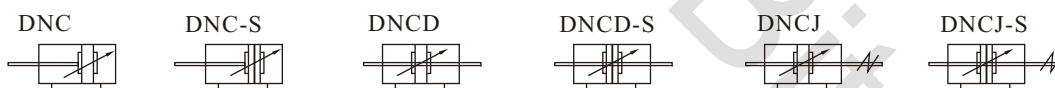




## Product feature

1. ISO15552 and VDMA24562 standard 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 <sup>+1.0</sup> <sub>0</sub>			1001 ~ 2000 <sup>+1.8</sup> <sub>0</sub>			
Cushion type	Variable cushion						
Port size [Note1]	G1/8	G1/4		G3/8		G1/2	

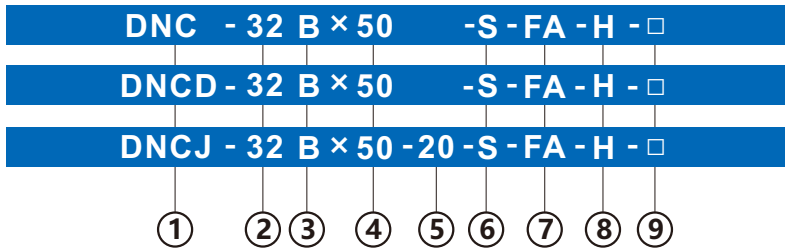
[Note1] The standard thread type is G thread, Please control us for other thread type.

## 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



<b>① Model</b>	<b>② Bore size</b>
DNC: Double acting type	32 40 50 63 80
DNCD: Double rod type	100 125
DNCJ: Adjustable stroke type	

<b>③ Rod material</b>
Blank: Medium carbon steel
A: SUS420J2
B: SUS304
C: SUS316

<b>④ Stroke</b>
Refer to stroke table for details

<b>⑤ Adjustable stroke</b>	
Series	Adjustable stroke
DNCJ series	10: 10mm
	20: 20mm
	30: 30mm
	40: 40mm
	50: 50mm
	75: 75mm
100: 100mm	
Others series	No this code

<b>⑦ Mounting style</b>	
Mounting style	Adaptable series
Blank: No accessories	
LB: LB type	DNC
FA: FA type	DNCD
FTC: FTC type	DNCJ
TC: TC type	
FB: FB type	
CA: CA type	DNC
CB: CB type	
CR: CR type	

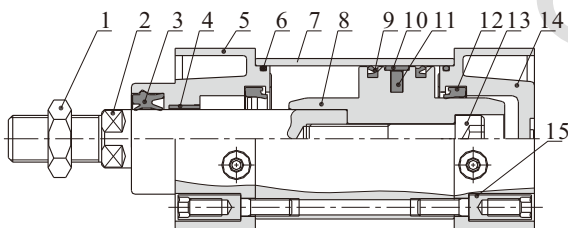
<b>⑥ Magnet</b>
Blank: Without magnet
S: With magnet

<b>⑧ Seals material</b>
Blank: NBR
H: Viton
T: TPU

<b>⑨ Thread type</b>
Blank: G thread
PT: PT thread

[Note1] CR is used with CB, FTC. TC are used with TCM1,TCM2.

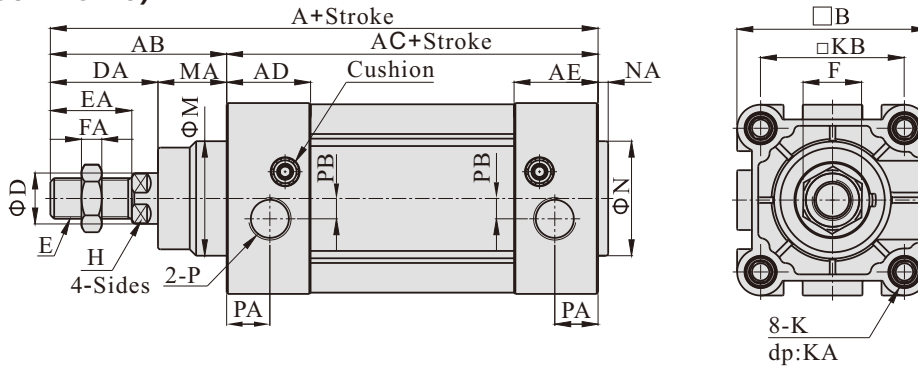
## Inner structure and material of major parts



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

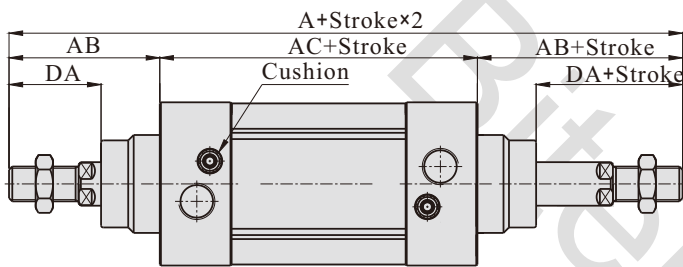
### DNC Series(Φ32 ~ Φ125)



Bore size\Item	A	AB	AC	AD	AE	B	D	DA	E	EA	F	FA	H	K	KA	KB	M	MA	NA	N	P	PA	PB
32	142	48	94	27.5	27.5	46.5	12	29	M10×1.25	22	17	6	10	M6	16	32.5	30	19	3	30	G1/8	13.5	6
40	159	54	105	32	32	54	16	33	M12×1.25	24	17	7	13	M6	17	38	35	21	3.5	35	G1/4	17.5	6
50	175	69	106	31	31	64	20	42	M16×1.5	32	23	8	17	M8	17	46.5	40	27	3.5	40	G1/4	14	8
63	190	69	121	33	33	75	20	42	M16×1.5	32	23	8	17	M8	17	56.5	45	27	4	45	G3/8	17	8
80	214	86	128	33	33	93	25	53	M20×1.5	40	26	10	22	M10	19	72	45	33	4	45	G3/8	16.5	8
100	229	91	138	37	37	110	25	55	M20×1.5	40	26	10	22	M10	19	89	55	36	4	55	G1/2	19.5	10
125	279	119	160	46	46	134	32	74	M27×2	54	41	13.5	27	M12	22	110	60	45	4	60	G1/2	23	11

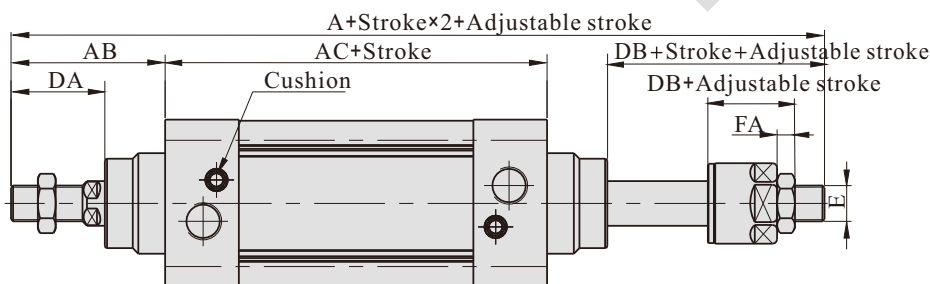
Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.

### DNCD Series(Φ32 ~ Φ125)



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

### DNCJ Series(Φ32 ~ Φ125)



Bore size\Item Model	DB	E	FA
32	27	M10X1.25	6
40	28	M12X1.25	7
50	29	M16X1.5	8
63	29	M16X1.5	8
80	35.5	M20X1.5	10
100	35.5	M20X1.5	10
125	42.5	M27X2.0	13.5

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.

## List for ordering code of accessories

Accessories Bore size	Mounting accessories								
	LB	FA/FB	CA	CB	CR	TC	FTC	TCM1	TCM2
32	F-DNC32LB	F-DNC32FA	F-DNC32CA	F-DNC32CB	F-DNC32CR	F-DNC32TC	F-DNC32FTC	F-DNC32TCM1	F-DNC32TCM2
40	F-DNC40LB	F-DNC40FA	F-DNC40CA	F-DNC40CB	F-DNC40CR	F-DNC40TC	F-DNC40FTC	F-DNC40TCM1	F-DNC40TCM2
50	F-DNC50LB	F-DNC50FA	F-DNC50CA	F-DNC50CB	F-DNC50CR	F-DNC50TC	F-DNC50FTC	F-DNC50TCM1	F-DNC50TCM2
63	F-DNC63LB	F-DNC63FA	F-DNC63CA	F-DNC63CB	F-DNC63CR	F-DNC63TC	F-DNC63FTC	F-DNC63TCM1	F-DNC63TCM2
80	F-DNC80LB	F-DNC80FA	F-DNC80CA	F-DNC80CB	F-DNC80CR	F-DNC80TC	F-DNC80FTC	F-DNC80TCM1	F-DNC80TCM2
100	F-DNC100LB	F-DNC100FA	F-DNC100CA	F-DNC100CB	F-DNC100CR	F-DNC100TC	F-DNC100FTC	F-DNC125TCM1	F-DNC125TCM2
125	F-DNC125LB	F-DNC125FA	F-DNC125CA	F-DNC125CB	F-DNC125CR	F-DNC125TC	F-DNC125FTC	F-DNC125TCM1	F-DNC125TCM2

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
DNC	Standard	●	●	●	●	●	●	●	●	●	●	●	●	●	×	×
	With magnet	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
DNCD	Standard	●	●	×	×	×	×	●	●	●	●	●	●	●	×	×
	With magnet	●	●	×	×	×	×	●	●	●	●	●	●	●	●	●
DNCJ	Standard	●	●	×	×	×	×	●	●	●	●	●	●	●	×	×
	With magnet	●	●	×	×	×	×	●	●	●	●	●	●	●	●	●

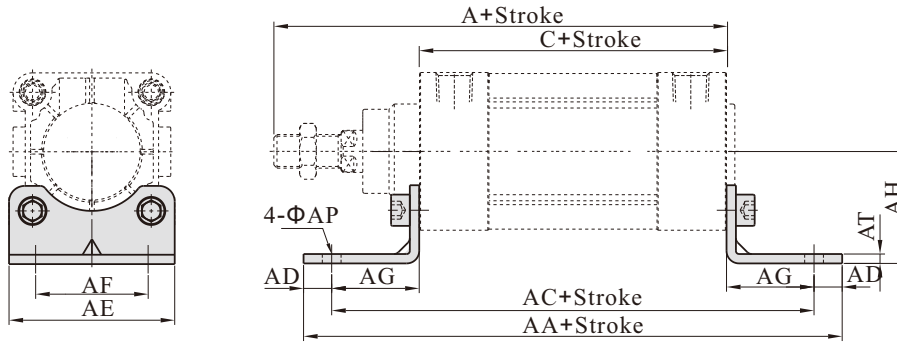
## Material of accessories

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.

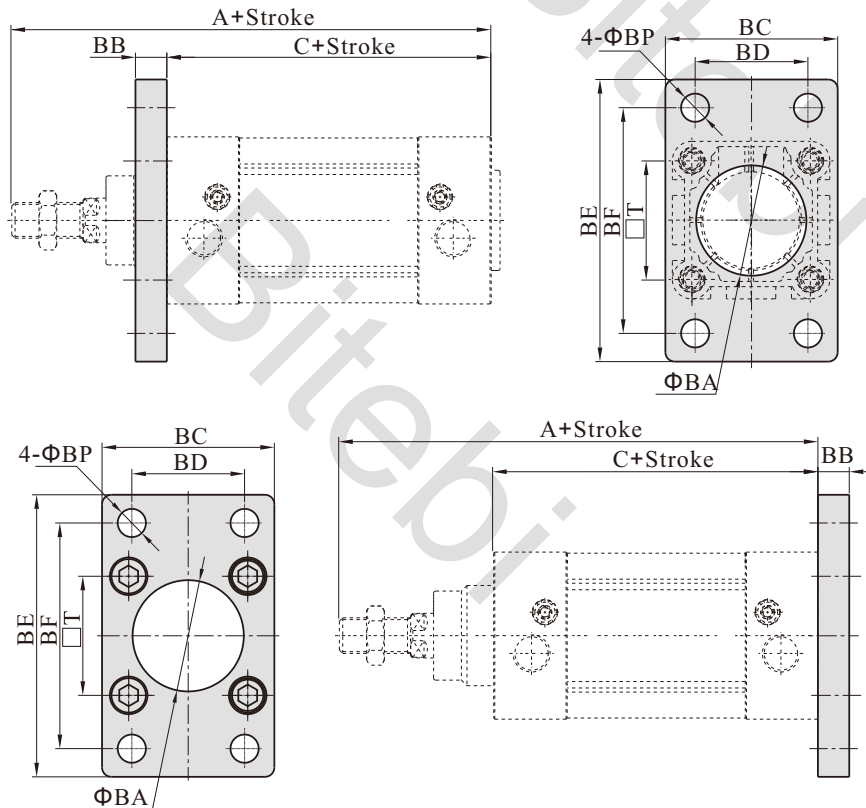
## Accessories Dimensions

### LB type



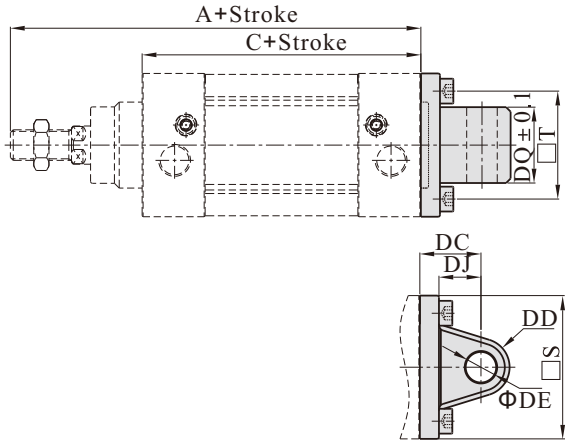
Bore size\Item	A	C	AA	AC	AD	AE	AF	AG	AH	AP	AT
32	142	94	158	142	8	47	32	24	32	7	3
40	159	105	179	161	9	53	36	28	36	9	3
50	175	106	190	170	10	65	45	32	45	9	3
63	190	121	209	185	12	75	50	32	50	9	3
80	214	128	248	210	19	95	63	41	63	12.5	4
100	229	138	258	220	19	115	75	41	71	14.5	4
125	279	160	290	250	20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

### FA\FB type



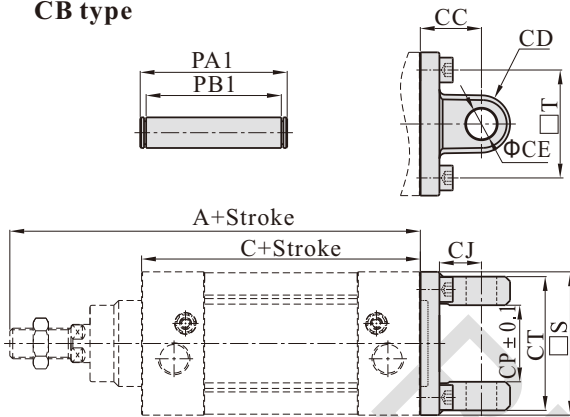
Bore size\Item	A	C	BA	BB	BC	BD	BE	BF	BP	T
32	142	94	30.5	10	47	32	80	64	7	32.5
40	159	105	35.5	10	53	36	90	72	9	38
50	175	106	40.5	12	65	45	108	90	9	46.5
63	190	121	45.5	12	75	50	118	100	9	56.5
80	214	128	45.5	16	95	63	150	126	12.5	72
100	229	138	55.5	16	115	75	176	150	14.5	89
125	279	160	60.5	20	139	90	218	180	16.5	110

## CA type



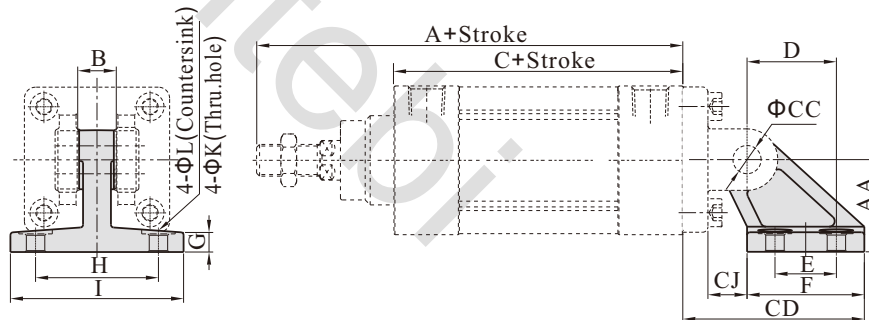
Bore size\Item	A	C	S	T	DC	DD	DE	DJ	DQ
32	142	94	46.5	32.5	22	10.5	10	13	25.8
40	159	105	54	38	25	12	12	16	27.8
50	175	106	64	46.5	27	12	12	17	31.7
63	190	121	75	56.5	32	15	16	22	39.7
80	214	128	93	72	36	15.5	16	22	49.7
100	229	138	110	89	41	20	20	27	59.7
125	279	160	134	110	50	24	25	33	69.7

## CB type



Bore size\Item	A	C	CC	CD	CE	CJ	CP	CT	PA1	PB1	S	T
32	142	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

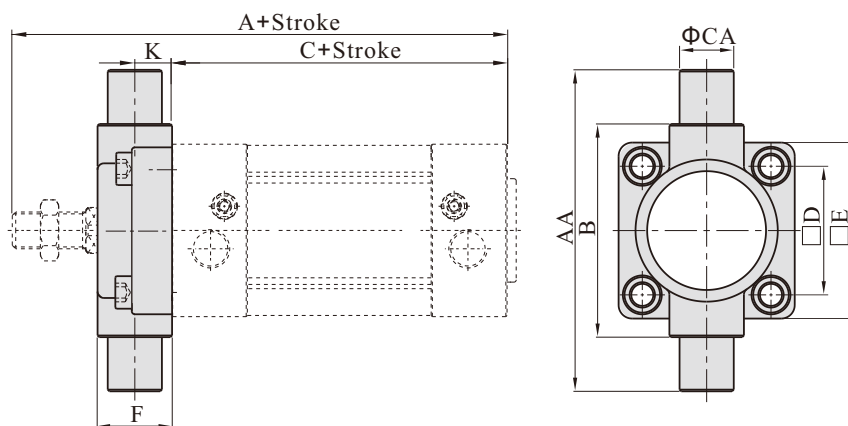
## CR type



Bore size\Item	A	AA	B	C	CC	CD	CJ	D	E	F	G	H	I	K	L
32	142	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

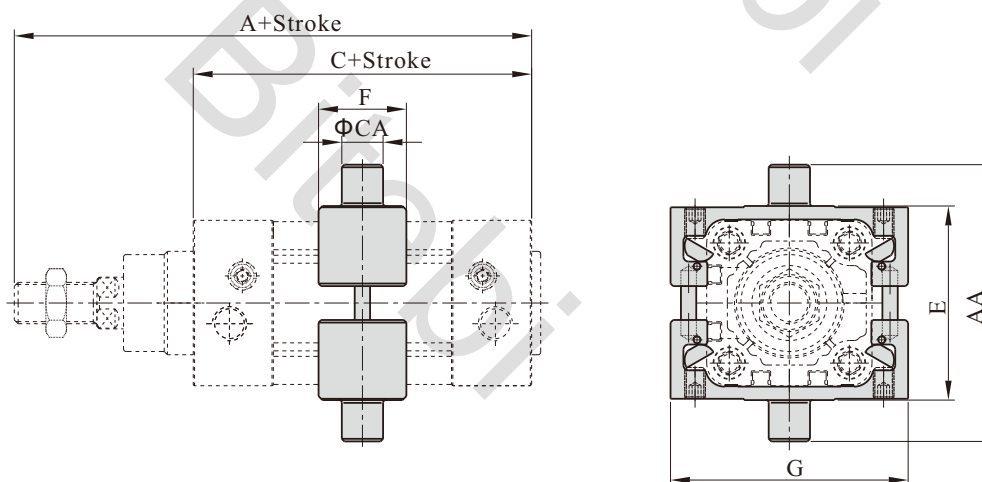
[Note] CR can't be used alone, it must be used with CB.

## FTC type



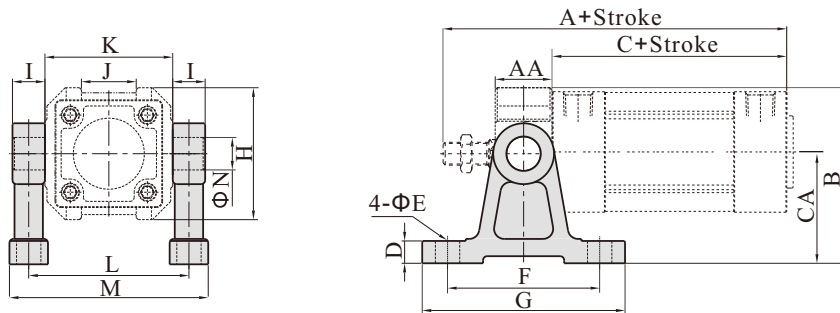
Bore size\Item	A	C	AA	B	CA	D	E	F	K
32	142	94	74	50	12	32.5	46	19	10
40	159	105	95	63	16	38	52	21	10
50	175	106	107	75	16	46.5	64	26	12
63	190	121	130	90	20	56.5	74	28	12
80	214	128	150	110	20	72	94	31	16
100	229	138	182	132	25	89	114	35	16
125	279	160	210	160	25	110	139	43	20

## TC type



Bore size\Item	A	AA	C	CA	E	F	G
32	142	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

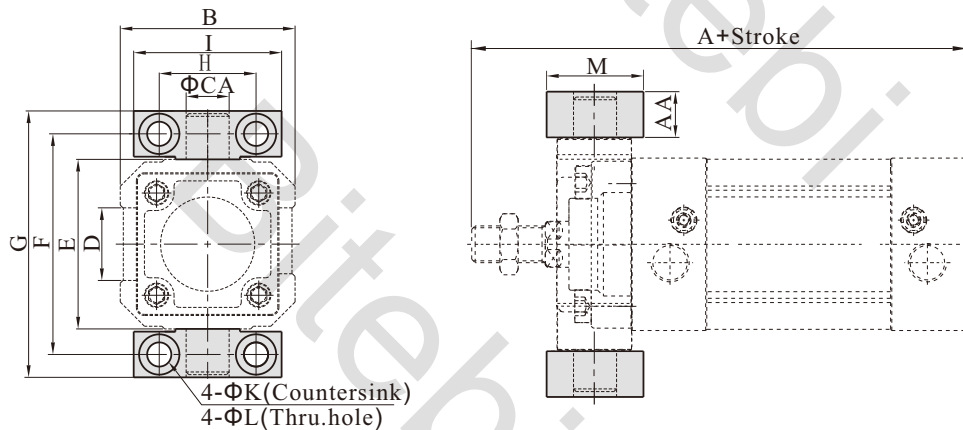
## TCM1 type



Bore size/Item	A	C	AA	B	CA	D	E	F	G	H	I	J	K	L	M	N
32	142	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	142	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.