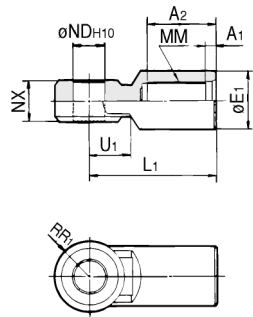


Air Cylinder Series CS1 Accessory Dimensions

Accessories



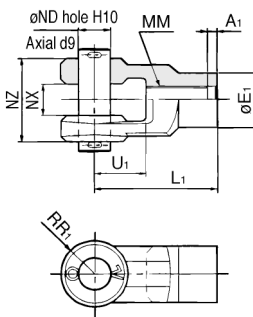
I type single knuckle joint*



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 *

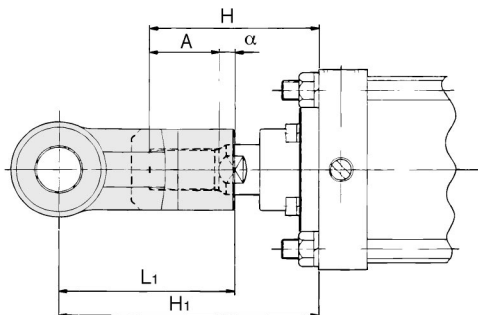


Material: Cast iron

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

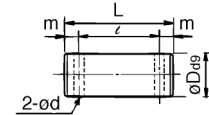


Symbol Bore (mm)	H	A	α	L ₁	H ₁	Applicable knuckle joint part No.	
						I type single knuckle	Y type double knuckle
125	110	50	3.5	100	156.5	I-12	Y-12
140	110	50	3.5	105	161.5	I-14	Y-14
160	120	56	3.5	110	170.5	I-16	Y-16
180 / 200	135	63	3.5	125	193.5	I-18, I-20	Y-18, Y-20
250	160	71	3.5	160	245.5	I-25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

Accessory SCS1 Bore size #9



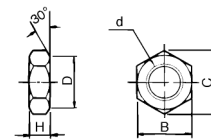
Knuckle pin, Clevis pin



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