

Stainless Steel Cylinder

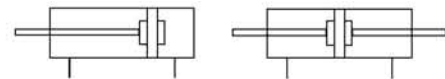
Character:

- Use imported non-lubrication oil seal, fits for high speed movement.
- No draw rod type, tube and covers made by roll extrusion.
- Has non-lubrication bearing, no maintenance for long time work with longer life than usual one.
- Magnet in piston, whole series can be attached with sensor switch.



Specification:

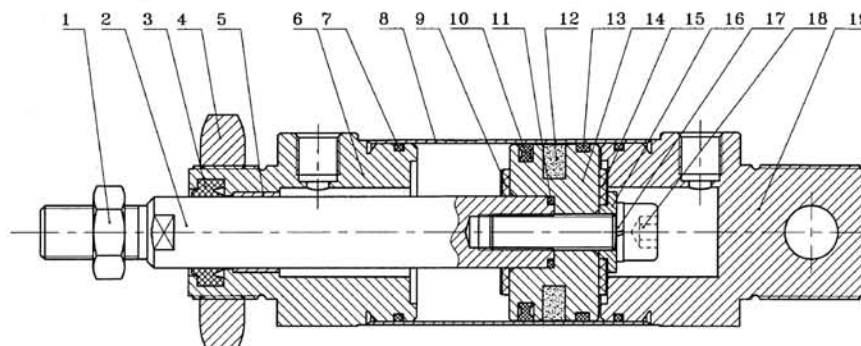
Mode	12	16	20	25	32	40
Motion	Double acting					
Series	MS, MSD					
Fluid	air					
Operating pressure range(Mpa)	0.1~0.9					
Operating speed(mm/sec)	50~500					
Ambient temperature(°C)	-10~70°C					
Port size	M5			1/8"		



How to order:

MS	20	×	100	LB	S	2												
series	bore		stroke	mounting type	with magnet	sensor												
MS:stainless steel cylinder MSD:Double rod stainless steel cylinder	<table border="1"> <tr><td>φ 12</td><td>φ 16</td></tr> <tr><td>φ 20</td><td>φ 25</td></tr> <tr><td>φ 32</td><td>φ 40</td></tr> </table>	φ 12	φ 16	φ 20	φ 25	φ 32	φ 40			<table border="1"> <tr> <td>LB</td> <td></td> </tr> <tr> <td>FA/FB</td> <td></td> </tr> </table>	LB		FA/FB		S:with magnet blank: without magnet	<table border="1"> <tr><td>1:1</td></tr> <tr><td>2:2</td></tr> </table>	1:1	2:2
φ 12	φ 16																	
φ 20	φ 25																	
φ 32	φ 40																	
LB																		
FA/FB																		
1:1																		
2:2																		

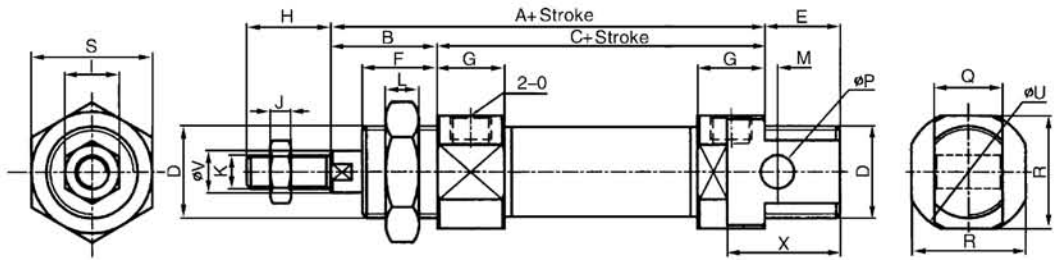
Inner structure drawing:



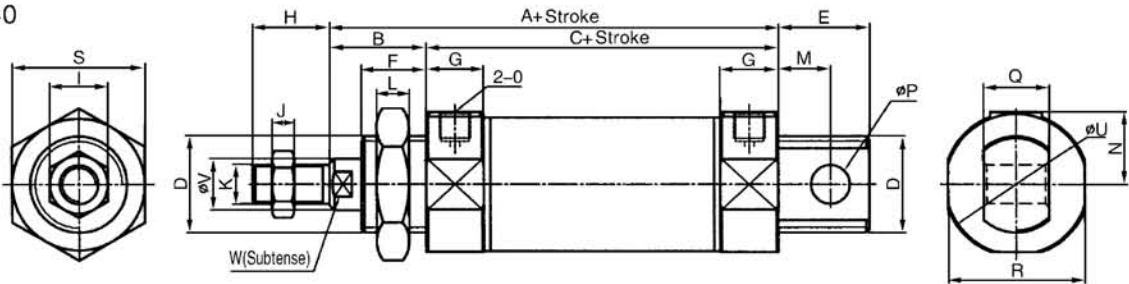
1	hexagon nut	11	O-ring
2	piston ring	12	magnet
3	compages seal	13	guard seals
4	hexagon nut	14	piston
5	oiled bearing	15	crashworthy washer
6	front cover	16	washer
7	O-ring	17	spring washer
8	tube	18	inner hexagon bolt
9	crashworthy washer	19	rear cover
10	C-ring		

Standard Dimension:

■ ϕ 12~ ϕ 20

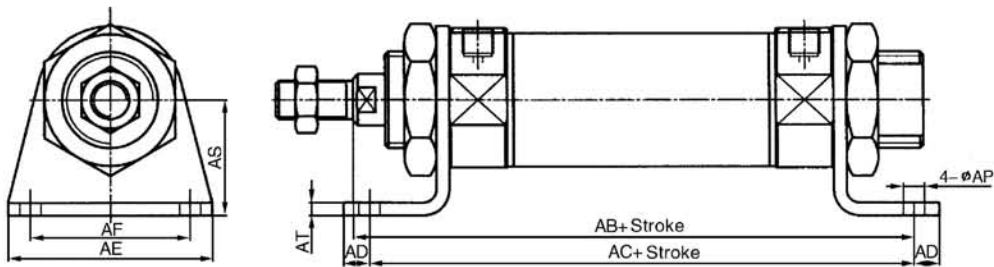


■ ϕ 25~ ϕ 40



bore/stroke	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	U	V	W	X
12	72	22	50	M16 x 1.5	16	17	11.5	16	10	4	M6	6	5	-	M5	6	12	19	22	21	6	-	23
16	79	22	57	M16 x 1.5	16	17	12	16	10	4	M6	6	5	-	M5	6	12	19	22	21	6	-	23
20	92	24	68	M22 x 1.5	18	18	16	20	13	5	M8	8	3	15	G1/8"	8	16	27	27	30	8	7	27
25	96	27	68	M22 x 1.5	20	20	16	22	17	6	M10 x 1.25	8	8	15	G1/8"	8	16	27	27	30	10	9	-
32	106	30	76	M24 x 1.5	24	20	18	22	17	6	M10 x 1.25	10	14	19	G1/8"	10	16	35	32	38	12	10	-
40	114	30	84	M30 x 1.5	28	20	18	24	19	7	M12 x 1.25	10	16	22.4	G1/8"	12	20	42	41	45	16	14	-

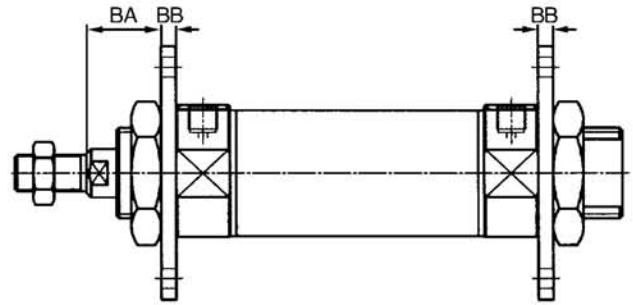
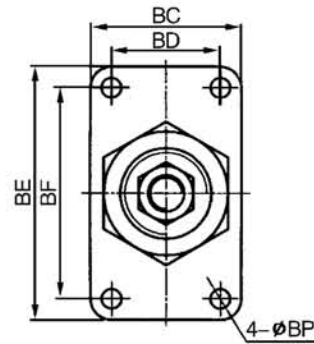
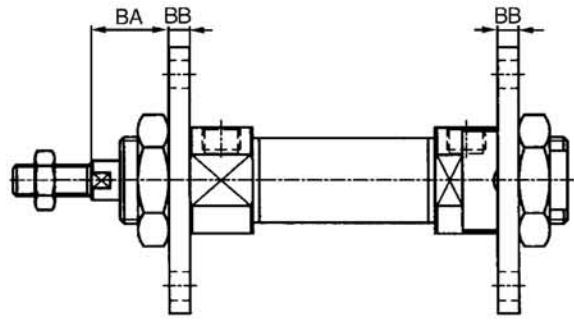
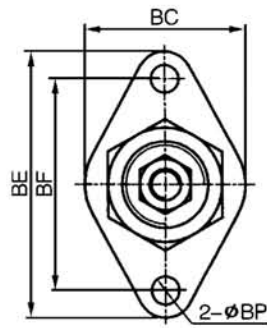
Foot bracket(LB)



bore/stroke	AB	AC	AD	AE	AF	AP	AS	AT
12	85	76	6	43	32	5.5	20	3
16	91.5	82	6	43	32	5.5	20	3
20	108	100	7.5	53	40	6.6	25	3
25	112	100	7.5	53	40	6.6	25	3
32	130	124	8	59	45	6.6	32	4
40	139	124	8	64	50	6.6	36	4

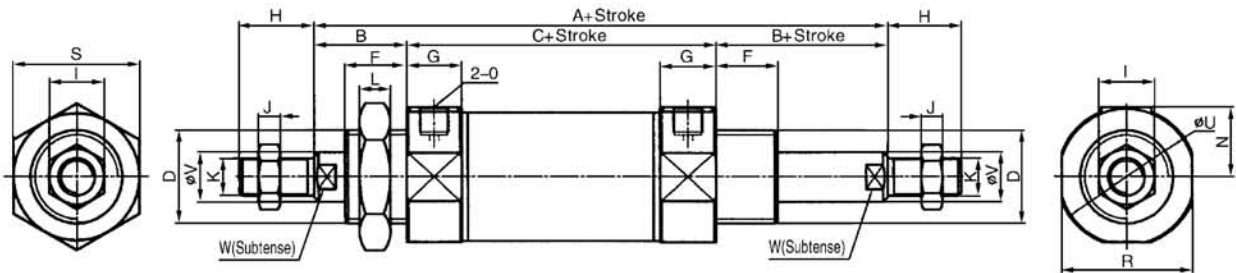
Front flange(FA)

Rear flange (FB)



bore/stroke	BA	BB	BC	BD	BE	BF	BP
12	19	3	28	-	51	40	5.5
16	19	3	28	-	51	40	5.5
20	19	5	38	-	63	50	6.6
25	23	5	38	-	63	50	6.6
32	25	5	47	33	72	58	6.6
40	25	5	50	36	84	70	6.6

Double shaft (MSD)



bore/stroke	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	U	V	W
12	94	22	50	M16 × 1.5	16	17	11.5	16	10	4	M6	6	5	-	M5	6	19	22	21	6	-
16	101	22	57	M16 × 1.5	16	17	12	16	10	4	M6	6	5	-	M5	6	19	22	21	6	-
20	116	24	68	M22 × 1.5	18	18	16	20	13	5	M8	8	3	15	G1/8"	8	27	27	30	8	7
25	124	27	68	M22 × 1.5	20	20	16	22	17	6	M10 × 1.25	8	8	15	G1/8"	8	27	27	30	10	9
32	136	30	76	M24 × 1.5	24	20	18	22	17	6	M10 × 1.25	10	14	19	G1/8"	10	35	32	38	12	10
40	144	30	84	M30 × 1.5	28	20	18	24	19	7	M12 × 1.25	10	16	22.4	G1/8"	12	42	41	45	16	14