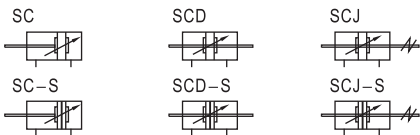


Standard cylinder(Tie-rod)
SC Series



Symbol



Product feature

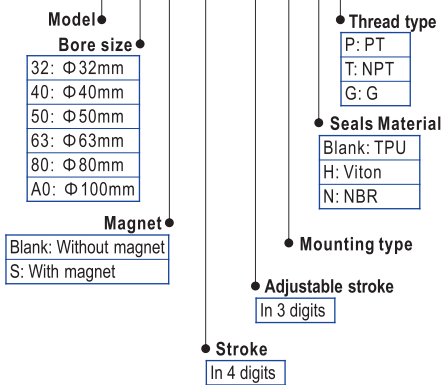
- 1. Standard cylinder manufactured by our enterprise.
- 2. The seal of piston adopts heterogeneous two way seal structure. It's dimension is tight and it has the function of grease reservation.
- 3. It is tie rod cylinder. The cylinder barrel and front/rear cap is jointed by tie rods with high reliability.
- 4. Compared with ISO15552 standard cylinder, SC series cylinder with the same bore size is shorter.
- 5. The buffer adjustment of cylinder is smooth and steady.
- 6. Cylinders and mounting accessories with several specifications are optional.
- 7. The seal material with high temperature resistance is adopted to guarantee the normal operation of cylinder at 150°C.

Ordering code

Model can to be changed Ordering code. Example:
Production type: SCJ
Bore size: 100mm
Stroke: 500mm
Adjustable stroke: 75mm
Magnet: With magnet
Mounting type: CB
Seals material: NBR
Thread type: NPT

Model: SCJ-100 × 500-75-S-N-CB-T

Ordering code: SCJ A0 S 0500 075 CB N T



Specification

Bore size(mm)		32	40	50	63	80	100
Acting type		Double acting					
Fluid		Air(to be filtered by 40 μ m filter element)					
Mounting type	SC	Basic FA FB CA CB LB TC TCM1					
	SCD, SCJ	Basic FA LB TC TCM1					
Operating pressure		0.1~1.0MPa(15~145psi)(1.0~10.0bar)					
Proof pressure		1.5MPa(215psi)(15bar)					
Temperature °C		-20~80					
Speed range mm/s		30~800					
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		21				28	29
Port size ①		1/8"	1/4"		3/8"		1/2"

① PT thread, NPT thread and G thread are available.
Add) Refer to P403~426 for detail of sensor switch.

Stroke

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

Note) If the stroke is ≥ 1600mm within the maximum stroke scope, it is treated as non-standard one.
Please contact the company for other special strokes.

Explain of model

Model

SC: Double acting type
SCD: Double rod type
SCJ: Adjustable stroke type

Bore size

32 40 50 63 80 100

Stroke

Refer to stroke table for details

Adjustable stroke

10: 10mm
20: 20mm
30: 30mm
40: 40mm
50: 50mm
75: 75mm
100: 100mm

Magnet

Blank: Without magnet
S: With magnet

Thread type

P: PT
T: NPT
G: G

Seals Material

Blank: TPU
H: Viton
N: NBR

Mounting type

Mounting type	Available series	Memo
Blank	SC SCD SCJ	
LB		
FA		
FB		
CA	SC	
CB		
TC	SC, SCD SCJ	Be used with TCM1

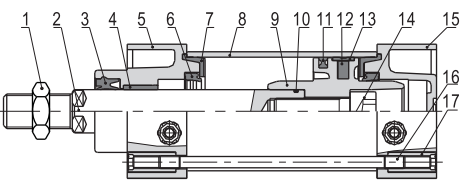
① Please refer to page 217~220 for accessory parts.



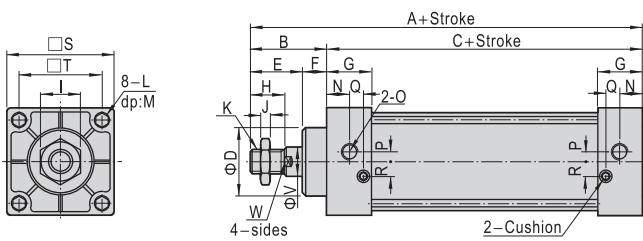
Standard cylinder(Tie-rod)
SC Series



Inner structure and material of major parts

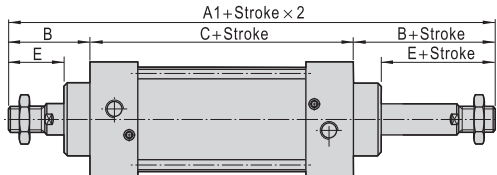
SC		
		
NO.	Item	Material
1	Rod nut	Carbon steel
2	Piston rod	Carbon steel with 20 μ m chrome plated
3	Front cover packing	TPU
4	Bushing	Wear resistant material
5	Front cover	Aluminum alloy
6	Cushing O-ring	NBR
7	Cushion gasket	TPU
8	Barrel	Aluminum alloy
9	Piston	Aluminum alloy
10	Piston rod O-ring	NBR
11	Piston seal	NBR
12	Magnet	Plastic
13	Wear ring	Wear resistant material
14	Bolt	Carbon steel
15	Back cover	Aluminum alloy
16	Tie-rod	Carbon steel
17	Tie-rod nut	Carbon steel

Dimensions

SC												
Bore size\Item	A	B	C	D	E	F	G	H	I	J	K	
32	140	47	93	28	32	15	27.5	22	17	6	M10×1.25	
40	142	49	93	32	34	15	27.5	24	17	7	M12×1.25	
50	150	57	93	38	42	15	27.5	32	23	8	M16×1.5	
63	153	57	96	38	42	15	27.5	32	23	8	M16×1.5	
80	182	75	107	47	54	21	33	40	26	10	M20×1.5	
100	188	75	113	47	54	21	33	40	26	10	M20×1.5	
Bore size\Item	L	M	N	O	P	Q	R	S	T	V	W	
32	M6×1.0	9.5	14	1/8"	5.5	6	6.5	45	33	12	10	
40	M6×1.0	9.5	15	1/4"	6	5	8.5	50	37	16	14	
50	M6×1.0	9.5	17	1/4"	8.5	2.5	10	62	47	20	17	
63	M8×1.25	9.5	15	3/8"	9.5	4	8.5	75	56	20	17	
80	M10×1.5	11.5	19.5	3/8"	10	4.5	14	94	70	25	22	
100	M10×1.5	11.5	16.5	1/2"	11	6.5	14	112	84	25	22	

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



SCD									
Bore size\Item	A1	A2	B	C	E	Z	J	K	
32	187	182	47	93	32	27	6	M10X1.25	
40	191	185	49	93	34	28	7	M12X1.25	
50	207	194	57	93	42	29	8	M16X1.5	
63	210	197	57	96	42	29	8	M16X1.5	
80	257	238.5	75	107	54	35.5	10	M20X1.5	
100	263	244.5	75	113	54	35.5	10	M20X1.5	

Remark:

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

2. The unmarked dimension is the same as SC standard type.