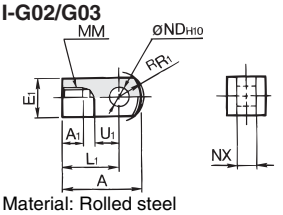
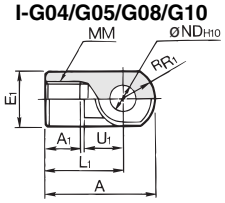
Series CG1
Accessory Bracket Dimensions

Single Knuckle Joint

I-G02/G03



I-G04/G05/G08/G10

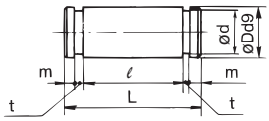


Material: Cast iron

Material: Rolled steel

Part no.	Applicable bore (mm)	A	A1	E1	L1	MM	R1	U1	NDH10	NX
I-G02	20	34	8.5	□16	25	M8 x 1.25	10.3	11.5	$8^{+0.058}_{0}$	$8^{-0.2}_{-0.4}$
I-G03	25, 32	41	10.5	□20	30	M10 x 1.25	12.8	14	$10^{+0.058}_{0}$	$10^{-0.2}_{-0.4}$
I-G04	40	42	14	ø22	30	M14 x 1.5	12	14	$10^{+0.058}_{0}$	$18^{-0.3}_{-0.5}$
I-G05	50, 63	56	18	ø28	40	M18 x 1.5	16	20	$14^{+0.070}_{0}$	$22^{-0.3}_{-0.5}$
I-G08	80	71	21	ø38	50	M22 x 1.5	21	27	$18^{+0.070}_{0}$	$28^{-0.3}_{-0.5}$
I-G10	100	79	21	ø44	55	M26 x 1.5	24	31	$22^{+0.084}_{0}$	$32^{-0.3}_{-0.5}$

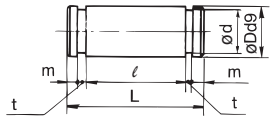
Knuckle Pin



Material: Carbon steel

Part no.	Applicable bore (mm)	Dd9	L	d	ℓ	m	t	Applicable snap ring
IY-G02	20	$8^{-0.040}_{-0.076}$	21	7.6	16.2	1.5	0.9	Type C 8 for axis
IY-G03	25, 32	$10^{-0.040}_{-0.076}$	25.6	9.6	20.2	1.55	1.15	Type C 10 for axis
IY-G04	40	$10^{-0.040}_{-0.076}$	41.6	9.6	36.2	1.55	1.15	Type C 10 for axis
IY-G05	50, 63	$14^{-0.050}_{-0.093}$	50.6	13.4	44.2	2.05	1.15	Type C 14 for axis
IY-G08	80	$18^{-0.050}_{-0.093}$	64	17	56.2	2.55	1.35	Type C 18 for axis
IY-G10	100	$22^{-0.065}_{-0.117}$	72	21	64.2	2.55	1.35	Type C 22 for axis

Clevis Pin



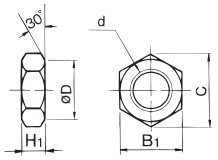
Material: Carbon steel

Part no.	Applicable bore (mm)	Dd9	L	d	ℓ	m	t	Applicable snap ring
CD-G02	20	$8^{-0.040}_{-0.076}$	43.4	7.6	38.6	1.5	0.9	Type C 8 for axis
CD-G25	25	$10^{-0.040}_{-0.076}$	48	9.6	42.6	1.55	1.15	Type C 10 for axis
CD-G03	32	$12^{-0.050}_{-0.093}$	59.4	11.5	54	1.55	1.15	Type C 12 for axis
CD-G04	40	$14^{-0.050}_{-0.093}$	71.4	13.4	65	2.05	1.15	Type C 14 for axis
CD-G05	50	$16^{-0.050}_{-0.093}$	86	15.2	79.6	2.05	1.15	Type C 16 for axis
CD-G06	63	$18^{-0.050}_{-0.093}$	105.4	17	97.8	2.45	1.35	Type C 18 for axis

∗ Clevis pin and knuckle pin are common for bore size ø80 and ø100.

Rod End Nut

Material: Rolled steel

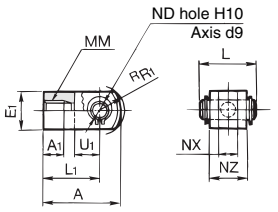


Part no.	Applicable bore (mm)	d	H1	B1	C	D
NT-02	20	M8 x 1.25	5	13	(15.0)	12.5
NT-03	25, 32	M10 x 1.25	6	17	(19.6)	16.5
NT-G04	40	M14 x 1.5	8	19	(21.9)	18
NT-05	50, 63	M18 x 1.5	11	27	(31.2)	26
NT-08	80	M22 x 1.5	13	32	(37.0)	31
NT-10	100	M26 x 1.5	16	41	(47.3)	39

Double Knuckle Joint

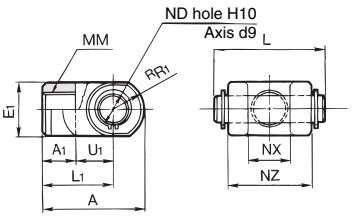
Y-G02/G03

Material: Rolled steel



Y-G04/G05/G08/G10

Material: Cast iron



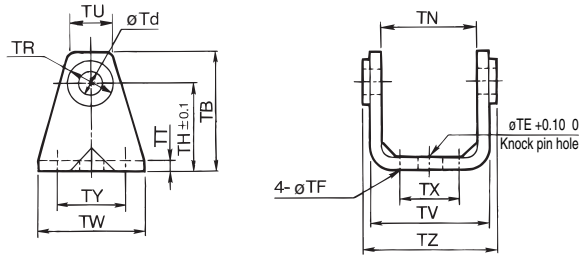
Part no.	Applicable bore (mm)	A	A1	E1	L1	MM	R1	U1	ND	NX	NZ	L	Applicable pin part no.
Y-G02	20	34	8.5	□16	25	M8 x 1.25	10.3	11.5	8	$8^{+0.4}_{+0.2}$	16	21	IY-G02
Y-G03	25, 32	41	10.5	□20	30	M10 x 1.25	12.8	14	10	$10^{+0.4}_{+0.2}$	20	25.6	IY-G03
Y-G04	40	42	16	ø22	30	M14 x 1.5	12	14	10	$18^{+0.5}_{+0.3}$	36	41.6	IY-G04
Y-G05	50, 63	56	20	ø28	40	M18 x 1.5	16	20	14	$22^{+0.5}_{+0.3}$	44	50.6	IY-G05
Y-G08	80	71	23	ø38	50	M22 x 1.5	21	27	18	$28^{+0.5}_{+0.3}$	56	64	IY-G08
Y-G10	100	79	24	ø44	55	M26 x 1.5	24	31	22	$32^{+0.5}_{+0.3}$	64	72	IY-G10

∗ Knuckle pin and set ring are shipped together.

Pivot Bracket (Order separately)

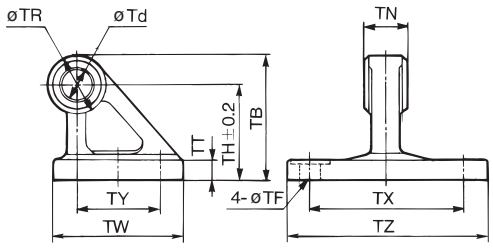
ø20 to ø63

Material: Rolled steel



ø80, ø100

Material: Cast iron

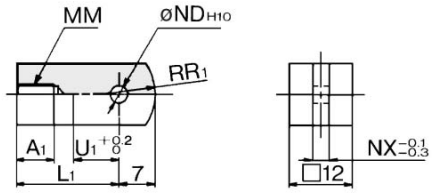


Part no.	Applicable bore (mm)	TB	Td	TE	TF	TH	TN	TR	TT
CG-020-24A	20	36	8	10	5.5	25	(29.3)	13	3.2
CG-025-24A	25	43	10	10	5.5	30	(33.1)	15	3.2
CG-032-24A	32	50	12	10	6.6	35	(40.4)	17	4.5
CG-040-24A	40	58	14	10	6.6	40	(49.2)	21	4.5
CG-050-24A	50	70	16	20	9	50	(60.4)	24	6
CG-063-24A	63	82	18	20	11	60	(74.6)	26	8
CG-080-24A	80	73	18	—	11	55	28^{-01}_{-03}	36	11
CG-100-24A	100	90	22	—	13.5	65	32^{-01}_{-03}	50	12

Part no.	Applicable bore (mm)	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	(29.7)	(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	$18d_9^{-0.050}_{-0.093}$
CG-080-24A	80	—	—	72	85	45	110	$18d_9^{-0.050}_{-0.093}$
CG-100-24A	100	—	—	93	100	60	130	$22d_9^{-0.065}_{-0.117}$

Accessory Bracket Dimensions

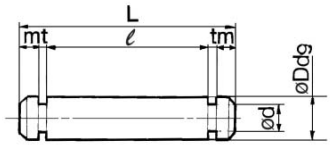
Single Knuckle Joint



Material: Rolled steel

Part no.	Applicable bore (mm)	A_1	L_1	MM	ND^{H10}	NX	R_1	U_1
I-J010B	**10**	8	21	M4 x 0.7	3.3 +0.048 0	3.1	8	9
I-J016B	**16**	8	25	M5 x 0.8	5.3 +0.048 0	6.4	12	14

Clevis Pin

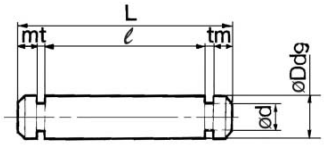


Material: Stainless steel

Part no.	Applicable bore (mm)	Dd9	d	L	ℓ	m	t	Applicable snap ring
CD-J010	**10**	3.3 -0.030 -0.060	3	15.2	12.2	1.2	0.3	Type C 3.2
CD-Z015	**16**	5.3 -0.030 -0.060	4.8	22.7	18.3	1.5	0.7	Type C 5
CD-JA010*	**10**	3.3 -0.030 -0.060	3	18.2	15.2	1.2	0.3	Type C 3.2

* For ø10 double clevis style, with air cushion and built-in speed controller.

Knuckle Pin



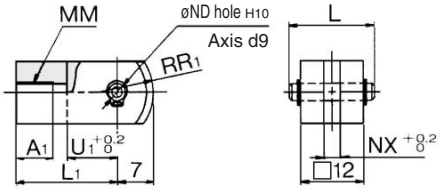
Material: Stainless steel

Part no.	Applicable bore (mm)	Dd9	d	L	ℓ	m	t	Applicable snap ring
CD-J010	**10**	3.3 -0.030 -0.060	3	15.2	12.2	1.2	0.3	Type C 3.2
IY-J015	**16**	5.3 -0.030 -0.060	4.8	16.6	12.2	1.5	0.7	Type C 5

* For size ø10, clevis pin is diverted.

Double Knuckle Joint

* Knuckle pin and set ring are shipped together.

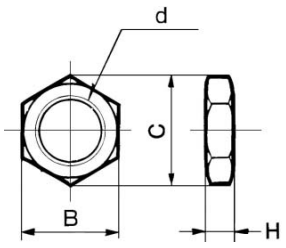


Material: Rolled steel

Part no.	Applicable bore (mm)	A_1	L	L_1	MM
Y-J010B	**10**	8	15.2	21	M4 x 0.7
Y-J016B	**16**	11	16.6	21	M5 x 0.8

Part no.	ND_{d9}	ND_{H10}	NX	R_1	U_1
Y-J010B	3.3 -0.030 -0.060	3.3 +0.048 0	3.2	8	10
Y-J016B	5.3 -0.030 -0.060	5.3 +0.048 0	6.5	12	10

Mounting Nut

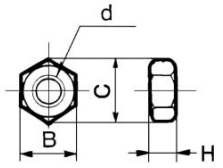


Material: Brass

Part no.	Applicable bore (mm)	B	C	d	H
SNJ-006B	**6**	8	9.2	M6 x 1.0	4
SNJ-010B	**10**	11	12.7	M8 x 1.0	4
SNJ-016B	**16**	14	16.2	M10 x 1.0	4
SNKJ-016B*	**16**	17	19.6	M12 x 1.0	4

* For ø16 non-rotating type. (Use SNJ-016B for ø10 non-rotating type.)

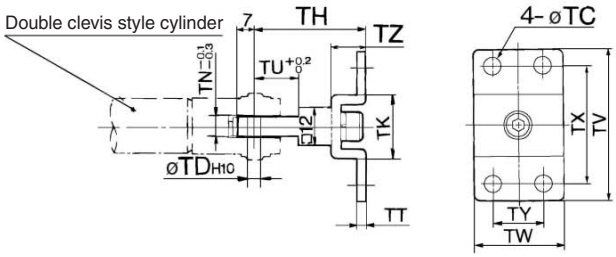
Rod End Nut



Material: Iron

Part no.	Applicable bore (mm)	B	C	d	H
NTJ-006A	**6**	5.5	6.4	M3 x 0.5	2.4
NTJ-010A	**10**	7	8.1	M4 x 0.7	3.2
NTJ-015A	**16**	8	9.2	M5 x 0.8	4

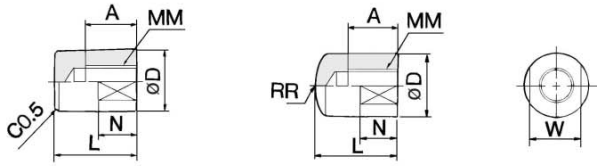
T-bracket



Part no.	Applicable bore (mm)	TC	TD_{H10}	TH	TK	TN	TT	TU	TV	TW	TX	TY	TZ
CJ-T010B	**10**	4.5	3.3 +0.048 0	29	18	3.1	2	9	40	22	32	12	8
CJ-T016B	**16**	5.5	5 +0.048 0	35	20	6.4	2.3	14	48	28	38	16	10

Rod End Cap

Flat type/CJ-CF□□□ Round type/CJ-CR□□□



Material: Polyacetal

Part no.		Applicable bore (mm)	A	D	L	MM	N	R	W
Flat type	Round type								
CJ-CF006	**CJ-CR006**	6	6	8	11	M3 x 0.5	5	8	6
CJ-CF010	**CJ-CR010**	10	8	10	13	M4 x 0.7	6	10	8
CJ-CF016	**CJ-CR016**	16	10	12	15	M5 x 0.8	7	12	10

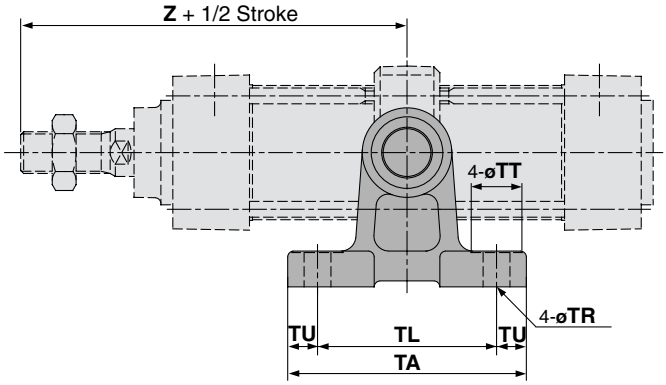
Trunnion/Double Clevis Pivot Bracket

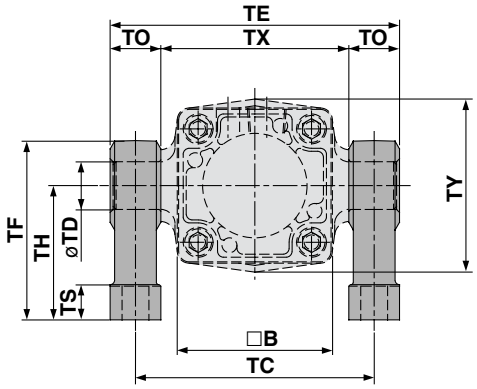
Part No.

Description \ Cylinder model	MB□32	MB□40	MB□50	MB□63	MB□80	MB□100	MB□125
Trunnion pivot bracket Note 1)	MB-S03	MB-S04		MB-S06		MB-S10	MB-S12
Double clevis pivot bracket	MB-B03		MB-B05		MB-B08		MB-B12

Note 1) When ordering a trunnion pivot bracket, order 2 pcs. for 1 cylinder.

Trunnion pivot bracket





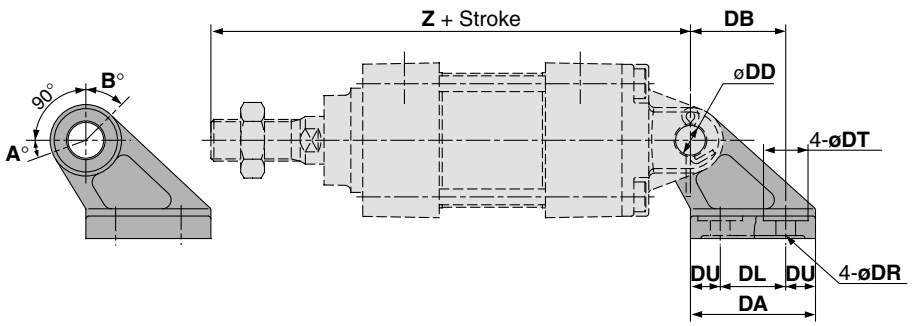
(mm)

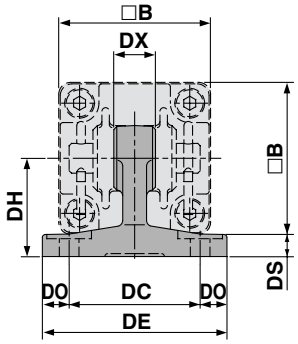
Part no.	Bore size (mm)	B	TA	TL	TU	TC	TX	TE	TO	TR	TT	TS	TH	TF	Z**	TDH10
MB-S03	32	46	62	45	8.5	62	50	74	12	7	13	10	35	47	89	$12^{+0.070}_{0}$
MB-S04	40	52	80	60	10	80	63	97	17	9	17	12	45	60	93	$16^{+0.070}_{0}$
	50	65	80	60	10	92	75	109	17	9	17	12	45	60	105	$16^{+0.070}_{0}$
MB-S06	63	75	100	70	15	110	90	130	20	11	22	14	60	80	105	$20^{+0.084}_{0}$
	80	95	100	70	15	130	110	150	20	11	22	14	60	80	129	$20^{+0.084}_{0}$
MB-S10	100	114	120	90	15	158	132	184	26	13.5	24	17	75	100	129	$25^{+0.084}_{0}$
MB-S12	125	136	142	105	18.5	186	160	212	26	13.5	24	25	85	115	157	$25^{+0.084}_{0}$

Without Air Cushion

Bore size (mm)	Z
32	92
40	96
50	109
63	109
80	134
100	134
125	163

Double clevis pivot bracket





(mm)

Part no.	Bore size (mm)	B	DA	DB	DL	DU	DC	DX	DE	DO	DR	DT	DS	DH	Z*	DDH10
MB-B03	32	46	42	32	22	10	44	14	62	9	6.6	15	7	33	154	$10^{+0.058}_{0}$
	40	52	42	32	22	10	44	14	62	9	6.6	15	7	33	158	$10^{+0.058}_{0}$
MB-B05	50	65	53	43	30	11.5	60	20	81	10.5	9	18	8	45	182	$14^{+0.070}_{0}$
	63	75	53	43	30	11.5	60	20	81	10.5	9	18	8	45	182	$14^{+0.070}_{0}$
MB-B08	80	95	73	64	45	14	86	30	111	12.5	11	22	10	65	228	$22^{+0.084}_{0}$
	100	114	73	64	45	14	86	30	111	12.5	11	22	10	65	228	$22^{+0.084}_{0}$
MB-B12	125	136	90	78	60	15	110	32	136	13	13.5	24	14	75	267	$25^{+0.084}_{0}$

Without Air Cushion

Bore size (mm)	Z
32	160
40	164
50	190
63	190
80	238
100	238
125	279

Rotating Angle

Bore size (mm)	A°	B°	A° + B° + 90°
32, 40	25°	45°	160°
50, 63	40°	60°	190°
80, 100	30°	55°	175°
125	30°	50°	170°

* **Mounting plate**
Model without air cushion is designed to include rubber bumpers. The overall length is longer than the cylinder with air cushion as follows because the bumpers are attached to the both sides of the piston; ø32, ø40: +6 mm, ø50, ø63: +8 mm, ø80, ø100: +10 mm, ø125: +12 mm

** **Trunnion pivot bracket**
Model without air cushion is designed to include rubber bumpers. The overall length is longer than the cylinder with air cushion as follows because the bumpers are attached to the both sides of the piston; ø32, ø40: +3 mm, ø50, ø63: +4 mm, ø80, ø100: +5 mm, ø125: +6 mm