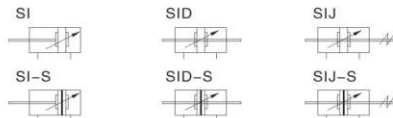


Cilindro Normalizado Série SI

Strokmatic
Automation Technology



Symbol



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 米-shaped 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.

Specification

Bore size		mm	32	40	50	63	80	100	125	160	200
Acting type			Double acting								
Fluid			Air(to be filtered by 40um filter element)								
Mounting type	SI	Basic FA FB CA CB CR LB TC FTC TCM1 TCM2									
	SID	Basic FA LB TC FTC TCM1 TCM2									
	SIJ										
Operating pressure			0.1~1.0MPa(14~145Psi)								
Proof pressure			1.5MPa(215Psi)								
Temperature ℃			-20~80								
Speed range mm/s			30~800						30~500		
Stroke tolerance			0~250 ^{+1.0} ₀		251~1000 ^{+1.4} ₀			1001~1500 ^{+1.8} ₀			
Cushion type			Variable cushion								
Adjustable cushion stroke mm			27		30		36		40		50
Port size ①			1/8"		1/4"		3/8"		1/2"		3/4"

① PT thread, NPT thread and G thread are available;
Add: Refer to PVI-81-VI-104 for detail of sensor switch.

Stroke

Unit: mm

Bore size (mm)	Standard stroke	Max. stroke	Available stroke
32	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500	1000	1800
40	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800	1200	1800
50	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1200	1800
63	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
80	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
100	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
125	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
160	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
200	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000

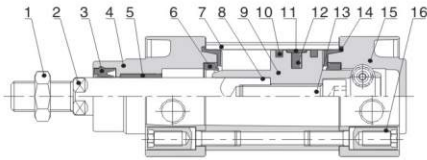
Remark: Consult us for non-standard stroke.

Ordering code

SI — 160 □ × 50 — S — □ — □ — P														
SID—160 □ × 50 — S — □ — □ — P														
SIJ—160 □ × 50 — 20 — S — □ — □ — P														
Model			Bore size			Stroke			Seal Material			Thread type		
SI: Double acting type						10: 10mm			Blank: TPU			P: PT		
SID: Double rod type						20: 20mm			H: Viton			T: NPT		
SIJ: Adjustable stroke type						30: 30mm			N: NBR			G: G		
						40: 40mm						① Mounting type		
						50: 50mm						Meno		
						75: 75mm								
						100: 100mm								

Inner structure and material of major parts

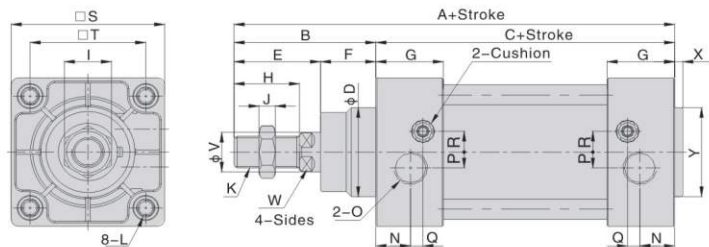
SI-S



NO.	Item	Material
1	Rod nut	Carbon steel
2	Piston rod	Carbon steel with 20um chrome plated Stainless steel
3	Front cover packing	TPU
4	Front cover	Aluminum alloy
5	Bushing	Wear resistant material
6	Cushion O-ring	TPU
7	Barrel	Aluminum alloy
8	Rod O-ring	NBR
9	Piston	Aluminum alloy
10	Piston O-ring	TPU
11	Wear ring	Wear resistant material
12	Magnet	Bore size < ϕ 100: Plastic Others: Rubber
13	Bolt	Carbon steel
14	Buffer gasket	TPU
15	Back cover	Aluminum alloy
16	Tie-rod nut	Carbon steel

■ Dimensions

SI

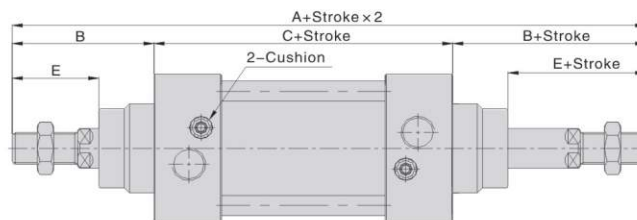


Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.

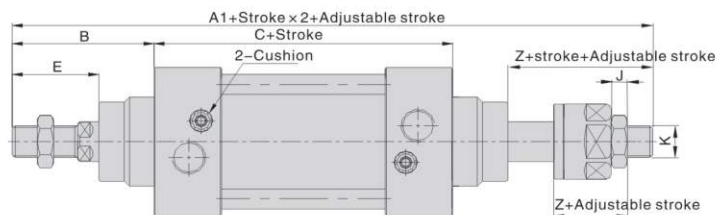
Item Bore size	A	B	C	D	E	F	G	H	I	J	K	L	N
32	142	48	94	30	29	19	27.5	22	17	6	M10 x 1.25	M6	13
40	159	54	105	35	33	21	32	24	17	7	M12 x 1.25	M6	17
50	175	69	106	40	42	27	31	32	23	8	M16 x 1.5	M8	15.5
63	190	69	121	45	42	27	33	32	23	8	M16 x 1.5	M8	16.5
80	214	86	128	45	53	33	33	40	26	10	M20 x 1.5	M10	16.5
100	229	91	138	55	55	36	37	40	26	10	M20 x 1.5	M10	18.5
125	279	119	160	60	74	45	46	54	41	13.5	M27 x 2	M12	23
160	332	152	180	65	94	58	50	72	55	18	M36 x 2	M16	25
200	347	167	180	75	100	67	50	72	55	18	M36 x 2	M16	25

Item Bore size	O	P	Q	R	S	T	V	W	X	Y
32	1/8"	5.5	6	6	47	32.5	12	10	3	30
40	1/4"	6	7.5	8.5	53	38	16	13	3.5	35
50	1/4"	7.5	6.5	9.5	65	46.5	20	17	3.5	40
63	3/8"	7.5	7.5	11.5	75	56.5	20	17	4	45
80	3/8"	9	7.5	13.5	95	72	25	22	4	45
100	1/2"	9.5	8.5	13.5	115	89	25	22	4	55
125	1/2"	14	12	14	140	110	32	27	4	60
160	3/4"	15	12	20	180	140	40	36	4	65
200	3/4"	15	12	20	220	175	40	36	5	75

SID



SIJ



Bore size/Item	A	A1	B	C	E	Z	J	K
32	190	188	48	94	29	27	6	M10X1.25
40	213	208	54	105	33	28	7	M12x1.25
50	244	231	69	106	42	29	8	M16X1.5
63	259	246	69	121	42	29	8	M16X1.5
80	300	282.5	86	128	53	35.5	10	M20X1.5
100	320	300.5	91	138	55	35.5	10	M20X1.5
125	398	366.5	119	160	74	42.5	13.5	M27X2
160	484	458	152	180	94	68	18	M36X2
200	514	482	167	180	100	68	18	M36X2

Remark:

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

Cilindro Normalizado Série SI

Strokmatic
Automation Technology

Ordering code

Accessory	F	SI	50	CA
Accessory		Model	Bore size	Accessory type
Mounting accessory	LB	LB type		
	FA	FA type		
	FB	FB type		
	CA	CA type		
	CB ^②	CB type		
	CR	CR type		
	TC	TC type		
	FTC	FTC type		
Sensor switch	TCM1	TCM1 type		
	TCM2	TCM2 type		

①: Please refer to the accessory list on PIII-12 for detailed information of accessories.

②: CB is attached with relevant PIN.

Accessory selection

Cylinder model	SI	SID	SIJ	SIL
Accessory	Standard	With magnet	Standard	With magnet
LB	●	●	●	●
FA	●	●	●	●
FB	●	●	●	●
CA	●	●	●	●
CB	●	●	●	●
CR	●	●	●	●
TC	●	●	●	●
FTC	●	●	●	●
TCM1	●	●	●	●
TCM2	●	●	●	●
Knuckle	●	●	●	●
I	●	●	●	●
Y	●	●	●	●
U	●	●	●	●
F	●	●	●	●
Sensor switch	●	●	●	●
CS1-B	●	●	●	●
DS1-B	●	●	●	●
CS1-F	●	●	●	●
DS1-F	●	●	●	●
CS1-U	●	●	●	●
DS1-U	●	●	●	●

①: Please refer to PVI-75-VI-80 for knuckle detail;

②: Please refer to PVI-81-VI-104 for detail of sensor switch.

Material of accessories

Accessories	Mounting accessories								Joint accessories
Bore size	LB	FA	FB	CR	CA	CB	TC	FTC	I, Y, F, U
32-100	Low carbon steel	Aluminum alloy	Nodular cast iron	Cast steel	Aluminum alloy	Carbon steel			
125-200									

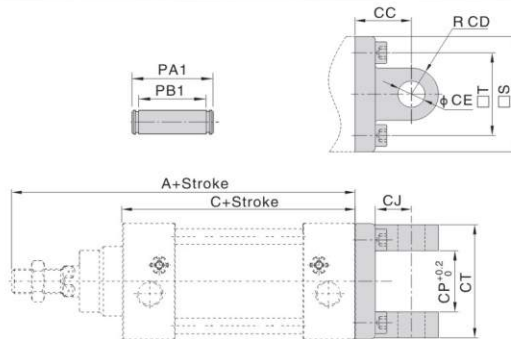
Item/Bore size	32	40	50	63	80	100	125	160	200
A	142	159	175	190	214	229	279	332	347
C	94	105	106	121	128	138	160	180	180
S	47	52	64	74	94	113	139	180	220
T	32.5	38	46.5	56.5	72	89	110	140	175
DC	22	25	27	32	36	41	50	55	60
DD	9	10.5	11	13.5	14.5	17	22	30	30
DE	10	12	12	16	16	20	25	30	30
DJ	13	16	17	22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

Dimensions

Item/Bore size	32	40	50	63	80	100	125	160	200
A	142	159	175	190	214	229	279	332	347
C	94	105	106	121	128	138	160	180	180
AA	158	179	190	209	248	266	290	340	380
AC	142	161	170	185	210	228	250	300	320
AD	8	9	10	12	19	19	20	20	30
AE	47	53	65	75	95	115	140	180	220
AF	32	36	45	50	63	75	90	115	135
AG	24	28	32	32	41	45	45	60	70
AH	32	36	45	50	63	71	90	115	135
AP	7	9	9	9	12.5	14.5	16.5	18.5	24
AT	3	3	3	3	4	4	8	8	9

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

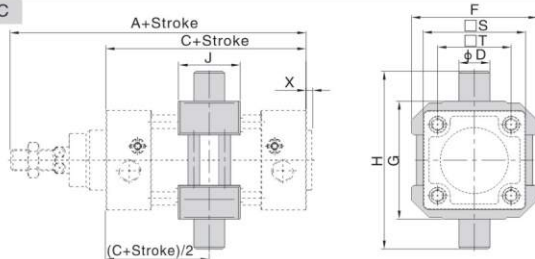
CB



Bore size Item	32	40	50	63	80	100	125	160	200
A	142	159	175	190	214	229	279	332	347
C	94	105	106	121	128	138	160	180	180
CC	22	25	27	32	36	41	50	55	60
CD	9	10.5	11	13	14	17.5	21.5	30	30
CE	10	12	12	16	16	20	25	30	30
CJ	13	16	17	22	22	27	33	35.5	36

Bore size Item	32	40	50	63	80	100	125	160	200
CP	26	28	32	40	50	60	70	90	90
CT	45	52	60	70	90	110	130	170	170
PA1	51	59	67	77	97	119	139	181	181
PB1	45.5	52.5	60.5	70.5	90.5	110.5	130.5	170.5	170.5
S	47	52	64	74	94	113	139	180	220
T	32.5	38	46.5	56.5	72	89	110	140	175

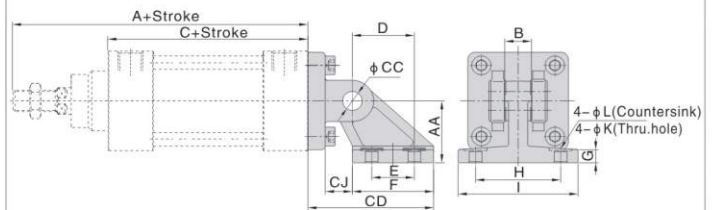
TC



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

Bore size\Item	A	C	D	F	G	H	J	S	X	T
32	142	94	12	52	50	74	22	47	3	32.5
40	159	105	16	65	63	95	28	53	3.5	38
50	175	106	16	75	75	107	28	65	3.5	46.5
63	190	121	20	90	90	130	30	75	4	56.5
80	214	128	20	112	110	150	32	95	4	72
100	229	138	25	135	132	182	38	115	4	89
125	279	160	25	170	160	210	40	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

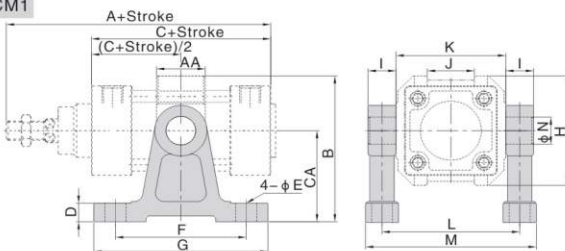
CR(Be used with CB)



Bore size Item	32	40	50	63	80	100	125	160	200
A	142	159	175	190	214	229	279	332	347
AA	32	36	45	50	63	71	90	115	135
B	26	28	32	40	50	60	70	90	90
C	94	105	106	121	128	138	160	180	180
CC	10	12	12	16	16	20	25	30	30
CD	50	56	68	77	93	106	135	171	185
CJ	10	12	13	17	19	22	26	31	31

Bore size Item	32	40	50	63	80	100	125	160	200
D	21	24	33	37	47	55	70	97	105
E	18	22	30	35	40	50	60	88	90
F	31	35	45	50	60	70	90	126	130
G	8	10	12	12	14	15	20	25	30
H	38	41	50	52	66	76	94	118	122
I	51	54	65	67	86	96	124	156	162
K	6.6	6.6	9	9	11	11	14	14	18
L	-	-	-	-	18	18	20	20	26

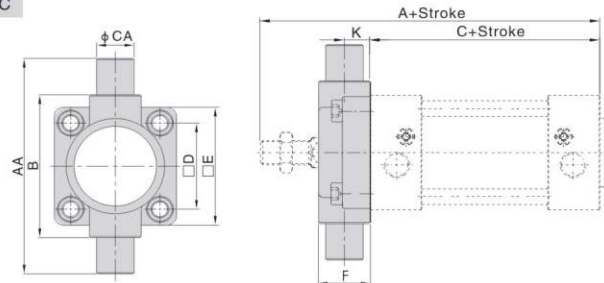
TCM1



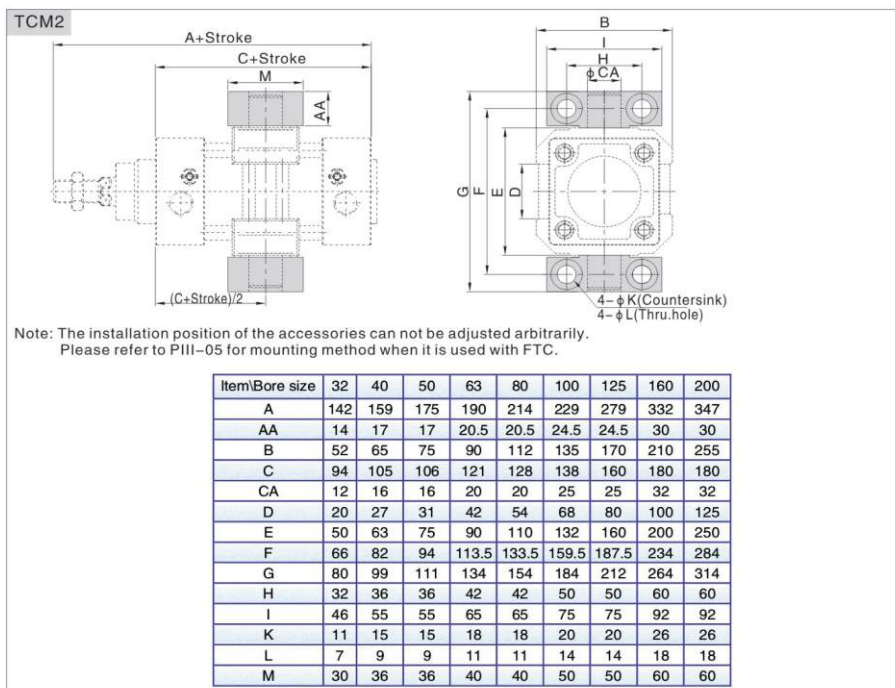
Note: The installation position of the accessories can not be adjusted arbitrarily. Please refer to PIII-05 for mounting method when it is used with FTC.

Item\Bore size	32	40	50	63	80	100	125	160	200
A	142	159	175	190	214	229	279	332	347
AA	22	28	28	30	32	38	40	50	50
B	66	86.5	91.5	115	126	157.5	175	215	262.5
C	94	105	106	121	128	138	160	180	180
CA	40	54	54	70	70	90	90	110	135
D	11	11	11	11	11	19	19	24	27
E	9	12	12	12	12	18	18	22	22
F	60	75	75	85	85	115	115	140	150
G	80	100	100	110	110	155	155	190	200
H	52	65	75	90	112	135	170	210	255
I	12	16	16	20	20	25	25	32	32
J	20	27	31	42	54	68	80	100	125
K	50	63	75	90	110	132	160	200	250
L	62	79	91	110	130	157	185	232	282
M	77	98	110	133	153	185	213	267	317
N	12	16	16	20	20	25	25	32	32

FTC



Item\Bore size	32	40	50	63	80	100	125	160	200
A	142	159	175	190	214	229	279	332	347
AA	74	95	107	130	150	182	210	264	314
B	50	63	75	90	110	132	160	200	250
C	94	105	106	121	128	138	160	180	180
CA	12	16	16	20	20	25	25	32	32
D	32.5	38	46.5	56.5	72	89	110	140	175
E	46	52	64	74	94	114	139	179	218
F	19	21	26	28	31	35	43	56	64
K	10	10	12	12	16	16	20	20	20



List for ordering code of accessories

Bore size		32	40	50	63	80	100	125	160	200
Accessories										
Mounting accessory	LB	F-SI32LB	F-SI40LB	F-SI50LB	F-SI63LB	F-SI80LB	F-SI100LB	F-SI125LB	F-SI160LB	F-SI200LB
	FA	F-SI32FA	F-SI40FA	F-SI50FA	F-SI63FA	F-SI80FA	F-SI100FA	F-SI125FA	F-SI160FA	F-SI200FA
	FB									
	CA	F-SI32CA	F-SI40CA	F-SI50CA	F-SI63CA	F-SI80CA	F-SI100CA	F-SI125CA	F-SI160CA	F-SI200CA
	CB	F-SI32CB	F-SI40CB	F-SI50CB	F-SI63CB	F-SI80CB	F-SI100CB	F-SI125CB	F-SI160CB	F-SI200CB
	CR	F-SI32CR	F-SI40CR	F-SI50CR	F-SI63CR	F-SI80CR	F-SI100CR	F-SI125CR	F-SI160CR	F-SI200CR
	TC	F-SI32TC	F-SI40TC	F-SI50TC	F-SI63TC	F-SI80TC	F-SI100TC	F-SI125TC	F-SI160TC	F-SI200TC
	FTC	F-SI32FTC	F-SI40FTC	F-SI50FTC	F-SI63FTC	F-SI80FTC	F-SI100FTC	F-SI125FTC	F-SI160FTC	F-SI200FTC
	TCM1	F-SI32TCM1	F-SI40TCM1		F-SI63TCM1		F-SI125TCM1		F-SI160TCM1	F-SI200TCM1
	TCM2	F-SI32TCM2	F-SI40TCM2		F-SI63TCM2		F-SI125TCM2		F-SI160TCM2	
Knuckle	I: I Knuckle	F-M10125II	F-M12125II	F-M16150II		F-M20150II		F-M27200II	F-M36200II	
	Y: Y Knuckle	F-M10125YI	F-M12125YI	F-M16150YI		F-M20150YI		F-M27200YI	F-M36200YI	
	U: U Knuckle	F-M10125U	F-M12125U	F-M16150U		F-M20150U		F-M27200U	F-M36200U	
	F: F Knuckle	F-M10125F	F-M12125F	F-M16150F		F-M20150F		-	-	-
Sensor switch	CS1-B	CS1-B1		CS1-B2		CS1-B3	CS1-B4	CS1-B5	CS1-B6	CS1-B7
	CS1-BX	CS1-B1X		CS1-B2X		CS1-B3X	CS1-B4X	CS1-B5X	CS1-B6X	CS1-B7X
	DS1-B	DS1-B1		DS1-B2		DS1-B3	DS1-B4	DS1-B5	DS1-B6	DS1-B7
	DS1-BN	DS1-B1N		DS1-B2N		DS1-B3N	DS1-B4N	DS1-B5N	DS1-B6N	DS1-B7N
	DS1-BP	DS1-B1P		DS1-B2P		DS1-B3P	DS1-B4P	DS1-B5P	DS1-B6P	DS1-B7P
	CS1-F					CS1-F	CS1-FX			
	DS1-F					DS1-F	DS1-FN	DS1-FP		
	CS1-U					CS1-U	CS1-UX			
	DS1-U					DS1-U	DS1-UN	DS1-UP		