

How to Order?

Series No	Type No	Bore	X	Stroke	Adjustable stroke	Magnet No	Piston Rod thread type	Thread type
SF	Blank: Basic type	20		5	10	Blank: No magnet		Blank: G
	D: Double shaft type	25		10	20	S: With magnet		P: PT
	J: Double shaft and adjustable stroke type	32		15	30			T: NPT
	SA: Single acting spring extend	...		20	40		Blank: Female thread	
	SB: Single acting spring return	100		...	50		M: Male thread	
					75		N: No thread	
					100			

Order Example:

SF Series basic cylinder, 25mm bore, 50mm stroke, with magnet, male thread on piston rod, G thread
ERP code is: SF25X50-S-M

Specifications

Bore size(mm)	20	25	32	40	50	63	80	100
Acting type	Double acting/Single acting							
Working medium	Clean Air(40 μm filtration)							
Working pressure(MPa)	0.1~1.0(Double acting) / 0.2~1.0(Single acting)(MPa)							
Guaranteed pressure(MPa)	1.5(MPa)							
Working temperature(°C)	-20~80(Dry air)							
Speed range(mm/s)	30~500							
Cushion type	Bumper							
Port size	M5X0.8				G1/8 ①			

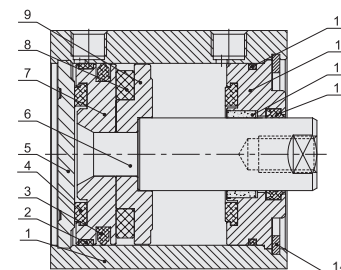
① NPT、PT port size is optional.

Stroke

Bore(mm)	Standard stroke(mm)	Max.stroke(mm)
20/25	5 10 15 20 25 30 35 40 45 50 60 80 100 125 150	150
32~63	5 10 15 20 25 30 35 40 45 50 60 80 100 125 150 175 200	200
80/100	10 15 20 25 30 35 40 45 50 60 80 100 125 150 175 200	200
Single Acting	5 10 15 20 25	25

Note:The dimensions of non-std stroke cylinder has the same dimensions as the next longer stroke std. stroke cylinder.
e.g. 27mm stroke cylinder has the same dimensions of 30 std. stroke cylinder.
When ordering stroke is larger than the maximum stroke, please contact us.

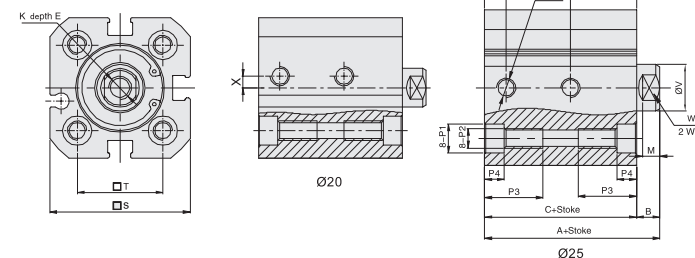
Internal structure



No	Part name	20	25	32	40	50	63	80	100
1	Barrel	Aluminum alloy							
2	Wear ring	No			PTEE				
3	Piston seal	NBR							
4	Anti-bump cushion	TPU				NBR			
5	Rear cover	Aluminum alloy							
6	Piston rod	Stainless steel			Carbon steel				
7	Piston	Aluminum alloy							
8	Magnet	RbFeB			Plastic				
9	Magnet base	Aluminum alloy							
10	O-ring	NBR							
11	Head cover	Aluminum alloy							
12	Bearing	No			Bronze powder				
13	Piston rod seal	TPU							
14	C type retainer ring	Spring steel							

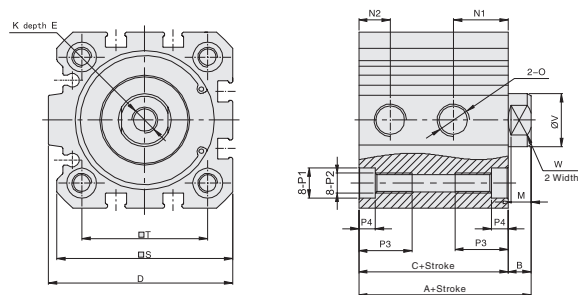
Main dimensions

Φ20、Φ25



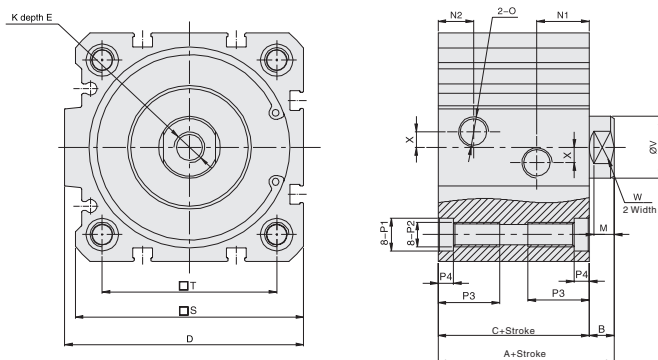
Bore/Sign	A	C	N1	N2	B	E	M	K	O	P1	P2	P3	P4	S	T	X	V	W
20	43	37	15	5.5	6	10	4	M6X1.0	M5X0.8	Φ7.3	M5X0.8	15	5	36	22	3	10	8
25	45	39	17	5.5	6	10	4.5	M6X1.0	M5X0.8	Φ7.3	M5X0.8	15	5	40	26	-	12	10

Φ32、Φ40



Bore/Sign	A	C	N1	N2	B	D	E	M	K	O	P1	P2	P3	P4	S	T	V	W
32	51	44	15	8	7	48	12	6	M8X1.25	1/8"	Φ9	M6X1.0	16	5	45.5	32.5	16	14
40	52	45	16.5	9.5	7	55.5	12	6	M8X1.25	1/8"	Φ9	M6X1.0	16	5	53	38	16	14

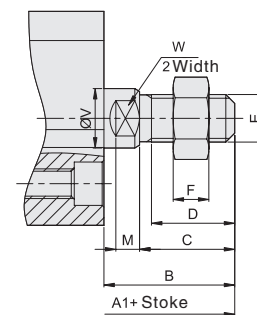
Φ50~Φ100



Bore/Sign	A	C	N1	N2	B	D	E	M	K	O	P1	P2	P3	P4	S	T	X	V	W
50	53	45	16	10.5	8	65.5	16	6.5	M10X1.5	1/8"	Ø10.5	M8X1.25	20	5	63	46.5	4	20	17
63	57	49	17	11.5	8	77.5	16	6.5	M10X1.5	1/8"	Ø10.5	M8X1.25	20	5	74	56.5	5	20	17
80	64	54	17	15	10	95.5	21	8.5	M12X1.75	1/8"	Ø13.7	M10X1.5	25	5	92	72	10	25	22
100	77	67	24.5	19	10	113.5	21	8	M12X1.75	1/8"	Ø13.7	M10X1.5	25	5	109	89	14	32	27

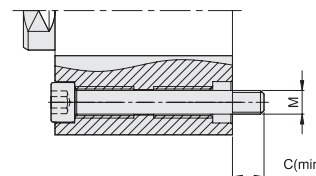
Note: With magnet and without magnet, the dimensions are same.

Male thread dimension



Bore/Sign	A1	B	C	D	E	F	M	V	W
20	59	22	16	14	M8X1.25	6	4	10	8
25	61	22	16	14	M8X1.25	6	4.5	12	10
32	70	26	19	16.5	M10X1.25	6	6	16	14
40	71	26	19	16.5	M10X1.25	6	6	16	14
50	75	30	22	19.5	M12X1.25	7	6.5	20	17
63	79	30	22	19.5	M12X1.25	7	6.5	20	17
80	92	38	28	25	M16X1.5	8	8.5	25	22
100	105	38	28	25	M16X1.5	8	8	32	27

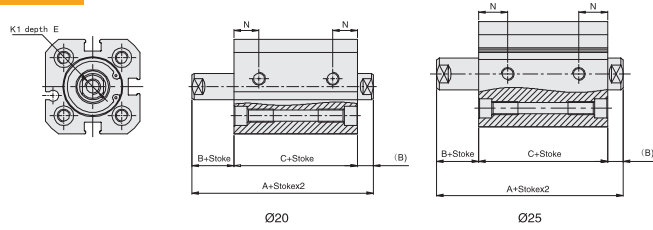
Installation note



Bore/Sign	M	C
20	M4X0.7	6
25	M4X0.7	6
32	M5X0.8	7
40	M5X0.8	7
50	M6X1.0	9
63	M6X1.0	9
80	M8X1.25	12
100	M8X1.25	12

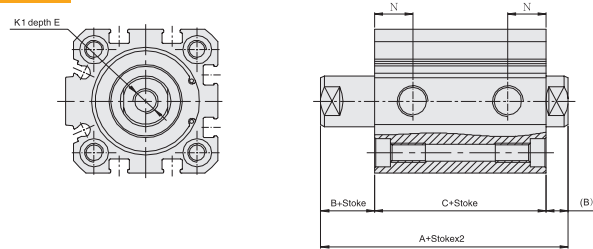
SFD Type

Φ 20、Φ 25



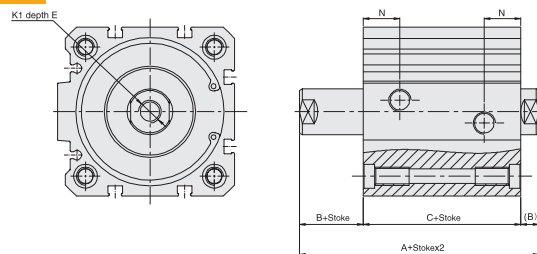
Bore/Sign	A	B	C	N	K1	E
20	49	6	37	9.5	M6X1.0	10
25	51	6	39	11	M6X1.0	10

Φ 32、Φ 40



Bore/Sign	A	B	C	N	K1	E
32	58	7	44	12	M8X1.25	12
40	59	7	45	13	M8X1.25	12

Φ 50~ Φ 100

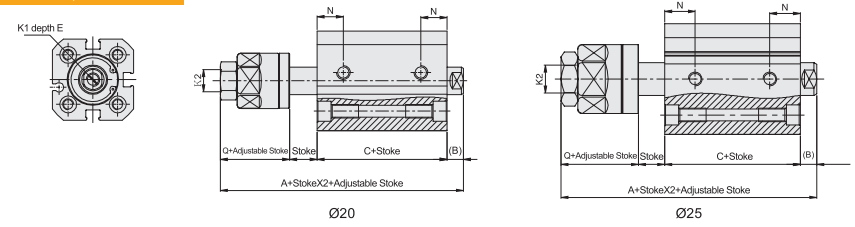


Bore/Sign	A	B	C	N	K1	E
50	61	8	45	13.5	M10X1.5	12(5≤S<15)/16(S≥15)
63	65	8	49	16	M10X1.5	12(5≤S<15)/16(S≥15)
80	74	10	54	16	M12X1.75	14(10≤S<25)/21(S≥25)
100	87	10	67	20.5	M12X1.75	21

Note: Not marked dimension, the same as standard type. Parts of double shaft male thread type, please refer to standard dimension.

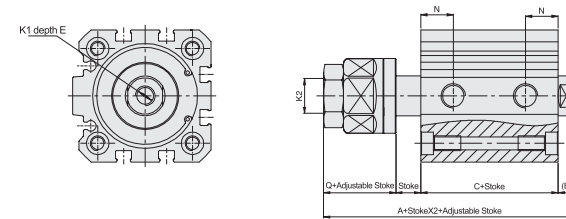
SFJ Type

Φ 20、Φ 25



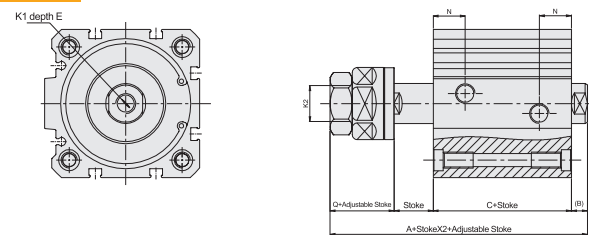
Bore/Sign	A	B	C	Q	N	K1	E	K2
20	68	6	37	25	9.5	M6X1.0	10	M8X1.25
25	72.5	6	39	28	11	M6X1.0	10	M10X1.25

Φ 32、Φ 40



Bore/Sign	A	B	C	Q	N	K1	E	K2
32	79	7	44	30	12	M8X1.25	12	M14X1.5
40	81	7	45	29	13	M8X1.25	12	M14X1.5

Φ 50~ Φ 100



Bore/Sign	A	B	C	Q	N	K1	E	K2
50	85	8	45	32	13.5	M10X1.5	12(5≤S<15)/16(S≥15)	M18X1.5
63	88.5	8	49	32	16	M10X1.5	12(5≤S<15)/16(S≥15)	M18X1.5
80	101	10	54	37	16	M12X1.75	14(10≤S<25)/21(S≥25)	M22X1.5
100	113.5	10	67	37	20.5	M12X1.75	21	M26X1.5

Note: Not marked dimension, the same as standard type. Parts dimension of adjustable male thread type, please refer to standard dimension.