



## SDA Series Thin Type(Compact) Cylinder

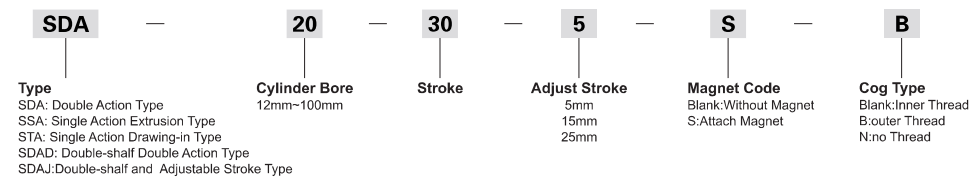


SDA 32×25



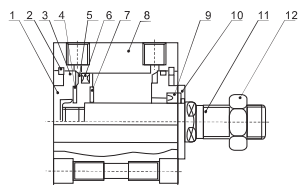
SDAJ 32×25-10

### Ordering Code



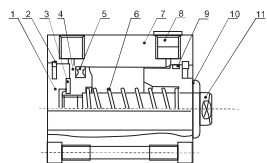
### Internal structure

#### SDA Type



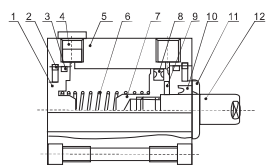
NO	Designation	NO	Designation
1	Back cover	2	Type C buckle ring
3	O-ring	4	Anti-crash cushion
5	Piston	6	Piston O-ring
7	Anti-crash cushion	8	Barrel
9	Front cover seal ring	10	Front cover
11	Piston rod	12	Piston Rod Nut

#### SSA Type



NO	Designation	NO	Designation
1	Back cover	2	Type C buckle ring
3	Anti-crash cushion	4	Piston
5	Piston O-ring	6	Compressed spring
7	Barrel	8	Silencer
9	Cover O-ring	10	Front cover
11	Piston rod		

#### STA Type



NO	Designation	NO	Designation
1	Back cover	2	Type C buckle ring
3	Cover O-ring	4	Silencer
5	Barrel	6	Compressed spring
7	Piston	8	Piston O-ring
9	Anti-crash cushion	10	Front cover seal ring
11	Front cover	12	Piston rod

## SDA Series Thin Type(Compact) Cylinder

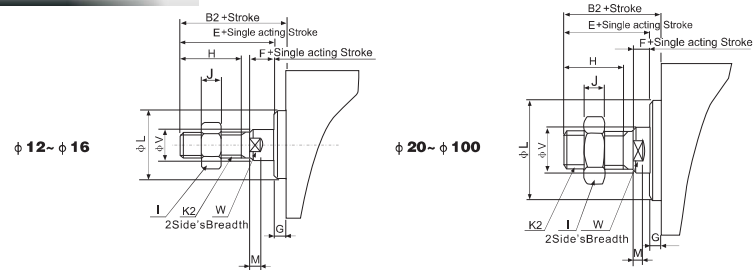
### Specification

Bore(mm)	12	16	20	25	32	40	50	63	80	100	
Motion Pattern	Double Acting										
	Single Acting Extrusion type					Single Acting Drawing-in Type					
Working Medium	Air										
Operating Voltage Range	Double Action					0.1-0.9MPa					
	Single Action										
Ensured Pressure Resistance	0.2-0.9MPa										
Operating Temperature Range	1.35MPa										
	-5-70℃										
Operating Speed Range	Double Action					30-500mm/s			30-350mm/s		30-250mm/s
	Single Action										
	100-500mm/s										
Buffer Type	Fixed Type Buffer										
Port Size	M5×0.8					G1/8"		G1/4"		G3/8"	

### Stroke

Bore(mm)	12	16	20	25	32	40	50	63	80	100	
Double Action	Not attach magnet	5-60 mm Every 5mm is grouped as one grade	5-85 mm Every 5mm is grouped as one grade	5-90 mm Every 5mm is grouped as one grade	100-110 mm Every 5mm is grouped as one grade	5-90 mm Every 5mm is grouped as one grade	5-90 mm Every 5mm is grouped as one grade	100-130 mm Every 5mm is grouped as one grade	100-130 mm Every 5mm is grouped as one grade	100-130 mm Every 5mm is grouped as one grade	
	Attach magnet	5-50 mm Every 5mm is grouped as one grade	5-75mm Every 5mm is grouped as one grade	5-90 mm Every 5mm is grouped as one grade	100mm	5-90 mm Every 5mm is grouped as one grade	5-90 mm Every 5mm is grouped as one grade	100-120 mm Every 5mm is grouped as one grade	100-120 mm Every 5mm is grouped as one grade	100-120 mm Every 5mm is grouped as one grade	
Single Action	Not attach magnet	5-30 mm Every 5mm is grouped as one grade					5-30 mm Every 5mm is grouped as one grade		-		-
	Attach magnet	5-30 mm Every 5mm is grouped as one grade					5-30 mm Every 5mm is grouped as one grade		-		-
Max.Stroke	60mm		100mm		120mm			130mm			

### Outer Thread Dimension



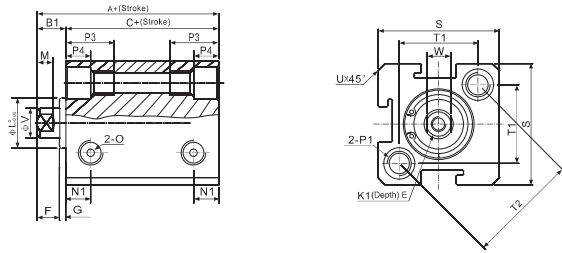
Bore/Symbol	B2	E	F	G	H	I	J	K2	L	M	V	W
12	17	16	4	1	10	8	4	M5×0.8	10.2	2.8	6	5
16	17.5	16	4	1.5	10	8	4	M5×0.8	11	2.8	6	5
20	20.5	19	4	1.5	13	10	5	M6×1.0	16	2.8	8	6
25	23	21	4	2	15	12	6	M10×1.5	17	2.8	10	8
32	25	22	4	3	15	17	6	M14×1.5	22	2.8	12	10
40	35	32	4	3	25	19	8	M18×1.5	28	2.8	16	14
50	37	33	5	4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



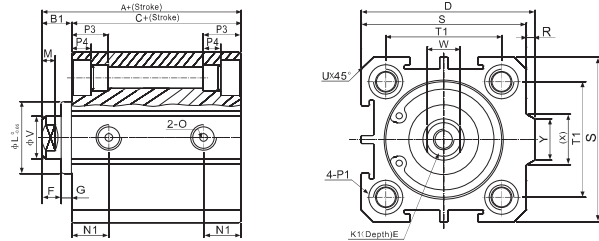
## SDA Series Thin Type(Compact) Cylinder

### Overall Dimensions

SDA.SDAS Type  
φ 12- φ 16



SDA.SDAS Type  
φ 20- φ 100



### Dimension Sheet

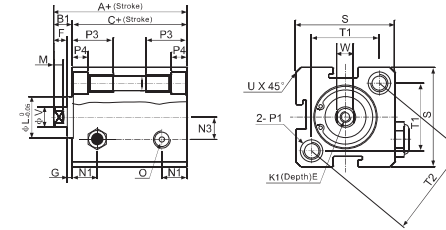
Type	Standard type			Attach Magnet			D	E		F	G	K1	L	M	N1
	A	B1	C	A	B1	C		Stroke ≤ 10	Stroke > 10						
12	22	5	17	32	5	27	-	6	4	1	M3×0.5	10.2	2.8	6.3	
16	24	5.5	18.5	34	5.5	28.5	-	6	4	1.5	M3×0.5	11	2.8	7.3	
20	25	5.5	19.5	35	5.5	29.5	36	8	4	1.5	M4×0.7	15	2.8	7.5	
25	27	6	21	37	6	31	42	10	4	2	M5×0.8	17	2.8	8	
32	31.5	7	24.5	41.5	7	34.5	50	12	4	3	M6×1	22	2.8	9	
40	33	7	28	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	20	6	M14×1.5	45	4	14.5	
100	63	12	51	73	12	61	124	18	20	7	M18×1.5	55	4	20.5	

Bore Size/Symbol	N3	O	P1								P3	P4	R	S	T1	T2	U	V	W	X	Y
12	6	M5×0.8	Double Sides: φ6.5/Thread:M5×0.8/Through ports:φ4.2								12	4.5	-	25	16.2	23	1.6	6	5	-	-
16	6.5	M5×0.8	Double Sides: φ6.5/Thread:M5×0.8/Through ports:φ4.2								12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	-	M5×0.8	Double Sides: φ6.5/Thread:M5×0.8/Through ports:φ4.2								14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	-	M5×0.8	Double Sides: φ8.2/Thread:M6×1.0/Through ports:φ4.6								15	5.5	2	40	28	-	3.1	10	8	12	10
32	-	G1/8"	Double Sides: φ8.2/Thread:M6×1.0/Through ports:φ4.6								16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	-	G1/8"	Double Sides: φ10/Thread:M8×1.25/Through ports:φ6.5								20	7.5	6.5	52	40	-	2.25	16	14	21.3	16
50	-	G1/4"	Double Sides: φ11/Thread:M8×1.25/Through ports:φ6.5								25	8.5	9.5	62	48	-	4.15	20	17	30	20
63	-	G1/4"	Double Sides: φ11/Thread:M8×1.25/Through ports:φ6.5								25	8.5	9.5	75	60	-	3.15	20	17	28.7	20
80	-	G3/8"	Double Sides: φ14/Thread:M12×1.75/Through ports:φ9.2								25	10.5	10	94	74	-	3.65	25	22	36	26
100	-	G3/8"	Double Sides: φ17.5/Thread:M14×2/Through ports:φ11.3								30	13	10	114	90	-	3.65	32	27	35	26

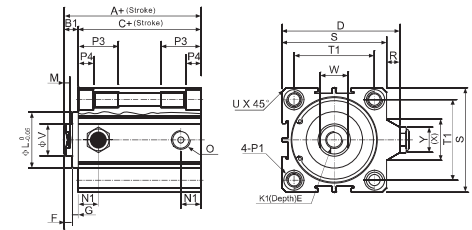
## SDA Series Thin Type(Compact) Cylinder

### Overall Dimensions

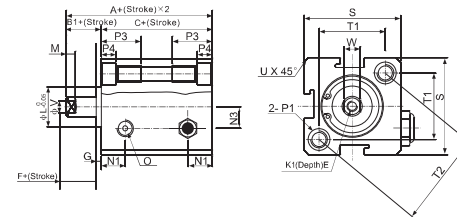
SSA.SSAS Type φ 12- φ 16



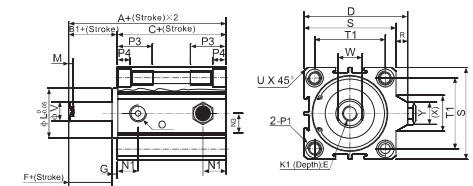
SSA.SSAS Type φ 20- φ 40



STA.STAS Type φ 12- φ 16



STA.STAS Type φ 20- φ 40



### Dimension Sheet

Type	Standard Type				Attach magnet				D	E	F	G	K1	L	M	N1		
	A	B1	C		A	B1	C											
12	32	42	5	27	37	42	52	5	37	47	-	6	4	1	M3×0.5	10.2	2.8	6.3
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
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	16	2.8	7.5
25	37	47	6	34	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	22	2.8	9
40	43	53	7	36	46	53	63	7	46	56	58.5	12	4	3	M8×1.25	28	2.8	10

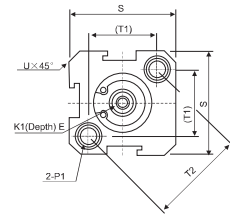
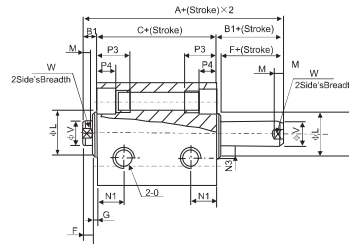
Bore Size/Symbol	N3	O	P1								P3	P4	R	S	T1	T2	U	V	W	X	Y
12	6	M5×0.8	Double Sides: φ6.5/Thread:M5×0.8/Through ports:φ4.2								12	4.5	-	25	16.2	23	1.6	6	5	-	-
16	6.5	M5×0.8	Double Sides: φ6.5/Thread:M5×0.8/Through ports:φ4.2								12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	-	M5×0.8	Double Sides: φ6.5/Thread:M5×0.8/Through ports:φ4.2								14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	-	M5×0.8	Double Sides: φ8.2/Thread:M6×1.0/Through ports:φ4.6								15	5.5	2	40	28	-	3.1	10	8	12	10
32	-	G1/8"	Double Sides: φ8.2/Thread:M6×1.0/Through ports:φ4.6								16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	-	G1/8"	Double Sides: φ10/Thread:M8×1.25/Through ports:φ6.5								20	7.5	6.5	52	40	-	2.25	16	14	21.3	16



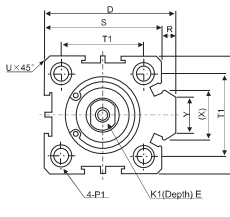
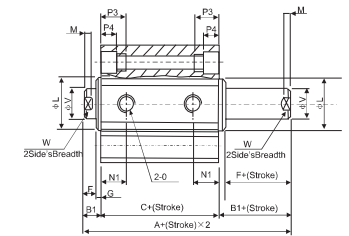
## SDA Series Thin Type(Compact) Cylinder

### Overall Dimensions

**SDAD.SDADS Type**  
φ 12~φ 16



**SDAD.SDADS Type**  
φ 20~φ 100



### Dimension Sheet

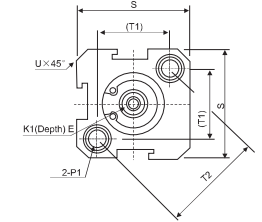
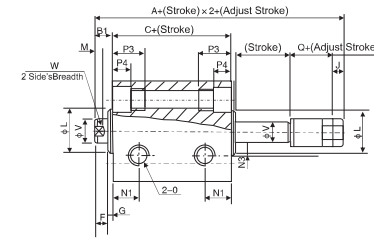
Type	Standard type			Attach Magnet			D	E		F	G	K1	L	M	N1
	A	B1	C	A	B1	C		Stroke ≤ 10	Stroke > 10						
12	27	5	17	37	5	27	-	6	4	1	M3×0.5	10.2	2.8	6.3	
16	29.5	5.5	18.5	39.5	5.5	28.5	-	6	4	1.5	M3×0.5	11	2.8	7.3	
20	30.5	5.5	19.5	40.5	5.5	29.5	36	8(Stroke=5/tis6.5)	4	1.5	M4×0.7	16	2.8	7.5	
25	33	6	21	43	6	31	42	10(Stroke=5/tis7)	4	2	M5×0.8	17	2.8	8	
32	38.5	7	24.5	48.5	7	34.5	50	8	4	3	M6×1	22	2.8	9	
40	40	7	28	50	7	36	58.5	9	4	3	M8×1.25	28	2.8	10	
50	46	9	28	56	9	38	71.5	11	5	4	M10×1.5	38	2.8	10.5	
63	50	9	32	60	9	42	84.5	11	5	4	M10×1.5	40	2.8	11.8	
80	63	11	41	73	11	51	104	14	20	6	M14×1.5	45	4	14.5	
100	75	12	51	85	12	61	124	18	20	7	M18×1.5	55	4	20.5	

Bore Size/Symbol	N3	O	P1	P3	P4	R	S	T1	T2	U	V	W	X	Y
16	6.5	M5×0.8	Double Sides: φ6.5/Thread:M5×0.8/Through ports:φ4.2	12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	-	M5×0.8	Double Sides: φ6.5/Thread:M5×0.8/Through ports:φ4.2	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	-	M5×0.8	Double Sides: φ8.2/Thread:M6×1.0/Through ports:φ4.6	15	5.5	2	40	28	-	3.1	10	8	12	10
32	-	G1/8"	Double Sides: φ8.2/Thread:M6×1.0/Through ports:φ4.6	16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	-	G1/8"	Double Sides: φ10/Thread:M8×1.25/Through ports:φ6.5	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16
50	-	G1/4"	Double Sides: φ11/Thread:M8×1.25/Through ports:φ6.5	25	8.5	9.5	62	48	-	4.15	20	17	30	20
63	-	G1/4"	Double Sides: φ11/Thread:M8×1.25/Through ports:φ6.5	25	8.5	9.5	75	60	-	3.15	20	17	28.7	20
80	-	G3/8"	Double Sides: φ14/Thread:M12×1.75/Through ports:φ9.2	25	10.5	10	94	74	-	3.65	25	22	36	26
100	-	G3/8"	Double Sides: φ17.5/Thread:M14×2/Through ports:φ11.3	30	13	10	114	90	-	3.65	32	27	35	26

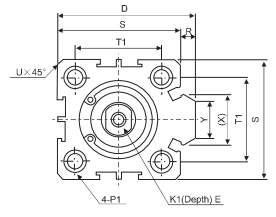
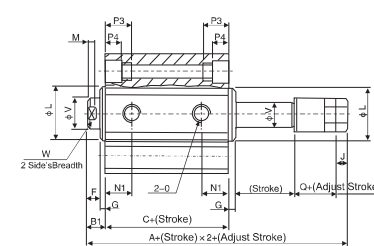
## SDA Series Thin Type(Compact) Cylinder

### Overall Dimensions

**SDAJ.SDAJS Type**  
φ 12~φ 16



**SDAJ.SDAJS Type**  
φ 20~φ 100



### Dimension Sheet

Type	Standard type			Attach Magnet			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	22	2.8	9	
40	33	7	28	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	20	6	M14×1.5	45	4	14.5	
100	63	12	51	73	12	61	124	18	20	7	M18×1.5	55	4	20.5	

Bore Size/Symbol	N3	O	P1	P3	P4	R	S	T1	T2	U	V	W	X	Y
16	6.5	M5×0.8	Double Sides: φ6.5/Thread:M5×0.8/Through ports:φ4.2	12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	-	M5×0.8	Double Sides: φ6.5/Thread:M5×0.8/Through ports:φ4.2	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	-	M5×0.8	Double Sides: φ8.2/Thread:M6×1.0/Through ports:φ4.6	15	5.5	2	40	28	-	3.1	10	8	12	10
32	-	G1/8"	Double Sides: φ8.2/Thread:M6×1.0/Through ports:φ4.6	16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	-	G1/8"	Double Sides: φ10/Thread:M8×1.25/Through ports:φ6.5	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16
50	-	G1/4"	Double Sides: φ11/Thread:M8×1.25/Through ports:φ6.5	25	8.5	9.5	62	48	-	4.15	20	17	30	20
63	-	G1/4"	Double Sides: φ11/Thread:M8×1.25/Through ports:φ6.5	25	8.5	9.5	75	60	-	3.15	20	17	28.7	20
80	-	G3/8"	Double Sides: φ14/Thread:M12×1.75/Through ports:φ9.2	25	10.5	10	94	74	-	3.65	25	22	36	26
100	-	G3/8"	Double Sides: φ17.5/Thread:M14×2/Through ports:φ11.3	30	13	10	114	90	-	3.65	32	27	35	26