

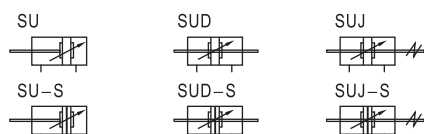
Standard cylinder(Profile)



SU Series



Symbol



Product feature

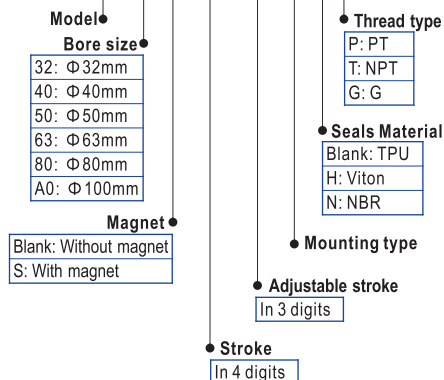
1. Standard cylinder manufactured by our enterprise.
2. The seal of piston adopts heterogeneous two way seal structure. It's dimension is tight and it has the function of oil reservation.
3. It is no tie rod cylinder. The cylinder barrel is "Mickey Mouse" shape ,and have good corrosion.
4. Compared with ISO1552 standard cylinder, SU series cylinder with the same bore size is shorter.
5. The buffer adjustment of cylinder is smooth and steady.
6. Mounting accessories are the same as SC series.
7. The seal material with high temperature resistance is adopted to guarantee the normal operation of cylinder at 150°C.

Ordering code

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

Model: SUJ-100 × 500-75-S-N-CB-T

Ordering code: SUJ 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	SU	Basic FA FB CA CB LB TC TCM1				
type	SUD, SUJ	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"

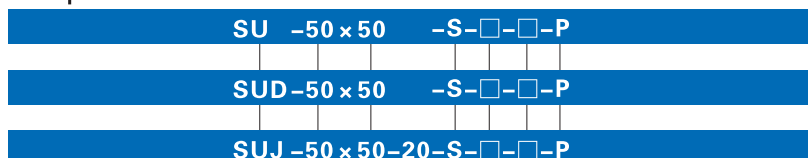
① PT thread, NPT thread and G thread are available.
 Add) Refer to P403-426 for detail of sensor switch.

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	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

Note) Consult us for non-standard stroke.

Explain of model



Model

- SU: Double acting type
- SUD: Double rod type
- SUJ: 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	SU	
LB	SUD SUJ	
FA		
FB		
CA	SU	
CB		
TC	SU, SUD SUJ	Be used with TCM1

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



Standard cylinder(Profile)



SU Series

Inner structure and material of major parts

SU

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 nut	Carbon steel

Dimensions

SU

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.



SUD

SUJ

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:

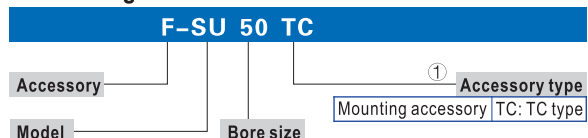
- The dimensions of magnet type cylinder are the same as non-magnet type cylinder.
- The unmarked dimension is the same as SU standard type.

Standard cylinder(Profile)



Accessories

Ordering code



① The listed accessories are for SU cylinder. Accessories that are adaptable to other cylinders are not shown. Please refer to accessory list for selection and ordering information.

Accessory selection

Cylinder model	SU, SUL	SUD	SUJ
Accessories	Standard With magnet	Standard With magnet	Standard With magnet
Mounting accessory			
LB	●	●	●
FA	●	●	●
FB	●	×	×
CA	●	×	×
CB	●	×	×
TC	●	●	●
TCM1	●	●	●
Knuckle			
I	●	●	●
Y	●	●	●
U	●	●	●
① F	●	●	●
Sensor switch			
CS1-B	×	×	×
DS1-B	×	×	×
CS1-F	×	×	×
DS1-F	×	×	×
CS1-U	×	×	×
DS1-U	×	×	×

① Please refer to P397-402 for knuckle detail.
 ② Please refer to P403-426 for detail of sensor switch.

Material of accessories

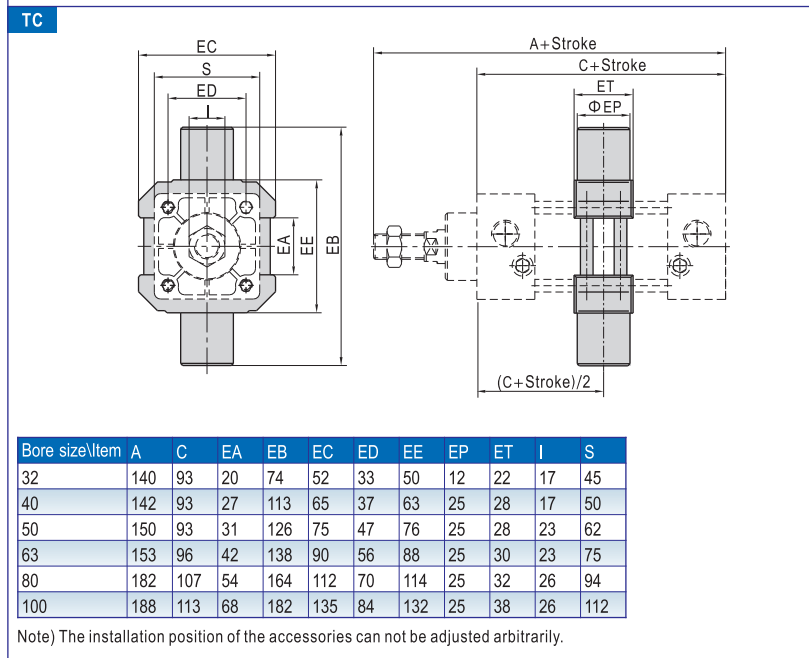
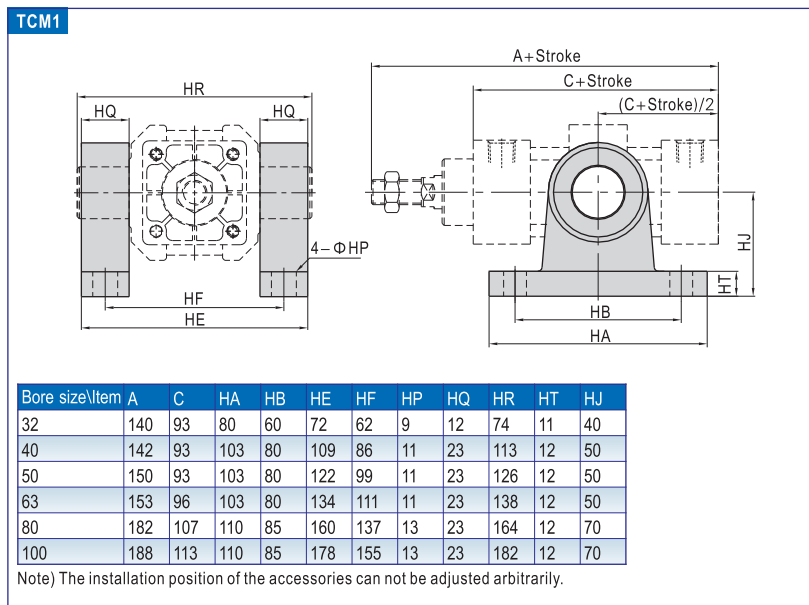
Accessories	Mounting accessories	Knuckle
Bore size	LB FA FB CA CB TC TCM1 I Y F U	I Y F U
32~100	□ ● ● ◇ ◇ ◇ ◇ □ □ □ □	□ □ □ □

●—Aluminum alloy, ◇—Cast steel, □—Carbon steel.

List for ordering code of accessories

Accessories	Mounting accessory			
Bore size	LB	FA	FB CA	
32	F-SC32LB	F-SC32FA	F-SC32CA	
40	F-SC40LB	F-SC40FA	F-SC40CA	
50	F-SC50LB	F-SC50FA	F-SC50CA	
63	F-SC63LB	F-SC63FA	F-SC63CA	
80	F-SC80LB	F-SC80FA	F-SC80CA	
100	F-SC100LB	F-SC100FA	F-SC100CA	
Accessories	Mounting accessory			
Bore size	CB	TC	TCM1	
32	F-SC32CB	F-SU32TC	F-SI32TCM1	
40	F-SC40CB	F-SU40TC	F-SC40TCM1	
50	F-SC50CB	F-SU50TC	F-SC40TCM1	
63	F-SC63CB	F-SU63TC	F-SC40TCM1	
80	F-SC80CB	F-SU80TC	F-SC80TCM1	
100	F-SC100CB	F-SU100TC	F-SC80TCM1	
Accessories	Knuckle			
Bore size	I: I Knuckle	Y: Y Knuckle	F: F Knuckle	U: U Knuckle
32	F-M10125I	F-M10125Y	F-M10125F	F-M10125U
40	F-M12125I	F-M12125Y	F-M12125F	F-M12125U
50	F-M16150I	F-M16150Y	F-M16150F	F-M16150U
63	F-M16150I	F-M16150Y	F-M16150F	F-M16150U
80	F-M20150I	F-M20150Y	F-M20150F	F-M20150U
100	F-M20150I	F-M20150Y	F-M20150F	F-M20150U
Accessories	Sensor switch			
Bore size	CS1-B	DS1-B	CS1-F	DS1-F CS1-U DS1-U
32	CS1-B1	DS1-B1		
40	CS1-B1	DS1-B1		
50	CS1-B1	DS1-B1		
63	CS1-B2	DS1-B2	CS1-F	DS1-F CS1-U DS1-U
80	CS1-B3	DS1-B3		
100	CS1-B4	DS1-B4		

Dimensions



The others accessories are the same as SC series's accessories, please refer to P217-220 for details.

