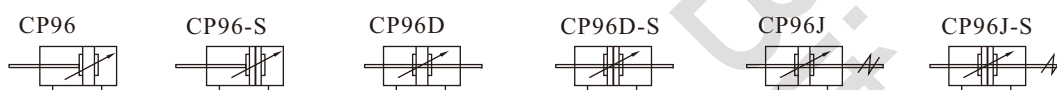


Product feature

1. ISO15552 and VDMA24562 standard cylinder and is a cross-shaped aluminum barrel cylinder.
2. The piston seal is composed of two Y-shape one-way seal structure, which has compensation function, long service life and low start-up pressure;
3. The square aluminum pipe without tie rod has good corrosion resistance;
4. The buffer adjustment of cylinder is smooth and steady;
5. Cylinders and accessories for installation with several specifications are optional.

Symbol



Specification

Bore size(mm)	32	40	50	63	80	100	125
Acting type	Double acting						
Fluid	Air(to be filtered by 40μm filter element)						
Operating pressure	0.15~1.0MPa(22~145psi)(1.5~10.0bar)						
Proof pressure	1.5MPa(215psi)(15bar)						
Temperature	-20~70°C						
Speed range	30~800 mm/s						
Stroke tolerance	0~1000 ^{+1.0} ₀ 1001~2000 ^{+1.8} ₀						
Cushion type	Variable cushion						
Port size [Note1]	G1/8	G1/4		G3/8		G1/2	

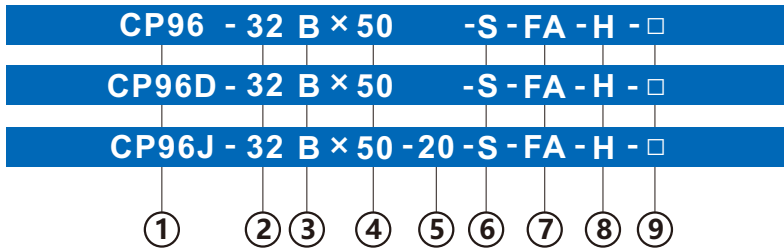
[Note1] The standard thread type is G thread, Please control us for other thread type.

Standard Stroke

Bore size(mm)	Standard stroke	Max.std stroke	Max. stroke
32	25 50 75 100 125 150 175 200 250 300 350 400 450 500	1000	1500
40	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800	1200	1500
50	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1200	1500
63	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
80	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
100	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
125	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800

[Note] Consult us for non-standard stroke.

Ordering code



① Model	② Bore size
CP96: Double acting type	32 40 50 63 80
CP96D: Double rod type	100 125
CP96J: Adjustable stroke type	

③ Rod material
Blank: Medium carbon steel
A: SUS420J2
B: SUS304
C: SUS316

④ Stroke
Refer to stroke table for details

⑤ Adjustable stroke	
Series	Adjustable stroke
CP96J series	10: 10mm
	20: 20mm
	30: 30mm
	40: 40mm
	50: 50mm
	75: 75mm
100: 100mm	
Others series	No this code

⑦ Mounting style	
Mounting style	Adaptable series
Blank: No accessories	
LB: LB type	CP96
FA: FA type	CP96D
FTC: FTC type	CP96J
TC: TC type	
FB: FB type	
CA: CA type	Cp96
CB: CB type	
CR: CR type	

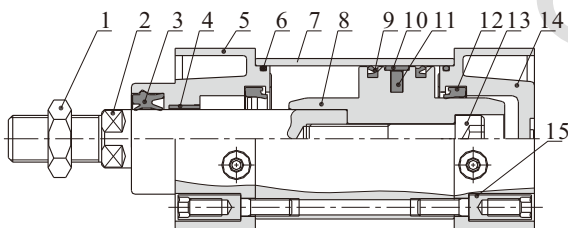
⑥ Magnet
Blank: Without magnet
S: With magnet

⑧ Seals material
Blank: NBR
H: Viton
T: TPU

⑨ Thread type
Blank: G thread
PT: PT thread

[Note1] CR is used with CB, FTC. TC are used with TCM1,TCM2.
The accessories are the same as DNC series's accessories, please refer to P21~26 for details.

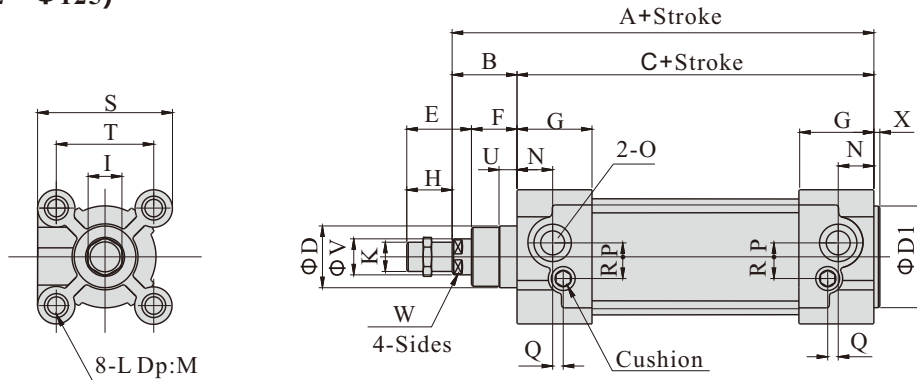
Inner structure and material of major parts



NO.	Item	Material
1	Rod nut	Carbon steel\Stainless steel
2	Piston rod	Carbon steel\Stainless steel
3	Front cover packing	TPU
4	Bushing	Wear resistant material
5	Front cover	Aluminum alloy
6	Cushing O-ring	NBR
7	Barrel	Aluminum alloy
8	Piston	Aluminum alloy
9	O-ring	TPU\NBR
10	Wear ring	Wear resistant material
11	Magnet	Plastic
12	Buffer gasket	TPU\NBR
13	Bolt	Carbon steel
14	Back cover	Aluminum alloy
15	Screw	Carbon steel

Dimensions

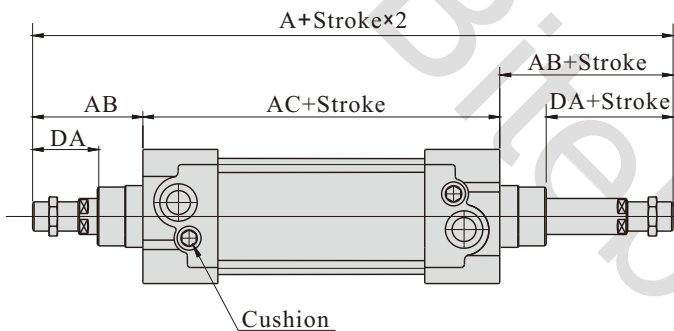
CP96 Series(Φ32 ~ Φ125)



Bore size\Item	A	B	C	D	E	F	G	H	I	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
32	120	26	94	30	30	18	25	22	17	M10×1.25	M6	9.5	12.6	G1/8	5.5	5.5	7.1	45	32.5	10	12	10	4
40	135	30	105	35	32.5	21.5	29.5	24	17	M12×1.25	M6	9.5	14.6	G1/4	6	7	7.5	54	38	10	16	13	4
50	143	37	106	40	41	28	29.5	32	23	M16×1.5	M8	9.5	14.6	G1/4	8.5	4.5	8.5	64	46.5	11.5	20	17	4
63	158	37	121	45	40.5	28.5	35.5	32	23	M16×1.5	M8	9.5	18.1	G3/8	10	2	12	75	56.5	15	20	17	4
80	174	46	128	45	51.3	34.7	36	40	26	M20×1.5	M10	11.5	17.9	G3/8	12.7	1	8	93	72	15.7	25	22	4
100	189	51	138	55	52.8	38.2	38.8	40	26	M20×1.5	M10	11.5	19.8	G1/2	11.8	4	10	110	89	19.2	25	22	4
125	225	65	160	60	73	46	45	54	41	M27×2.0	M12	11.5	18	G1/2	8	14	13	134	110	20.5	32	27	6

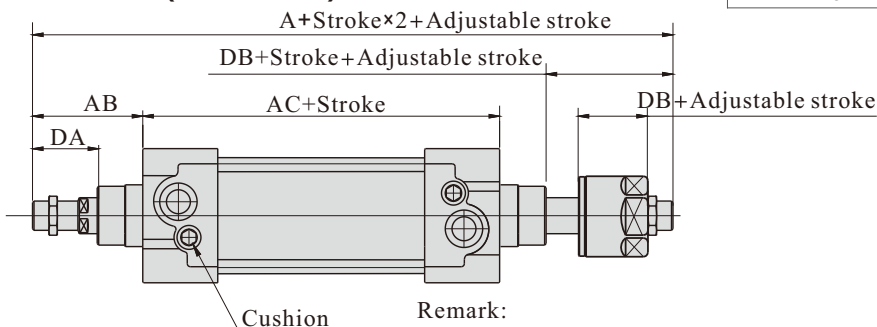
Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.

CP96D Series(Φ32 ~ Φ125)



Bore size\Item	A		AB	AC	DA	DB
	CP95D	CP95J				
32	190	188	48	94	29	27
40	213	208	54	105	33	28
50	244	231	69	106	42	29
63	259	246	69	121	42	29
80	300	282.5	86	128	53	35.5
100	320	300.5	91	138	55	35.5
125	398	366.5	119	160	74	42.5

CP96J Series(Φ32 ~ Φ125)



Remark:

1. The dimensions of magnet type cylinder are the same as non-magnet type cylinder.
2. The unmarked dimension is the same as CP96 standard type.

List for ordering code of accessories

Accessories Bore size	Mounting accessories								
	LB	FA/FB	CA	CB	CR	TC	FTC	TCM1	TCM2
32	F-CP9632LB	F-CP9632FA	F-CP9632CA	F-CP9632CB	F-CP9632CR	F-CP9632TC	F-CP9632FTC	F-CP9632TCM1	F-CP9632TCM2
40	F-CP9640LB	F-CP9640FA	F-CP9640CA	F-CP9640CB	F-CP9640CR	F-CP9640TC	F-CP9640FTC	F-CP9640TCM1	F-CP9640TCM2
50	F-CP9650LB	F-CP9650FA	F-CP9650CA	F-CP9650CB	F-CP9650CR	F-CP9650TC	F-CP9650FTC	F-CP9650TCM1	F-CP9650TCM2
63	F-CP9663LB	F-CP9663FA	F-CP9663CA	F-CP9663CB	F-CP9663CR	F-CP9663TC	F-CP9663FTC	F-CP9663TCM1	F-CP9663TCM2
80	F-CP9680LB	F-CP9680FA	F-CP9680CA	F-CP9680CB	F-CP9680CR	F-CP9680TC	F-CP9680FTC	F-CP9680TCM1	F-CP9680TCM2
100	F-CP96100LB	F-CP96100FA	F-CP96100CA	F-CP96100CB	F-CP96100CR	F-CP96100TC	F-CP96100FTC	F-CP96125TCM1	F-CP96125TCM2
125	F-CP96125LB	F-CP96125FA	F-CP96125CA	F-CP96125CB	F-CP96125CR	F-CP96125TC	F-CP96125FTC	F-CP96125TCM1	F-CP96125TCM2

Accessories Bore size	Knuckle				Sensor switch	
	I: I Knuckle	Y: Y Knuckle	F: F Knuckle	U: U Knuckle	CS1-E	DS1-E
32	F-M10X125I	F-M10X125Y	F-M10X125F	F-M10X125U	CS1-E	DS1-E
40	F-M12X125I	F-M12X125Y	F-M12X125F	F-M12X125U		
50	F-M16X150I	F-M16X150Y	F-M16X150F	F-M16X150U		
63	F-M16X150I	F-M16X150Y	F-M16X150F	F-M16X150U		
80	F-M20X150I	F-M20X150Y	F-M20X150F	F-M20X150U		
100	F-M20X150I	F-M20X150Y	F-M20X150F	F-M20X150U		
125	F-M27X200I	F-M27X200Y	F-M27X200F	F-M27X200U		

Accessory selection

Accessories Cylinder model	Mounting accessories										Knuckle				Sensor switch	
	LB	FA	FB	CA	CB	CR	TC	FTC	TCM1	TCM2	I	Y	U	F	CMSE	DMSE
CP96	Standard	●	●	●	●	●	●	●	●	●	●	●	●	●	×	×
	With magnet	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
CP96D	Standard	●	●	×	×	×	×	●	●	●	●	●	●	●	×	×
	With magnet	●	●	×	×	×	×	●	●	●	●	●	●	●	●	●
CP96J	Standard	●	●	×	×	×	×	●	●	●	●	●	●	●	×	×
	With magnet	●	●	×	×	×	×	●	●	●	●	●	●	●	●	●

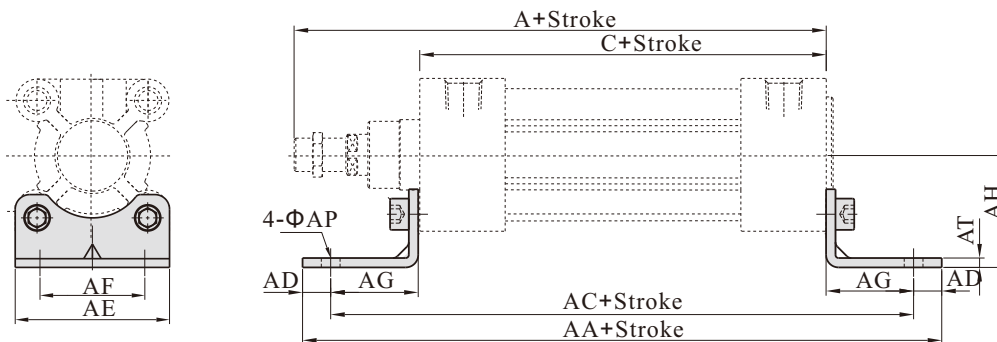
Material of accessories

Accessories Bore size	Mounting accessories									Knuckle			
	LB	FA	FB	CA	CB	CR	FTC	TCM1	TCM2	I	Y	F	U
32~100	○	●	●	◇	◇	◇	■	■	●	□	□	□	□
125	■	■	■	●	●	●	■	■	■	□	□	□	□

●—Aluminum alloy, ▲—S45C, ■—Cast steel, ○—Low carbon steel, ◇—Nodular cast iron, □—Carbon steel.

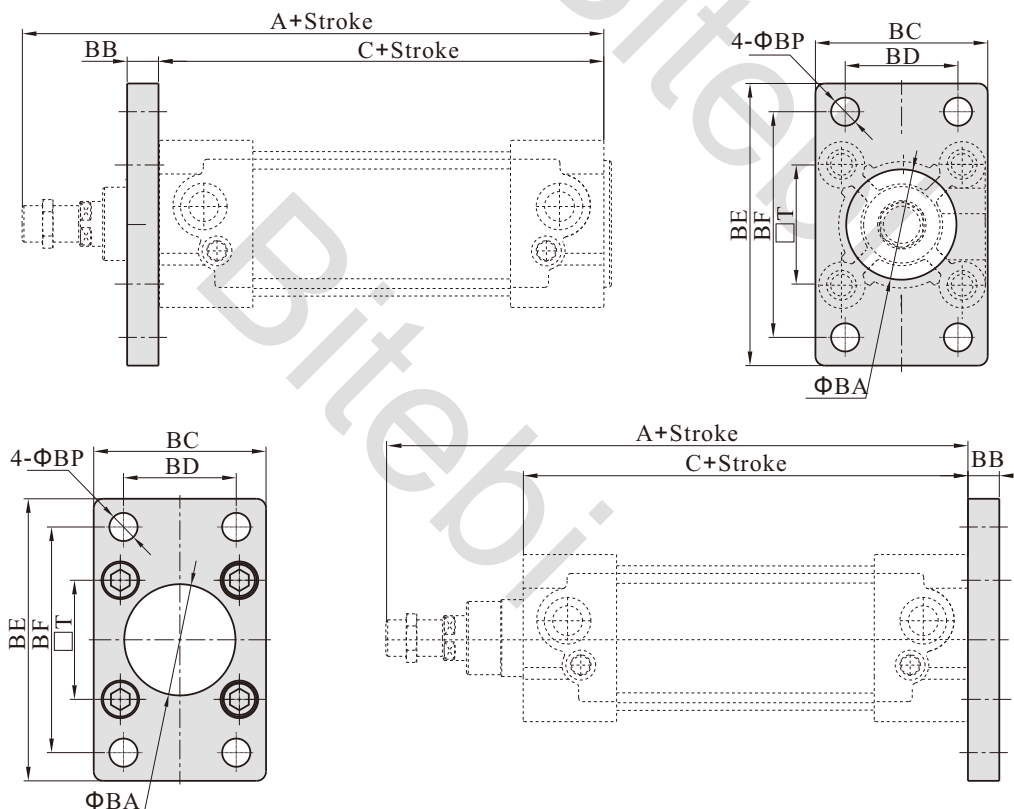
Accessories Dimensions

LB type



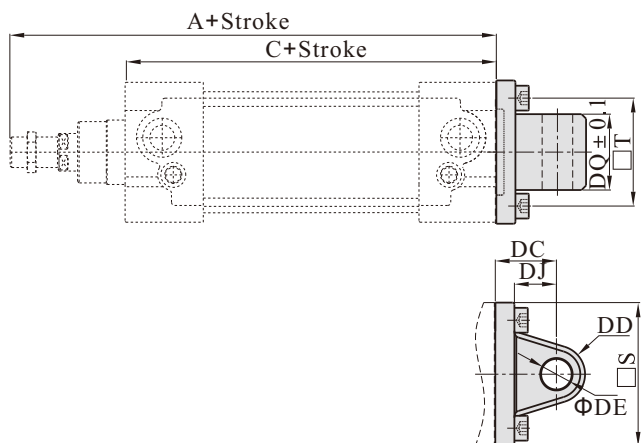
Bore size\Item	A	C	AA	AC	AD	AE	AF	AG	AH	AP	AT
32	144	94	158	142	8	47	32	24	32	7	3
40	159	105	179	161	9	53	36	28	36	9	3
50	175	106	190	170	10	65	45	32	45	9	3
63	190	121	209	185	12	75	50	32	50	9	3
80	214	128	248	210	19	95	63	41	63	12.5	4
100	229	138	258	220	19	115	75	41	71	14.5	4
125	279	160	290	250	20	140	90	45	90	16.5	8

FA\FB type



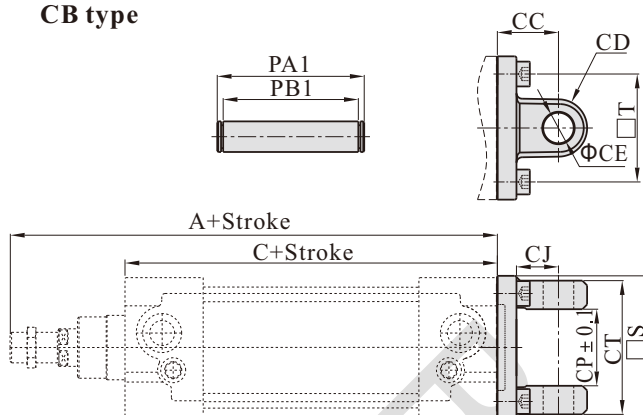
Bore size\Item	A	C	BA	BB	BC	BD	BE	BF	BP	T
32	144	94	30.5	10	47	32	80	64	7	32.5
40	159	105	35.5	10	53	36	90	72	9	38
50	175	106	40.5	12	65	45	108	90	9	46.5
63	190	121	45.5	12	75	50	118	100	9	56.5
80	214	128	45.5	16	95	63	150	126	12.5	72
100	229	138	55.5	16	115	75	176	150	14.5	89
125	279	160	60.5	20	139	90	218	180	16.5	110

CA type



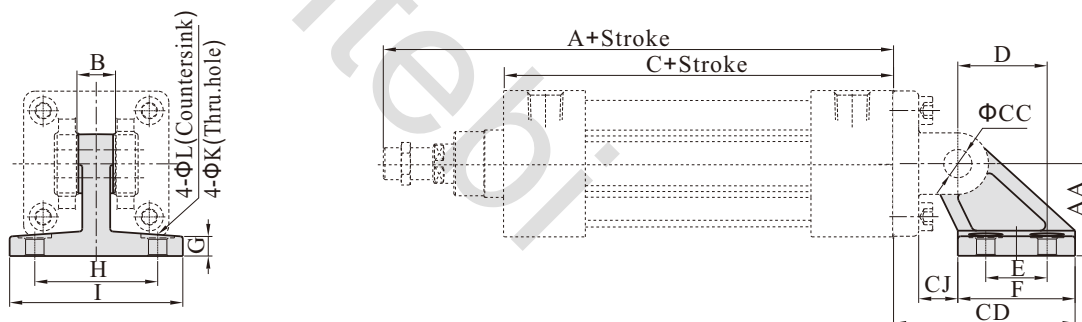
Bore size\Item	A	C	S	T	DC	DD	DE	DJ	DQ
32	144	94	46.5	32.5	22	10.5	10	13	25.8
40	159	105	54	38	25	12	12	16	27.8
50	175	106	64	46.5	27	12	12	17	31.7
63	190	121	75	56.5	32	15	16	22	39.7
80	214	128	93	72	36	15.5	16	22	49.7
100	229	138	110	89	41	20	20	27	59.7
125	279	160	134	110	50	24	25	33	69.7

CB type



Bore size\Item	A	C	CC	CD	CE	CJ	CP	CT	PA1	PB1	S	T
32	144	94	22	10.5	10	13	26	45	51	45.5	46.5	32.5
40	159	105	25	12	12	16	28	52	59	52.5	54	38
50	175	106	27	12	12	17	32	60	67	60.5	64	46.5
63	190	121	32	15	16	22	40	70	77	70.5	75	56.5
80	214	128	36	15.5	16	22	50	90	97	90.5	93	72
100	229	138	41	20	20	27	60	110	119	110.5	110	89
125	279	160	50	24	25	33	70	130	139	130.5	134	110

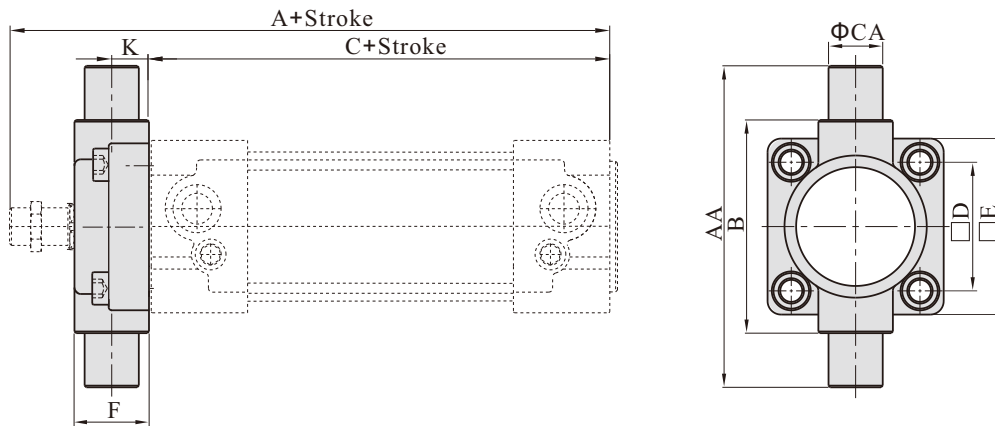
CR type



Bore size\Item	A	AA	B	C	CC	CD	CJ	D	E	F	G	H	I	K	L
32	144	32	26	94	10	49	10	21	18	30	8	38	50	6.5	10.5
40	159	36	28	105	12	55	12	24	22	34	10	41	53	6.5	10.5
50	175	45	32	106	12	67	13	33	30	44	12	50	64	9	14
63	190	50	40	121	16	76	17	37	35	49	12	52	66	9	14
80	214	63	50	128	16	92.5	19.5	47	40	59	14	66	85	11	17
100	229	71	60	138	20	105.5	22.5	55	50	69	15	76	95	11	17
125	279	90	70	160	25	134	29	70	60	88	20	94	122	13.5	20

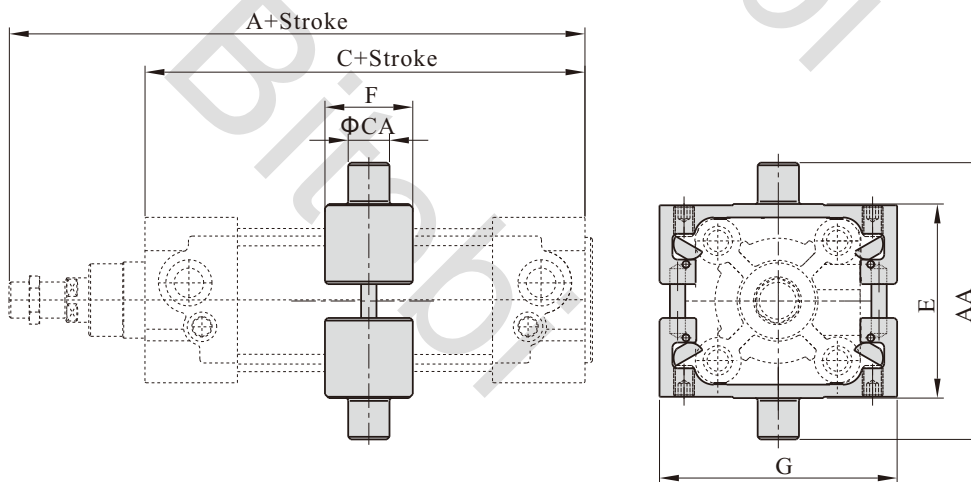
[Note] CR can't be used alone, it must be used with CB.

FTC type



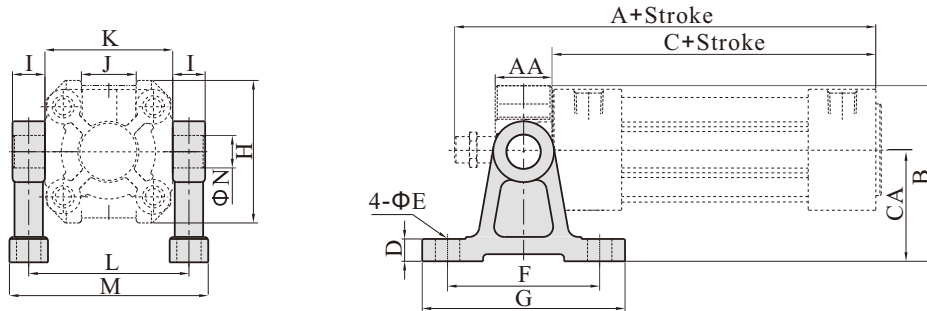
Bore size/Item	A	C	AA	B	CA	D	E	F	K
32	144	94	74	50	12	32.5	46	19	10
40	159	105	95	63	16	38	52	21	10
50	175	106	107	75	16	46.5	64	26	12
63	190	121	130	90	20	56.5	74	28	12
80	214	128	150	110	20	72	94	31	16
100	229	138	182	132	25	89	114	35	16
125	279	160	210	160	25	110	139	43	20

TC type



Bore size/Item	A	AA	C	CA	E	F	G
32	144	74	94	12	52	31	68
40	159	95	105	16	63	33	78
50	175	107	106	16	75	35	95
63	190	130	121	20	90	37	108
80	214	150	128	20	110	41	130
100	229	182	138	25	132	47	148
125	279	210	160	25	160	51	173

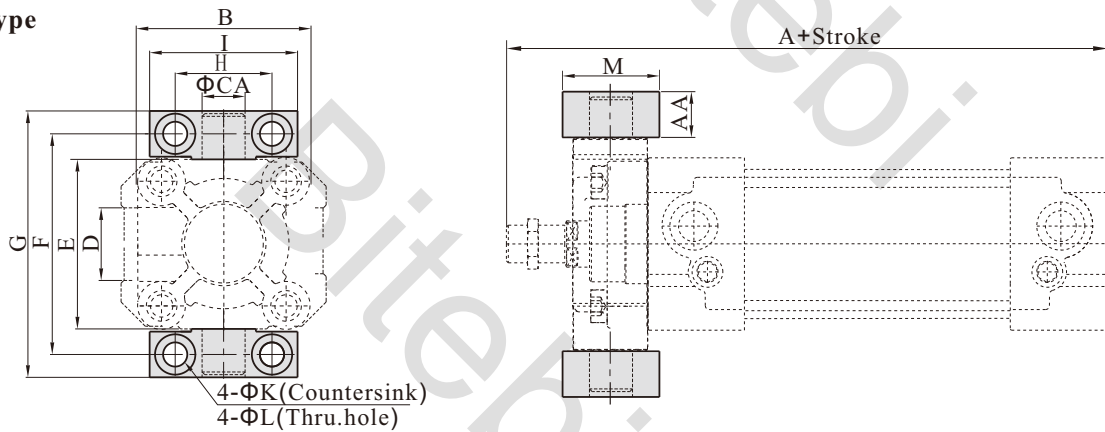
TCM1 type



Bore size/Item	A	C	AA	B	CA	D	E	F	G	H	I	J	K	L	M	N
32	144	94	19	66	40	11	9	60	80	52	12	20	50	62	77	12
40	159	105	21	86.5	54	11	12	75	100	65	16	27	63	79	98	16
50	175	106	26	91.5	54	11	12	75	100	75	16	31	75	91	110	16
63	190	121	28	115	70	11	12	85	110	90	20	42	90	110	133	20
80	214	128	31	126	70	11	12	85	110	112	20	54	110	130	153	20
100	229	138	35	157.5	90	19	18	115	155	135	25	68	135	157	185	25
125	279	160	43	169.3	90	19	18	115	155	170	25	80	160	185	213	25

[Note] The installation position of the accessories can not be adjusted arbitrarily.

TCM2 type



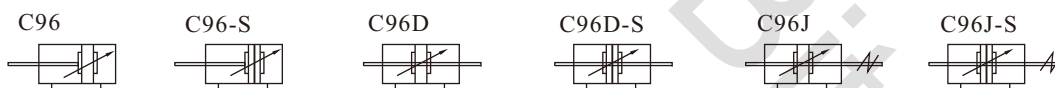
Bore size/Item	A	AA	B	CA	D	E	F	G	H	I	K	L	M
32	144	14	52	12	20	50	66	80	32	46	11	7	30
40	159	17	65	16	27	63	82	99	36	55	15	9	36
50	175	17	75	16	31	75	94	111	36	55	15	9	36
63	190	20.5	90	20	42	90	113.5	134	42	65	18	11	40
80	214	20.5	112	20	54	110	133.5	154	42	65	18	11	40
100	229	24.5	135	25	68	132	159.5	184	50	75	20	14	50
125	279	24.5	170	25	80	160	187.5	212	50	75	20	14	50

[Note] The installation position of the accessories can not be adjusted arbitrarily.

Product feature

1. ISO15552 and VDMA24562 standard cylinder is a cylindrical aluminum barrel cylinder.
2. The piston seal is composed of two Y-shape one-way seal structure, which has compensation function, long service life and low start-up pressure;
3. The square aluminum pipe without tie rod has good corrosion resistance;
4. The buffer adjustment of cylinder is smooth and steady;
5. Cylinders and accessories for installation with several specifications are optional.

Symbol



Specification

Bore size(mm)	32	40	50	63	80	100	125
Acting type	Double acting						
Fluid	Air(to be filtered by 40μm filter element)						
Operating pressure	0.15~1.0MPa(22~145psi)(1.5~10.0bar)						
Proof pressure	1.5MPa(215psi)(15bar)						
Temperature	-20~70°C						
Speed range	30~800 mm/s						
Stroke tolerance	0~1000 ^{+1.0} ₀			1001~2000 ^{+1.8} ₀			
Cushion type	Variable cushion						
Port size [Note1]	G1/8	G1/4		G3/8		G1/2	

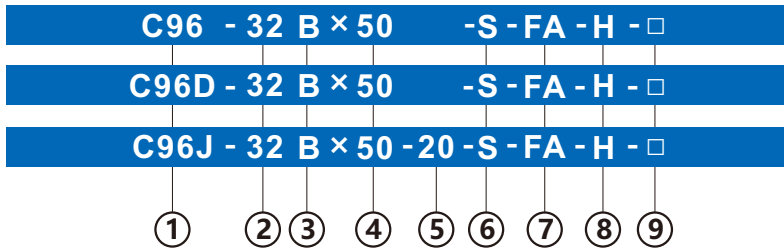
[Note1] The standard thread type is G thread, Please control us for other thread type.

Standard Stroke

Bore size(mm)	Standard stroke	Max.std stroke	Max. stroke
32	25 50 75 100 125 150 175 200 250 300 350 400 450 500	1000	1500
40	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800	1200	1500
50	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1200	1500
63	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
80	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
100	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
125	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800

[Note] Consult us for non-standard stroke.

Ordering code



① Model	② Bore size
C96: Double acting type	32 40 50 63 80
C96D: Double rod type	100 125
C96J: Adjustable stroke type	

③ Rod material
Blank: Medium carbon steel
A: SUS420J2
B: SUS304
C: SUS316

④ Stroke
Refer to stroke table for details

⑦ Mounting style	
Mounting style	Adaptable series
Blank: No accessories	
LB: LB type	C96
FA: FA type	C96D
FTC: FTC type	C96J
TC: TC type	
FB: FB type	
CA: CA type	C96
CB: CB type	
CR: CR type	

⑥ Magnet
Blank: Without magnet
S: With magnet

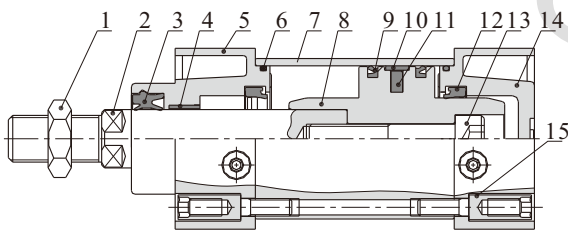
⑧ Seals material
Blank: NBR
H: Viton
T: TPU

⑨ Thread type
Blank: G thread
PT: PT thread

⑤ Adjustable stroke	
Series	Adjustable stroke
C96J series	10: 10mm
	20: 20mm
	30: 30mm
	40: 40mm
	50: 50mm
	75: 75mm
100: 100mm	
Others series	No this code

[Note1] CR is used with CB, FTC. TC are used with TCM1,TCM2.
The accessories are the same as DNC series's accessories, please refer to P21~26 for details.

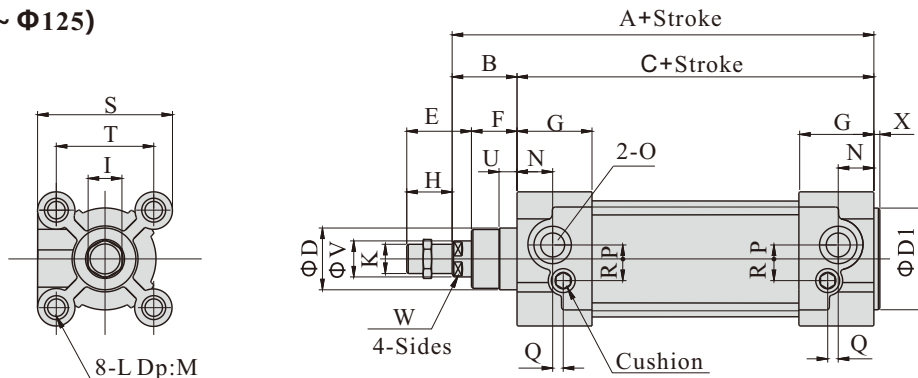
Inner structure and material of major parts



NO.	Item	Material
1	Rod nut	Carbon steel\Stainless steel
2	Piston rod	Carbon steel\Stainless steel
3	Front cover packing	TPU
4	Bushing	Wear resistant material
5	Front cover	Aluminum alloy
6	Cushing O-ring	NBR
7	Barrel	Aluminum alloy
8	Piston	Aluminum alloy
9	O-ring	TPU\NBR
10	Wear ring	Wear resistant material
11	Magnet	Plastic
12	Buffer gasket	TPU\NBR
13	Bolt	Carbon steel
14	Back cover	Aluminum alloy
15	Screw	Carbon steel

Dimensions

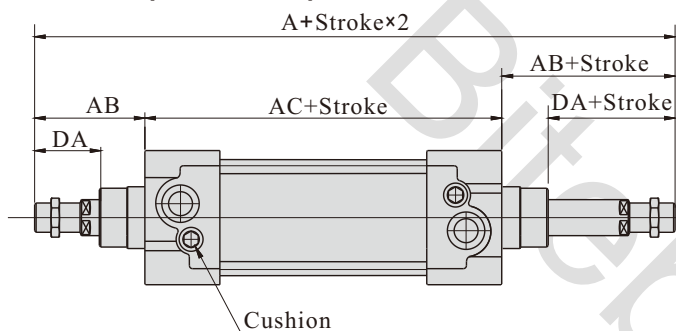
C96 Series(Φ32 ~ Φ125)



Bore size\Item	A	B	C	D	E	F	G	H	I	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
32	120	26	94	30	30	18	25	22	17	M10×1.25	M6	9.5	12.6	G1/8	5.5	5.5	7.1	45	32.5	10	12	10	4
40	135	30	105	35	32.5	21.5	29.5	24	17	M12×1.25	M6	9.5	14.6	G1/4	6	7	7.5	54	38	10	16	13	4
50	143	37	106	40	41	28	29.5	32	23	M16×1.5	M8	9.5	14.6	G1/4	8.5	4.5	8.5	64	46.5	11.5	20	17	4
63	158	37	121	45	40.5	28.5	35.5	32	23	M16×1.5	M8	9.5	18.1	G3/8	10	2	12	75	56.5	15	20	17	4
80	174	46	128	45	51.3	34.7	36	40	26	M20×1.5	M10	11.5	17.9	G3/8	12.7	1	8	93	72	15.7	25	22	4
100	189	51	138	55	52.8	38.2	38.8	40	26	M20×1.5	M10	11.5	19.8	G1/2	11.8	4	10	110	89	19.2	25	22	4
125	225	65	160	60	73	46	45	54	41	M27×2.0	M12	11.5	18	G1/2	8	14	13	134	110	20.5	32	27	6

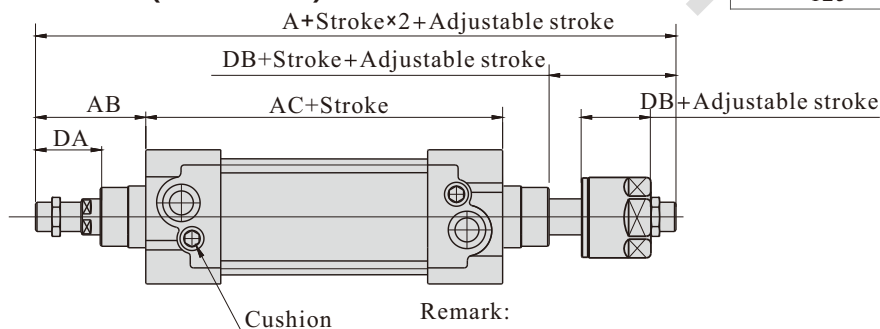
Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.

C96D Series(Φ32 ~ Φ125)



Bore size\Item	A		AB	AC	DA	DB	
	Model	CP95D					CP95J
32		190	188	48	94	29	27
40		213	208	54	105	33	28
50		244	231	69	106	42	29
63		259	246	69	121	42	29
80		300	282.5	86	128	53	35.5
100		320	300.5	91	138	55	35.5
125		398	366.5	119	160	74	42.5

C96J Series(Φ32 ~ Φ125)



Remark:

1. The dimensions of magnet type cylinder are the same as non-magnet type cylinder.
2. The unmarked dimension is the same as DNC standard type.

Accessories

C96 series's accessories are all with CP96 series, please refer to page 4~8 for details.