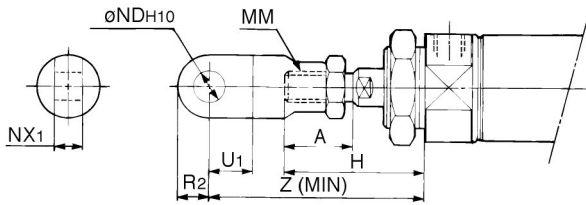


Series CM2 Accessory Dimensions

Single Knuckle Joint

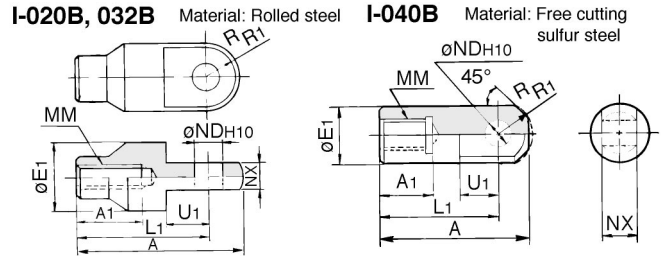
(mm)



Bore size	A	H	MM	NDH10	NX1	U1	R2	Z
20	18	41	M8 X 1.25	9 ^{+0.058} ₀	9 ^{-0.1} _{-0.2}	14	10	66
25/32	22	45	M10 X 1.25	9 ^{+0.058} ₀	9 ^{-0.1} _{-0.2}	14	10	69
40	24	50	M14 X 1.5	12 ^{+0.070} ₀	16 ^{-0.1} _{-0.3}	20	14	92

Single Knuckle Joint

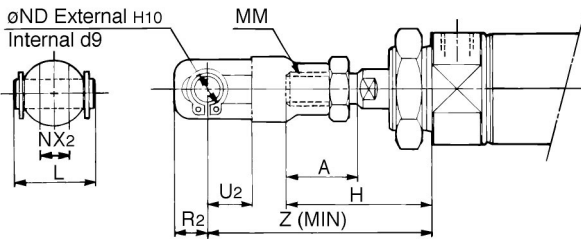
(mm)



Part No.	Applicable bore size	A	A1	E1	L1	MM	NDH10	NX	R1	U1
I-020B	20	46	16	20	36	M8 X 1.25	9 ^{+0.058} ₀	9 ^{-0.1} _{-0.2}	10	14
I-032B	25/32	48	18	20	38	M10 X 1.25	9 ^{+0.058} ₀	9 ^{-0.1} _{-0.2}	10	14
I-040B	40	69	22	24	55	M14 X 1.5	12 ^{+0.070} ₀	16 ^{-0.1} _{-0.3}	15.5	20

Double Knuckle Joint

(mm)

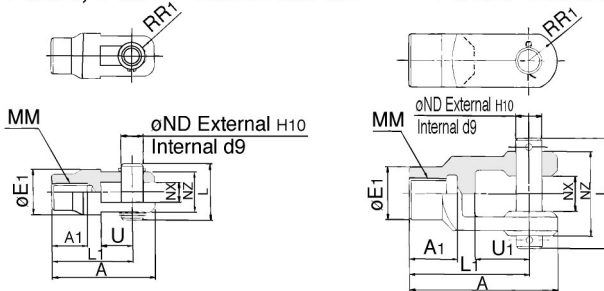


Bore size	A	H	L	MM	ND	NX2	R2	U2	Z
20	18	41	25	M8 X 1.25	9	9 ^{+0.2} _{+0.1}	10	14	66
25/32	22	45	25	M10 X 1.25	9	9 ^{+0.2} _{+0.1}	10	14	69
40	24	50	49.7	M14 X 1.5	12	16 ^{+0.3} _{+0.1}	13	25	92

Double Knuckle Joint

(mm)

Y-020B, Y-032B Material: Rolled steel Y-040B Material: Cast iron



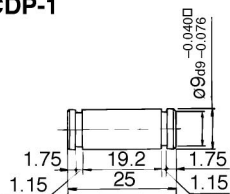
Part No.	Applicable bore size	A	A1	E1	L	L1	MM	ND	NX	NZ	R1	U1	Applicable pin part No.	Snap ring/Cotter pin size
Y-020B	20	46	16	20	25	36	M8 X 1.25	9	9 ^{+0.2} _{+0.1}	18	5	14	CDP-1	C9 type for pivot
Y-032B	25,32	48	18	20	25	38	M10 X 1.25	9	9 ^{+0.2} _{+0.1}	18	5	14	CDP-1	C9 type for pivot
Y-040B	40	68	22	24	49.7	55	M14 X 1.5	12	16 ^{+0.3} _{+0.1}	38	13	25	CDP-3	ø3 X 18ℓ

*Clevis pins and snap rings (cotter pins for bore size 40) are attached.

Double Clevis Pin/Material: Carbon steel

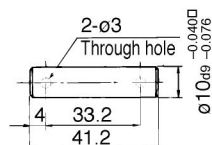
(mm)

Bore size: ø20, ø25, ø32
CDP-1



Snap ring: C9 type for pivot

Bore size: ø40
CDP-2

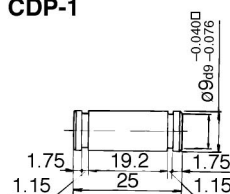


Cotter pin: ø3 X 18ℓ

Double Knuckle Pin/Material: Carbon steel

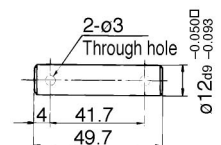
(mm)

Bore size: ø20, ø25, ø32
CDP-1



Snap ring: C9 type for pivot

Bore size: ø40
CDP-3



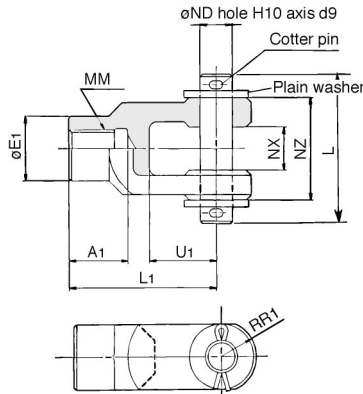
Cotter pin: ø3 X 18ℓ

Series CA1

Accessories Dimensions



Y Type Double Knuckle Joint *Pin, snap ring, etc. for double clevis and double knuckle joint are packed together.

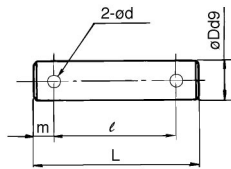


Material: Casting steel

Part No.	Cylinder bore (mm)	A1	E1	L1	MM	RR1	U1	ND	NX	NZ	L	Cotter pin size	Plain washer size
Y-04C	40	22	24	55	M14 X 1.5	13	25	12	16 ^{+0.3} / _{+0.1}	38	55.5	ø3 X 18ℓ	MIGAKIMARU 12
Y-05C	50-63	27	28	60	M18 X 1.5	15	27	12	16 ^{+0.3} / _{+0.1}	38	55.5	ø3 X 18ℓ	MIGAKIMARU 12
Y-08C	80	37	36	71	M22 X 1.5	19	28	18	28 ^{+0.3} / _{+0.1}	55	76.5	ø4 X 25ℓ	MIGAKIMARU 18
Y-10C	100	37	40	83	M 26 X 1.5	21	38	20	30 ^{+0.3} / _{+0.1}	61	83	ø4 X 30ℓ	MIGAKIMARU 20

*Knuckle pin, cotter pin and plain washer are packed together.

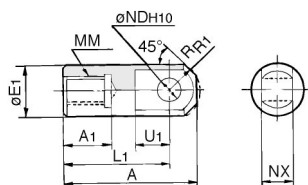
Clevis Pin/Knuckle Pin



Material: Carbon steel

Part No.	Cylinder bore		Dd9	L	ℓ	m	d hole	Cotter pin size	Plain washer size
	Clevis	Knuckle							
CDP-2A	40	-	10 ^{-0.040} / _{-0.076}	46	38	4	3	ø3 X 18ℓ	MIGAKIMARU 10
CDP-3A	50	40-50-63	12 ^{-0.050} / _{-0.093}	55.5	47.5	4	3	ø3 X 18ℓ	MIGAKIMARU 12
CDP-4A	63	-	16 ^{-0.050} / _{-0.093}	71	61	5	4	ø4 X 25ℓ	MIGAKIMARU 16
CDP-5A	-	80	18 ^{-0.050} / _{-0.093}	76.5	66.5	5	4	ø4 X 25ℓ	MIGAKIMARU 18
CDP-6A	80	100	20 ^{-0.065} / _{-0.117}	83	73	5	4	ø4 X 30ℓ	MIGAKIMARU 20
CDP-7A	100	-	25 ^{-0.065} / _{-0.117}	88	78	5	4	ø4 X 36ℓ	MIGAKIMARU 24

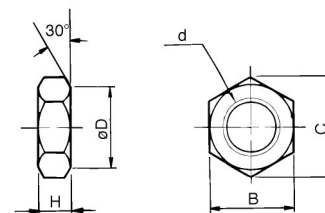
I Type Single Knuckle Joint



Material: Sulfur free cutting steel

Part No.	Cylinder bore (mm)	A	A1	E1	L1	MM	R1	U1	NDH10	NX
I-04	40	69	22	24	55	M14 X 1.5	15.5	20	12 ^{+0.070} / ₀	16 ^{-0.1} / _{-0.3}
I-05	50/63	74	27	28	60	M18 X 1.5	15.5	20	12 ^{+0.070} / ₀	16 ^{-0.1} / _{-0.3}
I-08	80	91	37	36	71	M22 X 1.5	22.5	26	18 ^{+0.070} / ₀	28 ^{-0.1} / _{-0.3}
I-10	100	105	37	40	83	M26 X 1.5	24.5	28	20 ^{+0.084} / ₀	30 ^{-0.1} / _{-0.3}

Rod end nut (Standard equipment)



Material: Rolled steel

Part No.	Cylinder bore (mm)	d	H	B	C	D
NT-04	40	M14 X 1.5	8	22	25.4	21
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



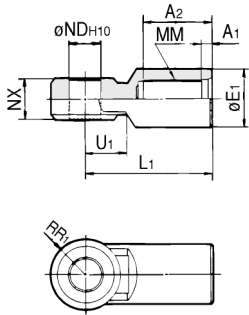
AccessorySCA1 Bore size , #8

Air Cylinder Series CS1 Accessory Dimensions

Accessories



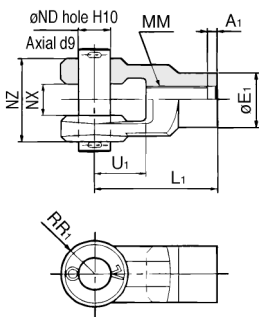
I type single knuckle joint*



Material: Cast iron

Part No.	Bore (mm)	A ₁	A ₂	E ₁	L ₁	MM	ND _{H10}	NX	RR ₁	U ₁
I-12	125	8	54	46	100	M30 X 1.5	25 ^{+0.084} ₀	32 ^{-0.1} _{-0.3}	27	33
I-14	140	8	54	48	105	M30 X 1.5	28 ^{+0.084} ₀	36 ^{-0.1} _{-0.3}	30	39
I-16	160	8	60	55	110	M36 X 1.5	32 ^{+0.1} ₀	40 ^{-0.1} _{-0.3}	34	39
I-18	180	8	67	70	125	M40 X 1.5	40 ^{+0.1} ₀	50 ^{-0.1} _{-0.3}	42.5	44
I-20	200	8	67	70	125	M45 X 1.5	40 ^{+0.1} ₀	50 ^{-0.1} _{-0.3}	42.5	44
I-25	250	9	75.5	86	160	M56 X 2	50 ^{+0.1} ₀	63 ^{-0.1} _{-0.3}	53	66
I-30	300	9	84.5	105	175	M64 X 2	63 ^{+0.12} ₀	80 ^{-0.1} _{-0.3}	66	71

Y type double knuckle joint *



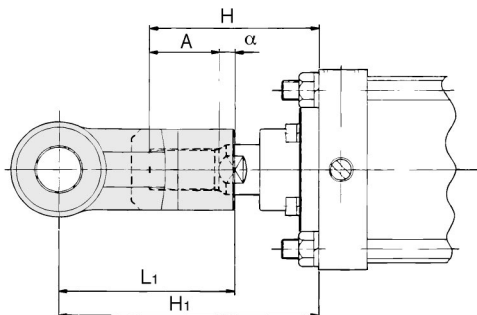
Material: Cast iron

Part No.	Bore (mm)	A ₁	E ₁	L ₁	MM	ND _{H10}	NX	NZ	RR ₁	U ₁
Y-12	125	8	46	100	M30 X 1.5	25 ^{+0.084} ₀	32 ^{+0.3} _{+0.1}	64 ^{-0.1} _{-0.3}	27	42
Y-14	140	8	48	105	M30 X 1.5	28 ^{+0.084} ₀	36 ^{+0.3} _{+0.1}	72 ^{-0.1} _{-0.3}	30	47
Y-16	160	8	55	110	M36 X 1.5	32 ^{+0.1} ₀	40 ^{+0.3} _{+0.1}	80 ^{-0.1} _{-0.3}	34	46
Y-18	180	8	70	125	M40 X 1.5	40 ^{+0.1} ₀	50 ^{+0.3} _{+0.1}	100 ^{-0.1} _{-0.3}	42.5	54
Y-20	200	8	70	125	M45 X 1.5	40 ^{+0.1} ₀	50 ^{+0.3} _{+0.1}	100 ^{-0.1} _{-0.3}	42.5	54
Y-25	250	9	86	160	M56 X 2	50 ^{+0.1} ₀	63 ^{+0.3} _{+0.1}	126 ^{-0.1} _{-0.3}	53	81
Y-30	300	9	105	175	M64 X 2	63 ^{+0.12} ₀	80 ^{+0.3} _{+0.1}	160 ^{-0.1} _{-0.3}	66	87

* Use a single knuckle joint or a double knuckle joint individually.
(Screw it entirely over the rod end threads and tighten it.)

* To use a single knuckle joint or a double knuckle joint concurrently with a rod end nut, extend dimensions A/H.
(To extend dimensions A/H, refer to the table below, and specify the product as Order Made -XAO.)

Single/Double knuckle joint mounting

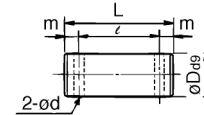


Symbol Bore (mm)	H	A	α	L ₁	H ₁	Applicable knuckle joint part No.	
						I type single knuckle	Y type double knuckle
125	110	50	3.5	100	156.5	I-12	Y-12
140	110	50	3.5	105	161.5	I-14	Y-14
160	120	56	3.5	110	170.5	I-16	Y-16
180 / 200	135	63	3.5	125	193.5	I-18, I-20	Y-18, Y-20
250	160	71	3.5	160	245.5	I-25	Y-25
300	175	80	3.5	175	266.5	I-30	Y-30

Accessory SCS1 Bore size #9



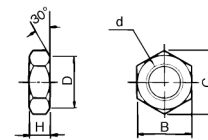
Knuckle pin, Clevis pin



Material: Carbon steel

Part No.	Bore (mm)	Dd ₉	L	l	m	d (Drill through)	Cotter pin
IY-12	125	25 ^{-0.065} _{-0.117}	79.5	69.5	5	4	ø4 X 40
IY-14	140	28 ^{-0.065} _{-0.117}	86.5	76.5	5	4	ø4 X 40
IY-16	160	32 ^{-0.080} _{-0.142}	94.5	84.5	5	4	ø4 X 40
IY-18	180/200	40 ^{-0.080} _{-0.142}	115	105	5	4	ø4 X 55
IY-25	250	50 ^{-0.080} _{-0.142}	144	132	6	5	ø5 X 65
IY-30	300	63 ^{-0.100} _{-0.174}	178	166	6	5	ø5 X 80

Rod end nut



Material: Rolled steel

Part No.	Bore (mm)	d	H	B	C	D
NT-12	125/140	M30 X 1.5	18	46	53.1	44
NT-16	160	M36 X 1.5	21	55	63.5	53
NT-18	180	M40 X 1.5	23	60	69.3	57
NT-20	200	M45 X 1.5	27	70	80.8	67
NT-25	250	M56 X 2	34	85	98.1	82
NT-30	300	M64 X 2	38	95	110.0	92

A, H dimensions at using both single/double knuckle joint and rod end nut

Bore (mm)	A	H
125	65	125
140	65	125
160	76	140
180	83	155
200	88	160
250	106	195
300	115	210

Series CQ2

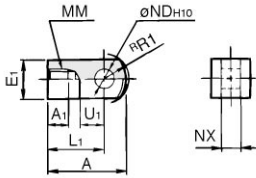
Accessories



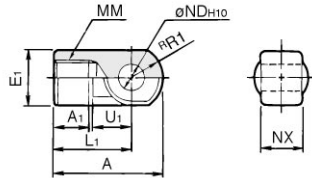
Single knuckle joint

I-G012, I-Z015A
I-G02, I-G03

I-G04, I-G05
I-G08, I-G10



Material: Rolled steel



Material: Cast steel

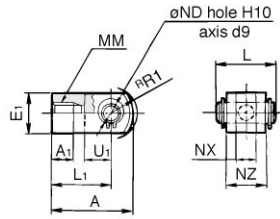
(mm)

Part No.	Bore size (mm)	A	A ₁	E ₁	L ₁	MM	^R R ₁	U ₁	ND _{H10}	NX
I-G012	12	21.5	6	□10	16	M5 X 0.8	6.3	7	5 ^{+0.048} ₀	5 ^{-0.2} _{-0.4}
I-Z015A	16	32	8	□12	25	M6 X 1	8.1	14	5 ^{+0.048} ₀	6.4 ^{-0.1} _{-0.3}
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	41	10.5	□20	30	M10 X 1.25	12.8	14	10 ^{+0.058} ₀	10 ^{-0.2} _{-0.4}
I-G04	32, 40	42	14	∅22	30	M14 X 1.5	12	14	10 ^{+0.058} ₀	18 ^{-0.3} _{-0.5}
I-G05	50, 63	56	18	∅28	40	M18 X 1.5	16	20	14 ^{+0.070} ₀	22 ^{-0.3} _{-0.5}
I-G08	80	71	21	∅38	50	M22 X 1.5	21	27	18 ^{+0.070} ₀	28 ^{-0.3} _{-0.5}
I-G10	100	79	21	∅44	55	M26 X 1.5	24	31	22 ^{+0.084} ₀	32 ^{-0.3} _{-0.5}

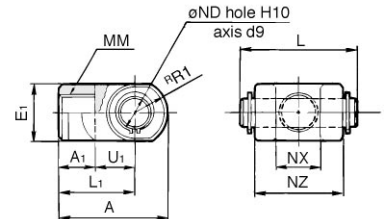
Double knuckle joint

Y-G012, Y-Z015A
Y-G02, Y-G03

Y-G04, Y-G05
Y-G08, Y-G10



Material: Rolled steel



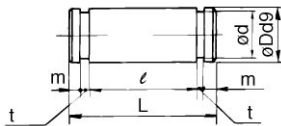
Material: Cast steel

(mm)

Part No.	Bore size (mm)	A	A ₁	E ₁	L ₁	MM	^R R ₁	U ₁	ND _{H10}	NX	NZ	L	Pin part No.
Y-G012	12	21.5	6	□10	16	M5 X 0.8	6.3	7	5 ^{+0.048} ₀	5 ^{-0.4} _{-0.2}	10	14.6	IY-G012
Y-Z015A	16	28	11	□12	21	M6 X 1	8.1	10	5 ^{+0.048} ₀	6.5 ^{-0.2} _{-0.4}	12	16.8	IY-J015
Y-G02	20	34	8.5	□16	25	M8 X 1.25	10.3	11.5	8 ^{+0.058} ₀	8 ^{-0.4} _{-0.2}	16	21	IY-G02
Y-G03	25	41	10.5	□20	30	M10 X 1.25	12.8	14	10 ^{+0.058} ₀	10 ^{-0.4} _{-0.2}	20	26.8	IY-G03
Y-G04	32, 40	42	16	∅22	30	M14 X 1.5	12	14	10 ^{+0.058} ₀	18 ^{-0.5} _{-0.3}	36	41.6	IY-G04
Y-G05	50, 63	56	20	∅28	40	M18 X 1.5	16	20	14 ^{+0.070} ₀	22 ^{-0.5} _{-0.3}	44	50.6	IY-G05
Y-G08	80	71	23	∅38	50	M22 X 1.5	21	27	18 ^{+0.070} ₀	28 ^{-0.5} _{-0.3}	56	64	IY-G08
Y-G10	100	79	24	∅44	55	M26 X 1.5	24	31	22 ^{+0.084} ₀	32 ^{-0.5} _{-0.3}	64	72	IY-G10

*Knuckle pin and snap ring are contained.

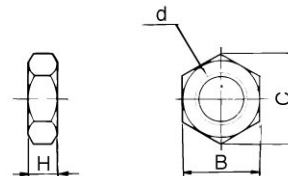
Knuckle pin (Common with double clevis pin)



Material: Carbon steel
(mm)

Part No.	Bore size (mm)	Dd9	L	d	l	m	t	Snap ring
IY-G012	12	5 ^{-0.030} _{-0.060}	14.6	4.8	10.2	1.5	0.7	For axis C shaped 5
IY-J015	16	5 ^{-0.030} _{-0.060}	16.6	4.8	12.2	1.5	0.7	For axis C shaped 5
IY-G02	20	8 ^{-0.040} _{-0.076}	21	7.6	16.2	1.5	0.9	For axis C shaped 8
IY-G03	25	10 ^{-0.040} _{-0.076}	25.6	9.6	20.2	1.55	1.15	For axis C shaped 10
IY-G04	32, 40	10 ^{-0.040} _{-0.076}	41.6	9.6	36.2	1.55	1.15	For axis C shaped 10
IY-G05	50, 63	14 ^{-0.050} _{-0.093}	50.6	13.4	44.2	2.05	1.15	For axis C shaped 14
IY-G08	80	18 ^{-0.050} _{-0.093}	64	17	56.2	2.55	1.35	For axis C shaped 18
IY-G10	100	22 ^{-0.065} _{-0.117}	72	21	64.2	2.55	1.35	For axis C shaped 22

Rod end nut



Material: Carbon steel
(mm)

Part No.	Bore size (mm)	d	H	B	C
NTJ-015A	12	M5 X 0.8	4	8	9.2
NT-015A	16	M6 X 1	5	10	11.5
NT-02	20	M8 X 1.25	5	13	15.0
NT-03	25	M10 X 1.25	6	17	19.6
NT-04	32, 40	M14 X 1.5	8	22	25.4
NT-05	50, 63	M18 X 1.5	11	27	31.2
NT-08	80	M22 X 1.5	13	32	37.0
NT-10	100	M26 X 1.5	16	41	47.3

CAD (Accessory)SCQ2 Bore size B, #11

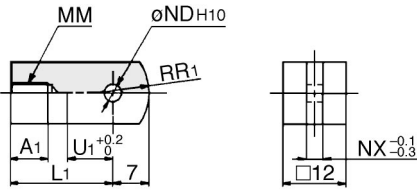
Series CJ2



Accessory Dimensions

(mm)

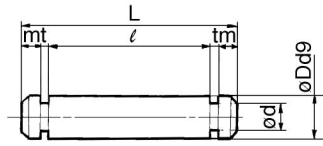
Single knuckle joint



Material: Rolled steel

Part No.	Bore	A1	L1	MM	ND ^{H10}	NX	R1	U1
I-J010B	10	8	21	M4 X 0.7	33 ^{+0.048} ₀	3.1	8	9
I-J016B	16	8	25	M5 X 0.8	5 ^{+0.048} ₀	6.4	12	14

Clevis pin

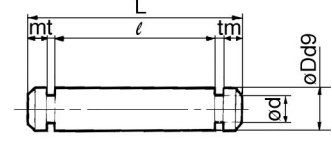


Material: Stainless steel

Part No.	Bore	Dd9	d	L	ℓ	m	t	Set ring
CD-J010	10	33 ^{-0.030} _{-0.060}	3	15.2	12.2	1.2	0.3	C 3.2
CD-Z015	16	5 ^{-0.030} _{-0.060}	4.8	22.7	18.3	1.5	0.7	C 5
CD-JA010*	10	33 ^{-0.030} _{-0.060}	3	18.2	15.2	1.2	0.3	C 3.2

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

Knuckle pin

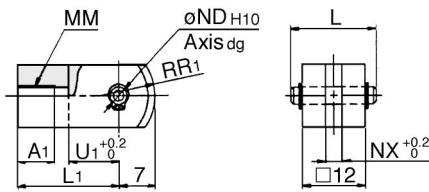


Material: Stainless steel

Part No.	Bore	Dd9	d	L	ℓ	m	t	Set ring
IY-J010	10	33 ^{-0.030} _{-0.060}	3	16.2	12.2	1.7	0.3	C 3.2
IY-J015	16	5 ^{-0.030} _{-0.060}	4.8	16.6	12.2	1.5	0.7	C 5

Double knuckle joint

* Knuckle pins and set rings are attached.

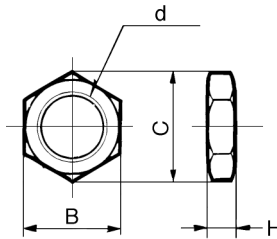


Material: Rolled steel

Part No.	Bore	A1	L	L1	MM
Y-J010B	10	8	16.2	21	M4 X 0.7
Y-J016B	16	11	16.6	21	M5 X 0.8

Part No.	ND ^{d9}	ND ^{H10}	NX	R1	U1
Y-J010B	33 ^{-0.030} _{-0.060}	33 ^{+0.048} ₀	3.2	8	10
Y-J016B	5 ^{-0.030} _{-0.060}	5 ^{+0.048} ₀	6.5	12	10

Mounting nut

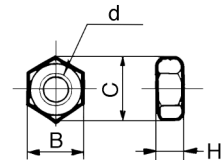


Material: Brass

Part No.	Bore	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 style.
(Use SNJ-016B for ø10 non-rotating style.)

Rod end nut

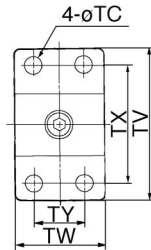
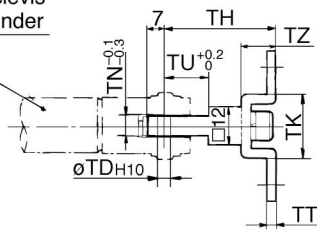


Material: Iron

Part No.	Bore	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

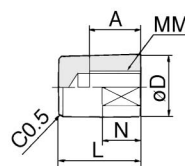
Double clevis style cylinder



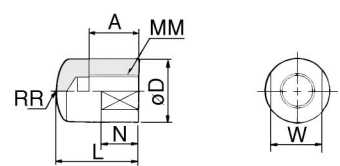
Part No.	Bore	TC	TDH10	TH	TK	TN	TT	TU	TV	TW	TX	TY	TZ
CJ-T010B	10	4.5	3.3 ^{+0.048} ₀	29	18	3.1	2	9	40	22	32	12	8
CJ-T016B	16	5.5	5 ^{+0.048} ₀	35	20	6.4	2.3	14	48	28	38	16	10

Rod end cap

Flat: CJ-CF□□□



Round: CJ-CR□□□



Material: Iron

Part No.		Bore	A	D	L	MM	N	R	W
Flat	Round								
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



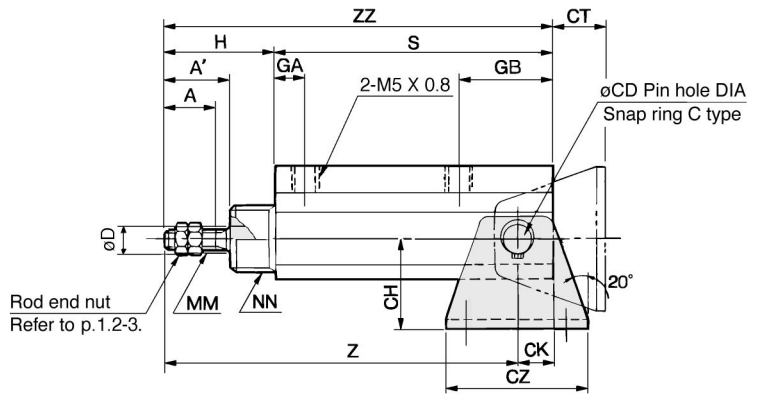
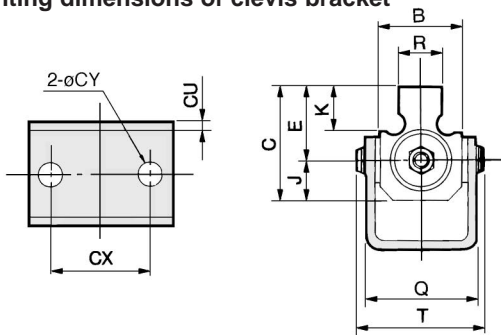
Accessory: SCJ2 [Bore size] #11

Pin Cylinder/Double Acting Single Rod *Series CJP*



CJPT/Without Auto Switch

Mounting dimensions of clevis bracket



Bore (mm)	A	A'	B	C	D	E	GA	GB	H	J	K	MM	NN	Q	T	CD	CH	CK	CT	CU	CX	CY	CZ
6	7	9	14	16.5	3	10.5	6	11	17	6	8	M3 X 0.5	M10 X 1.0	18.5	20.4	3	16	4	12	1.6	18	3.4	26
10	10	12	15	20	5	13	6	17	20	7	8	M4 X 0.7	M12 X 1.0	20.5	23.9	5	20	6.5	13.5	1.6	24	4.5	33
15	12	14	20	24.5	6	15.5	6	18.5	24	9	8	M5 X 0.8	M14 X 1.0	28	31.7	6	25	8	17	2.9	29	5.5	42

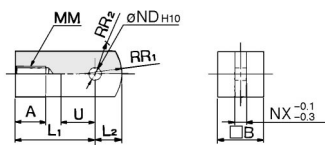
Bore (mm)	S					Z					ZZ					R
	5 st	10 st	15 st	20 st	30 st	5 st	10 st	15 st	20 st	30 st	5 st	10 st	15 st	20 st	30 st	
6	35.5	40.5	45.5	50.5	—	48.5	53.5	58.5	63.5	—	52.5	57.5	62.5	67.5	—	7
10	40.5	45.5	50.5	55.5	65.5	54	59	64	69	79	60.5	65.5	70.5	75.5	85.5	8
15	42	47	52	57	67	58	63	68	73	83	66	71	76	81	91	10

CJPT6.....SCJP6, #5
 CJPT10.....SCJP10, #5
 CJPT15.....SCJP15, #5

- CJ1
- CJP
- CJ2
- CM2
- C85
- CG1
- MB
- C95
- CA1
- CS1

Accessories

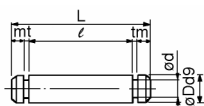
Single Knuckle Joint



Material: Rolled steel

Model	Bore (mm)	A	B	L1	L2	MM	NDH10	NX	R1	R2	U
I-P006	6	5	6	12	3.5	M3 X 0.5	3 ^{+0.040}	3	5	4	5
I-P010	10	6.5	10	16	5.5	M4 X 0.7	5 ^{+0.048}	5	8	6.3	7
I-P015	15	7	12	19	7	M5 X 0.8	6 ^{+0.048}	6	10	7.8	9

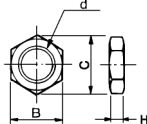
Knuckle Pin



Material: Stainless steel

Model	Bore (mm)	D d9	L	d	ℓ	m	t	Snap ring
IY-P006	6	3 ^{-0.020} _{-0.045}	9	2.85	6.2	0.75	0.65	Clip C type 3
IY-P010	10	5 ^{-0.030} _{-0.060}	13.6	4.8	10.2	1	0.7	C type 5
IY-P015	15	6 ^{-0.030} _{-0.060}	15.8	5.7	12.2	1	0.8	C type 6

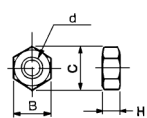
Mounting Nut



Material: Brass

Model	Bore (mm)	d	H	B	C
SNP-006	6	M10 X 1.0	3	14	16.2
SNP-010	10	M12 X 1.0	3	17	19.6
SNP-015	15	M14 X 1.0	4	19	21.9

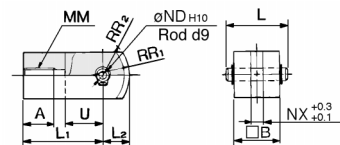
Rod End Nut



Material: Steel

Model	Bore (mm)	d	H	B	C
NTP-006	6	M3 X 0.5	1.8	5.5	6.4
NTP-010	10	M4 X 0.7	2.4	7	8.1
NTP-015	15	M5 X 0.8	3.2	8	9.2

Double Knuckle Joint

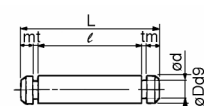


* Knuckle pin and snap ring are sent together.

Material: Rolled steel

Model	Bore (mm)	A	B	L	L1	L2	MM	NDd9	NDH10	NX	R1	R2	U
Y-P006	6	5	6	9	12	3.5	M3 X 0.5	3 ^{-0.020} _{-0.045}	3 ^{+0.040}	3	5	4	5
Y-P010	10	6.5	10	13.6	16	5.5	M4 X 0.7	5 ^{-0.030} _{-0.060}	5 ^{+0.048}	5	8	6.3	7
Y-P015	15	7	12	15.8	19	7	M5 X 0.8	6 ^{-0.030} _{-0.060}	6 ^{+0.048}	6	10	7.8	9

Trunnion Pin



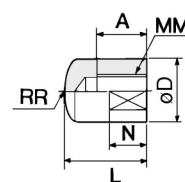
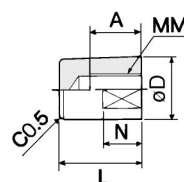
Material: Stainless steel

Model	Bore (mm)	D d9	L	d	ℓ	m	t	Snap ring
CT-P006	6	3 ^{-0.020} _{-0.045}	20.4	2.85	17.6	0.75	0.65	Clip C type 3
CT-P010	10	5 ^{-0.030} _{-0.060}	23.9	4.8	20.5	1	0.7	C type 5
CT-P015	15	6 ^{-0.030} _{-0.060}	31.7	5.7	28.1	1	0.8	C type 6

Rod End Cap

Flat style/CJ-CF□□□

Rounded style/CJ-CR□□□



Material: POM.

Model	Bore (mm)		A	D	L	MM	N	R	W
	Flat style	Rounded style							
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	15	10	12	15	M5 X 0.8	7	12	10

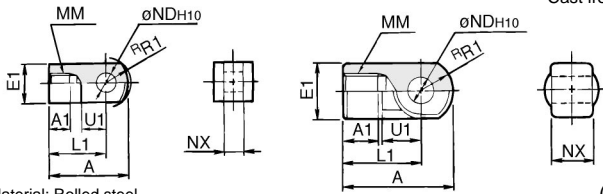
Series CG1 Accessory Dimensions

Single Knuckle Joint

I-G02, G03

I-G04, G05, G08, G10

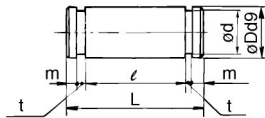
Material: Cast iron



Material: Rolled steel

Part No.	Bore size (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	∅22	30	M14 X 1.5	12	14	10 ^{+0.058} ₀	18 ^{-0.3} _{-0.5}
I-G05	50, 63	56	18	∅28	40	M18 X 1.5	16	20	14 ^{+0.070} ₀	22 ^{-0.3} _{-0.5}
I-G08	80	71	21	∅38	50	M22 X 1.5	21	27	18 ^{+0.070} ₀	28 ^{-0.3} _{-0.5}
I-G10	100	79	21	∅44	55	M26 X 1.5	24	31	22 ^{+0.084} ₀	32 ^{-0.3} _{-0.5}

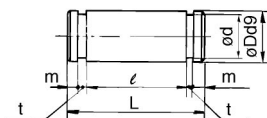
Knuckle Pin



Material: Carbon steel

Part No.	Bore size (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	C-8 type for pivot
IY-G03	25, 32	10 ^{-0.040} _{-0.076}	25.6	9.6	20.2	1.55	1.15	C-10 type for pivot
IY-G04	40	10 ^{-0.040} _{-0.076}	41.6	9.6	36.2	1.55	1.15	C-10 type for pivot
IY-G05	50, 63	14 ^{-0.050} _{-0.093}	50.6	13.4	44.2	2.05	1.15	C-14 type for pivot
IY-G08	80	18 ^{-0.050} _{-0.093}	64	17	56.2	2.55	1.35	C-18 type for pivot
IY-G10	100	22 ^{-0.065} _{-0.117}	72	21	64.2	2.55	1.35	C-22 type for pivot

Clevis Pin

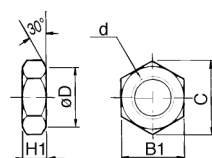


Material: Carbon steel

Part No.	Bore size (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	C-8 type for pivot
CD-G25	25	10 ^{-0.040} _{-0.076}	48	9.6	42.6	1.55	1.15	C-10 type for pivot
CD-G03	32	12 ^{-0.050} _{-0.093}	59.4	11.5	54	1.55	1.15	C-12 type for pivot
CD-G04	40	14 ^{-0.050} _{-0.093}	71.4	13.4	65	2.05	1.15	C-14 type for pivot
CD-G05	50	16 ^{-0.050} _{-0.093}	86	15.2	79.6	2.05	1.15	C-16 type for pivot
CD-G06	63	18 ^{-0.050} _{-0.093}	105.4	17	97.8	2.45	1.35	C-18 type for pivot

* Clevis pins and knuckle pins are common for bore size ∅80 and ∅100.

Rod End Nut



Material: Rolled steel

Part No.	Bore size (mm)	d	H1	B1	C	D
NT-02	20	M8 X 1.25	5	13	(15)	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

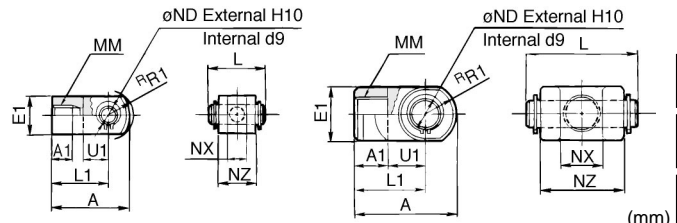
Double Knuckle Joint

Y-G02, G03

Material: Rolled steel

Y-G04, G05, G08, G10

Material: Cast iron



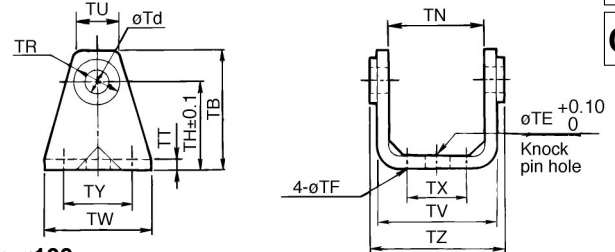
Part No.	Bore size (mm)	A	A1	E1	L1	MM	R1	U1	ND	NX	NZ	L	Applicable pin
Y-G02	20	34	8.5	□16	25	M8 X 1.25	10.3	11.5	8	8 ^{+0.4} _{+0.2}	16	21	IY-G02
Y-G03	25, 32	41	10.5	□20	30	M10 X 1.25	12.8	14	10	10 ^{+0.4} _{+0.2}	20	25.6	IY-G03
Y-G04	40	42	16	∅22	30	M14 X 1.5	12	14	10	18 ^{+0.5} _{+0.3}	36	41.6	IY-G04
Y-G05	50, 63	56	20	∅28	40	M18 X 1.5	16	20	14	22 ^{+0.5} _{+0.3}	44	50.6	IY-G05
Y-G08	80	71	23	∅38	50	M22 X 1.5	21	27	18	28 ^{+0.5} _{+0.3}	56	64	IY-G08
Y-G10	100	79	24	∅44	55	M26 X 1.5	24	31	22	32 ^{+0.5} _{+0.3}	64	72	IY-G10

* Knuckle pins and snap rings are attached.

Pivot Bracket

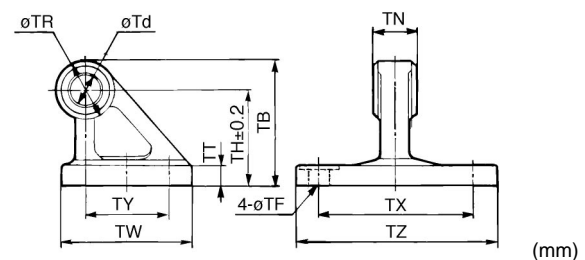
∅20 to ∅63

Material: Rolled steel



∅80 to ∅100

Material: Cast iron



Part No.	Bore size (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 ^{-0.1} _{-0.3}	36	11
CG-100-24A	100	90	22	—	13.5	65	32 ^{-0.1} _{-0.3}	50	12

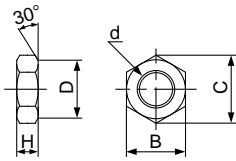
Part No.	Bore size (mm)	TU	TV	TW	TX	TY	TZ	Applicable pin O.D.
CG-020-24A	20	18.1	35.8	42	16	28	38.3	8d9 ^{-0.040} _{-0.076}
CG-025-24A	25	20.7	39.8	42	20	28	42.1	10d9 ^{-0.040} _{-0.076}
CG-032-24A	32	23.6	49.4	48	22	28	53.8	12d9 ^{-0.050} _{-0.093}
CG-040-24A	40	27.3	58.4	56	30	30	64.6	14d9 ^{-0.050} _{-0.093}
CG-050-24A	50	29.7	72.4	64	36	36	79.2	16d9 ^{-0.050} _{-0.093}
CG-063-24A	63	34.3	90.4	74	46	46	97.2	18d9 ^{-0.050} _{-0.093}
CG-080-24A	80	—	—	72	85	45	110	18d9 ^{-0.050} _{-0.093}
CG-100-24A	100	—	—	93	100	60	130	22d9 ^{-0.065} _{-0.117}

Accessory.....SCG1 [Bore size] #11



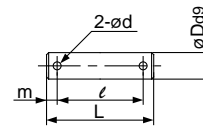
Dimensions for Accessories

Rod end nut
(Standard)



Part No.	Bore size (mm)	d	H	B	C	D
NT-03	32	M10 X 1.25	6	17	19.6	16.5
NT-04	40	M14 X 1.5	8	22	25.4	21
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

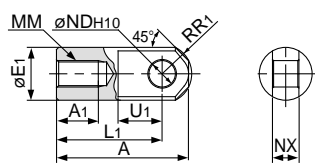
Knuckle joint pin
Clevis pin



Part No.	Bore size (mm)		Dd9	L	l	m	d (Through hole diameter)	Applicable cotter pin (1)
	Clevis	Knuckle						
CD-M03	32/40	10	$10_{-0.040}^{-0.076}$	44	36	4	3	ø3 X 18 ℓ
CD-M05	50/63	14	$14_{-0.050}^{-0.093}$	60	51	4.5	4	ø4 X 25 ℓ
CD-M08	80/100	22	$22_{-0.065}^{-0.117}$	82	72	5	4	ø4 X 35 ℓ

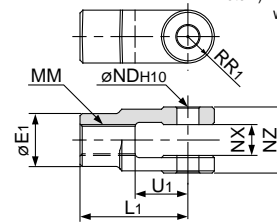
Note 1) When using cotter pin, flat washer is used together.

Single knuckle joint



Part No.	Bore size (mm)	A	A1	E1	L1	MM	R1	U1	NDH10	NX
I-03M	32	40	14	20	30	M10 X 1.25	12	16	$10_{0}^{+0.058}$	$14_{-0.10}^{-0.30}$
I-04M	40	50	19	22	40	M14 X 1.5	12.5	19	$10_{0}^{+0.058}$	$14_{-0.10}^{-0.30}$
I-05M	50/63	64	24	28	50	M18 X 1.5	16.5	24	$14_{0}^{+0.070}$	$20_{-0.10}^{-0.30}$
I-08M	80	80	26	40	60	M22 X 1.5	23.5	34	$22_{0}^{+0.084}$	$30_{-0.10}^{-0.30}$
I-10M	100	80	26	40	60	M26 X 1.5	23.5	34	$22_{0}^{+0.084}$	$30_{-0.10}^{-0.30}$

Double knuckle joint



Part No.	Bore size (mm)	E1	L1	MM	R1	U1	NDH10	NX	NZ
Y-03M	32	20	30	M10 X 1.25	10	16	$10_{0}^{+0.058}$	$14_{+0.10}^{+0.30}$	$28_{-0.10}^{-0.30}$
Y-04M	40	22	40	M14 X 1.5	11	19	$10_{0}^{+0.058}$	$14_{+0.10}^{+0.30}$	$28_{-0.10}^{-0.30}$
Y-05M	50/63	28	50	M18 X 1.5	14	24	$14_{0}^{+0.070}$	$20_{+0.10}^{+0.30}$	$40_{-0.10}^{-0.30}$
Y-08M	80	40	65	M22 X 1.5	20	34	$22_{0}^{+0.084}$	$30_{+0.10}^{+0.30}$	$60_{-0.10}^{-0.30}$
Y-10M	100	40	65	M26 X 1.5	20	34	$22_{0}^{+0.084}$	$30_{+0.10}^{+0.30}$	$60_{-0.10}^{-0.30}$

Note) For a double clevis, a clevis pin (with a retaining ring) is equipped as standard.

- CJ1**
- CJP**
- CJ2**
- CM2**
- C85**
- CG1**
- MB**
- C95**
- CA1**
- CS1**

Combinations of Support Brackets

Available combinations Refer to below picture together.

Bracket for work for cylinder	Single clevis	Double clevis	Single knuckle joint	Double knuckle joint	Pivot bracket
Single clevis	—	①	—	②	—
Double clevis	③	—	④	—	⑨
Single knuckle joint	—	⑤	—	⑥	—
Double knuckle joint	⑦	—	⑧	—	⑩

No.	Appearance	No.	Appearance
①	Single clevis + Double clevis 	⑥	Single knuckle joint + Double knuckle joint
②	Single clevis + Double knuckle joint 	⑦	Double knuckle joint + Single clevis
③	Double clevis + Single clevis 	⑧	Double knuckle joint + Single knuckle joint
④	Double clevis + Single knuckle joint 	⑨	Double clevis + Pivot bracket
⑤	Single knuckle joint + Double clevis 	⑩	Double knuckle joint + Pivot bracket