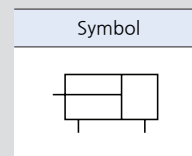


ACI series



Features

- ISO15552(original ISO6431) standard cylinder
- Sturdy wear ring provide a long service life and low start up pressure
- The Aluminum profile without tie rod provides excellent corrosion resistance, and has an auto switch groove for easy attachment
- The cushion adjustment is smooth and stable

How to order

ACI - **B** - **125** - S **50** - **□** - **□** - **□**

① ② ③ ④ ⑤ ⑥ ⑦

① Series

ACI	Standard
ACIW	Double rod

② Mounting style

Nil	Standard	LB	Foot
FA	Rod side flange	FB	Head side flange
CA	Single clevis	CB	Double clevis
CR	Double clevis bracket	TA	Rod side trunnion
TC	Center trunnion	KA2	Trunnion bracket
TCM2	Trunnion block		

※ The CR is an accessory for CB (Double clevis) and cannot be used alone.
 ※ The KA2, TCM2 are accessories for TC, TA (Trunnion) and cannot be used alone.

③ Tube size

32	Ø32	100	Ø100
40	Ø40	125	Ø125
50	Ø50	160	Ø160
63	Ø63	200	Ø200
80	Ø80		

④ Cylinder stroke

Please refer to stroke table for details.

⑤ Rod material

Nil	S45C(Standard)
A	STS304
B	STS420J2

⑥ Seals material

Nil	For general use
H	For heat resistance

⑦ Adjustable Stroke

Nil	None
ASJ	25mm (Adjustable when forward)
BSJ	50mm (Adjustable when forward)

Specifications

Bore size	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100	Ø125	Ø160	Ø200
Acting type	Double acting type								
Fluid	Air								
Mounting style	ACI FA,FB,CA,CB,CR,LB,TC,TA,KA2,TCM2								
	ACIW ACI-ASJ,BSJ FA,FB,TC,TA,KA2,TCM2								
Operation pressure	0.15 ~ 1.0MPa								
Proof pressure	1.5MPa(15bar)								
Temperature	-20 ~ 70℃								
Operating piston speed	30 ~ 500mm/s								
Tolerance of stroke	0~250 ^{+1.0} ₀			251~1000 ^{+1.5} ₀			1001~1500 ^{+2.0} ₀		
Cushion	Adjustable cushion								
Adjustable cushion stroke	27		30		36		40		50
Port size	1/8		1/4		3/8		1/2		3/4

Compendium of ACI

ISO15552 Profile cylinder
Bore size: 32, 40, 50, 63, 80, 100, 125, 160, 200

Adjustable air cushion
Adjustable the cushion with rod and head cover needle

Convenient automatic switch attachment
The cylinder body has a slot for auto switch, so it is easy to attach

Four kinds of cylinder joints
Single knuckle joint, Double knuckle joint, Floating joint, Rod end bearing

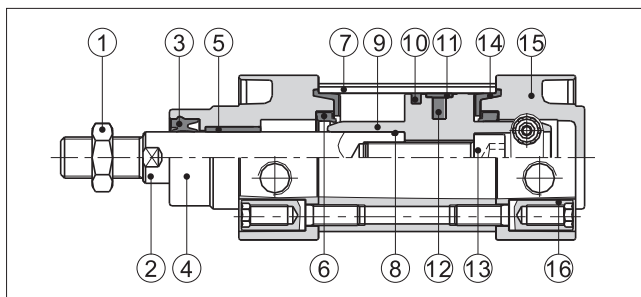
Three types cylinder
ACI: Double acting type, ACIW: Double rod type, ACI-ASJ, BSJ: Adjustable stroke type

Multi mounting accessories
LB, FA, FB, CA, CB, CR, TA, KA2, TCM2, TC

Stroke table

Bore size	Standard stroke(mm)	Max.STD stroke	Max. stroke
32	25 50 75 100 125 175 200 250 300 350 400 450 500	1000	1800
40	25 50 75 100 125 175 200 250 300 350 400 450 500 600 700 800	1200	1800
50	25 50 75 100 125 175 200 250 300 350 400 450 500 600 700 800 900 1000	1200	1800
63	25 50 75 100 125 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
80	25 50 75 100 125 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
100	25 50 75 100 125 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
125	25 50 75 100 125 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
160	25 50 75 100 125 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
200	25 50 75 100 125 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000

Inner structure and material of major parts



No.	Parts	Material
5	Bushing	Wear resistance material
6	Cushion seal	TPU
7	Tube	Aluminum alloy
8	O-ring	NBR
9	Piston	Aluminum alloy
10	Piston seal	NBR
11	Wear ring	Wear resistance material
12	Magnet	Plastic(Ø100 and below) / Rubber(Others)
13	Bolot	Carbon steel
14	Buffer gasket	TPU
15	Head cover	Aluminum alloy
16	Screw	Carbon steel / Stainless steel

No.	Parts	Material
1	Rod nut	Carbon steel / Stainless steel
2	Piston rod	Carbon steel(Chrome plated) / Stainless steel
3	Rod cover packing	TPU
4	Rod cover	Aluminum alloy

Mounting style and Rod end attachment

Bore size	Mounting style								
	LB	FA/FB	CA	CB	CR	TC	TA	KA2	TCM2
Ø32	F-SI32LB	F-SI32FA	F-SI32CA	F-SI32CB	F-SI32CR	F-SI32TC	F-SI32FTC	F-SI32TCM1	F-SI32TCM2
Ø40	F-SI40LB	F-SI40FA	F-SI40CA	F-SI40CB	F-SI40CR	F-SI40TC	F-SI40FTC	F-SI40TCM1	F-SI40TCM2
Ø50	F-SI50LB	F-SI50FA	F-SI50CA	F-SI50CB	F-SI50CR	F-SI50TC	F-SI50FTC	F-SI50TCM1	F-SI50TCM2
Ø63	F-SI63LB	F-SI63FA	F-SI63CA	F-SI63CB	F-SI63CR	F-SI63TC	F-SI63FTC	F-SI63TCM1	F-SI63TCM2
Ø80	F-SI80LB	F-SI80FA	F-SI80CA	F-SI80CB	F-SI80CR	F-SI80TC	F-SI80FTC	F-SI80TCM1	F-SI80TCM2
Ø100	F-SI100LB	F-SI100FA	F-SI100CA	F-SI100CB	F-SI100CR	F-SI100TC	F-SI100FTC	F-SI100TCM1	F-SI100TCM2
Ø125	F-SI125LB	F-SI125FA	F-SI125CA	F-SI125CB	F-SI125CR	F-SI125TC	F-SI125FTC	F-SI125TCM1	F-SI125TCM2
Ø160	F-SI160LB	F-SI160FA	F-SI160CA	F-SI160CB	F-SI160CR	F-SI160TC	F-SI160FTC	F-SI160TCM1	F-SI160TCM2
Ø200	F-SI200LB	F-SI200FA	F-SI200CA	F-SI200CB	F-SI200CR	F-SI200TC	F-SI200FTC	F-SI200TCM1	F-SI200TCM2

Bore size	Rod end attachment			
	I	Y	F	U
Ø32	F-M10x125I	F-M10x125Y	F-M10x125F	F-M10x125U
Ø40	F-M12x125I	F-M12x125Y	F-M12x125F	F-M12x125U
Ø50	F-M16x150I	F-M16x150Y	F-M16x150F	F-M16x150U
Ø63	F-M16x150I	F-M16x150Y	F-M16x150F	F-M16x150U
Ø80	F-M20x150I	F-M20x150Y	F-M20x150F	F-M20x150U
Ø100	F-M20x150I	F-M20x150Y	F-M20x150F	F-M20x150U
Ø125	F-M27x200I	F-M27x200Y	F-M27x200F	F-M27x200U
Ø160	F-M36x200I	F-M36x200Y	F-M36x200F	F-M36x200U
Ø200	F-M36x200I	F-M36x200Y	F-M36x200F	F-M36x200U

Accessory

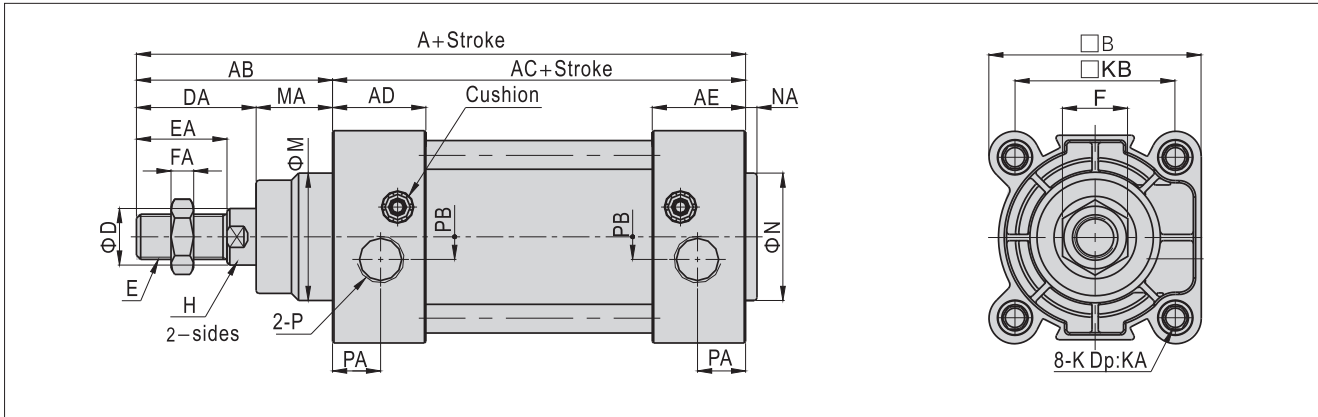
Model	Mounting style										Rod end attachment			
	LB	FA	FB	CA	CB	CR	TC	TA	KA2	TCM2	I	Y	U	F
ACI	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ACIW	●	●	x	x	x	x	●	●	●	●	●	●	●	●
ACI-ASJ, BSJ	●	●	x	x	x	x	●	●	●	●	●	●	●	●

Accessory material

Bore size	Mounting style										Rod end attachment			
	LB	FA	FB	CA	CB	CR	TC	TA	KA2	TCM2	I	Y	U	F
Ø32~Ø100	○	●	●	◇	◇	◇	◇	■	■	●	□	□	□	□
Ø125~Ø200	□	□	□	□	□	□	□	□	□	●	□	□	□	□

● - Aluminum alloy / ■ - Cast steel / ○ - Low carbon steel / ◇ - Spheroidal graphite cast iron / □ - Carbon steel

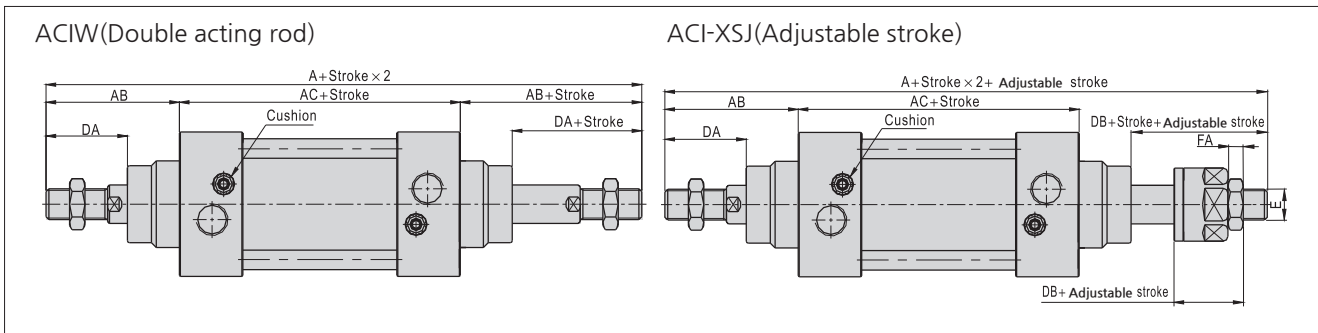
Dimensions(ACI, Standard)



Unit:mm

Bore size	A	AB	AC	AD	AE	B	D	DA	E	EA	F	FA	M	MA	H	K	KA	KB	N	NA	P	PA	PB
Ø32	142	48	94	27.5	27.5	47	12	29	M10x1.25	22	17	6	30	19	10	M6	16	32.5	30	3	1/8	13	5.5
Ø40	159	54	105	32	32	53	16	33	M12x1.25	24	17	7	35	21	13	M6	17	38	35	3.5	1/4	17	6
Ø50	175	69	106	31	31	65	20	42	M16x1.5	32	23	8	40	27	17	M8	17	46.5	40	3.5	1/4	15.5	7.5
Ø63	190	69	121	33	33	75	20	42	M16x1.5	32	23	8	45	27	17	M8	17	56.5	45	4	3/8	16.5	7.5
Ø80	214	86	128	33	33	95	25	53	M20x1.5	40	26	10	45	33	22	M10	19	72	45	4	3/8	16.5	9
Ø100	229	91	138	37	37	115	25	55	M20x1.5	40	26	10	55	36	22	M10	19	89	55	4	1/2	18.5	9.5
Ø125	279	119	160	46	46	140	32	74	M27x2.0	54	41	13.5	60	45	27	M12	22	110	60	4	1/2	23	14
Ø160	332	152	180	50	50	180	40	94	M36x2.0	72	55	18	65	58	36	M16	30	140	65	4	3/4	25	15
Ø200	347	167	180	50	50	220	40	100	M36x2.0	72	55	18	75	67	36	M16	30	175	75	5	3/4	25	15

Dimensions((ACIW, Double acting rod / ACI-XSJ, Adjustable stroke)



Unit:mm

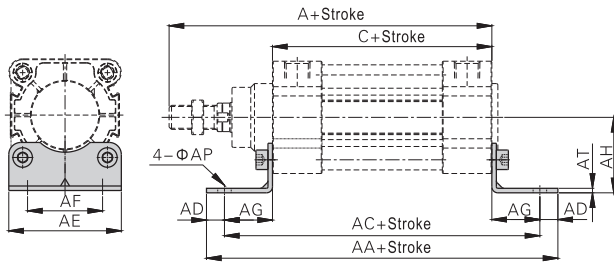
Bore size	A		AB	AB	DA	DB	E	FA
	ACIW	ACI-XSJ						
Ø32	190	188	48	94	29	27	M10x1.25	6
Ø40	213	208	54	105	33	28	M12x1.25	7
Ø50	244	231	69	106	42	29	M16x1.5	8
Ø63	259	246	69	121	42	29	M16x1.5	8
Ø80	300	282.5	86	128	53	35.5	M20x1.5	10
Ø100	320	300.5	91	138	55	35.5	M20x1.5	10
Ø125	398	366.5	119	160	74	42.5	M27x2.0	13.5
Ø160	484	458	152	180	94	68	M36x2.0	18
Ø200	514	482	167	180	100	68	M36x2.0	18

※ The dimensions of magnet type cylinder are the same as non-magnet type cylinder.
 ※ The unmarked dimension in the same as ACI standard type.

Dimensions-Accessories

Foot(LB)

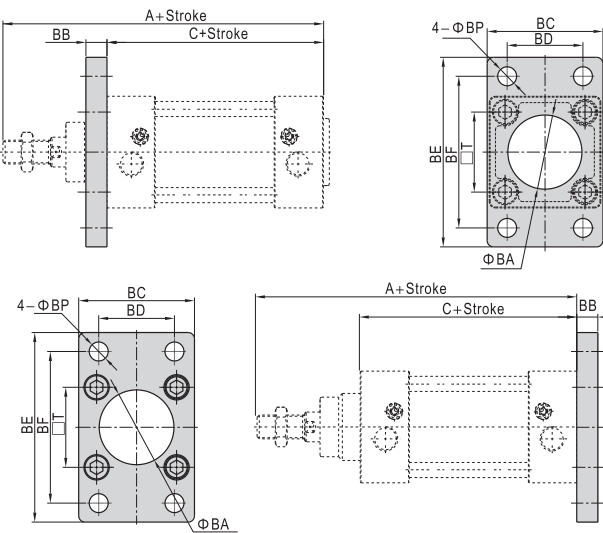
Unit:mm



Bore size	A	C	AA	AC	AD	AE	AF	AG	AH	AP	AT
Ø32	142	94	158	142	8	47	32	24	32	7	3
Ø40	159	105	179	161	9	53	36	28	36	9	3
Ø50	175	106	190	170	10	65	45	32	45	9	3
Ø63	190	121	209	185	12	75	50	32	50	9	3
Ø80	214	128	248	210	19	95	63	41	63	12.5	4
Ø100	229	138	266	220	19	115	75	41	71	14.5	4
Ø125	279	160	290	250	20	140	90	45	90	16.5	8
Ø160	332	180	340	300	20	180	115	60	115	18.5	8
Ø200	347	180	380	320	30	220	135	70	135	24	9

FA/FB(Flange)

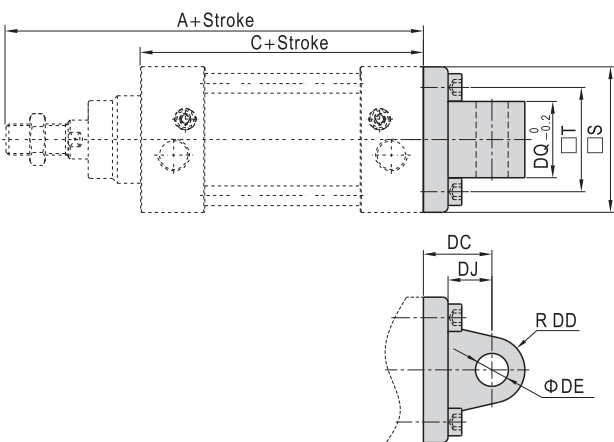
Unit:mm



Bore size	A	C	BA	BB	BC	BD	BE	BF	BP	T
Ø32	142	94	30.5	10	47	32	80	64	7	32.5
Ø40	159	105	35.5	10	53	36	90	72	9	38
Ø50	175	106	40.5	12	65	45	108	90	9	46.5
Ø63	190	121	45.5	12	75	50	118	100	9	56.5
Ø80	214	128	45.5	16	95	63	150	126	12.5	72
Ø100	229	138	55.5	16	115	75	176	150	14.5	89
Ø125	279	160	60.5	20	139	90	218	180	16.5	110
Ø160	332	180	65.5	20	180	115	280	230	18.5	140
Ø200	347	180	75.5	25	220	135	320	270	24	175

CA(Single clevis)

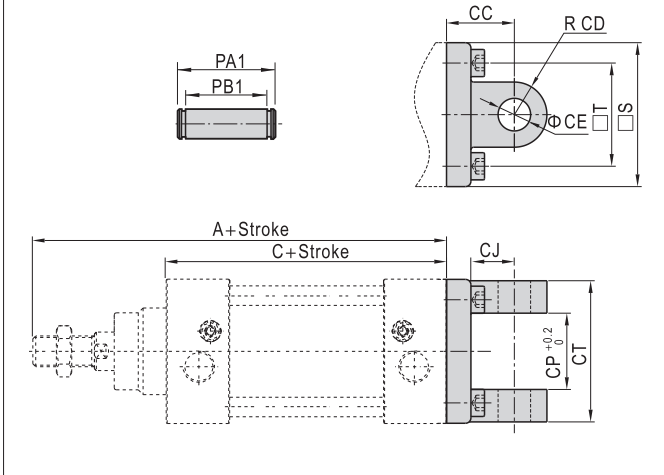
Unit:mm



Bore size	A	C	S	T	DC	DD	DE	DJ	DQ
Ø32	142	94	47	32.5	22	9	10	13	25.8
Ø40	159	105	52	38	25	10.5	12	16	27.8
Ø50	175	106	64	46.5	27	11	12	17	31.7
Ø63	190	121	74	56.5	32	13.5	16	22	39.7
Ø80	214	128	94	72	36	14.5	16	22	49.7
Ø100	229	138	113	89	41	17	20	27	59.7
Ø125	279	160	139	110	50	22	25	33	69.7
Ø160	332	180	180	140	55	30	30	35.5	89.7
Ø200	347	180	220	175	60	30	30	37	89.7

Dimensions-Accessories

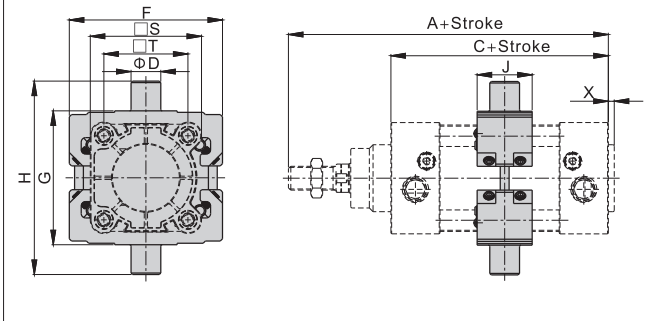
Double clevis(CB)



Unit:mm

Bore size	A	C	CC	CD	CE	CJ	CP	CT	PA1	PB1	S	T
Ø32	142	94	22	9	10	13	26	45	51	45.5	47	32.5
Ø40	159	105	25	10.5	12	16	28	52	59	52.5	52	38
Ø50	175	106	27	11	12	17	32	60	67	60.5	64	46.5
Ø63	190	121	32	13	16	22	40	70	77	70.5	74	56.5
Ø80	214	128	36	14	16	22	50	90	97	90.5	94	72
Ø100	229	138	41	17.5	20	27	60	110	119	110.5	113	89
Ø125	279	160	50	21.5	25	33	70	130	139	130.5	139	110
Ø160	332	180	55	30	30	35.5	90	170	181	170.5	180	140
Ø200	347	180	60	30	30	36	90	170	181	170.5	220	175

Center trunnion(TC)

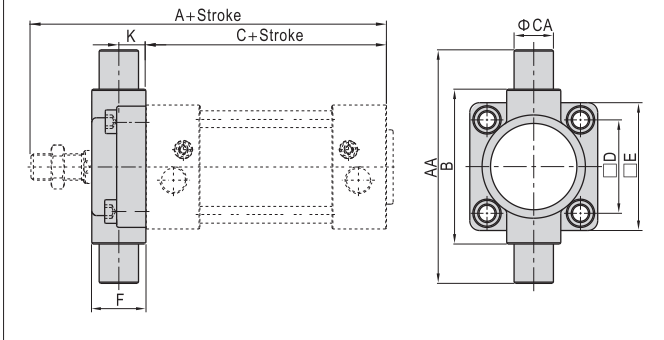


Unit:mm

Bore size	A	C	D	F	G	H	J	S	X	T
Ø32	142	94	12	65	52	76	31	47	3	32.5
Ø40	159	105	16	75	63	95	31	53	3.5	38
Ø50	175	106	16	91	75	107	35	65	3.5	46.5
Ø63	190	121	20	103	90	130	35	75	4	56.5
Ø80	214	128	20	126	110	150	45	95	4	72
Ø100	229	138	25	145	132	182	45	115	4	89
Ø125	279	160	25	175	160	210	51	140	4	110
Ø160	332	180	32	210	200	264	50	180	4	140
Ø200	347	108	32	255	250	314	50	220	5	175

※ TC accessories are installed on the 160 and 200 cylinders and the location of the accessories cannot be adjusted arbitrarily.

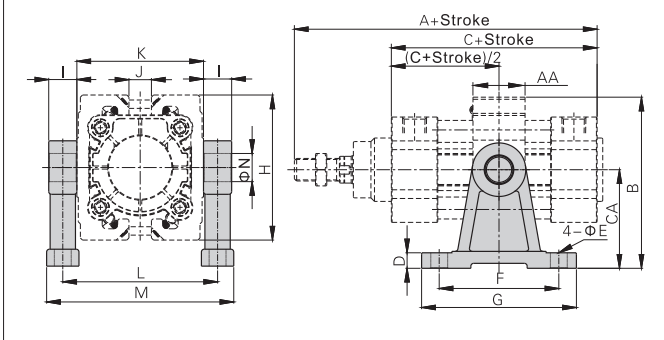
Rod side trunnion(TA)



Unit:mm

Bore size	A	C	AA	B	CA	D	E	F	K
Ø32	142	94	74	50	12	32.5	46	19	10
Ø40	159	105	95	63	16	38	52	21	10
Ø50	175	106	107	75	16	46.5	64	26	12
Ø63	190	121	130	90	20	56.5	74	28	12
Ø80	214	128	150	110	20	72	94	31	16
Ø100	229	138	182	132	25	89	114	35	16
Ø125	279	160	210	160	25	110	139	43	20
Ø160	332	180	264	200	32	140	179	56	20
Ø200	347	180	314	250	32	175	218	64	20

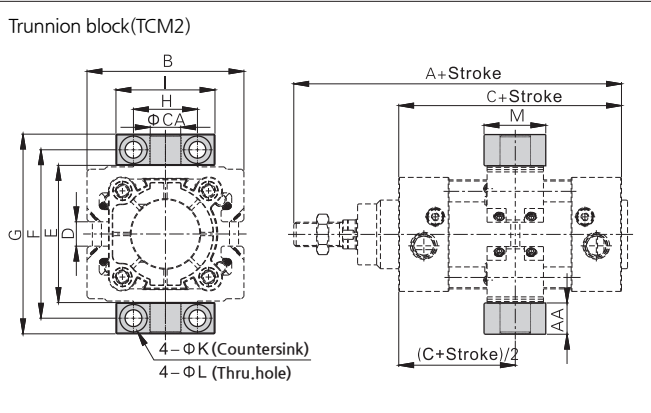
Trunnion bracket(KA2)



Unit:mm

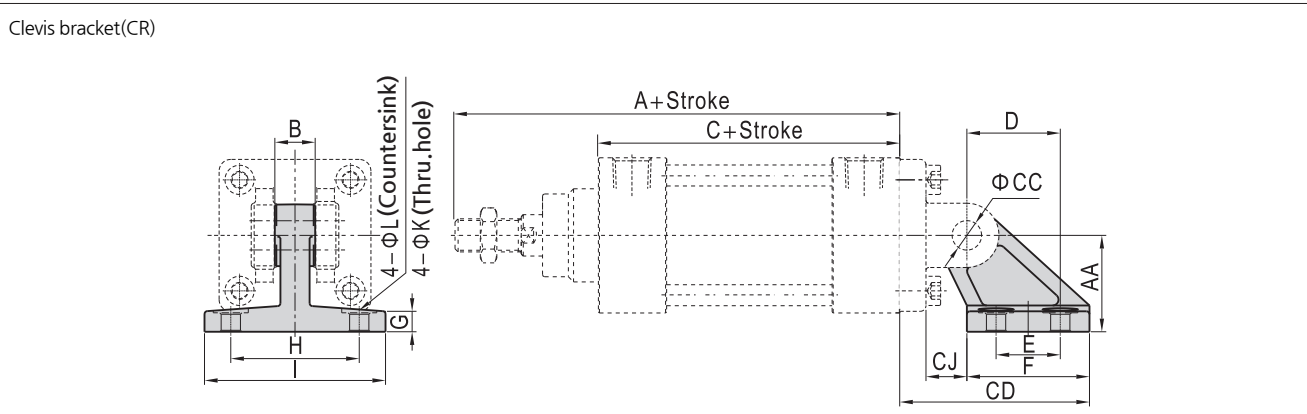
Bore size	A	C	AA	B	CA	D	E	F	G	H	I	J	K	L	M	N
Ø32	142	94	31	72.5	40	11	9	60	80	65	12	5	52	64	79	12
Ø40	159	105	31	91.5	54	11	12	75	100	75	16	8	63	79	98	16
Ø50	175	106	35	99.5	54	11	12	75	100	91	16	10	75	91	110	16
Ø63	190	121	35	121.5	70	11	12	85	110	103	20	16	90	110	133	20
Ø80	214	128	45	133	70	110	12	85	110	126	20	20	110	130	153	20
Ø100	229	138	45	162.5	90	19	18	115	155	145	25	28	132	157	185	25
Ø125	279	160	51	177.5	90	19	18	115	155	175	25	40	160	185	213	25
Ø160	332	180	50	215	110	24	22	140	190	210	32	100	200	232	267	32
Ø200	347	180	50	262.5	135	27	22	150	200	255	32	125	250	282	317	32

Dimensions-Accessories



Unit:mm

Bore size	A	AA	B	C	CA	D	E	F	G	H	I	K	L	M
Ø32	142	14	65	94	12	5	52	68	82	32	46	11	7	30
Ø40	159	17	75	105	16	8	63	82	99	36	55	15	9	36
Ø50	175	17	91	106	16	10	75	94	111	36	55	15	9	36
Ø63	190	20.5	103	121	20	16	90	113.5	134	42	65	18	11	40
Ø80	214	20.5	126	128	20	20	110	133.5	154	42	65	18	11	40
Ø100	229	24.5	145	138	25	28	132	159.5	184	50	75	20	14	50
Ø125	279	24.5	175	160	25	40	160	187.5	212	50	75	20	14	50
Ø160	332	30	210	180	32	100	200	234	264	60	92	26	18	60
Ø200	347	30	255	180	32	125	250	284	314	60	92	26	18	60

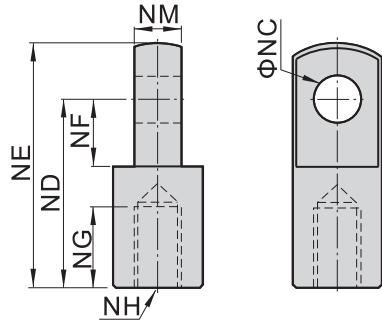


Unit:mm

Bore size	A	AA	B	C	CC	CD	CJ	D	E	F	G	H	I	K	L
Ø32	142	32	26	94	10	49	10	21	18	30	8	38	50	6.5	10.5
Ø40	159	36	28	105	12	55	12	24	22	34	10	41	53	6.5	10.5
Ø50	175	45	32	106	12	67	13	33	30	44	12	50	46	9	14
Ø63	190	50	40	121	16	76	17	37	35	49	12	52	66	9	14
Ø80	214	63	50	128	16	92.5	19.5	47	40	59	14	66	85	11	17
Ø100	229	71	60	138	20	105.5	22.5	55	50	69	15	76	95	11	17
Ø125	279	90	70	160	25	134	29	70	60	88	20	94	122	13.5	20
Ø160	332	115	90	18	30	171	25.5	97	88	126	25	118	156	13.5	20
Ø200	347	135	90	180	30	185	31	105	90	130	30	122	162	18	26

Dimensions-Accessories

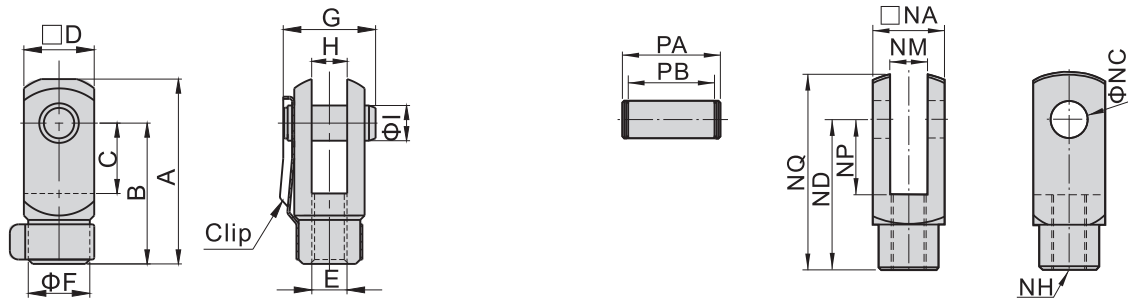
Single knuckle joint(l)



Unit:mm

Bore size	NC	ND	NE	NF	NG	NH	NM
Ø32	10	40	50	15	20	M10X1.25	10
Ø40	12	48	62	24	20	M12X1.25	12
Ø50	16	64	82	32	23	M16X1.5	16
Ø63	16	64	82	32	23	M16X1.5	16
Ø80	20	80	102	40	30	M20X1.5	20
Ø100	20	80	102	40	30	M20X1.5	20
Ø125	30	110	139	51	45	M27X2.0	30
Ø160	35	144	181	65	55	M36X2.0	35
Ø200	35	144	181	65	55	M36X2.0	35

Double knuckle joint(Y)



Ø32

Ø40 ~ Ø200

Unit:mm

Bore size	A	B	C	D	F	G	E	H	I
Ø32	52	40	20	19	18	25	M10x1.25	10	10
Bore size	NA	NC	ND	NP	NQ	NM	NH	PA	PB
Ø40	25.4	12	48	24	62	12	M12x1.25	32.4	26.2
Ø50	32	16	64	32	80	16	M16x1.5	39	32.8
Ø63	32	16	64	32	80	16	M16x1.5	39	32.8
Ø80	44.4	20	80	40	101	20	M20x1.5	53.4	45.2
Ø100	44.4	20	80	40	101	20	M20x1.5	53.4	45.2
Ø125	54	30	110	55	139	30	M27x2.0	64.2	54.8
Ø160	70	35	144	73	179	35	M36x2.0	80.2	70.8
Ø200	70	35	144	73	179	35	M36x2.0	80.2	70.8