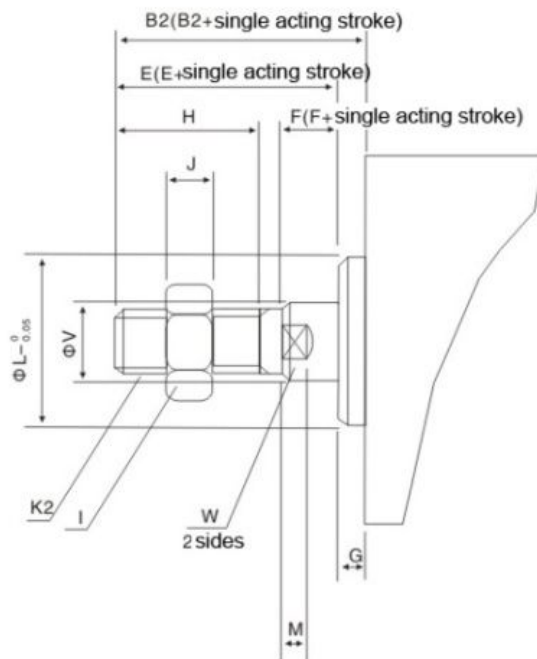
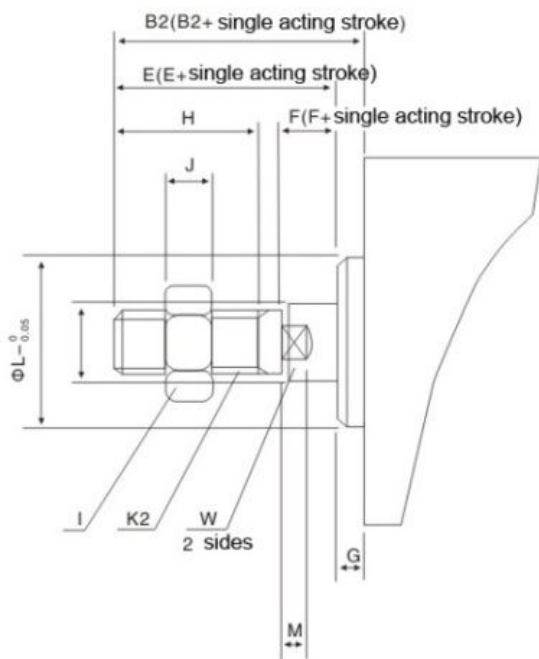


External dimension

Φ12~Φ16

Φ20~Φ100

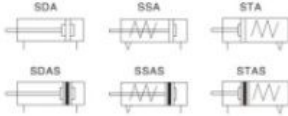


Bore/Symbol	B2	E	F	G	H	I	J	K2	L	M	V	W
12	17	16	4	1	10	8	4	M5×0.8	10.2	2.8	6	5
16	17.5	16	4	1.5	10	8	4	M5×0.8	11	2.8	6	5
20	20.5	19	4	1.5	13	10	5	M6×1.0	15	2.8	8	6
25	23	21	4	2	15	12	6	M8×1.25	17	2.8	10	8
32	25	22	4	3	15	17	6	M10×1.25	22	2.8	12	10
40	35	32	4	3	25	19	8	M14×1.5	28	2.8	16	14
50	37	33	5	4	25	27	11	M18×1.5	38	2.8	20	17
63	37	33	5	4	25	27	11	M18×1.5	40	2.8	20	17
80	44	39	6	5	30	32	13	M22×1.5	45	4	25	22
100	50	45	7	5	35	36	13	M26×1.5	55	4	32	27

Ordering Code

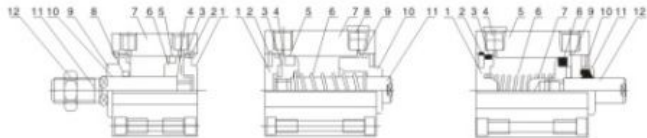
SDA S - 20 × 30 - B

- thread: blank, female; B: male; N: no thread
- stroke
- bore
- magnet: S: with magnet; blank: without magnet
- acting type: SDA: double acting type; SSA: single extrusion type; STA: single drawing-in type



Technical parameters

Bore size: mm / ID		12	16	20	25	32	40	50	63	80	100
Acting type	Medium	Single extrusion type		Double acting							
	Double acting type	Compressed clean air		Single drawing-in type							
Operating pressure Kgf/cm ²	Double acting type	1-9		1-9							
	Single acting type	2-9		13.5							
Proof pressure Kgf/cm ²				13.5							
Ambient and operating temperature range °C				-5~70							
Speed range mm/s	Double acting type	30-500		30-350		30-250					
	Single acting type	100-500									
Buffer type				Fixed type							
Pipe size		M5 × 0.8		PT1/8"		PT1/4"		PT3/8"			



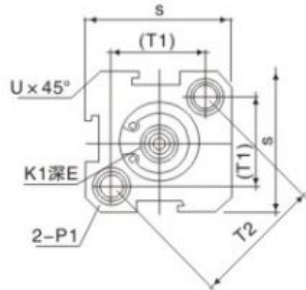
No.	Name	No.	Name	No.	Name	No.	Name	No.	Name	No.	Name
1	back cover	2	C-ring	1	back cover	2	C-ring	1	back cover	2	C-ring
3	cover O-ring	4	anti-collision pad	3	anti-collision pad	4	piston	3	cover O-ring	4	silencer
5	piston	6	piston O-ring	5	piston O-ring	6	compress spring	5	body	6	compress spring
7	anti-collision pad	8	body	7	body	8	silencer	7	piston	8	piston O-ring
9	front seal ring	10	front cover	9	cover O-ring	10	front cover	9	anti-collision pad	10	front seal ring
11	piston rod	12	nut	11	piston rod	12		11	front cover	12	piston rod

Main part material

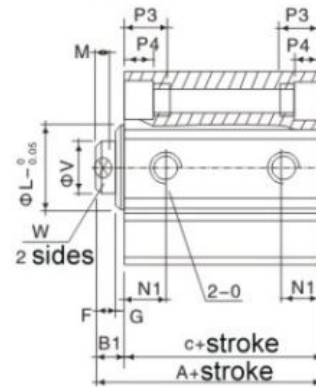
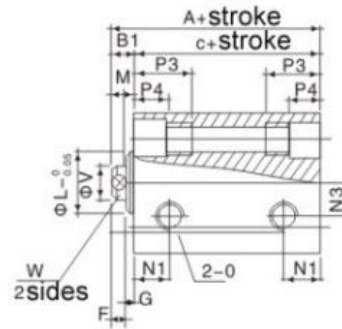
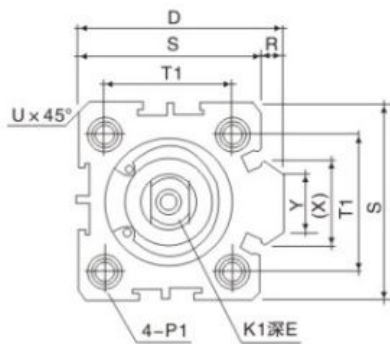
Bore size	12	16	20	25	32	40	50	63	80	100
Body	Aluminum alloy									
Piston	Aluminum alloy									
Piston rod	High carbon steel									
Piston O-ring	NBR									
Front seal ring	NBR									
Anti-collision pad	NBR									
Oil bearing	Oil powder copper									
Front cover	Copper (nickel plating)					Aluminum alloy				
Back cover	Copper (nickel plating)					Aluminum alloy				
C-ring	Spring steel									
Spring	Stainless steel									
Silencer	Oil powder copper									
Magnet	Plastic rubber									

SDA、SDAS basic type dimension

Φ12~Φ16



Φ20~Φ100

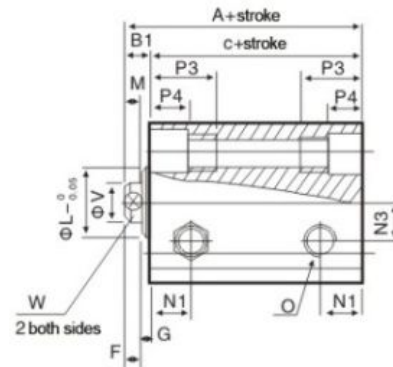
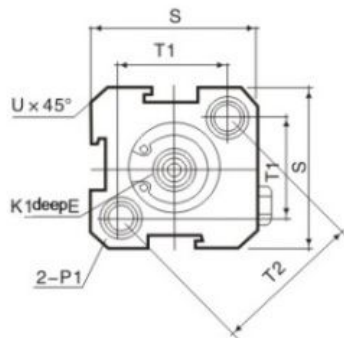


Type	Standard type			With maget			D	E		F	G	K1	L	M	N1
	A	B1	C	A	B1	C		Stroke ≤ 10	Stroke > 10						
12	22	5	17	32	5	27	-	6	4	1	M3×0.5	10.2	2.8	6.3	
16	24	5.5	18.5	34	5.5	28.5	-	6	4	1.5	M3×0.5	11	2.8	7.3	
20	25	5.5	19.5	35	5.5	29.5	36	8	4	1.5	M4×0.7	15	2.8	7.5	
25	27	6	21	37	6	31	42	10	4	2	M5×0.8	17	2.8	8	
32	31.5	7	24.5	41.5	7	34.5	50	12	4	3	M6×1.0	22	2.8	9	
40	33	7	26	43	7	36	58.5	12	4	3	M8×1.25	28	2.8	10	
50	37	9	28	47	9	38	71.5	15	5	4	M10×1.5	38	2.8	10.5	
63	41	9	32	51	9	42	84.5	15	5	4	M10×1.5	40	2.8	11.8	
80	52	11	41	62	11	51	104	15	6	5	M14×1.5	45	4	14.5	
100	63	12	51	73	12	61	124	18	7	5	M18×1.5	55	4	20.5	

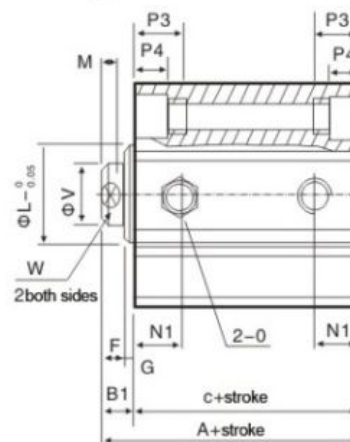
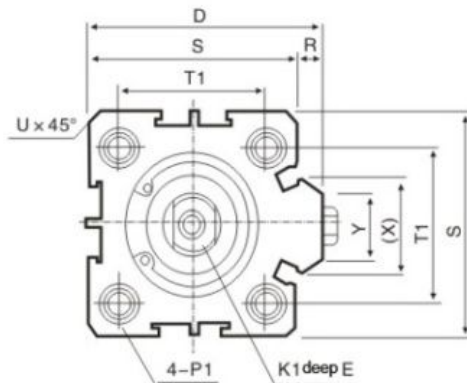
Bore/symbol	B3	O	P1				P3	P4	R	S	T1	T2	U	V	W	X	Y
12	6	M5×0.8	Both sides: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2				12	4.5	-	25	16.2	23	1.6	6	5	-	-
16	6.5	M5×0.8	Both sides: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2				12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	-	M5×0.8	Both sides: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2				14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	-	M5×0.8	Both sides: Φ8.2 Thread: M6×1.0 Through hole: Φ4.6				15	5.5	2	40	28	-	3.1	10	8	12	10
32	-	G1/8	Both sides: Φ8.2 Thread: M6×1.0 Through hole: Φ4.6				16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	-	G1/8	Both sides: Φ10 Thread: M8×1.25 Through hole: Φ6.5				20	7.5	6.5	52	40	-	2.25	16	14	21.3	16
50	-	G1/4	Both sides: Φ11 Thread: M8×1.25 Through hole: Φ6.5				25	8.5	6.5	62	48	-	4.15	20	17	30	20
63	-	G1/4	Both sides: Φ11 Thread: M8×1.25 Through hole: Φ6.5				25	8.5	9.5	75	60	-	3.15	20	17	28.7	20
80	-	G3/8	Both sides: Φ14 Thread: M12×1.75 Through hole: Φ9.2				25	10.5	10	94	74	-	3.65	25	22	36	26
100	-	G3/8	Both sides: Φ17.5 Thread: M14×2 Through hole: Φ11.3				30	13	10	114	90	-	3.65	32	27	35	26

SSA、SSAS basic type dimension

Φ12~Φ16



Φ20~Φ40

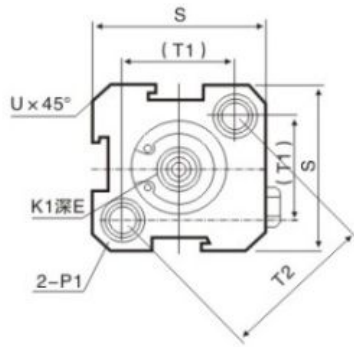


Type	Without magnet				With magnet				D	E	F	G	K1	L	M	N1	N3		
	A		B1	C		A		B1										C	
	≤ 10	> 10		≤ 10	> 10	≤ 10	> 10											≤ 10	> 10
12	32	42	5	27	37	42	52	5	37	47	-	6	4	1	M3×0.5	10.2	2.8	6.3	6
16	34	44	5.5	28.5	38.5	44	54	5.5	38.5	48.5	-	6	4	1.5	M3×0.5	11	2.8	7.3	6.5
20	35	45	5.5	29.5	39.5	45	55	5.5	39.5	49.5	36	8	4	1.5	M4×0.7	15	2.8	7.5	-
25	37	47	6	31	41	47	57	6	41	51	42	10	4	2	M5×0.8	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	M6×1.0	22	2.8	9	-
40	43	53	7	36	46	53	63	7	46	56	58.5	12	4	3	M8×1.5	28	2.8	10	-

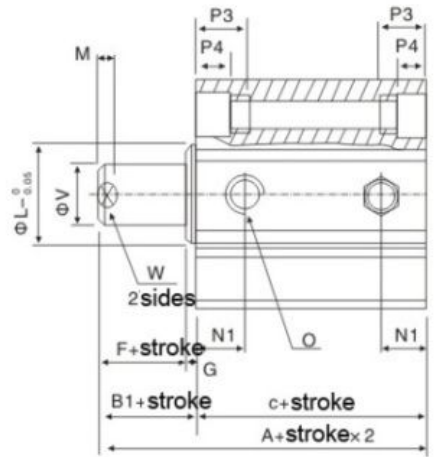
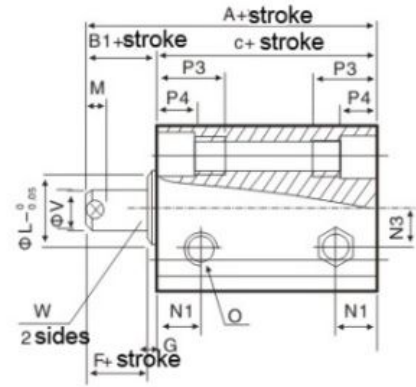
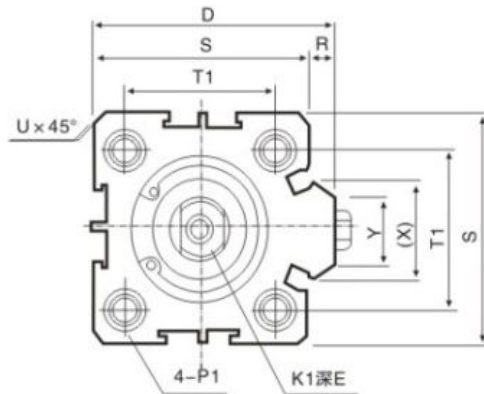
Bore/Symbol	O	P1		P3	P4	R	S	T1	T2	U	V	W	X	Y
12	M5×0.8	Both sides: Φ6.5 Thread:M5×0.8 Through hole:Φ4.2		12	4.5	-	25	16.2	23	1.6	6	5	-	-
16	M5×0.8	Both sides: Φ6.5 Thread:M5×0.8 Through hole:Φ4.2		12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	M5×0.8	Both sides: Φ6.5 Thread:M5×0.8 Through hole:Φ4.2		14	4.5	2	34	24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

STA、STAS Compact Basic Type Dimension

Φ12~Φ16



Φ20~Φ40



Type	Without magnet				With magnet				D	E	F	G	K1	L	M	N1	N3		
	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	M3×0.5	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	M3×0.5	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	M4×0.7	15	2.8	7.5	-
25	37	47	6	31	41	47	57	6	41	51	42	10	4	2	M5×0.8	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	M8×1.0	22	2.8	9	-
40	43	53	7	36	46	53	63	7	46	56	58.5	12	4	3	M8×0.5	28	2.8	10	-

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