



Standard cylinder—SE Series

In accordance with ISO15552 and VDMA24562 standard

Compendium of SE Series

ISO15552,VDMA24562 Standard cylinder
Bore size: 32、40、50、63、80、100、125

Adjustable air buffer
With adjustable air buffer on the front and back cover

Without tie rod
The square aluminum pipe without tie rod has good corrosion resistance

With sensor switch groove
With sensor switch groove on the three sides of body, the counterpart sensor switch type is: CS1-E \ DS1-E.

Four kinds of cylinder joints

I Knuckle Y Knuckle Floating Joint Universal Joint

Multi-mounting accessories

LB FA FB

CA CB CR

FTC TCM1 TCM2

TC

Multi-type cylinder

SE: Double acting type SED: Double rod type

SEJ: Adjustable stroke type BSE: Enclasp type

Criteria for selection: Cylinder thrust

Unit: Newton(N)

Bore size	Rod size	Acting type	Pressure area(mm ²)	Operating pressure(MPa)										
				0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9		
32	12	Double acting Push side	804	80.4	160.8	241.2	321.6	402.0	482.4	562.8	643.2	723.6		
		Pull side	690	69.0	138.0	207.0	276.0	345.0	414.0	483.0	552.0	621.0		
40	16	Double acting Push side	1256	125.6	251.2	376.8	502.4	628.0	753.6	879.2	1002.4	1130.4		
		Pull side	1055	105.5	211.0	316.5	422.0	527.5	633.0	738.5	844.0	949.5		
50	20	Double acting Push side	1963	196.3	392.6	588.9	785.2	981.5	1177.8	1374.1	1570.4	1766.7		
		Pull side	1649	164.9	329.8	494.7	659.6	824.5	989.4	1154.3	1399.2	1484.1		
63	20	Double acting Push side	3117	311.7	623.4	935.1	1246.8	1558.5	1870.2	2181.9	2493.6	2805.3		
		Pull side	2803	280.3	560.6	840.9	1121.2	1401.5	1681.8	1962.1	2242.4	2522.7		
80	25	Double acting Push side	5026	502.6	1005.2	1507.8	2010.4	2513.0	3015.6	3518.2	4020.8	4523.4		
		Pull side	4536	453.6	907.2	1360.8	1814.4	2268.0	2721.6	3175.2	3628.8	4082.4		
100	25	Double acting Push side	7853	785.3	1570.6	2355.9	3141.2	3926.5	4711.8	4288.2	6282.4	7067.7		
		Pull side	7362	736.2	1472.4	2208.6	2948.6	3681.0	4417.2	5153.4	5889.6	6625.8		
125	32	Double acting Push side	12272	1227.2	2454.4	3681.6	4908.8	6136.0	7363.2	8590.4	9817.6	11044.8		
		Pull side	11468	1146.8	2293.6	3440.4	4587.2	5734.0	6880.8	8027.6	9174.4	10321.2		

Installation and application



- When load changes in the work, the cylinder with abundant output capacity shall be selected.
- Relative cylinder with high temperature resistance or corrosion resistance shall be chosen under the condition of high temperature or corrosion.
- Necessary protection measure shall be taken in the environment with higher humidity, much dust or water drops, oil dust and welding dregs.
- Dirty substances in the pipe must be eliminated before cylinder is connected with pipeline to prevent the entrance of particles into the cylinder.
- The medium used by cylinder shall be filtered to 40 μm or below.
- Anti-freezing measure shall be adopted under low temperature environment to prevent moisture freezing.
- The cylinder shall be carried out test run without load before application. Prior to run, buffer shall be turned to the minimum and gradually released to avoid the damage on cylinder caused by excessive impact.
- The cylinder shall avoid the influence of side load in operation to maintain the normal work of cylinder and extend the service life.
- If the cylinder is dismantled and stored for a long time, please conduct anti-rust treatment to the surface. Anti-dust caps shall be added in air inlet and outlet ports.



ISO15552 Standard cylinder



SE Series



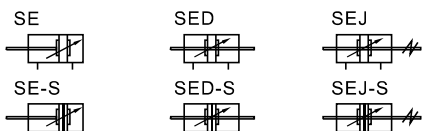
Specification

Bore size(mm)	32	40	50	63	80	100	125
Acting type	Double acting						
Fluid	Air(to be filtered by 40 μm filter element)						
Mounting type	SE	Basic FA FB CA CB CR LB TC FTC TCM1 TCM2					
	SED、SEJ	Basic FA LB TC FTC TCM1 TCM2					
Operating pressure	0.15~1.0MPa(22~145psi)(1.5~10.0bar)						
Proof pressure	1.5MPa(215psi)(15bar)						
Temperature °C	-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	27		30		36		40
Port size [Note1]	1/8"		1/4"		3/8"		1/2"

[Note1] PT thread, G thread and NPT thread are available.

Add) Refer to P313 for detail of sensor switch.

Symbol



Product feature

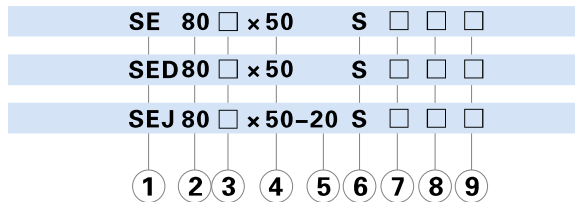
1. ISO15552 and VDMA24562 standard cylinder;
2. The piston seal is composed of two Y-shape one-way seal structure, which has compensation function, long service life and low start-up pressure;
3. The square aluminum pipe without tie rod has good corrosion resistance;
4. The buffer adjustment of cylinder is smooth and steady;
5. Cylinders and accessories for installation with several specifications are optional.

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
125	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.

Ordering code



① Model	② Bore size	③ Rod Material	④ Stroke	⑤ Adjustable stroke	⑥ Magnet	⑦ Mounting type[Note1]	⑧ Seals Material	⑨ Thread type
SE: Double acting type	32 40 50 63 80 100 125	Blank: Medium carbon steel A: SUS420J2 B: SUS304 C: SUS316	Refer to stroke table for details	No this code	Blank: Without magnet S: With magnet	Blank LB FA FB CA CB CR FTC TC	Blank: TPU H: Viton N: NBR	Blank: PT G: G T: NPT
SED: Double rod type						Blank LB FA FTC TC		
SEJ: Adjustable stroke type				10 20 30 40 50 75 100				

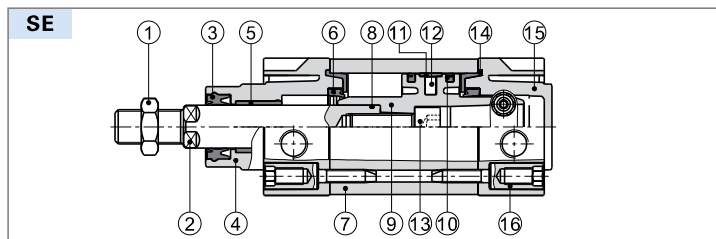
[Note1] CR is used with CB; FTC、TC are used with TCM1、TCM2.



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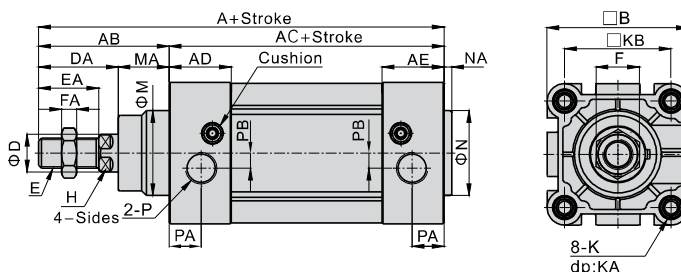
Inner structure and material of major parts



NO.	Item	Material
1	Rod nut	Carbon steel\Stainless steel
2	Piston rod	Carbon steel with 20 μ m chrome plated or Stainless steel
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	TPU
11	Wear ring	Wear resistant material
12	Magnet	Plastic\Rubber(Φ 125)
13	Bolt	Carbon steel
14	Buffer gasket	TPU
15	Back cover	Aluminum alloy
16	Screw	Carbon steel\Stainless steel

Dimensions

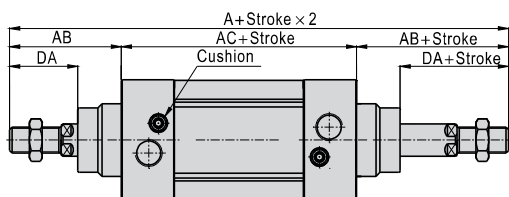
SE



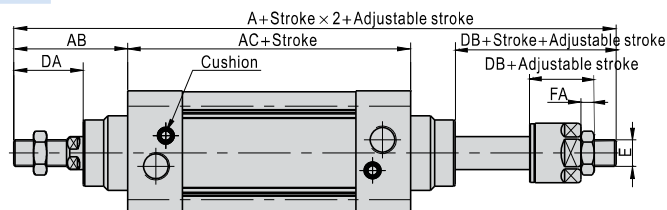
Bore size\Item	A	AB	AC	AD	AE	B	D	DA	E	EA	F	FA	H	K	KA	KB	M	MA	NA	N	P	PA	PB
32	142	48	94	27.5	27.5	46.5	12	29	M10×1.25	22	17	6	10	M6	16	32.5	30	19	3	30	1/8"	13.5	6
40	159	54	105	32	32	54	16	33	M12×1.25	24	17	7	13	M6	16	38	35	21	3.5	35	1/4"	17.5	6
50	175	69	106	31	31	64	20	42	M16×1.5	32	23	8	17	M8	16	46.5	40	27	3.5	40	1/4"	14	8
63	190	69	121	33	33	75	20	42	M16×1.5	32	23	8	17	M8	16	56.5	45	27	4	45	3/8"	17	8
80	214	86	128	33	33	93	25	53	M20×1.5	40	26	10	22	M10	17	72	45	33	4	45	3/8"	16.5	8
100	229	91	138	37	37	110	25	55	M20×1.5	40	26	10	22	M10	17	89	55	36	4	55	1/2"	19.5	10
125	279	119	160	46	46	134	32	74	M27×2	54	41	13.5	27	M12	20	110	60	45	4	60	1/2"	23	11

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

SED



SEJ



Bore size\Item	A		AB	AC	DA	DB	E	FA
	SED	SEJ						
32	190	188	48	94	29	27	M10X1.25	6
40	213	208	54	105	33	28	M12X1.25	7
50	244	231	69	106	42	29	M16X1.5	8
63	259	246	69	121	42	29	M16X1.5	8
80	300	282.5	86	128	53	35.5	M20X1.5	10
100	320	300.5	91	138	55	35.5	M20X1.5	10
125	398	366.5	119	160	74	42.5	M27X2.0	13.5

Remark:

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