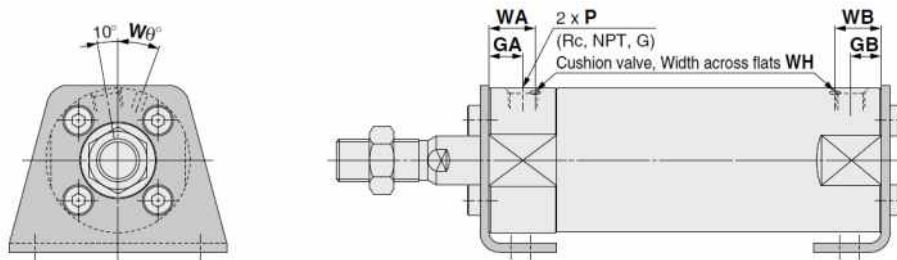
Bore size	A1	H	MM	ZZ
20	8	13	M4X0.7	84 (92)
25	8	14	M5X0.8	85 (93)
32	12	14	M6X1	87 (95)
40	13	15	M8X1.25	95 (104)
50	18	16	M10X1.5	108 (120)
63	18	16	M14X1.5	108 (120)
80	21	19	M14X1.5	130 (144)
100	25	22	M16X1.5	133 (147)

* When female thread is used, use a washer etc. to prevent the contact part at the rod end from being deformed depending on the material of the workpiece.

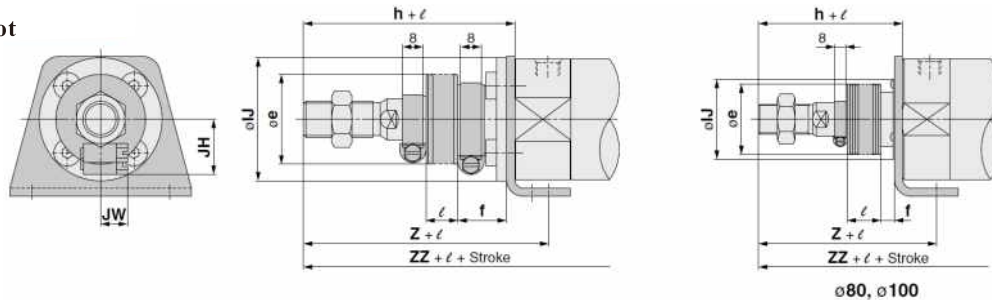
Axial Foot: CG1LN



With air cushion



With rod boot



ø80, ø100

Bore size	Stroke		Rc, NPT port			G port			A	AL	B	BI	C	D	H	HI	I	J	K	KA	LC	LD	LH	LS	LT	LX	LZ	M	MM
	Standard	Long stroke	GA	GB	P	GA	GB	P																					
20	Up to 200	201~1500	12	10(12)	1/8	12	10(12)	M5X0.8	18	15.5	34	13	14	8	35	5	26	M4 x 0.7	5	6	4	6	20	45(53)	3	32	44	3	M8X1.25
25	Up to 300	301~1500	12	10(12)	1/8	12.5	10(12.5)	M5X0.8	22	19.5	38.5	17	16.5	10	40	6	31	M5 x 0.8	5.5	8	4	6	22	45(53)	3	36	49	3.5	M10X1.25
32	Up to 300	301~1500	12	10(12)	1/8	10.5	10(10.5)	1/8	22	19.5	45	17	20	12	40	6	38	M5 x 0.8	5.5	10	4	7	25	45(53)	3	44	58	3.5	M10X1.25
40	Up to 300	301~1500	13	10(13)	1/8	13	10(10)	1/8	30	27	54.5	19	26	16	50	8	47	M6 x 1	6	14	4	7	30	51(60)	3	54	71	4	M14X1.5
50	Up to 300	301~1500	14	12(14)	1/4	14	12(14)	1/4	35	32	70.5	27	32	20	58	11	58	M8 x 1.25	7	18	5	10	40	55(67)	4.5	66	86	5	M18X1.5
63	Up to 300	301~1500	14	12(14)	1/4	14	12(14)	1/4	35	32	82.5	27	38	20	58	11	72	M10 x 1.5	7	18	5	12	45	55(67)	4.5	82	106	5	M18X1.5
80	Up to 300	301~1500	20	16(20)	3/8	17.5	16(17.5)	3/8	40	37	101	32	50	25	71	13	89	M10 x 1.5	10	22	6	11	55	60(74)	4.5	100	125	5	M22X1.5
100	Up to 300	301~1500	20	16(20)	1/2	17.5	16(17.5)	1/2	40	37	121	41	60	30	71	16	110	M12 x 1.75	10	26	6	14	65	60(74)	6	120	150	7	M26X1.5

With Air Cushion

With Rod Boot

Bore size	NA	S	W	X	Y	Z	ZZ	Bore size	Rc, NPT port			WA	WB	W θ	WH	Bore size	e	f	h	IJ	JH	JW	ℓ	ZZ
									GA	GB	P													
20	24	69 (77)	10	15	7	47	110 (118)	20	12	10(12)	M5 x 0.8	16	15 (16)	25°	1.5	20	30	18	55	27	15.5	10.5	1/4 stroke	130 (138)
25	29	69 (77)	10	15	7	52	115.5 (123.5)	25	12.5	10(12.5)	M5 x 0.8	16	14.5 (16)	25°	1.5	25	30	19	62	32	16.5	10.5		137.5 (145.5)
32	35.5	71 (79)	10	16	8	53	117.5 (125.5)	32	12	10(12)	1/8	16	14(16)	25°	1.5	32	35	19	62	38	18.5	10.5		139.5 (147.5)
40	44	78 (87)	10	16.5	8.5	63.5	135 (144)	40	13	10(13)	1/8	17	15 (17)	20°	1.5	40	35	19	70	48	21.5	10.5		155 (164)
50	55	90 (102)	17.5	22	11	75.5	157.5(169.5)	50	14	12(14)	1/4	18	16 (18)	20°	3	50	40	19	78	59	24	10.5		177.5 (189.5)
63	69	90 (102)	17.5	22	13	75.5	157.5 (169.5)	63	14	12(14)	1/4	18	17 (18)	20°	3	63	40	20	78	72	24	10.5		177.5 (189.5)
80	86	108 (122)	20	28.5	14	95	188.5 (202.5)	80	20	16(20)	3/8	24	20 (24)	20°	4	80	52	10	80	59	-	-		197.5 (211.5)
100	106	108 (122)	20	30	16	95	192 (206)	100	20	16(20)	1/2	24	20 (24)	20°	4	100	62	7	80	71	-	-		201 (215)

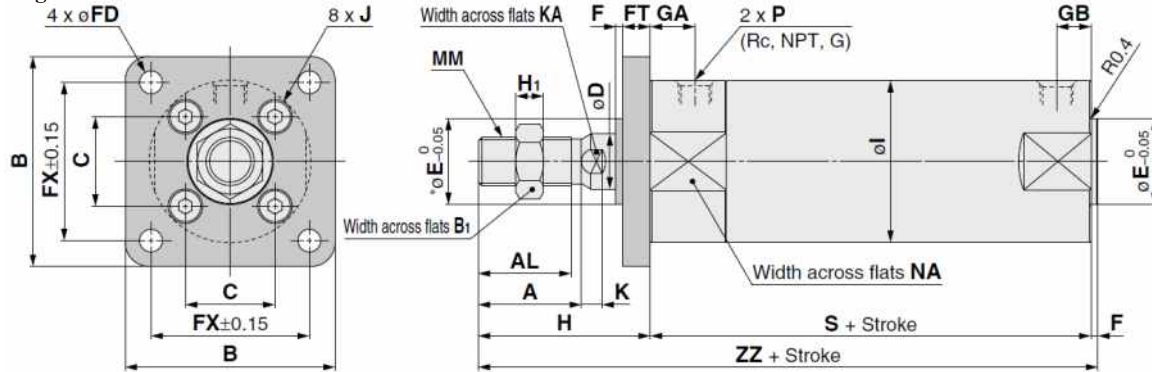
* For female rod end, since the wrench flap (K and KA portions) will be inside of the bracket when the piston rod is retracted at the stroke end, extend the piston rod to tighten the nut using a tool, and mount a workpiece on the rod end.

* Refer to the basic type for the female rod end.

Note) (): Denotes the dimensions for long stroke.

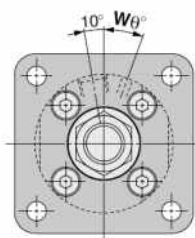
* The minimum stroke with rod boot is 20 mm.

Rod Flange: CG1FN

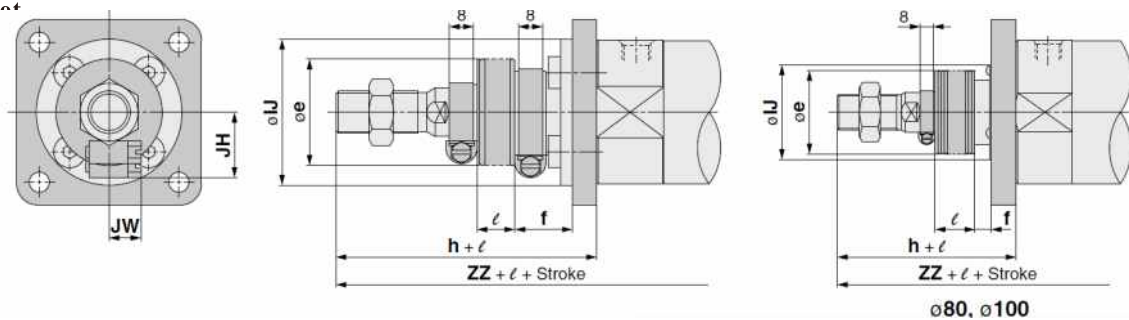


* End boss is machined on the flange for E.

With air cushion



With rod boot



Bore size	Stroke		Rc, NPT port			G port																				
	Standard	Long stroke	GA	GB	P	GA	GB	P	A	AL	B	BI	C	D	E	F	FD	FT	FX	H	HI	I	J	K		
20	Up to 200	201~1500	12	10(12)	1/8	12	10(12)	M5X0.8	18	15.5	40	13	14	8	12	2	5.5	6	28	35	5	26	M4 x 0.7	5		
25	Up to 300	301~1500	12	10(12)	1/8	12.5	10(12.5)	M5X0.8	22	19.5	44	17	16.5	10	14	2	5.5	7	32	40	6	31	M5 x 0.8	5.5		
32	Up to 300	301~1500	12	10(12)	1/8	10.5	10(10.5)	1/8	22	19.5	53	17	20	12	18	2	6.6	7	38	40	6	38	M5 x 0.8	5.5		
40	Up to 300	301~1500	13	10(13)	1/8	13	10(10)	1/8	30	27	61	19	26	16	25	2	6.6	8	46	50	8	47	M6 x 1	6		
50	Up to 300	301~1500	14	12(14)	1/4	14	12(14)	1/4	35	32	76	27	32	20	30	2	9	9	58	58	11	58	M8 x 1.25	7		
63	Up to 300	301~1500	14	12(14)	1/4	14	12(14)	1/4	35	32	92	27	38	20	32	2	11	9	70	58	11	72	M10 x 1.5	7		
80	Up to 300	301~1500	20	16(20)	3/8	17.5	16(17.5)	3/8	40	37	104	32	50	25	40	3	11	11	82	71	13	89	M10 x 1.5	10		
100	Up to 300	301~1500	20	16(20)	1/2	17.5	16(17.5)	1/2	40	37	128	41	60	30	50	3	14	14	100	71	16	110	M12 x 1.75	10		

With Air Cushion

With Rod Boot

Bore size	KA	MM	NA	S	ZZ	Bore size	Rc, NPT port			WA	WB	W θ	WH	Bore size	e	f	h	IJ	JH	JW	ℓ	ZZ
							GA	GB	P													
20	6	M8X1.25	24	69 (77)	106 (114)	20	12	10(12)	M5 x 0.8	16	15 (16)	25°	1.5	20	30	18	55	27	15.5	10.5	1/4 stroke	126 (134)
25	8	M10X1.25	29	69 (77)	111 (119)	25	12.5	10(12.5)	M5 x 0.8	16	14.5 (16)	25°	1.5	25	30	19	62	32	16.5	10.5		133 (141)
32	10	M10X1.25	35.5	71 (79)	113 (121)	32	12	10(12)	1/8	16	14(16)	25°	1.5	32	35	19	62	38	18.5	10.5		135 (143)
40	14	M14X1.5	44	78 (87)	130 (139)	40	13	10(13)	1/8	17	15 (17)	20°	1.5	40	35	19	70	48	21.5	10.5		150 (159)
50	18	M18X1.5	55	90 (102)	150 (162)	50	14	12(14)	1/4	18	16 (18)	20°	3	50	40	19	78	59	24	10.5		170 (182)
63	18	M18X1.5	69	90 (102)	150 (162)	63	14	12(14)	1/4	18	17 (18)	20°	3	63	40	20	78	72	24	10.5		170 (182)
80	22	M22X1.5	86	108 (122)	182 (196)	80	20	16(20)	3/8	24	20 (24)	20°	4	80	52	10	80	59	-	-		191 (205)
100	26	M26X1.5	106	108 (122)	182 (196)	100	20	16(20)	1/2	24	20 (24)	20°	4	100	62	7	80	71	-	-		191 (205)

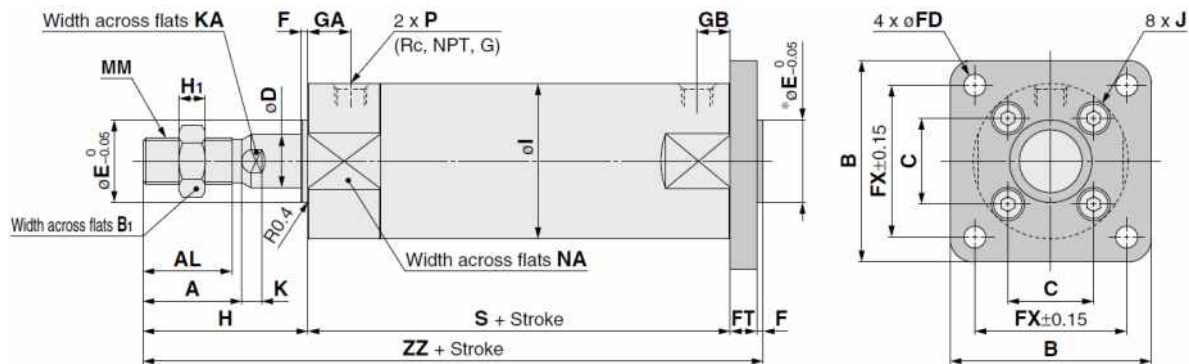
* For female rod end, since the wrench flap (K and KA portions) will be inside of the bracket when the piston rod is retracted at the stroke end, extend the piston rod to tighten the nut using a tool, and mount a workpiece on the rod end.

* Refer to the basic type for the female rod end.

Note) () : Denotes the dimensions for long stroke.

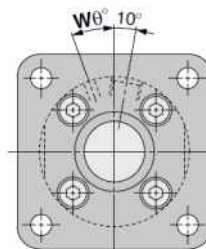
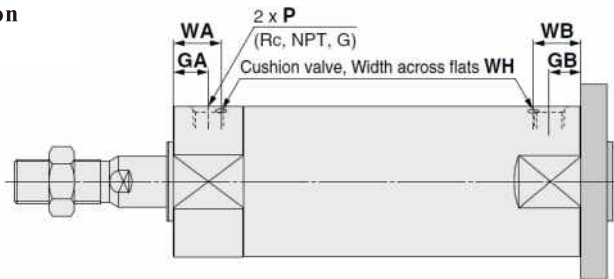
* The minimum stroke with rod boot is 20 mm.

Head Flange: CG1GN

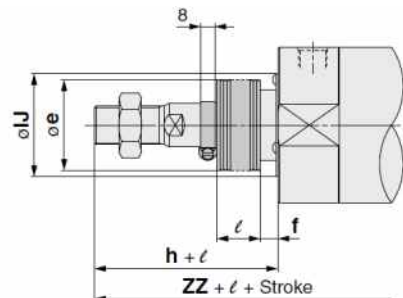
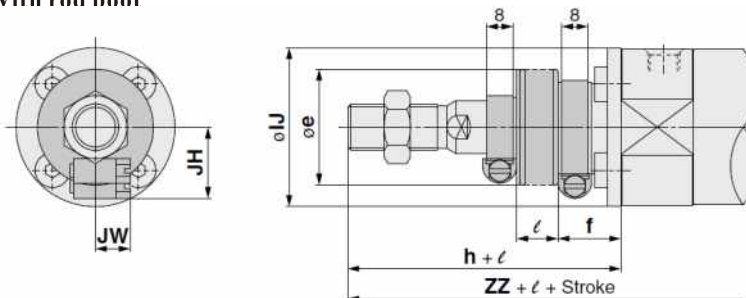


* End boss is machined on the flange for E.

With air cushion



With rod boot



Bore size	Stroke		Rc, NPT port			G port			A	AL	B	B1	C	D	E	F	FD	FT	FX	H	H1	I	J	K
	Standard	Long stroke	GA	GB	P	GA	GB	P																
20	Up to 200	201~1500	12	10(12)	1/8	12	10(12)	M5X0.8	18	15.5	40	13	14	8	12	2	5.5	6	28	35	5	26	M4 x 0.7	5
25	Up to 300	301~1500	12	10(12)	1/8	12.5	10(12.5)	M5X0.8	22	19.5	44	17	16.5	10	14	2	5.5	7	32	40	6	31	M5 x 0.8	5.5
32	Up to 300	301~1500	12	10(12)	1/8	10.5	10(10.5)	1/8	22	19.5	53	17	20	12	18	2	6.6	7	38	40	6	38	M5 x 0.8	5.5
40	Up to 300	301~1500	13	10(13)	1/8	13	10(10)	1/8	30	27	61	19	26	16	25	2	6.6	8	46	50	8	47	M6 x 1	6
50	Up to 300	301~1500	14	12(14)	1/4	14	12(14)	1/4	35	32	76	27	32	20	30	2	9	9	58	58	11	58	M8 x 1.25	7
63	Up to 300	301~1500	14	12(14)	1/4	14	12(14)	1/4	35	32	92	27	38	20	32	2	11	9	70	58	11	72	M10 x 1.5	7
80	Up to 300	301~1500	20	16(20)	3/8	17.5	16(17.5)	3/8	40	37	104	32	50	25	40	3	11	11	82	71	13	89	M10 x 1.5	10
100	Up to 300	301~1500	20	16(20)	1/2	17.5	16(17.5)	1/2	40	37	128	41	60	30	50	3	14	14	100	71	16	110	M12 x 1.75	10

ø80, ø100

With Air Cushion

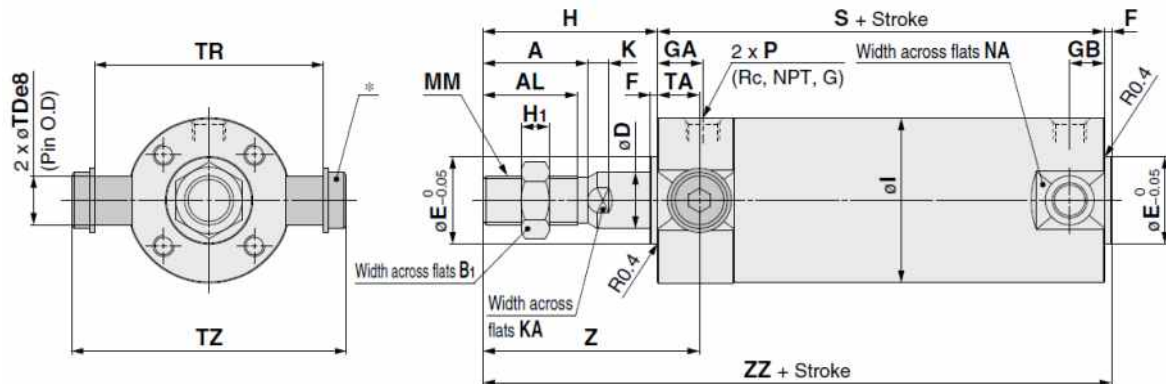
With Rod Boot

Bore size	KA	MM	NA	S	ZZ	Bore size	Rc, NPT port			WA	WB	Wθ	WH	Bore size	e	f	h	IJ	JH	JW	ℓ	ZZ
							GA	GB	P													
20	6	M8X1.25	24	69 (77)	112 (120)	20	12	10(12)	M5 x 0.8	16	15 (16)	25°	1.5	20	30	18	55	27	15.5	10.5		132 (140)
25	8	M10X1.25	29	69 (77)	118 (126)	25	12.5	10(12.5)	M5 x 0.8	16	14.5 (16)	25°	1.5	25	30	19	62	32	16.5	10.5		140 (148)
32	10	M10X1.25	35.5	71 (79)	120 (128)	32	12	10(12)	1/8	16	14 (16)	25°	1.5	32	35	19	62	38	18.5	10.5		142 (150)
40	14	M14X1.5	44	78 (87)	138 (147)	40	13	10(13)	1/8	17	15 (17)	20°	1.5	40	35	19	70	48	21.5	10.5		158 (167)
50	18	M18X1.5	55	90 (102)	159 (171)	50	14	12(14)	1/4	18	16 (18)	20°	3	50	40	19	78	59	24	10.5	1/4 stroke	179 (191)
63	18	M18X1.5	69	90 (102)	159 (171)	63	14	12(14)	1/4	18	17 (18)	20°	3	63	40	20	78	72	24	10.5		179 (191)
80	22	M22X1.5	86	108 (122)	193 (207)	80	20	16(20)	3/8	24	20 (24)	20°	4	80	52	10	80	59	-	-		202 (216)
100	26	M26X1.5	106	108 (122)	196 (210)	100	20	16(20)	1/2	24	20 (24)	20°	4	100	62	7	80	71	-	-		205 (219)

* Refer to the basic type for the female rod end.
Note) () : Denotes the dimensions for long stroke.

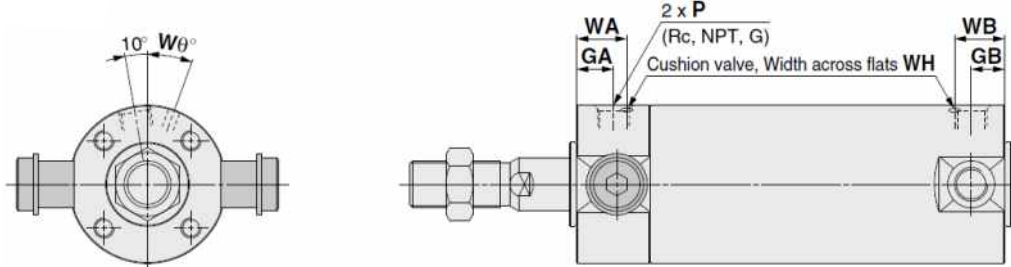
* The minimum stroke with rod boot is 20 mm.

Rod Trunnion: CG1UN

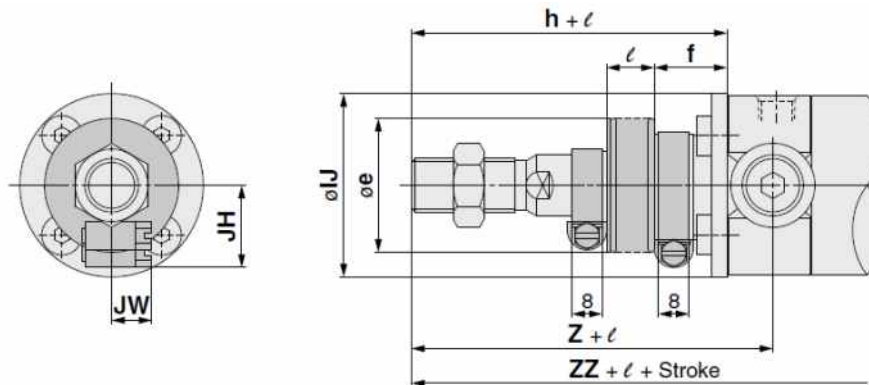


* Constructed of a trunnion pin, flat washer and hexagon socket head cap bolt.

With air cushion



With rod boot



Bore size	Stroke		Rc, NPT port			G port			A	AL	B1	D	E	F	H	H1	I	K	KA	MM	NA	S
	Standard	Long stroke	GA	GB	P	GA	GB	P														
20	Up to 200	201~1500	12	10(12)	1/8	12	10(12)	M5X0.8	18	15.5	13	8	12	2	35	5	26	5	6	M8 x 1.25	24	69(77)
25	Up to 300	301~1500	12	10(12)	1/8	12.5	10(12.5)	M5X0.8	22	19.5	17	10	14	2	40	6	31	5.5	8	M10 x 1.25	29	69(77)
32	Up to 300	301~1500	12	10(12)	1/8	10.5	10(10.5)	1/8	22	19.5	17	12	18	2	40	6	38	5.5	10	M10 x 1.25	35.5	71(79)
40	Up to 300	301~1500	13	10(13)	1/8	13	10(10)	1/8	30	27	19	16	25	2	50	8	47	6	14	M14 x 1.5	44	78(87)
50	Up to 300	301~1500	14	12(14)	1/4	14	12(14)	1/4	35	32	27	20	30	2	58	11	58	7	18	M18 x 1.5	55	90(102)
63	Up to 300	301~1500	14	12(14)	1/4	14	12(14)	1/4	35	32	27	20	32	2	58	11	72	7	18	M18 x 1.5	69	90(102)

With Air Cushion

With Rod Boot

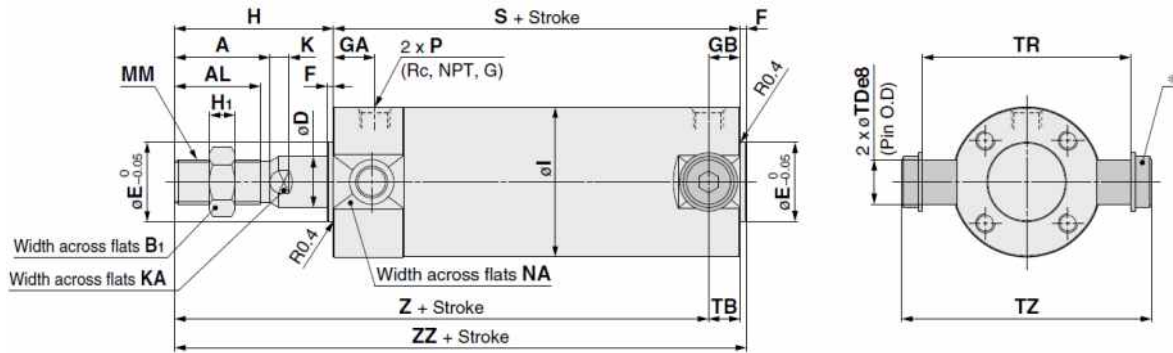
Bore size	TA	TDe8	TR	TZ	Z	ZZ	Bore size	Rc, NPT port			WA	WB	W θ	WH	Bore size	e	f	h	IJ	JH	JW	ℓ	Z	ZZ
								GA	GB	P														
20	11	8 ^{-0.025} _{-0.047}	39	47.6	46	106 (114)	20	12	10(12)	M5 x 0.8	16	15 (16)	25°	1.5	20	30	18	55	27	15.5	10.5	1/4 stroke	66	126 (134)
25	11	10 ^{-0.025} _{-0.047}	43	53	51	111 (119)	25	12.5	10(12.5)	M5 x 0.8	16	14.5 (16)	25°	1.5	25	30	19	62	32	16.5	10.5		73	133(141)
32	11	12 ^{-0.032} _{-0.059}	54.5	67.7	51	113 (121)	32	12	10(12)	1/8	16	14(16)	25°	1.5	32	35	19	62	38	18.5	10.5		73	135 (143)
40	12	14 ^{-0.032} _{-0.059}	65.5	78.7	62	130 (139)	40	13	10(13)	1/8	17	15 (17)	20°	1.5	40	35	19	70	48	21.5	10.5		82	150 (159)
50	13	16 ^{-0.032} _{-0.059}	80	98.6	71	150 (162)	50	14	12(14)	1/4	18	16 (18)	20°	3	50	40	19	78	59	24	10.5		91	170 (182)
63	13	18 ^{-0.032} _{-0.059}	98	119.2	71	150 (162)	63	14	12(14)	1/4	18	17 (18)	20°	3	63	40	20	78	72	24	10.5	91	170 (182)	

* Refer to the basic type for the female rod end.

Note) () : Denotes the dimensions for long stroke.

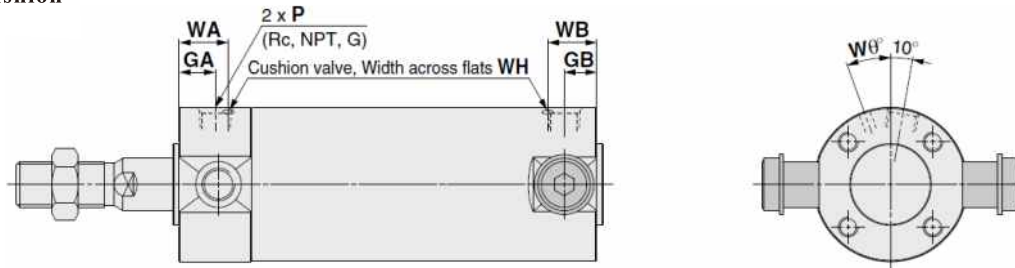
* The minimum stroke with rod boot is 20 mm.

Head Trunnion: CG1TN

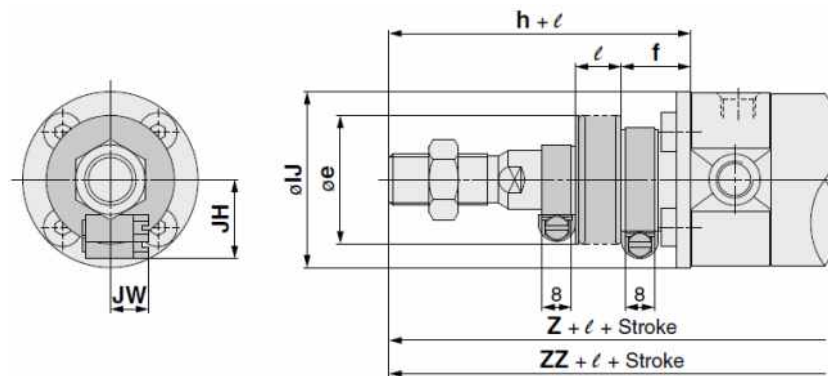


* Constructed of a trunnion pin, flat washer and hexagon socket head cap bolt.

With air cushion



With rod boot



Bore size	Stroke		Rc, NPT port			G port			A	AL	B1	D	E	F	H	H1	I	K	KA	MM	NA	S
	Standard	Long stroke	GA	GB	P	GA	GB	P														
20	Up to 200	201~1500	12	10(12)	1/8	12	10(12)	M5X0.8	18	15.5	13	8	12	2	35	5	26	5	6	M8 x 1.25	24	69(77)
25	Up to 300	301~1500	12	10(12)	1/8	12.5	10(12.5)	M5X0.8	22	19.5	17	10	14	2	40	6	31	5.5	8	M10 x 1.25	29	69(77)
32	Up to 300	301~1500	12	10(12)	1/8	10.5	10(10.5)	1/8	22	19.5	17	12	18	2	40	6	38	5.5	10	M10 x 1.25	35.5	71(79)
40	Up to 300	301~1500	13	10(13)	1/8	13	10(10)	1/8	30	27	19	16	25	2	50	8	47	6	14	M14 x 1.5	44	78(87)
50	Up to 300	301~1500	14	12(14)	1/4	14	12(14)	1/4	35	32	27	20	30	2	58	11	58	7	18	M18 x 1.5	55	90(102)
63	Up to 300	301~1500	14	12(14)	1/4	14	12(14)	1/4	35	32	27	20	32	2	58	11	72	7	18	M18 x 1.5	69	90(102)

With Air Cushion

With Rod Boot

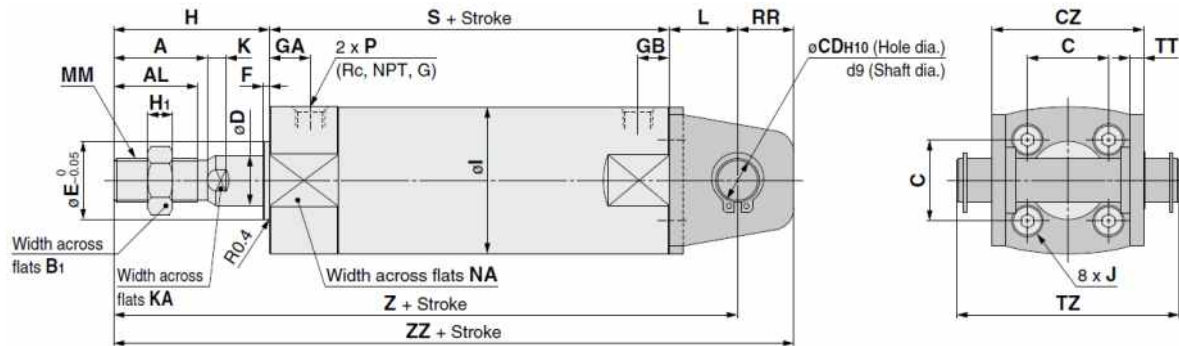
Bore size	TB	TDe8	TR	TZ	Z	ZZ	Bore size	Rc, NPT port			WA	WB	WØ	WH	Bore size	e	f	h	IJ	JH	JW	l	Z	ZZ
								GA	GB	P														
20	11	8	39	47.6	93(101)	106(114)	20	12	10(12)	M5 x 0.8	16	15 (16)	25°	1.5	20	30	18	55	27	15.5	10.5		113(121)	126(134)
25	11	10	43	53	98(106)	111(119)	25	12.5	10(12.5)	M5 x 0.8	16	14.5 (16)	25°	1.5	25	30	19	62	32	16.5	10.5		120(128)	133(141)
32	10(11)	12	54.5	67.7	101(108)	113(121)	32	12	10(12)	1/8	16	14(16)	25°	1.5	32	35	19	62	38	18.5	10.5	1/4	123(130)	135(143)
40	10(12)	14	65.5	78.7	118(125)	130(139)	40	13	10(13)	1/8	17	15 (17)	20°	1.5	40	35	19	70	48	21.5	10.5	stroke	138(145)	150(159)
50	12(13)	16	80	98.6	136(147)	150(162)	50	14	12(14)	1/4	18	16 (18)	20°	3	50	40	19	78	59	24	10.5		156(167)	170(182)
63	14(13)	18	98	119.2	136(147)	150(162)	63	14	12(14)	1/4	18	17 (18)	20°	3	63	40	20	78	72	24	10.5		156(167)	170(182)

* Refer to the basic type for the female rod end.

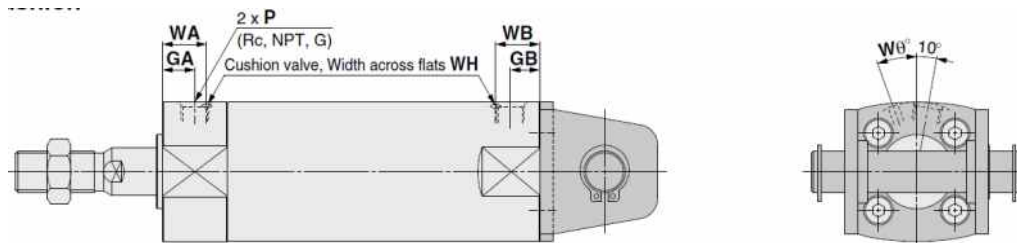
Note) (): Denotes the dimensions for long stroke.

* The minimum stroke with rod boot is 20 mm.

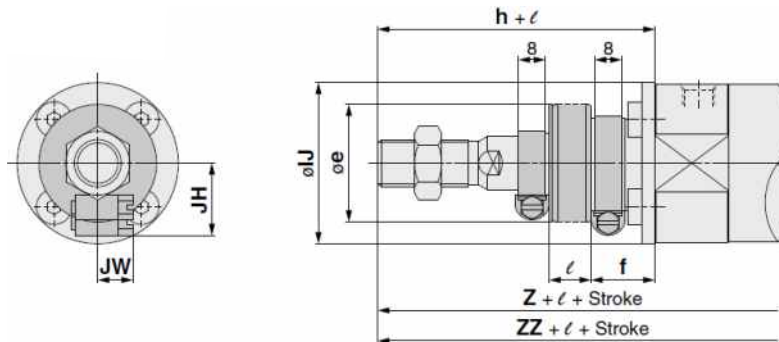
Clevis: CG1DN (ø20 to ø63)



With air cushion



With rod boot



Bore size	Stroke		Rc, NPT port			G port			A	AL	BI	C	CD	CZ	D	E	F	H	HI	I	J	K	KA	L	MM	NA
	Standard	Long stroke	GA	GB	P	GA	GB	P																		
20	Up to 200	201~1500	12	10(12)	1/8	12	10(12)	M5X0.8	18	15.5	13	14	8	29	8	12	2	35	5	26	M4x0.7	5	6	14	M8 x 1.25	24
25	Up to 300	301~1500	12	10(12)	1/8	12.5	10(12.5)	M5X0.8	22	19.5	17	16	10	33	10	14	2	40	6	31	M5x0.8	5.5	8	16	M10x1.25	29
32	Up to 300	301~1500	12	10(12)	1/8	10.5	10(10.5)	1/8	22	19.5	17	20	12	40	12	18	2	40	6	38	M5x0.8	5.5	10	20	M10x1.25	35.5
40	Up to 300	301~1500	13	10(13)	1/8	13	10(10)	1/8	30	27	19	26	14	49	16	25	2	50	8	47	M6x1	6	14	22	M14x1.5	44
50	Up to 300	301~1500	14	12(14)	1/4	14	12(14)	1/4	35	32	27	32	16	60	20	30	2	58	11	58	M8x1.25	7	18	25	M18x1.5	55
63	Up to 300	301~1500	14	12(14)	1/4	14	12(14)	1/4	35	32	27	38	18	74	20	32	2	58	11	72	M10x1.5	7	18	30	M18x1.5	69

With Air Cushion

With Rod Boot

Bore size	RR	S	TT	TZ	Z	ZZ	Applicable pin part no.	Bore size	Rc, NPT port			WA	WB	Wθ	WH	Bore size	e	f	h	IJ	JH	JW	l	Z	ZZ
									GA	GB	P														
20	11	69(77)	3.2	43.4	118(126)	129(137)	CD-G02	20	12	10(12)	M5 x 0.8	16	15 (16)	25°	1.5	20	30	18	55	27	15.5	10.5		138(146)	149(157)
25	13	69(77)	3.2	48	125(133)	138(146)	CD-G25	25	12.5	10(12.5)	M5 x 0.8	16	14.5 (16)	25°	1.5	25	30	19	62	32	16.5	10.5		147(155)	160(168)
32	15	71(79)	4.5	59.4	131(139)	146(154)	CD-G03	32	12	10(12)	1/8	16	14(16)	25°	1.5	32	35	19	62	38	18.5	10.5	1/4	153(161)	168(176)
40	18	78(87)	4.5	71.4	150(159)	168(177)	CD-G04	40	13	10(13)	1/8	17	15 (17)	20°	1.5	40	35	19	70	48	21.5	10.5	stroke	170(179)	188(197)
50	20	90(102)	6	86	173(185)	193(205)	CD-G05	50	14	12(14)	1/4	18	16 (18)	20°	3	50	40	19	78	59	24	10.5		193(205)	213(225)
63	22	90(102)	8	105.4	178(190)	200(212)	CD-G06	63	14	12(14)	1/4	18	17 (18)	20°	3	63	40	20	78	72	24	10.5		198(210)	220(232)

* Refer to the basic type for the female rod end.
Note) (): Denotes the dimensions for long stroke.

* The minimum stroke with rod boot is 20 mm.

BITEBI®

Technical drawing of a shaft-hub assembly showing dimensions and tolerances. The drawing includes a side view and a cross-sectional view.

Side View Dimensions:

- H:** Total length of the shaft.
- F:** Distance from the left end of the shaft to the start of the first keyway.
- GA:** Distance from the left end of the shaft to the start of the second keyway.
- 2 x P (Rc, NPT, G):** Two keyways, each with a pitch P and thread specification Rc, NPT, G .
- GB:** Distance from the right end of the shaft to the start of the second keyway.
- L:** Distance from the right end of the shaft to the start of the first keyway.
- RR:** Distance from the right end of the shaft to the end of the first keyway.
- V:** Distance from the right end of the shaft to the end of the second keyway.
- MM:** Distance from the left end of the shaft to the end of the first keyway.
- 0 E_{0.05}:** Tolerance on the distance from the left end of the shaft to the end of the first keyway.
- ØD:** Diameter of the shaft.
- R0.4:** Fillet radius at the transition between the shaft and the hub.
- Width across flats KA:** Width across flats of the hub at the first keyway.
- Width across flats NA:** Width across flats of the hub at the second keyway.
- S + Stroke:** Total length of the shaft including stroke.
- Z + Stroke:** Total length of the shaft including stroke.
- ZZ + Stroke:** Total length of the shaft including stroke.

Cross-sectional View Dimensions:

- TZ:** Total thickness of the hub.
- CZ:** Thickness of the hub at the keyway.
- C:** Thickness of the hub at the keyway.
- 8 x J:** Eight holes, each with a diameter J .
- ØCD_{H10} (Hole dia.):** Diameter of the hole in the hub.
- d9 (Shaft dia.):** Diameter of the shaft.
- CX_{+0.5/-0.3}:** Tolerance on the distance from the center of the shaft to the center of the hole.

Technical drawing of a cushion valve. The side view shows a cylindrical body with two end flanges. Dimensions include WA (flange width), GA (flange thickness), WB (flange width), GB (flange thickness), and WH (width across flats). The end view shows a circular cross-section with four mounting holes. Dimensions include $W\theta$ (hole diameter) and 10° (angle).

Technical drawing of a shaft-hub assembly. The drawing shows a shaft with a keyway and a hub with a keyway. The dimensions are labeled as follows:

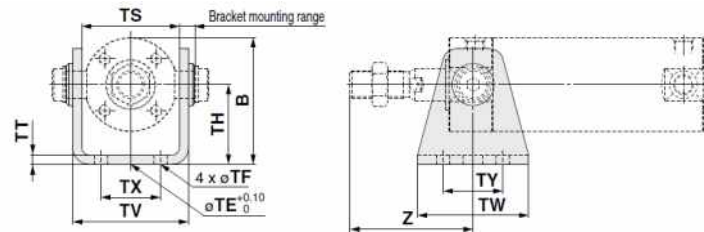
- $h + \ell$: Total length of the shaft and hub assembly.
- 8 : Distance from the end of the shaft to the start of the keyway.
- ϕJ : Shaft diameter.
- ϕe : Hub bore diameter.
- ℓ : Length of the keyway.
- f : Distance from the end of the hub to the start of the keyway.
- $Z + \ell + \text{Stroke}$: Total length of the shaft and hub assembly.
- $ZZ + \ell + \text{Stroke}$: Total length of the shaft and hub assembly.

								With Air Cushion							With Rod Boot								
Bore size	RR	S	TZ	V	Z	ZZ	Applicable pin part no.	Bore size	Rc, NPT port			WA	WB	W θ	WH	Bore size	e	f	h	IJ	ℓ	Z	ZZ
									GA	GB	P												
80	18	108(122)	64	26	214(228)	232(246)	IY-G08	80	20	16(20)	3/8	24	20(24)	20°	4	80	52	10	80	59	1/4	223(237)	241(255)
100	22	108(122)	72	32	222(236)	244(258)	IY-G10	100	20	16(20)	1/2	24	20(24)	20°	4	100	62	7	80	71	stroke	231(245)	253(267)

* The minimum stroke with rod boot is 20 mm.

With Pivot Bracket [() : Denotes the dimensions for long stroke.]

Rod Trunnion (U) with Pivot Bracket



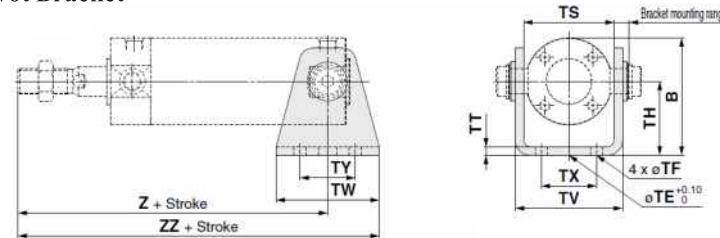
Male Thread

Bore size	B	TE	TF	TH	TS	TT	TV	TW	TX	TY	Z
20	38	10	5.5	25	28	3.2	35.8	42	16	28	46
25	45.5	10	5.5	30	33	3.2	39.8	42	20	28	51
32	54	10	6.6	35	40	4.5	49.4	48	22	28	51
40	63.5	10	6.6	40	49	4.5	58.4	56	30	30	62
50	79	20	9	50	60	6	72.4	64	36	36	71
63	96	20	11	60	74	8	90.4	74	46	46	71

Female Thread

Bore size	Z
20	24
25	25
32	25
40	27
50	29
63	29

Head Trunnion (T) with Pivot Bracket



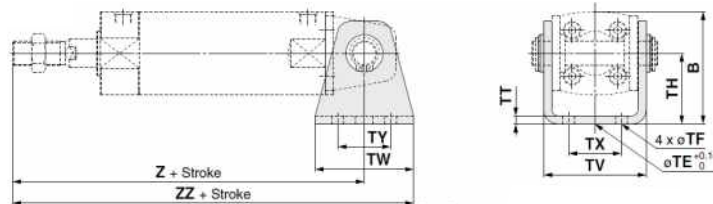
Male Thread

Bore size	B	TE	TF	TH	TS	TT	TV	TW	TX	TY	Z	ZZ
20	38	10	5.5	25	28	3.2	35.8	42	16	28	93 (101)	114 (122)
25	45.5	10	5.5	30	33	3.2	39.8	42	20	28	98 (106)	119 (127)
32	54	10	6.6	35	40	4.5	49.4	48	22	28	101 (108)	125 (132)
40	63.5	10	6.6	40	49	4.5	58.4	56	30	30	118 (125)	146 (153)
50	79	20	9	50	60	6	72.4	64	36	36	136 (147)	168 (179)
63	96	20	11	60	74	8	90.4	74	46	46	136 (147)	173 (184)

Female Thread

Bore size	Z	ZZ
20	71 (79)	92 (100)
25	72 (80)	93 (101)
32	75 (82)	99 (106)
40	83 (90)	111 (118)
50	94 (105)	126 (137)
63	94 (105)	131 (142)

Clevis (D) with Pivot Bracket ø20 to ø63



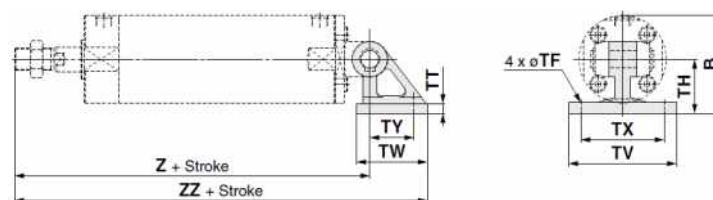
Male Thread

Bore size	B	TE	TF	TH	TT	TV	TW	TX	TY	Z	ZZ
20	38	10	5.5	25	3.2	35.8	42	16	28	118 (126)	139 (147)
25	45.5	10	5.5	30	3.2	39.8	42	20	28	125 (133)	146 (154)
32	54	10	6.6	35	4.5	49.4	48	22	28	131 (139)	155 (163)
40	63.5	10	6.6	40	4.5	58.4	56	30	30	150 (159)	178 (187)
50	79	20	9	50	6	72.4	64	36	36	173 (185)	205 (217)
63	96	20	11	60	8	90.4	74	46	46	178 (190)	215 (227)

Female Thread

Bore size	Z	ZZ
20	96 (104)	117 (125)
25	99 (107)	120 (128)
32	105 (113)	129 (137)
40	115 (124)	143 (152)
50	131 (143)	163 (175)
63	136 (148)	173 (185)

Clevis (D) with Pivot Bracket ø80, ø100



Male Thread

Bore size	B	TF	TH	TT	TV	TW	TX	TY	Z	ZZ
80	99.5	11	55	11	110	72	85	45	214 (228)	272.5 (286.5)
100	120	13.5	65	12	130	93	100	60	222 (236)	298.5 (312.5)

Female Thread

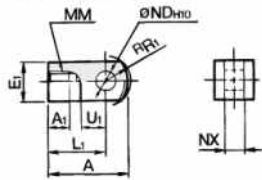
Bore size	Z	ZZ
80	162 (176)	220.5 (234.5)
100	173 (187)	249.5 (263.5)

Dimensions of Accessories

Single Knuckle Joint

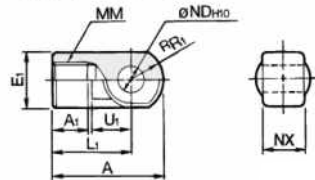
I-G02, G03

Material: Carbon steel



I-G04, G05, G08, G10

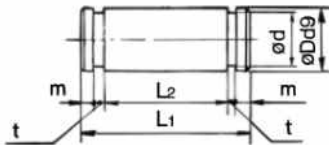
Material: Cast iron



Part no.	Applicable bore size	A	A1	E1	L1	MM	R1	U1	ND _{H10}	NX
I-G02	20	34	8.5	16	25	M8x1.25	10.3	11.5	8 ^{+0.058} ₀	8 ^{-0.2} _{-0.4}
I-G03	25,32	41	10.5	20	30	M10x1.25	12.8	14	10 ^{+0.058} ₀	10 ^{-0.2} _{-0.4}
I-G04	40	42	14	22	30	M14x1.5	12	14	10 ^{+0.058} ₀	18 ^{-0.3} _{-0.5}
I-G05	50,63	56	18	28	40	M18x1.5	16	20	14 ^{+0.070} ₀	22 ^{-0.3} _{-0.5}
I-G08	80	71	21	38	50	M22x1.5	21	27	18 ^{+0.070} ₀	28 ^{-0.3} _{-0.5}
I-G10	100	79	21	44	55	M26x1.5	24	31	22 ^{+0.084} ₀	32 ^{-0.3} _{-0.5}

Knuckle Pin

Material: Carbon steel

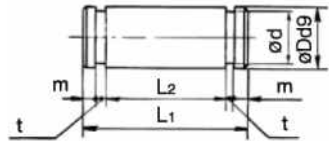


Part no.	Applicable bore size	D ₉	L1	d	L2	m	t	Included retaining ring
IY-G02	20	8 ^{-0.040} _{-0.076}	21	7.6	16.2	1.5	0.9	Type C8 for axis
IY-G03	25,32	10 ^{-0.040} _{-0.076}	25.6	9.6	20.2	1.55	1.15	Type C10 for axis
IY-G04	40	10 ^{-0.040} _{-0.076}	41.6	9.6	36.2	1.55	1.15	Type C10 for axis
IY-G05	50,63	14 ^{-0.050} _{-0.093}	50.6	13.4	44.2	2.05	1.15	Type C14 for axis
IY-G08	80	18 ^{-0.050} _{-0.093}	64	17	56.2	2.55	1.35	Type C18 for axis
IY-G10	100	22 ^{-0.065} _{-0.117}	72	21	64.2	2.55	1.35	Type C22 for axis

* Retaining rings are included.

Clevis Pin

Material: Carbon steel



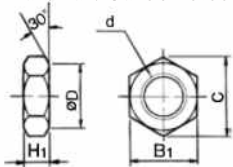
Part no.	Applicable bore size	D ₉	L1	d	L2	m	t	Included retaining ring
CD-G02	20	8 ^{-0.040} _{-0.076}	43.4	7.6	38.6	1.5	0.9	Type C8 for axis
CD-G25	25	10 ^{-0.040} _{-0.076}	48	9.6	42.6	1.55	1.15	Type C10 for axis
CD-G03	32	12 ^{-0.050} _{-0.093}	59.4	11.5	54	1.55	1.15	Type C12 for axis
CD-G04	40	14 ^{-0.050} _{-0.093}	71.4	13.4	65	2.05	1.15	Type C14 for axis
CD-G05	50	16 ^{-0.050} _{-0.093}	88	15.2	79.6	2.05	1.15	Type C16 for axis
CD-G06	63	18 ^{-0.050} _{-0.093}	105.4	17	97.8	2.45	1.35	Type C18 for axis

* Retaining rings are included.

* A clevis pin and a knuckle pin are common for the bore size ø80 and ø100.

Rod End Nut

Material: Carbon steel

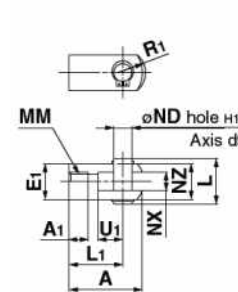


Part no.	Applicable bore size	d	H1	B1	C	C
NT-02	20	M8x1.25	5	13	(15)	12.5
NT-03	25,32	M10x1.25	6	17	(19.6)	16.5
NT-G04	40	M14x1.5	8	19	(21.9)	15
NT-05	50,63	M18x1.5	11	27	(31.2)	26
NT-08	80	M22x1.5	13	32	(37.0)	31
NT-10	100	M26x1.5	16	41	(47.3)	39

Double Knuckle Joint

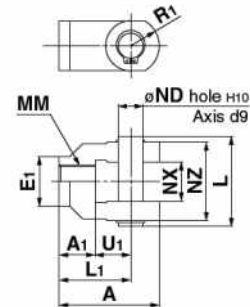
Y-G02, G03

Material: Carbon steel



Y-G04, G05, G08, G10

Material: Cast iron



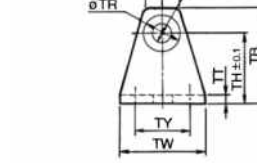
Part no.	Applicable bore size	A	A1	E1	L1	MM	R1	U1	ND	NX	NZ	L	Included pin part no.
Y-G02	20	34	8.5	16	25	M8x1.25	10.3	11.5	8	8 ^{+0.4} _{-0.2}	16	21	IY-G02
Y-G03	25,32	41	10.5	20	30	M10x1.25	12.8	14	10	10 ^{+0.4} _{-0.2}	20	25.6	IY-G03
Y-G04	40	42	16	22	30	M14x1.5	12	14	18	18 ^{+0.5} _{-0.3}	36	41.6	IY-G04
Y-G05	50,63	56	20	28	40	M18x1.5	16	20	22	22 ^{+0.5} _{-0.3}	44	50.6	IY-G05
Y-G08	80	71	23	38	50	M22x1.5	21	27	28	28 ^{+0.5} _{-0.3}	56	64	IY-G08
Y-G10	100	79	24	44	55	M26x1.5	24	31	32	32 ^{+0.5} _{-0.3}	64	72	IY-G10

* A knuckle pin and retaining rings are included.

Pivot Bracket

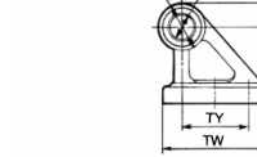
ø20 to ø63

Material: Carbon steel



ø80, ø100

Material: Cast iron



Part no.	Applicable bore size	TB	Td	TE	TF	TH	TN	TR	TT
CG-020-24A	20	36	8	10	5.5	25	(29.3)	13	3.2
CG-025-24A	25	43	10	10	5.5	30	(33.1)	15	3.2
CG-032-24A	32	50	12	10	6.6	35	(40.4)	17	4.5
CG-040-24A	40	58	14	10	6.6	40	(49.2)	21	4.5
CG-050-24A	50	70	16	20	9	50	(60.4)	24	6
CG-063-24A	63	82	18	20	11	60	(74.6)	26	8
CG-080-24A	80	73	18	-	11	55	28 ^{-0.1} _{-0.3}	36	11
CG-100-24A	100	90	22	-	13.5	65	32 ^{-0.1} _{-0.3}	50	12

Part no.	Applicable bore size	TU	TV	TW	TX	TY	TZ	Applicable pin O.D.
CG-020-24A	20	(18.1)	(35.8)	42	16	28	38.3	8d ₉ ^{-0.040} _{-0.076}
CG-025-24A	25	(20.7)	(39.8)	42	20	28	42.1	10d ₉ ^{-0.040} _{-0.076}
CG-032-24A	32	(23.6)	(49.4)	48	22	28	53.8	12d ₉ ^{-0.050} _{-0.093}
CG-040-24A	40	(27.3)	(58.4)	56	30	30	64.6	14d ₉ ^{-0.050} _{-0.093}
CG-050-24A	50	(29.4)	(72.4)	64	36	36	79.2	16d ₉ ^{-0.050} _{-0.093}
CG-063-24A	63	(34.3)	(90.4)	74	46	46	97.2	16d ₉ ^{-0.050} _{-0.093}
CG-080-24A	80	-	-	72	85	45	110	16d ₉ ^{-0.050} _{-0.093}
CG-100-24A	100	-	-	93	100	60	130	22d ₉ ^{-0.065} _{-0.117}

Mounting Brackets, Rod End Brackets, and Nut Material: Stainless Steel

Part No.

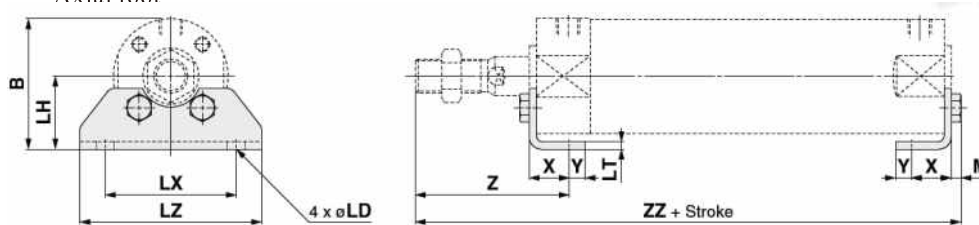
Bore size	Axial foot*1	Single knuckle joint	Double knuckle joint*1	Rod end nut
20	-	I-G02SUS	Y-G02SUS	NT-02SUS
25	-	I-G03SUS	Y-G03SUS	NT-03SUS
32	CG-L032SUS			
40	CG-L040SUS	I-G04SUS	Y-G04SUS	NT-G04SUS
50	CG-L050SUS	I-G05SUS	Y-G05SUS	NT-05SUS
63	CG-L063SUS			
80	CG-L080SUS	I-G08SUS	Y-G08SUS	NT-08SUS
100	CG-L0100SUS	I-G10SUS	Y-G10SUS	NT-10SUS

*1 A knuckle pin and retaining rings are shipped together. Refer to the XC27 for details on stainless steel double clevis pins and double knuckle pins. The accessories need to be ordered separately from the cylinder.

Dimensions

The single knuckle joint, double knuckle joint, mounting nut, and rod end nut are the same as the standard type.

Axial foot



Bore size	B	LD	LH	LT	LX	LZ	M	X	Y	Z	ZZ
32	44	7.2	[25]	[3]	[44]	60	[3.5]	[16]	6	[53]	[117.5(125.5)]
40	53.5	7.2	[30]	[3]	[54]	75	[4]	[16.5]	6.5	[63.5]	[135(144)]
50	69	[10]	[40]	4	[66]	90	5.5	21.5	11.5	[75.5]	[157.5(169.5)]
63	81	[12]	[45]	4	[82]	110	7	21.5	11.5	[75.5]	159(171)
80	99.5	12	[55]	4	[100]	130	7	28	17	[95]	190(204)
100	125	[14]	[70]	[6]	[120]	160	8	[30]	15	[95]	193(207)

*1 []: Same as the standard type (): Denotes the dimensions for long strokes

*2 Supplied with 4 mounting screws.

Special function cylinder

Series	Action/Type	Cushion	Applicable bore size
CG1 (Standard type)	Double acting	Single rod	ø20 to ø100
		Rubber	
		Air	
		Double rod	
CG1K (Non-rotating rod type)	Double acting	Single rod	ø20 to ø63
		Rubber	
		Air	
		Double rod	
CG1R (Direct mount type)	Double acting Single rod	Rubber	ø20 to ø63
		Air	
CG1KR (Direct mount, Non-rotating rod type)	Double acting Single rod	Rubber	ø20 to ø63
CBG1 (With end lock)	Double acting Single rod	Rubber	ø20 to ø100
		Air	
CG1□Y (Smooth Cylinder)	Double acting Single rod	-	ø20 to ø100

CG1 Series

CG1R Series

CG1K Series

CBG1 Series

CG1KR Series

*) Please contact the us for details.

**) Our company can provide for various other purposes cylinders. Please contact us.