SDA Series Compact Cylinder

How to Order

SDA	-	20	X	30	-	S	-	B

- SDA: Double acting
  SSA: Single acying Spring extend
  STA: Single acting Spring return
  SDAD: Through end rod
- Bore
- Stroke
- Blank: Without magnet
  S: With magnet
- Rod end thread type
  Blank: Internal thread
  B: External thread
  N: Without thread

Technical data

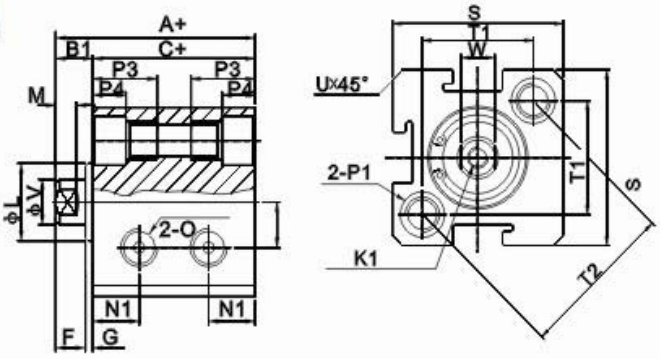
Bore (mm)		12	16	20	25	32	40	50	63	80	100
Working medium		Filtered air									
Operating pressure range	Double acting	0.1~0.9MPa									
	Single acting	2~9						—			
Max. Pressure		1.05MPa									
Operating temperature range		0~70℃									
Operating Speed Range (mm/s)	Double acting	30~500						30~350		30~250	
	Single acting	100~500						—			
Port connection		M5 x 0.8				G1/8		G1/4		G3/8	

Stroke

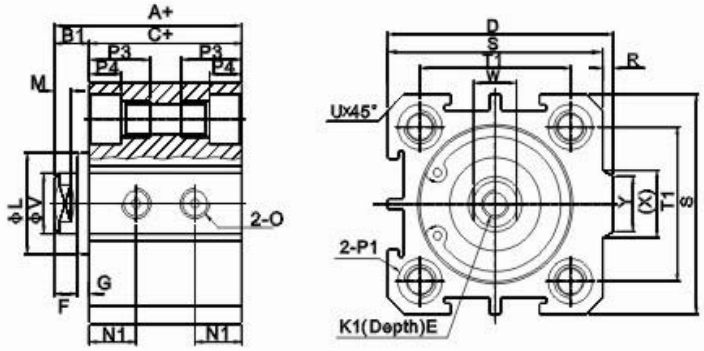
Bore (mm)		12 16	20	25		32 40 50 63 80 100	
Double Acting	Without magnet	5~60mm	5~85mm	5~90mm	100~110mm	5~90mm	100~130mm
	With magnet	5~50mm	5~75mm	5~90mm	100mm	5~90mm	100~120mm
Single Acting	Without magnet	5~30mm	5~30mm	5~30mm		5~30mm	—
	With magnet	5~30mm	5~30mm	5~30mm		5~30mm	—
Max.Stroke		60mm	100mm	120mm		130mm	

Dimensions(mm):

SDA12-16



SDA20-100

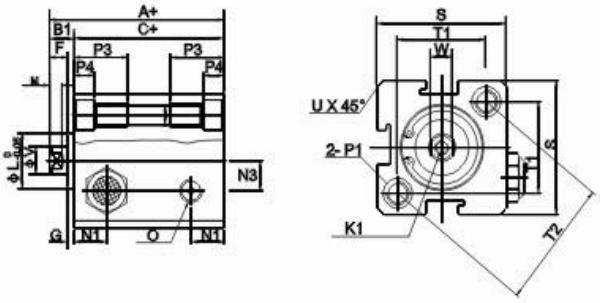


Type / Bore	Without magnet A	B1	C	With magnet A	B1	C	D	E	F	G	K1	L	M	N1	N3	O
12	22	5	17	32	5	27	-	6	4	1	M3 X 0.5	10.2	2.8	6.3	6	M5 X 0.8
16	24	5.5	18.5	34	5.5	28.5	-	6	4	1.5	M3 X 0.5	11	2.8	7.3	6.5	M5 X 0.8
20	25	5.5	19.5	35	5.5	29.5	36	8	4	1.5	M4 X 0.7	16	2.8	7.5	-	M5 X 0.8
25	27	6	21	37	6	34	42	10	4	2	M5 X 0.8	17	2.8	8	-	M5 X 0.8
32	31.5	7	24.5	41.5	7	34.5	50	12	4	3	M6X 1	22	2.8	9	-	G1/8
40	33	7	26	43	7	36	58.5	12	4	3	M8 X 1.25	28	2.8	10	-	G1/8
50	37	9	28	47	9	38	71.5	15	5	4	M10 X 1.5	38	2.8	10.5	-	G1/4
63	41	9	32	51	9	42	84.5	15	5	4	M10 X 1.5	40	2.8	11.8	-	G1/4
80	52	11	41	62	11	51	104	15	6	5	M14 X 1.5	45	4	14.5	-	G3/8
100	63	12	51	73	12	61	124	18	7	5	M18 X 1.5	55	4	20.5	-	G3/8

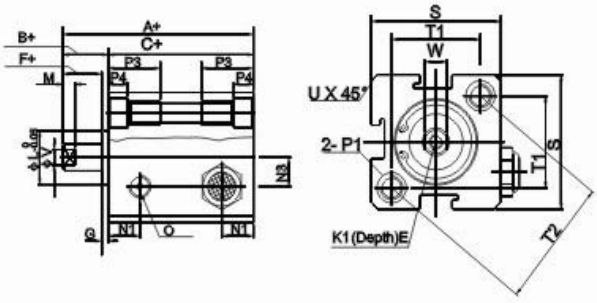
Bore	P1	P3	P4	R	S	T1	T2	U	V	W	X	Y
12	Both side ϕ6.5 Cog M5 X 0.8 Through Hole: ϕ4.2	12	4.5	-	25	16.2	23	1.6	6	5	-	-
16	Both side ϕ6.5 Cog M5 X 0.8 Through Hole: ϕ4.2	12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	Both side ϕ6.5 Cog M5 X 0.8 Through Hole: ϕ4.2	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	Both side ϕ8.2 Cog M6 X 1.0 Through Hole: ϕ4.6	15	5.5	2	40	28	-	3.1	10	8	12	10
32	Both side ϕ8.2 Cog M6 X 1.0 Through Hole: ϕ4.6	16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	Both side ϕ10 Cog M8 X 1.25 Through Hole: ϕ6.5	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16
50	Both side ϕ11 Cog M8 X 1.25 Through Hole: ϕ6.5	25	8.5	9.5	62	48	-	4.15	20	17	30	20
63	Both side ϕ11 Cog M8 X 1.25 Through Hole: ϕ6.5	25	8.5	9.5	75	60	-	3.15	20	17	28.7	20
80	Both side ϕ14 Cog M12 X 1.75 Through Hole: ϕ9.2	25	10.5	10	94	74	-	3.65	25	22	36	26
100	Both side ϕ17.5 Cog M12 X 1.75 Through Hole: ϕ11.3	30	13	10	114	90	-	3.65	32	27	35	26

Dimensions(mm):

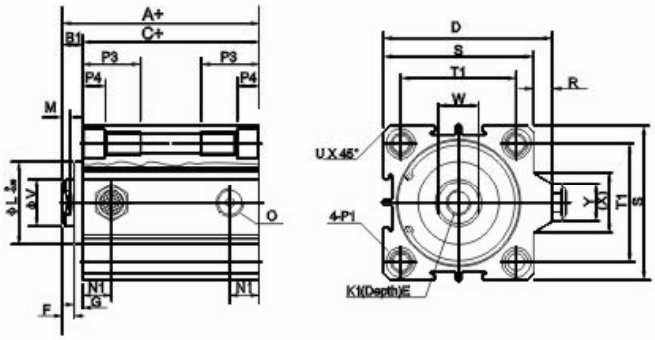
STA 12-16, spring return



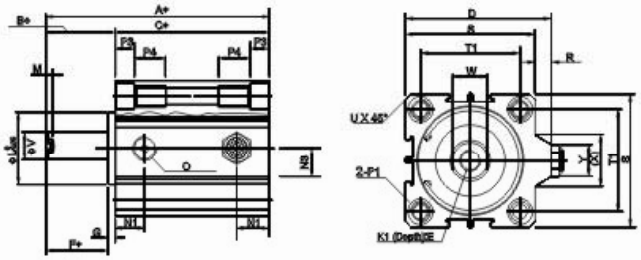
SSA12-16, spring extend



STA20-40, spring return



SSA20-40, spring extend

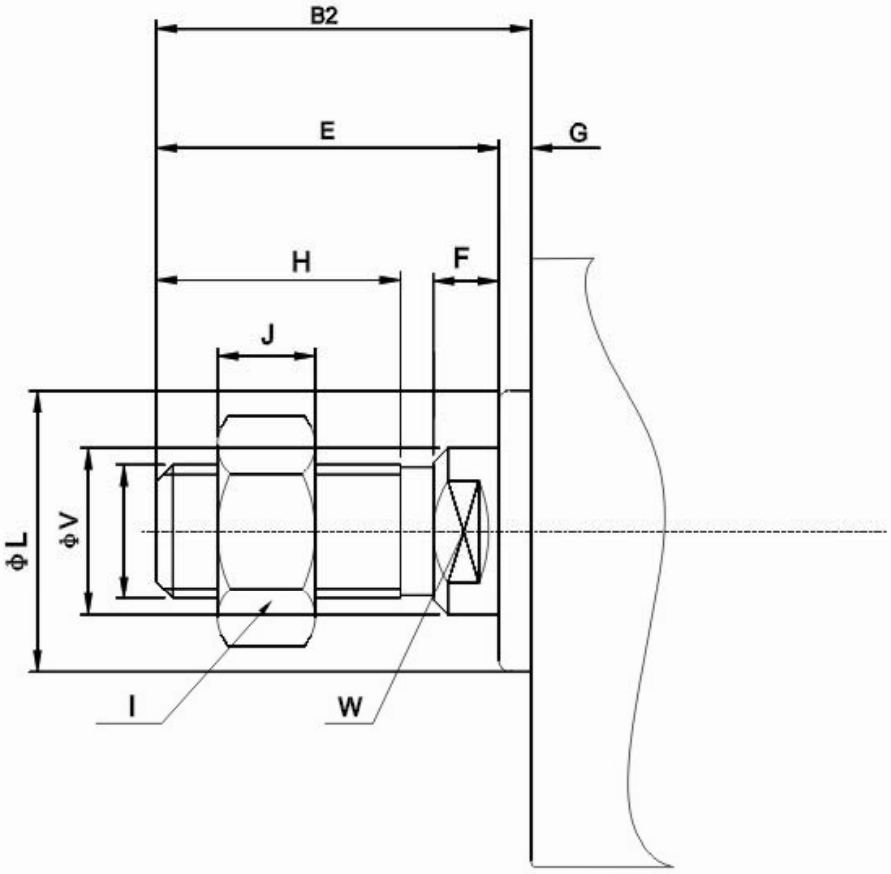


Type	Without magnet					With magnet					D	E	F	G	K1	L	M	N1	N3
Bore/Stroke	A		B1	C		A		B1	C										
	≤10	>10		≤10	>10	≤10	>10		≤10	>10									
12	32	42	5	27	37	42	52	5	37	47	-	6	4	1	M3x0.5	10.2	2.8	6.3	6
16	34	44	5.5	28.5	38.5	44	54	5.5	38.5	48.5	-	6	4	1.5	M3x0.5	11	2.8	7.3	6.5
20	35	45	5.5	29.5	39.5	45	55	5.5	39.5	49.5	36	8	4	1.5	M4x0.7	16	2.8	7.5	-
25	37	47	6	34	41	47	57	6	41	51	42	10	4	2	M5x0.8	17	2.8	8	-
32	41.5	51.5	7	34.5	44.5	51.5	61.5	7	44.5	54.5	50	12	4	3	M6x1	22	2.8	9	-
40	43	53	7	36	46	53	63	7	46	56	58.5	12	4	3	M8x1.25	28	2.8	10	-

Bore	O	P1	P3	P4	R	S	T1	T2	U	V	W	X	Y
12	M5 X 0.8	Both side Φ6.5 Cog M5 X 0.8 Through Hole: Φ4.2	12	4.5	-	25	16.2	23	1.6	6	5	-	-
16	M5 X 0.8	Both side Φ6.5 Cog M5 X 0.8 Through Hole: Φ4.2	12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	M5 X 0.8	Both side Φ6.5 Cog M5 X 0.8 Through Hole: Φ4.2	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	M5 X 0.8	Both side Φ8.2 Cog M6 X 1.0 Through Hole: Φ4.6	15	5.5	2	40	28	-	3.1	10	8	12	10
32	G1/8	Both side Φ8.2 Cog M6 X 1.0 Through Hole: Φ4.6	16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	G1/8	Both side Φ10 Cog M8 X 1.25 Through Hole: Φ6.5	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16

Dimensions(mm)

Male threaded piston rod end



Model	B2	E	F	G	H	I	J	K2	L	M	V	W
12	17	16	4	1	10	8	4	M5 X 0.8	10.2	2.8	6	5
16	17.5	16	4	1.5	10	8	4	M5 X 0.8	11	2.8	6	5
20	20.5	19	4	1.5	13	10	5	M6 X 1.0	16	2.8	8	6
25	23	21	4	2	15	12	6	M10 X 1.25	17	2.8	10	8
32	25	22	4	3	15	17	6	M14 X 1.5	22	2.8	12	10
40	35	32	4	3	25	19	8	M18 X 1.5	28	2.8	16	14
50	37	33	5	4	25	27	11	M18 X 1.5	38	2.8	20	17
63	37	33	5	4	25	27	11	M22 X 1.5	40	2.8	20	17
80	44	39	6	5	30	32	13	M22 X 1.5	45	4	25	22
100	50	45	7	5	35	36	13	M26 X 1.5	55	4	32	27