



Product feature

1. ISO15552 (original ISO6431) 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 aluminum profile without tie rod has good corrosion resistance. With sensor switch groove on the two sides of body;
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	160	200
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						30~500 mm/s		
Stroke tolerance	0~250 ^{+1.0} ₀			251~1000 ^{+1.5} ₀		1001~2000 ^{+2.0} ₀			
Cushion type	Variable cushion								
Cushion stroke	27		30		36		40	50	
Port size [Note1]	G1/8	G1/4		G3/8		G1/2		G3/4	

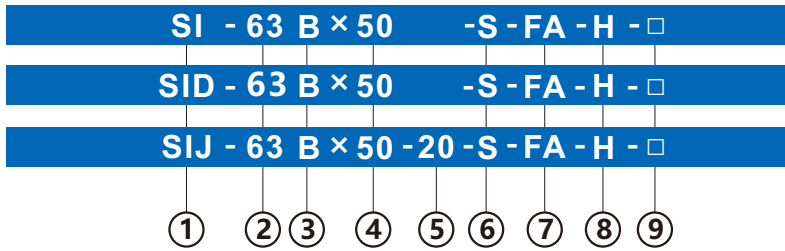
[Note1] The standard thread type is G thread, Please control us for other thread type.

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
160	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
200	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000

[Note] Consult us for non-standard stroke.

Ordering code



① Model	② Bore size
SI: Double acting type	32 40 50 63 80
SID: Double rod type	100 125 160
SIJ: Adjustable stroke type	200

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

④ Stroke
Refer to stroke table for details

⑤ Adjustable stroke	
Series	Adjustable stroke
SIJ 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	SI
FA: FA type	SID
FTC: FTC type	SIJ
TC: TC type	
FB: FB type	
CA: CA type	SI
CB: CB type	
CR: CR type	

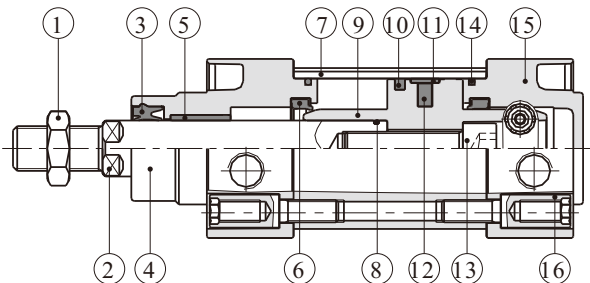
⑥ Magnet
Blank: Without magnet
S: With magnet

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.

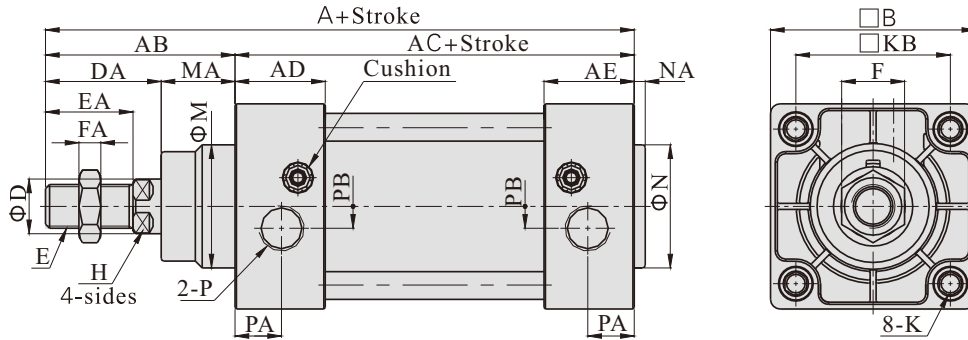
Inner structure and material of major parts



NO.	Item	Material
1	Rod nut	Carbon steel\Stainless steel
2	Piston rod	Carbon steel with 20μm chrome plated
3	Front cover packing	TPU
4	Front cover	Aluminum alloy
5	Bushing	Wear resistant material
6	Cushing O-ring	TPU
7	Barrel	Aluminum alloy
8	O-ring	NBR
9	Piston	Aluminum alloy
10	Piston Seal	NBR
11	Wear ring	Wear resistant material
12	Magnet	Plastic
13	Bolt	Carbon steel
14	O-ring	NBR
15	Back cover	Aluminum alloy
16	Screw	Carbon steel\Stainless steel

Dimensions

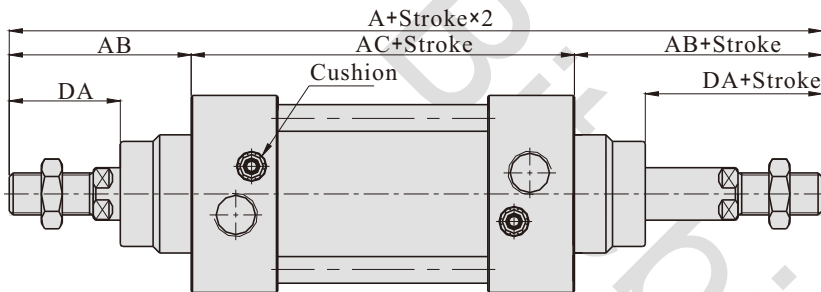
SI Series(Φ32~Φ200)



Bore size\Item	A	AB	AC	AD	AE	B	D	DA	E	EA	F	FA	M	MA	H	K	KB	N	NA	P	PA	PB
32	142	48	94	27	27	47	12	29	M10×1.25	22	17	6	30	19	10	M6	32.5	30	3	G1/8	13	5.5
40	159	54	105	31	31	53	16	33	M12×1.25	24	17	7	35	21	13	M6	38	35	3.5	G1/4	17	6
50	175	69	106	31	31	65	20	42	M16×1.5	32	23	8	40	27	17	M8	46.5	40	3.5	G1/4	15.5	7.5
63	190	69	121	33	33	75	20	42	M16×1.5	32	23	8	45	27	17	M8	56.5	45	4	G3/8	16.5	7.5
80	214	86	128	33	33	95	25	53	M20×1.5	40	26	10	45	33	22	M10	72	45	4	G3/8	16.5	9
100	229	91	138	37	37	115	25	55	M20×1.5	40	26	10	55	36	22	M10	89	55	4	G1/2	18.5	9.5
125	279	119	160	46	45	140	32	74	M27×2.0	54	41	13.5	60	40	27	M12	110	60	4	G1/2	23	14
160	332	152	180	50	50	180	40	94	M36×2.0	72	55	18	65	55	36	M16	140	65	4	G3/4	25	15
200	347	167	180	50	50	220	40	100	M36×2.0	72	55	18	75	67	36	M16	175	75	5	G3/4	25	15

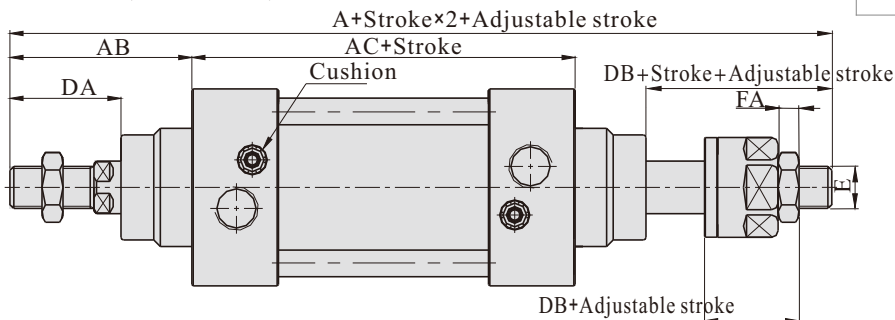
Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.

SID Series(Φ32~Φ200)



Bore size\Item	A		AB	AC	DA
	SAID	SAIJ			
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
160	484	458	152	180	94
200	514	482	167	180	100

SIJ Series(Φ32~Φ200)



Bore size\Item	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
160	68	M36X2.0	18
200	68	M36X2.0	18

Remark:

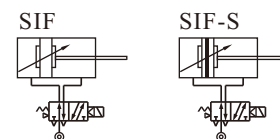
1. The dimensions of magnet type cylinder are the same as non-magnet type cylinder.
2. The unmarked dimension is the same as SI standard type.



Product feature

1. For Standard Cylinders: use 4M210 valve for bore size 32, 40 & 50; 4M310 valve for bore size 63, 80 & 100mm.
2. Individually control, no need for extra solenoid valves.
3. Installation time & space saving; suitable for decentralize installation in large system.
4. Options of mounting accessories & easy installation.

Symbol



Specification

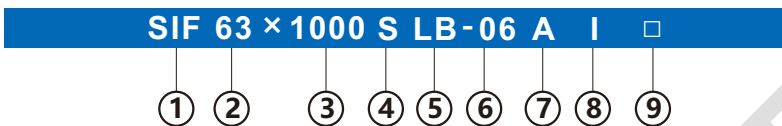
Cylinder specification											
Bore size(mm)	32	40	50	63	80	100					
Acting type	Double acting										
Fluid	Air(to be filtered by 40μm filter element)										
Mounting type	Basic	FA	FB	CA	CB	CR	LB	TC	FTC	TCM1	TCM2
Operating pressure	0.1~1.0MPa(15~145psi)(1.0~10.0bar)										
Proof pressure	1.5MPa(215psi)(15bar)										
Temperature	-20~70										
Speed range mm/s	30~800										
Stroke tolerance	0~250 ^{+1.0} ₀ 251~1000 ^{+1.5} ₀ 1001~1500 ^{+2.0} ₀										
Cushion type	Variable cushion										
Adjustable cushionstroke	27		30		36						
Port size	G1/8	G1/4		G3/8		G1/2					
PU tube size(ODXID)	Φ8×Φ5			Φ10×Φ6.5							
Solenoid valve specification											
Model	4M210-06 & 4M210-08			4M310-08 & 4M310-10							
Fluid	Air(to be filtered by 40μm filter element)										
Acting type	Internal piloted										
Port size [Note1]	In=Exhaust=1/8" & In=1/4" Exhaust=1/8"			In=Exhaust=1/4" & In=PT3/8 Exhaust=1/4"							
Orifice size	4M210-06: 14.0mm ² (Cv=0.78) 4M210-08: 16.0mm ² (Cv=0.89)			4M310-08: 25.0mm ² (Cv=1.40) 4M310-10: 30.0mm ² (Cv=1.68)							
Valve type	5 port 2 position										
Operating pressure	0.15~0.8MPa(21~114psi)										
Proof pressure	1.5MPa(215psi)										
Temperature °C	-20~70										
Body material	Aluminum alloy										
Lubrication	Not required										
Max. frequency	5 cycle/sec			4 cycle/sec							
Coil specification											
Standard voltage	AC220V、AC110V、AC24V、DC24V、DC12V										
Scope voltage	AC: ±15% DC: ±10%										
Power consumption	AC: 3.5VA DC: 3.0W										
Protection	IP65(DIN40050)										
Temperature classification	B Class										
Electrical entry	Terminal, Grommet										
Activating time	0.05 sec and below										

Standard Stroke

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

[Note] Consult us for non-standard stroke.

Ordering code



① Model	② Bore size
SIF: Double acting with valve type	32 40 50 63 80 100

⑤ Mounting style
Blank: No accessories
LB: LB type
FA: FA type
FB: FB type
CA: CA type
CB: CB type
CR: CR type
FTC: FTC type
TC: TC type

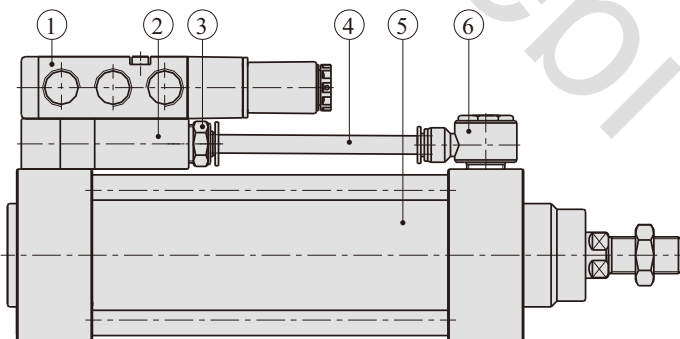
⑥ Port size	⑦ Voltage
06: 1/8"	A: AC220V
08: 1/4"	B: DC24V
10: 3/8"	C: AC110V
	E: AC24V
	F: DC12V

⑧ Electrical entry
Blank: Terminal
I: Grommet

③ Stroke
Refer to stroke table for details
④ Magnet
Blank: Without magnet
S: With magnet
⑨ Thread type
Blank: G thread
PT: PT thread

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

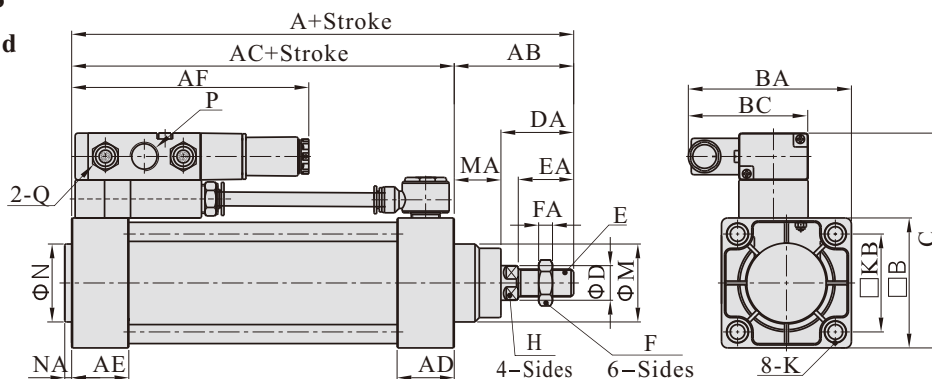
Inner structure and material of major parts



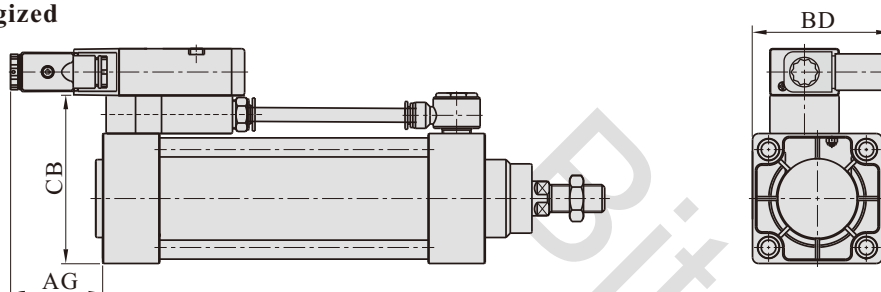
NO.	Item
1	4M series solenoid valve
2	Unite block
3	APC series tube connector
4	PU tube
5	SI series cylinder
6	APH series tube connector

Dimensions

Pull when energized



Push when energized



Bore size\Item	A	AB	AC	AD	AE	AF	AG	B	BA	BC	BD	C	CB
32	142	48	94	27.5	27.5	117.5	53.5	47	78.5	67	67.5	91	69
40	159	54	105	32	32	120	51	53	82	67	70	97	75
50	175	69	106	31	31	118.5	52.5	65	89.5	67	74.5	109	87
63	190	69	121	33	33	137	53	75	94.5	69.5	79.5	124	97
80	214	86	128	33	33	137	53	95	105	69.5	88	144	117
100	229	91	138	37	37	137.5	52.5	115	118	69.5	96	164	137

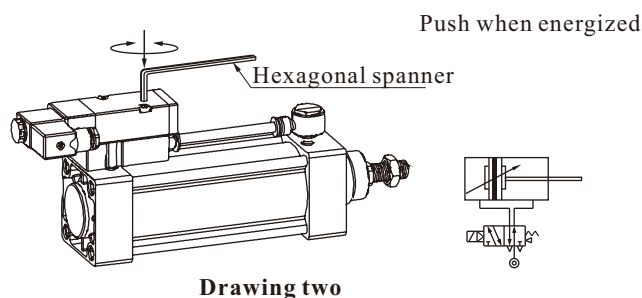
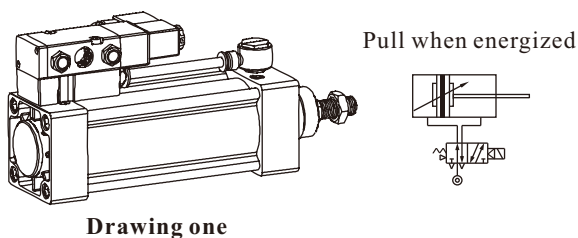
Bore size\Item	valve's type	P	K
32	4M210-06	1/8"	M6
	4M210-08	1/4"	
40	4M210-06	1/8"	M6
	4M210-08	1/4"	
50	4M210-06	1/8"	M8
	4M210-08	1/4"	
63	4M310-08	1/4"	M8
	4M310-10	3/8"	
80	4M310-08	1/4"	M10
	4M310-10	3/8"	
100	4M310-08	1/4"	M10
	4M310-10	3/8"	

Bore size\Item	D	DA	E	EA	F	FA	H	M	MA	N	NA	Q	KB
32	12	29	M10X1.25	22	17	6	10	30	19	30	3	1/8"	32.5
40	16	33	M12X1.25	24	17	7	13	35	21	35	3.5	1/8"	38
50	20	42	M16X1.5	32	23	8	17	40	27	40	4	1/8"	46.5
63	20	42	M16X1.5	32	23	8	17	45	27	45	4	1/4"	56.5
80	25	53	M20X1.5	40	26	10	22	45	33	45	4	1/4"	72
100	25	55	M20X1.5	40	26	10	22	55	36	55	4	1/4"	89

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

How to use

- Options for piston rod to retract or extend when solenoid coil is energized.
- Default factory setting will be piston rod to retract when energized (see Drawing one). Should you require piston rod to extend when energized, reposition the solenoid valve as shown in Drawing two.



Attention Ensure that the seals between the mounting block & valve are placed correctly when repositioning the valve.

List for ordering code of accessories

Accessories Bore size	Mounting accessories								
	LB	FA/FB	CA	CB	CR	TC	FTC	TCM1	TCM2
32	F-SI32LB	F-SI32FA	F-SI32CA	F-SI32CB	F-SI32CR	F-SI32TC	F-SI32FTC	F-SI32TCM1	F-SI32TCM2
40	F-SI40LB	F-SI40FA	F-SI40CA	F-SI40CB	F-SI40CR	F-SI40TC	F-SI40FTC	F-SI40TCM1	F-SI40TCM2
50	F-SI50LB	F-SI50FA	F-SI50CA	F-SI50CB	F-SI50CR	F-SI50TC	F-SI50FTC	F-SI40TCM1	F-SI40TCM2
63	F-SI63LB	F-SI63FA	F-SI63CA	F-SI63CB	F-SI63CR	F-SI63TC	F-SI63FTC	F-SI63TCM1	F-SI63TCM2
80	F-SI80LB	F-SI80FA	F-SI80CA	F-SI80CB	F-SI80CR	F-SI80TC	F-SI80FTC	F-SI63TCM1	F-SI63TCM2
100	F-SI100LB	F-SI100FA	F-SI100CA	F-SI100CB	F-SI100CR	F-SI100TC	F-SI100FTC	F-SI125TCM1	F-SI125TCM2
125	F-SI125LB	F-SI125FA	F-SI125CA	F-SI125CB	F-SI125CR	F-SI125TC	F-SI125FTC	F-SI125TCM1	F-SI125TCM2
160	F-SI160LB	F-SI160FA	F-SI160CA	F-SI160CB	F-SI160CR	F-SI160TC	F-SI160FTC	F-SI160TCM1	F-SI160TCM2
200	F-SI200LB	F-SI200FA	F-SI200CA	F-SI200CB	F-SI200CR	F-SI200TC	F-SI200FTC	F-SI200TCM1	F-SI160TCM2

Accessories Bore size	Knuckle				Sensor switch	
	I	Y	F	U	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		
160	F-M36X200I	F-M36X200Y	F-M36X200F	F-M36X200U		
200	F-M36X200I	F-M36X200Y	F-M36X200F	F-M36X200U		

Accessory selection

Accessories Cylinder model	Mounting accessories										Knuckle				Sensor switch	
	LB	FA	FB	CA	CB	CR	TC	FTC	TCM1	TCM2	I	Y	U	F	CS1-E	DS1-E
SI	Standard	●	●	●	●	●	●	●	●	●	●	●	●	●	×	×
	With magnet	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
SIF	Standard	●	●	●	●	●	●	●	●	●	●	●	●	●	×	×
	With magnet	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
SID	Standard	●	●	×	×	×	×	●	●	●	●	●	●	●	×	×
	With magnet	●	●	×	×	×	×	●	●	●	●	●	●	●	●	●
SIJ	Standard	●	●	×	×	×	×	●	●	●	●	●	●	●	×	×
	With magnet	●	●	×	×	×	×	●	●	●	●	●	●	●	●	●

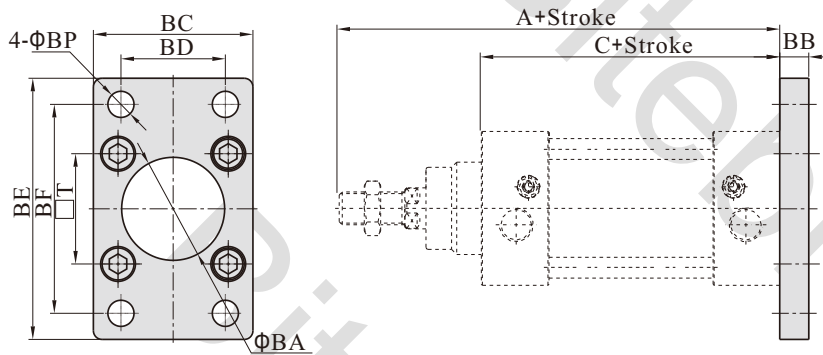
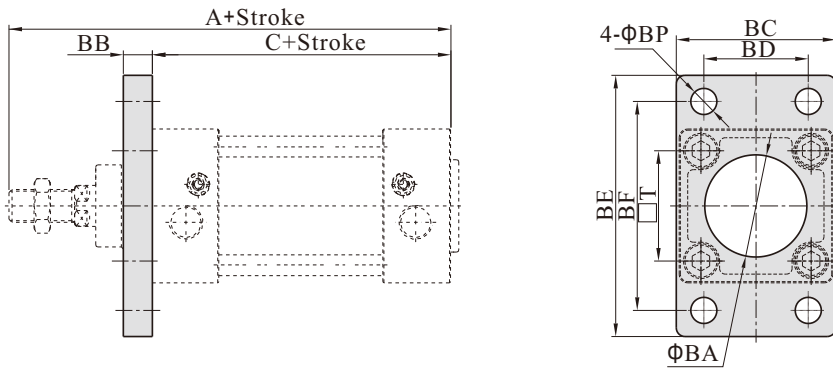
Material of accessories

Accessories Bore size	Mounting accessories										Knuckle			
	LB	FA	FB	CA	CB	CR	TC	FTC	TCM1	TCM2	I	Y	F	U
32~100	○	●	●	◇	◇	◇	◇	■	■	●	□	□	□	□
125~200	□	□	□	□	□	□	□	□	□	●	□	□	□	□

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

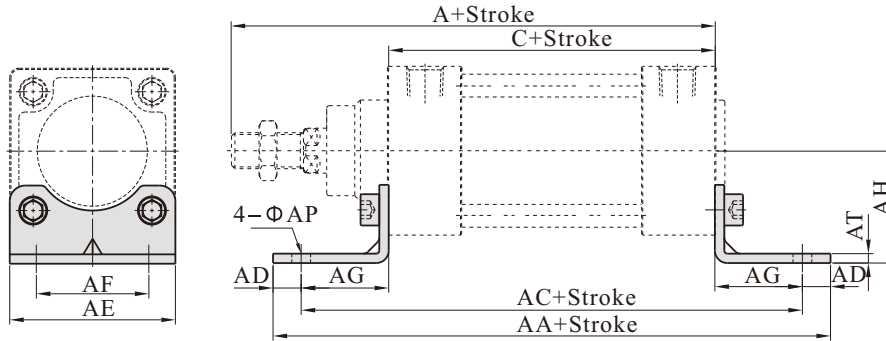
Accessories Dimensions

FA\FB type



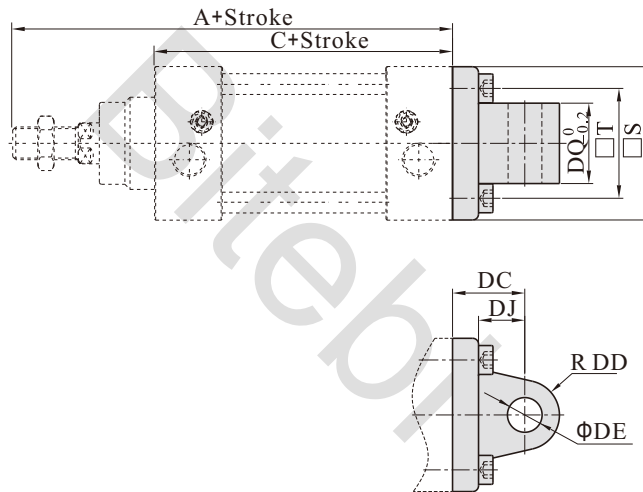
Bore size\Item	A	C	BA	BB	BC	BD	BE	BF	BP	T
32	142	94	30.5	10	47	32	80	64	7	32.5
40	159	105	35.5	10	53	36	90	72	9	38
50	175	106	40.5	12	65	45	108	90	9	46.5
63	190	121	45.5	12	75	50	118	100	9	56.5
80	214	128	45.5	16	95	63	150	126	12.5	72
100	229	138	55.5	16	115	75	176	150	14.5	89
125	279	160	60.5	20	139	90	218	180	16.5	110
160	332	180	65.5	20	180	115	280	230	18.5	140
200	347	180	75.5	25	220	135	320	270	24	175

LB type



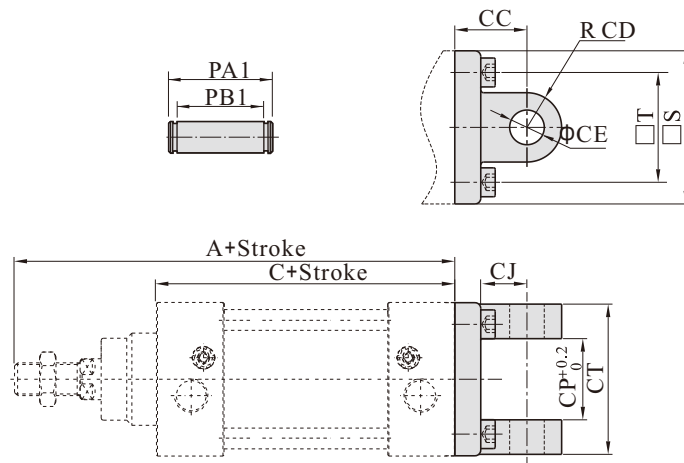
Bore size\Item	A	C	AA	AC	AD	AE	AF	AG	AH	AP	AT
32	142	94	158	142	8	47	32	24	32	7	3
40	159	105	179	161	9	53	36	28	36	9	3
50	175	106	190	170	10	65	45	32	45	9	3
63	190	121	209	185	12	75	50	32	50	9	3
80	214	128	248	210	19	95	63	41	63	12.5	4
100	229	138	266	220	19	115	75	41	71	14.5	4
125	279	160	290	250	20	140	90	45	90	16.5	8
160	332	180	340	300	20	180	115	60	115	18.5	8
200	347	180	380	320	30	220	135	70	135	24	9

CA type



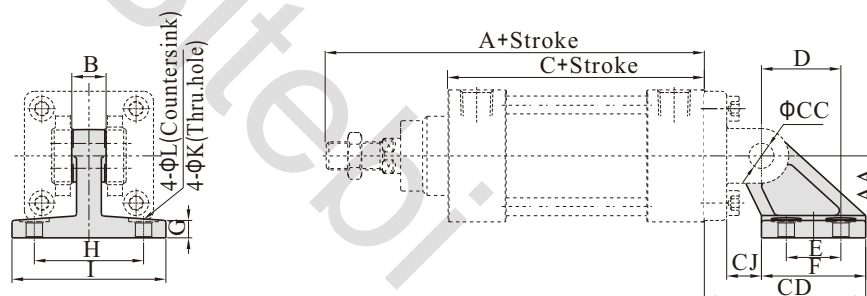
Bore size\Item	A	C	S	T	DC	DD	DE	DJ	DQ
32	142	94	47	32.5	22	9	10	13	25.8
40	159	105	52	38	25	10.5	12	16	27.8
50	175	106	64	46.5	27	11	12	17	31.7
63	190	121	74	56.5	32	13.5	16	22	39.7
80	214	128	94	72	36	14.5	16	22	49.7
100	229	138	113	89	41	17	20	27	59.7
125	279	160	139	110	50	22	25	33	69.7
160	332	180	180	140	55	30	30	35.5	89.7
200	347	180	220	175	60	30	30	37	89.7

CB type



Bore size\Item	A	C	CC	CD	CE	CJ	CP	CT	PA1	PB1	S	T
32	142	94	22	9	10	13	26	45	51	45.5	47	32.5
40	159	105	25	10.5	12	16	28	52	59	52.5	52	38
50	175	106	27	11	12	17	32	60	67	60.5	64	46.5
63	190	121	32	13	16	22	40	70	77	70.5	74	56.5
80	214	128	36	14	16	22	50	90	97	90.5	94	72
100	229	138	41	17.5	20	27	60	110	119	110.5	113	89
125	279	160	50	21.5	25	33	70	130	139	130.5	139	110
160	332	180	55	30	30	35.5	90	170	181	170.5	180	140
200	347	180	60	30	30	36	90	170	181	170.5	220	175

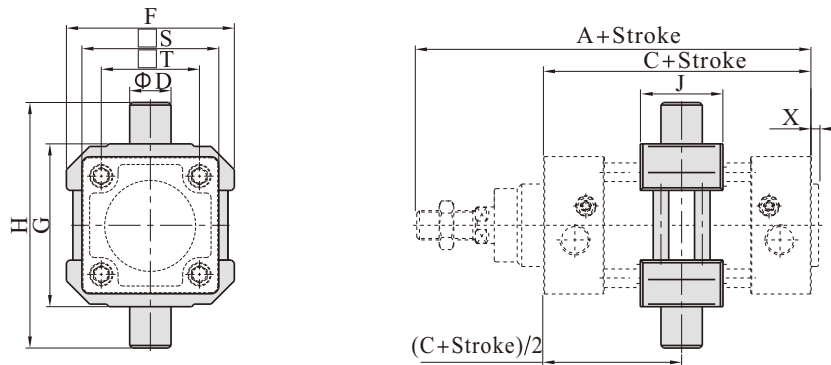
CR type



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
160	332	115	90	180	30	171	25.5	97	88	126	25	118	156	13.5	20
200	347	135	90	180	30	185	31	105	90	130	30	122	162	18	26

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

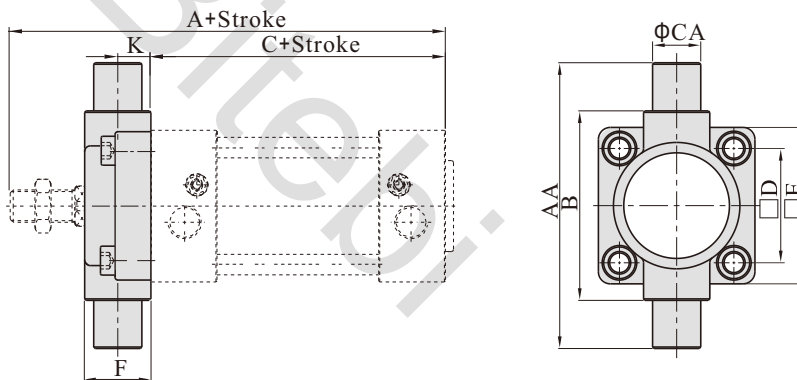
TC type



Bore size/Item	A	C	D	F	G	H	J	S	X	T
32	142	94	12	65	52	76	31	47	3	32.5
40	159	105	16	75	63	95	31	53	3.5	38
50	175	106	16	91	75	107	35	65	3.5	46.5
63	190	121	20	103	90	130	35	75	4	56.5
80	214	128	20	126	110	150	45	95	4	72
100	229	138	25	145	132	182	45	115	4	89
125	279	160	25	175	160	210	51	140	4	110
160	332	180	32	210	200	264	50	180	4	140
200	347	180	32	255	250	314	50	220	5	175

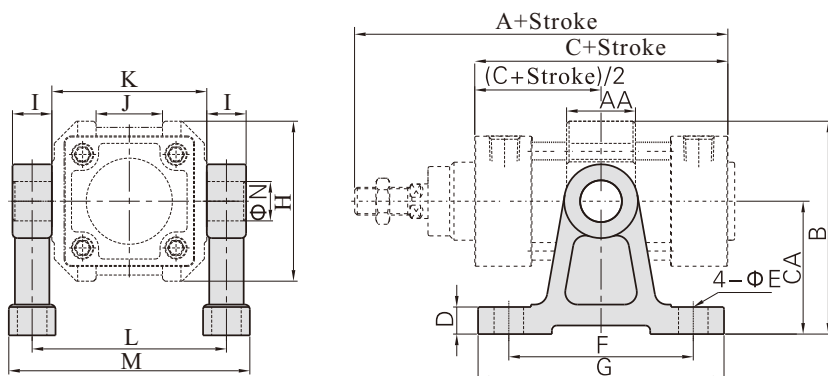
[Note] 160 and 200 TC accessory has been installed on the barrel of cylinder before it worked off, and the position of the accessories can not be adjusted arbitrarily. If consumer orders the TC solely, he will not install it on the barrel of standard cylinder directly.

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
160	332	180	264	200	32	140	179	56	20
200	347	180	314	250	32	175	218	64	20

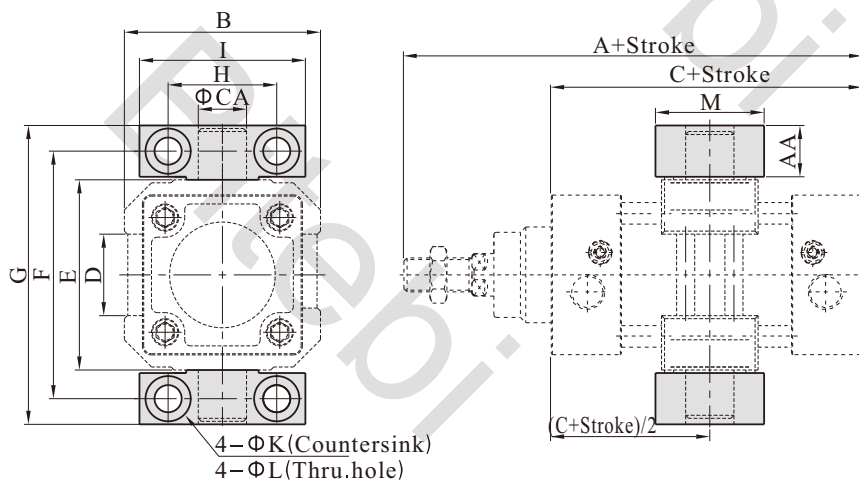
TCM1 type



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

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

TCM2 type



Bore size\Item	A	AA	B	C	CA	D	E	F	G	H	I	K	L	M
32	142	14	65	94	12	5	52	68	82	32	46	11	7	30
40	159	17	75	105	16	8	63	82	99	36	55	15	9	36
50	175	17	91	106	16	10	75	94	111	36	55	15	9	36
63	190	20.5	103	121	20	16	90	113.5	134	42	65	18	11	40
80	214	20.5	126	128	20	20	110	133.5	154	42	65	18	11	40
100	229	24.5	145	138	25	28	132	159.5	184	50	75	20	14	50
125	279	24.5	175	160	25	40	160	187.5	212	50	75	20	14	50
160	332	30	210	180	32	100	200	234	264	60	92	26	18	60
200	347	30	255	180	32	125	250	284	314	60	92	26	18	60

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



Product feature

1. JIS standard cylinder and is a cross-shaped aluminum barrel cylinder.
2. The seal of piston adopts heterogeneous two way seal structure. It's dimension is tight and it has the function of greasel reservation.
3. The cylinder barrel is aluminum profile with hard anodizing treatment.
4. Compared with ISO15552 standard cylinder, the cylinder of JSI series with the same cylinder diameter is shorter.
5. The buffer adjustment of cylinder is smooth and steady.
6. Cylinders and mounting 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						
Speed range mm/s	30~800						30~500
Stroke tolerance	0~250 ^{+1.0} ₀ 251~1000 ^{+1.5} ₀ 1001~1500 ^{+2.0} ₀						
Cushion type	Variable cushion						
Adjustable cushion stroke	24			32		37.5	40
Port size [Note1]	G1/8	G1/4		G3/8		G1/2	

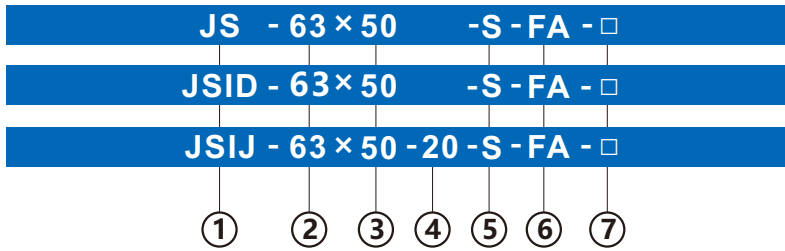
[Note1] The standard thread type is G thread, Please control us for other thread type.

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	1800
40	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800	1200	1800
50	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1200	1800
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
JSI: Double acting type
JSID: Double rod type
JSIJ: Adjustable stroke type

② Bore size
32 40 50 63
80 100 125

③ Stroke
Refer to stroke table for details

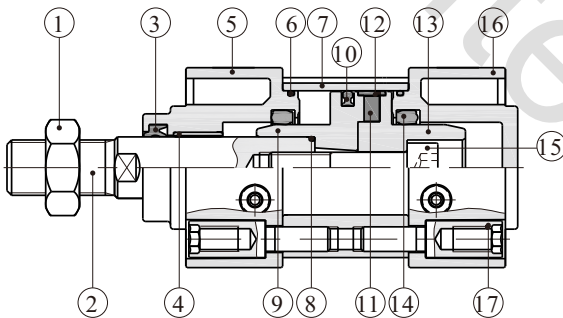
⑥ Mounting style	
Mounting style	Adaptable series
Blank: No accessories	JSI
LB: LB type	JSID
FA: FA type	JSIJ
TC: TC type	
FB: FB type	
CA: CA type	JSI
CB: CB type	
CR: CR type	

⑤ Magnet
Blank: Without magnet
S: With magnet

④ Adjustable stroke	
Series	Adjustable stroke
JSIJ series	10: 10mm
	20: 20mm
	30: 30mm
	40: 40mm
	50: 50mm
	75: 75mm
100: 100mm	
Others series	No this code

⑦ Thread type
Blank: G thread
PT: PT thread

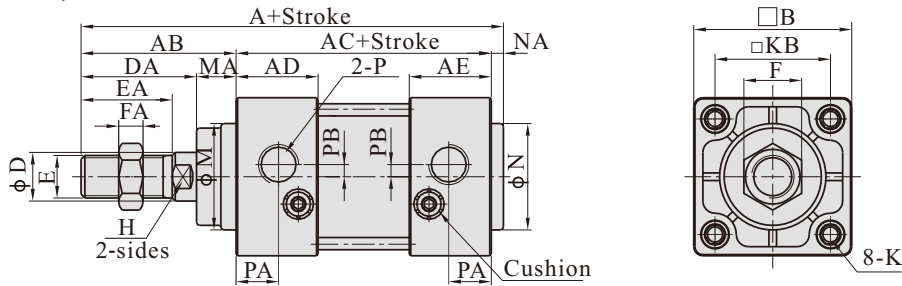
Inner structure and material of major parts



NO.	Item	Material
1	Rod nut	Carbon steel/Stainless steel
2	Piston rod	Carbon steel with 20μm chrome plated
3	Front cover packing	NBR
4	Bushing	Wear resistant material
5	Front cover	Aluminum alloy
6	O-ring	NBR
7	Barrel	Aluminum alloy
8	O-ring	NBR
9	Piston	Aluminum alloy
10	Piston seal	NBR
11	Magnet	Plastic
12	Wear ring	Wear resistant material
13	Magnet holder	Aluminum alloy
14	Buffer gasket	NBR
15	Screw	Carbon steel
16	Back cover	Aluminum alloy
17	Tie-rod nut	Carbon steel

Dimensions

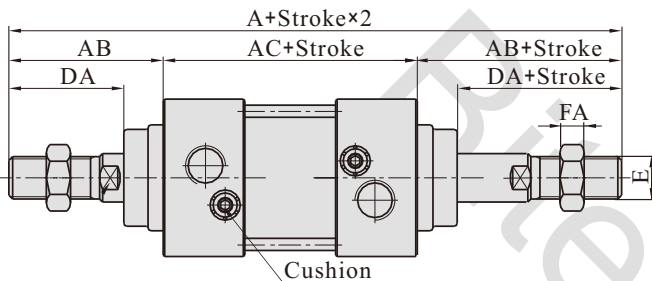
JSI Series(Φ32~Φ125)



Item Bore size	A	AB	AC	AD	AE	B	D	DA	E	EA	F	FA	H	M	MA	K (No TC)	K (With TC)	KB	N	NA	P	PA	PB
32	135	47	84	27	27	46	12	34	M10×1.25	22	17	6	10	30	13	M6	M5	32.5	30	4	G1/8	13	4
40	139	51	84	27	27	52	16	38	M14×1.5	30	19	7	14	35	13	M6	M5	38	35	4	G1/4	14	4
50	156	58	94	31.5	31	65	20	44	M18×1.5	35	24	8	17	40	14	M8	M6	46.5	40	4	G1/4	15.5	5
63	156	58	94	30.5	31	75	20	44	M18×1.5	35	24	8	17	45	14	M8	M6	56.5	45	4	G3/8	16.5	9
80	190	72	114	38	38	95	25	52	M22×1.5	40	30	10	22	45	20	M10	M8	72	45	4	G3/8	19	11.5
100	190	72	114	38	38	114	30	52	M26×1.5	40	30	10	26	55	20	M10	M8	89	55	4	G1/2	19	17
125	223	97	120	38	40	140	32	70	M27×2.0	54	41	13.5	27	60	27	M12	M12	110	60	6	G1/2	23	14

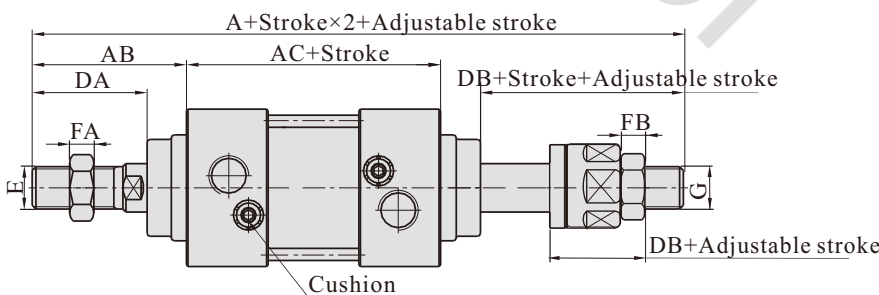
Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.

JSID Series(Φ32~Φ125)



Bore size\Item	A(JSID)	A(JSIJ)	AB	AC	DA	DB
32	178	171	47	84	34	27
40	186	176	51	84	38	28
50	210	195	58	94	44	29
63	210	195	58	94	44	29
80	258	241.5	72	114	52	35.5
100	258	248.5	72	114	52	42.5
125	314	286.5	97	120	70	42.5

JSIJ Series(Φ32~Φ125)



Bore size\Item	E	FA	FB	G
32	M10X1.25	6	6	M10X1.25
40	M14X1.5	8	7	M12X1.25
50	M18X1.5	11	8	M16X1.5
63	M18X1.5	11	8	M16X1.5
80	M22X1.5	13	10	M20X1.5
100	M26X1.5	13	13.5	M27X2.0
125	M27X2.0	13.5	13.5	M27X2.0

Remark:

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

List for ordering code of accessories

Accessories Bore size	Mounting accessories							
	LB	FA\FB	CA	CB	CR	TC	TCM1	TCM2
32	F-JSI32LB	F-SI32FA	F-JSI32CA	F-JSI32CB	F-JSI32CR	F-SI32TC	F-SI32TCM1	F-SI32TCM2
40	F-JSI40LB	F-SI40FA	F-JSI40CA	F-JSI40CB	F-JSI32CR	F-SI40TC	F-SI40TCM1	F-SI40TCM2
50	F-JSI50LB	F-SI50FA	F-JSI50CA	F-JSI50CB	F-JSI50CR	F-SI50TC	F-SI40TCM1	F-SI40TCM2
63	F-JSI63LB	F-SI63FA	F-JSI63CA	F-JSI63CB	F-JSI50CR	F-SI63TC	F-SI63TCM1	F-SI63TCM2
80	F-JSI80LB	F-SI80FA	F-JSI80CA	F-JSI80CB	F-JSI80CR	F-SI80TC	F-SI63TCM1	F-SI63TCM2
100	F-JSI100LB	F-SI100FA	F-JSI100CA	F-JSI100CB	F-JSI80CR	F-SI100TC	F-SI125TCM1	F-SI125TCM2
125	F-JSI125LB	F-JSI125FA	F-JSI125CA	F-JSI125CB	F-JSI125CR	F-SI125TC	F-SI125TCM1	F-SI125TCM2

Accessories Bore size	Knuckle			
	I: I Knuckle	Y: Y Knuckle	F: F Knuckle	U: U Knuckle
32	F-M10X125I	F-M10X125Y	F-M10X125F	F-M10X125U
40	F-M14X150I	F-M14X150Y	F-M14X150F	F-M14X150U
50	F-M18X150I	F-M18X150Y	F-M18X150F	F-M18X150U
63	F-M18X150I	F-M18X150Y	F-M18X150F	F-M18X150U
80	F-M22X150I	F-M22X150Y	F-M22X150F	-
100	F-M26X150I	F-M26X150Y	F-M26X150F	F-M26X150U
125	F-M27X200I	F-M27X200Y	F-M27X200F	F-M27X200U

Accessory selection

Accessories Cylinder model	Mounting accessories										Knuckle			
	LB	FA	FB	CA	CB	CR	TC	TCM1	TCM2	I	Y	U	F	
JSI MB	Standard	●	●	●	●	●	●	●	●	●	●	●	●	
	With magnet	●	●	●	●	●	●	●	●	●	●	●	●	
JSID MBD	Standard	●	●	×	×	×	×	●	●	●	●	●	●	
	With magnet	●	●	×	×	×	×	●	●	●	●	●	●	
JSIJ MBJ	Standard	●	●	×	×	×	×	●	●	●	●	●	●	
	With magnet	●	●	×	×	×	×	●	●	●	●	●	●	

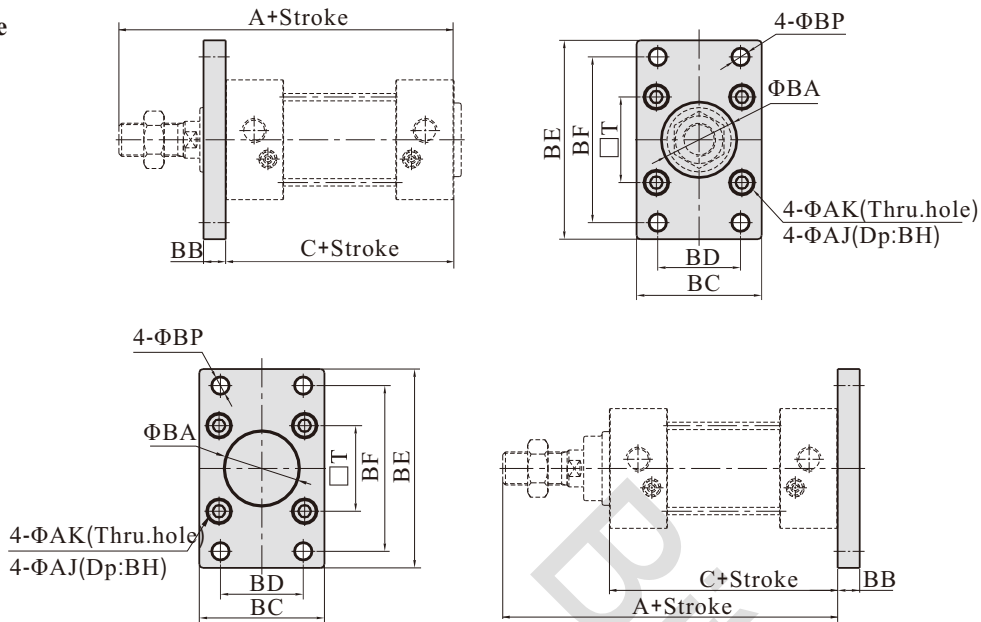
Material of accessories

Accessories Bore size	Mounting accessories										Knuckle			
	LB	FA	FB	CA	CB	CR	TC	TCM1	TCM2	I	Y	F	U	
32~63	□	●	●	△	△	◇	◇	□	●	□	□	□	□	
80、100	□	●	●	△	△	◇	◇	□	●	□	□	□	□	
125	□	■	■	□	□	◇	◇	□	●	□	□	□	□	

●——Aluminum alloy, ■——Cast steel, □——Nodular cast iron, △——FC25, ◇——Carbon steel.

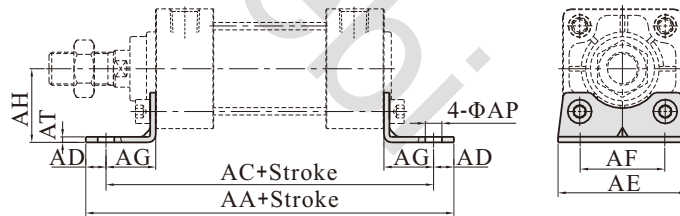
Accessories Dimensions

FA\FB type



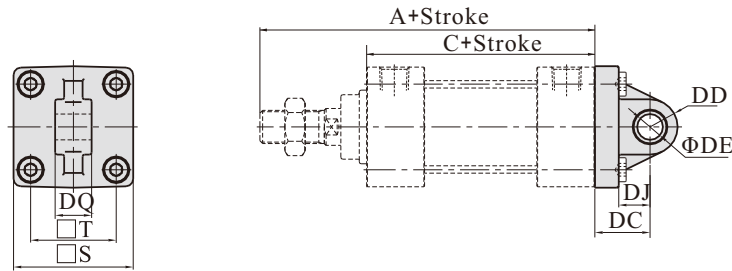
Bore size\Item	A	C	AJ	AK	BA	BB	BC	BD	BE	BF	BH	BP	T
32	131	84	11	6.5	30.5	10	47	32	80	64	6.5	7	32.5
40	135	84	11	6.5	35.5	10	53	36	90	72	6.5	9	38
50	152	94	14	9	40.5	12	65	45	108	90	8.5	9	46.5
63	152	94	14	9	45.5	12	75	50	118	100	8.5	9	56.5
80	186	114	17	11	45.5	16	95	63	150	126	10.5	12.5	72
100	186	114	17	11	55.5	16	115	75	176	150	10.5	14.5	89
125	217	120	19	13	60.5	20	138	102	216	180	12.5	14	110

LB type



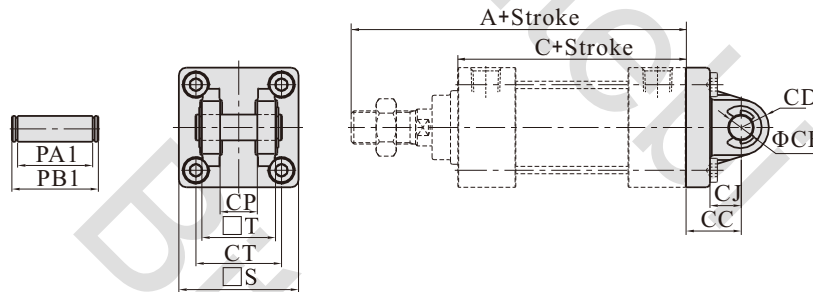
Bore size\Item	AA	AC	AD	AE	AF	AG	AH	AP	AT
32	146	128	9	50	32	22	30	7	3
40	154	132	11	55	38	24	33	9	3
50	170	148	11	70	46	27	40	9	3
63	176	148	14	80	56	27	45	12	4
80	202	174	14	100	72	30	55	12	5
100	210	178	16	120	89	32	65	14	5
125	250	210	20	136	90	45	81	14	8

CA type



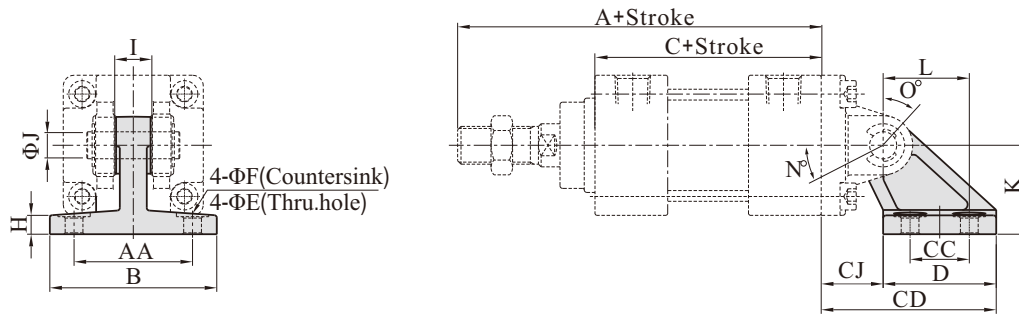
Bore size\Item	A	C	S	T	DC	DD	DE	DJ	DQ
32	131	84	46	32.5	23	10.5	10	13	13.8
40	135	84	52	38	23	11	10	13	13.8
50	152	94	65	46.5	30	15	14	17	19.8
63	152	94	75	56.5	30	15	14	17	19.8
80	186	114	95	72	42	17.5	22	27	29.8
100	186	114	114	89	42	17.5	22	27	29.8
125	217	120	136	110	50	28	25	28	31.8

CB type



Bore size\Item	A	C	CC	CD	CE	CJ	CP	CT	PA1	PB1	S	T
32	131	84	23	10.5	10	14	14.2	32.5	28.8	34.6	46	28
40	135	84	23	11	10	14	14.2	38	28.8	34.6	52	28
50	152	94	30	15	14	18	20.2	46.5	40.8	47	65	40
63	152	94	30	15	14	18	20.2	56.5	40.8	47	75	40
80	186	114	42	20	22	27	30.2	72	60.8	69.2	95	60
100	186	114	42	20	22	27	30.2	89	60.8	69.2	114	60
125	217	120	50	25	25	32	32.2	110	64.8	73.2	136	64

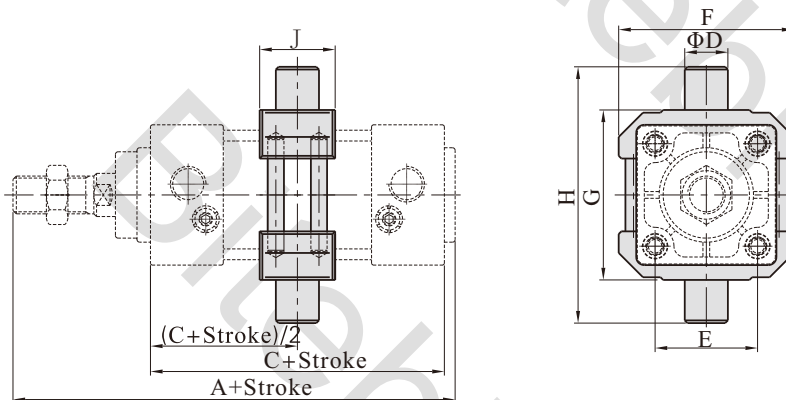
CR type



Bore size\Item	A	AA	B	C	CC	CD	CJ	D	E	F	H	I	J	K	L	N	O	N+O+90°
32	131	44	62	84	22	65	23	42	6.6	12	7	13.8	10	33	32	25	45	160
40	135	44	62	84	22	65	23	42	6.6	12	7	13.8	10	33	32	25	45	160
50	152	60	81	94	30	84.5	31.5	53	9	15	8	19.8	14	45	43	40	60	190
63	152	60	81	94	30	84.5	31.5	53	9	15	8	19.8	14	45	43	40	60	190
80	186	86	111	114	45	120	47	73	11	18	10	29.8	22	65	64	30	55	175
100	186	86	111	114	45	120	47	73	11	18	10	29.8	22	65	64	30	55	175
125	217	110	136	120	60	143	53	90	13.5	20	14	31.8	25	75	78	30	50	170

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

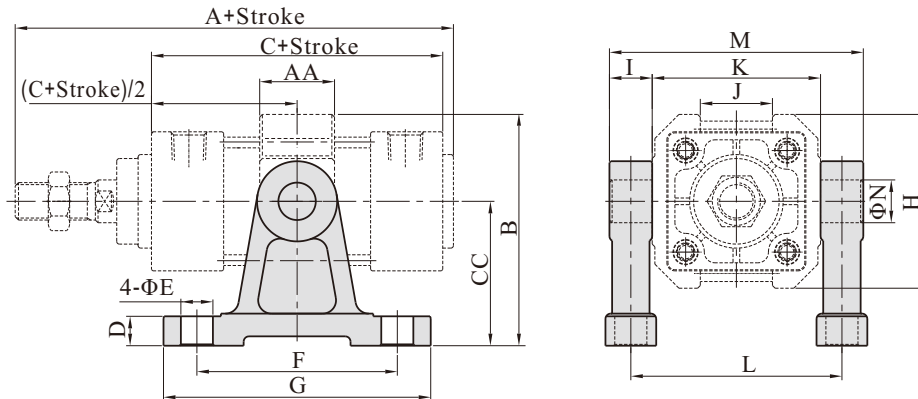
TC type



Bore size\Item	A	C	D	E	F	G	H	J
32	135	84	12	32.5	52	50	74	22
40	139	84	16	38	65	63	95	28
50	156	94	16	46.5	75	75	107	28
63	156	94	20	56.5	90	90	130	30
80	190	114	20	72	112	110	150	32
100	190	114	25	89	135	132	182	38
125	223	120	25	110	170	160	210	40

[Note] The TC accessory has been installed on the barrel of cylinder before it worked off, and the position of the accessories can not be adjusted arbitrarily.
If consumer orders the TC solely, he will not install it on the barrel of standard cylinder directly.

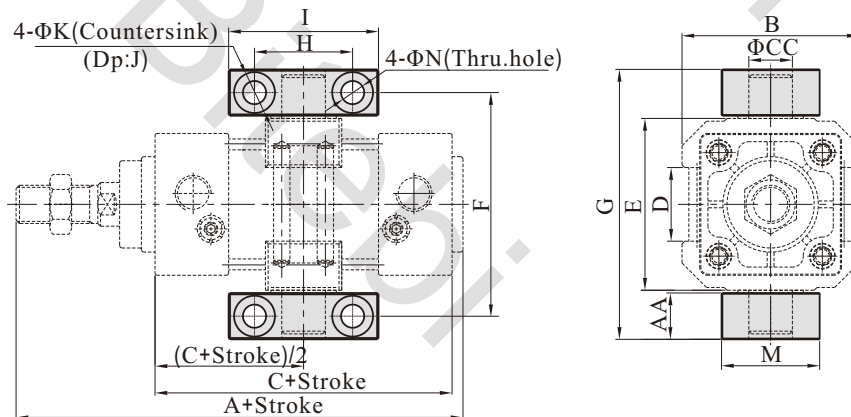
TCM1 type



Bore size\Item	B	A	AA	C	CC	D	E	F	G	H	I	J	K	L	M	N
32	66	135	22	84	40	11	9	60	80	52	12	20	50	62	77	12
40	86.5	139	28	84	54	11	12	75	100	65	16	27	63	79	98	16
50	91.5	156	28	94	54	11	12	75	100	75	16	31	75	91	110	16
63	115	156	30	94	70	11	12	85	110	90	20	42	90	110	133	20
80	126	190	32	114	70	11	12	85	110	112	20	54	110	130	153	20
100	157.5	190	38	114	90	19	18	115	155	135	25	68	132	157	185	25
125	175	223	40	120	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	C	CC	D	E	F	G	H	I	J	K	M	N
32	135	14	52	84	12	20	50	66	80	32	46	6.8	11	30	7
40	139	17	65	84	16	27	63	82	99	36	55	9	15	36	9
50	156	17	75	94	16	31	75	94	111	36	55	9	15	36	9
63	156	20.5	90	94	20	42	90	113.5	134	42	65	11	18	40	11
80	190	20.5	112	114	20	54	110	133.5	154	42	65	11	18	40	11
100	190	24.5	135	114	25	68	132	159.5	184	50	75	14	20	50	14
125	223	24.5	170	120	25	80	160	187.5	212	50	75	14	20	50	14

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