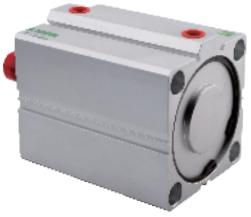
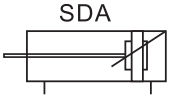
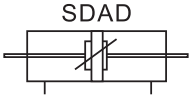
SDA Series Compact Cylinder

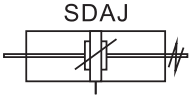


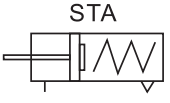


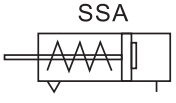


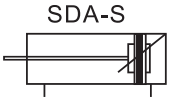


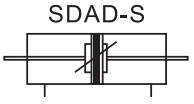


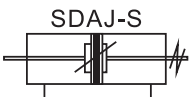


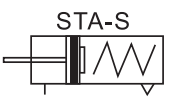


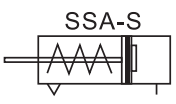












Ordering Code SDA Series Compact Cylinder

S D A — S — 2 0 X 3 0 - 2 0 - B

- **Series Code**
  - SDA:Double Acting
  - SSA:Single Acting Spring Extend
  - STA:Single Acting Spring Return
  - SDAD:Double Shaft Acting
  - SDAJ:Adjustable cushion type
- **Magnet**
  - Blank : Without Magnet
  - S:With Magnet
- **Bore**
- **Stroke**
- **Adjustable Stroke**
  - 10:10mm
  - 20:20mm
  - 30:30mm
  - 40:40mm
  - 50:50mm
  - 75:75mm
  - 100:100mm
- **Thread**
  - Blank: Female thread
  - B: Male thread
  - N: No thread

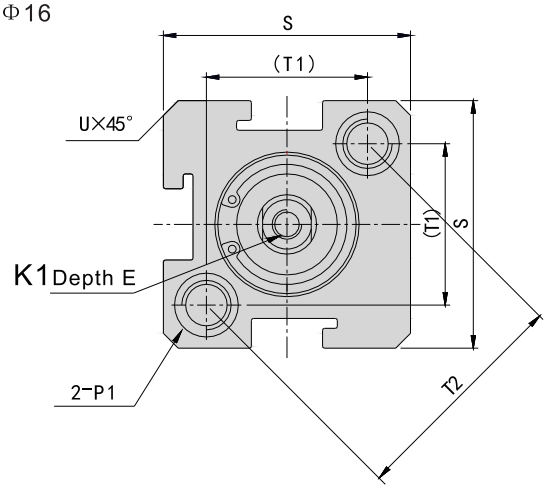
Specifications

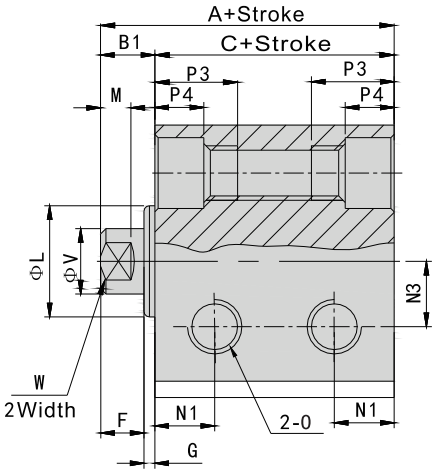
Bore (mm)		12	16	20	25	32	40	50	63	80	100
Acting type		Double acting									
		Single Acting Spring Extend、Single Acting Spring Return								-	
Working medium		Clean air(40μm Filteration)									
pressure range	Double acting	0.1~0.9Mpa									
	Single acting	0.2~0.9Mpa								-	
Guaranteed pressure		1.5Mpa(213Psi)									
Working temperature		-5~70°C									
Speed range	Double acting	30~500mm/s						30~350mm/s		30~250mm/s	
	Single acting	100-500mm/s						-			
Cushion type		Fixed Cushion									
Port size		M5X0.8				G1/8		G1/4		G3/8	

SDA Series Compact Cylinder

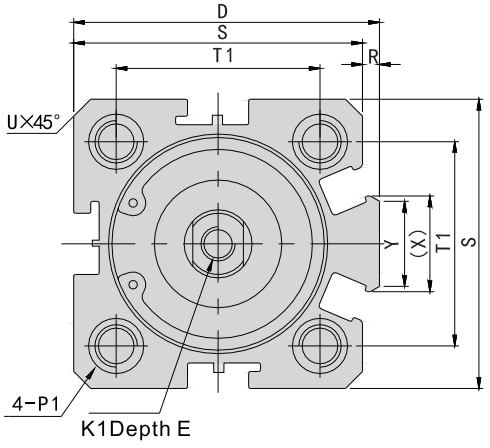
Main Dimensions SDA/SDAS(Double Acting Type)

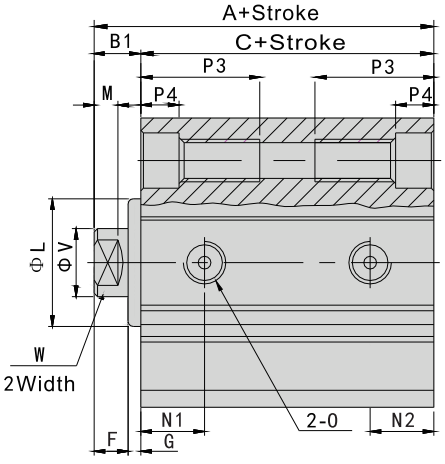
Φ12-Φ16





Φ20-Φ100





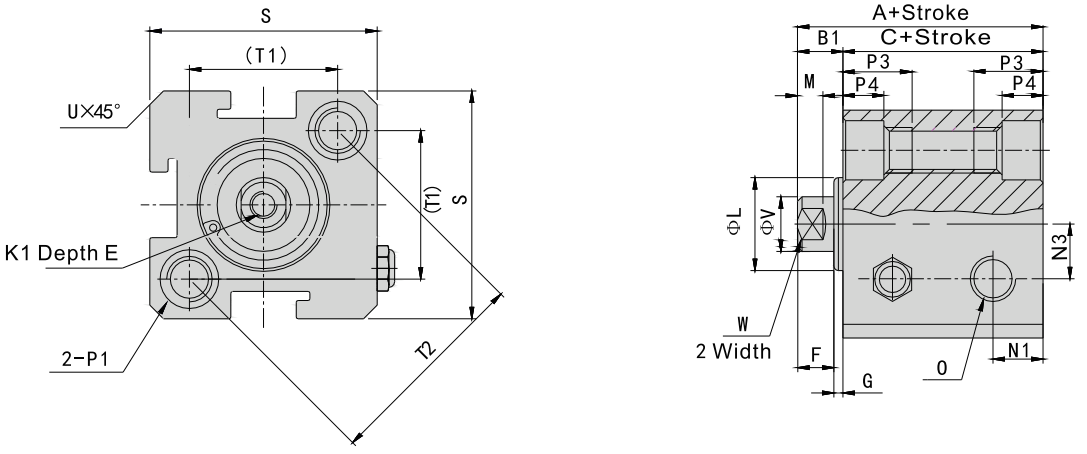
Model	Standard			With Magnet			D	E	F	G	K1	L	M	N1		N2		N3
Bore/Sign	A	B1	C	A	B1	C								S=5	S>5	S=5	S>5	
12	22	5	17	32	5	27	-	6	4	1	M3X0.5	10.2	2.8	6.3		6.3		6
16	24	5.5	18.5	34	5.5	28.5	-	6	4	1.5	M3X0.5	11	2.8	7.3		7.3		6.5
20	25	5.5	19.5	35	5.5	29.5	36	8	4	1.5	M4X0.7	15	2.8	7.5		7.5		-
25	27	6	21	37	6	31	42	10	4	2	M5X0.8	17	2.8	8		8		-
32	31.5	7	24.5	41.5	7	34.5	50	12	4	3	M6X1	22	2.8	9		9		-
40	33	7	26	43	7	36	58.5	12	4	3	M8X1.25	28	2.8	10		10		-
50	37	9	28	47	9	38	71.5	15	5	4	M10X1.5	38	2.8	10.5		10.5		-
63	41	9	32	51	9	42	84.5	15	5	4	M10X1.5	40	2.8	9.5	12	9.5	11	-
80	52	11	41	62	11	51	104	20	6	5	M14X1.5	45	4	11.5	14.5	11.5	14.5	-
100	63	12	51	73	12	61	124	20	7	5	M18X1.5	55	4	16	20.5	16	20.5	-

Bore \ Sign	O	P1	P3	P4	R	S	T1	T2	U	V	W	X	Y
12	M5X0.8	Double Side:Φ6.5 Thread:M5X0.8 Through Hole:Φ4.2	12	4.5	–	25	16.2	23	1.6	6	5	–	–
16	M5X0.8	Double Side:Φ6.5 Thread:M5X0.8 Through Hole:Φ4.2	12	4.5	–	29	19.8	28	1.6	6	5	–	–
20	M5X0.8	Double Side:Φ6.5 Thread:M5X0.8 Through Hole:Φ4.2	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	M5X0.8	Double Side:Φ8.2 Thread:M6X1.0 Through Hole:Φ4.6	15	5.5	2	40	28	-	3.1	10	8	12	10
32	G1/8	Double Side:Φ8.2 Thread:M6X1.0 Through Hole:Φ4.6	16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	G1/8	Double Side:Φ10 Thread:M8X1.25 Through Hole:Φ6.5	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16
50	G1/4	Double Side:Φ11 Thread:M8X1.25 Through Hole:Φ6.5	25	8.5	9.5	62	48	-	4.15	20	17	30	20
63	G1/4	Double Side:Φ11 Thread:M8X1.25 Through Hole:Φ6.5	25	8.5	9.5	75	60	-	3.15	20	17	28.7	20
80	G3/8	Double Side:Φ14 Thread:M12X1.75 Through Hole:Φ9.2	25	10.5	10	94	74	-	3.65	25	22	36	26
100	G3/8	Double Side:Φ17.5 Thread:M14X2 Through Hole:Φ11.3	30	13	10	114	90	-	3.65	32	27	35	26

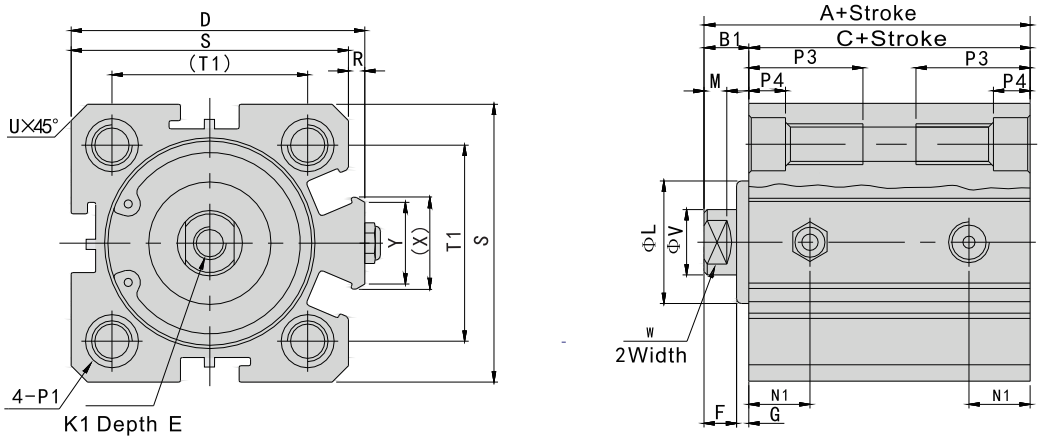
SDA Series Compact Cylinder

Main Dimensions SSA/SSAS(Single Acting Spring Extend)

Φ12-Φ16



Φ20-Φ40



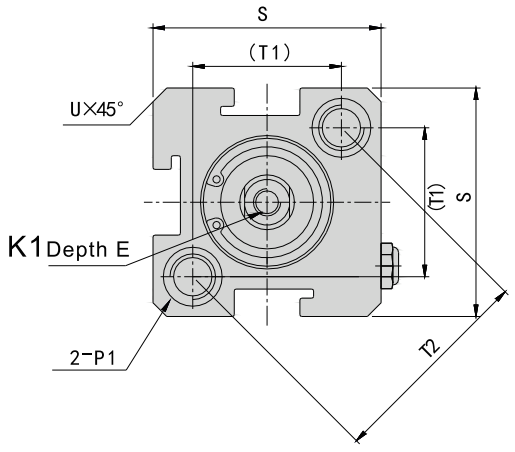
Model	Standard					With Magnet					D	E	F	G	K1	L	M	N1	N3
Bore/Sign Stroke	A		B1	C		A		B1	C										
	≤10	>10		≤10	>10	≤10	>10		≤10	>10									
12	32	42	5	27	37	42	52	5	37	47	-	6	4	1	M3X0.5	10.2	2.8	6.3	6
16	34	44	5.5	28.5	38.5	44	54	5.5	38.5	48.5	-	6	4	1.5	M3X0.5	11	2.8	7.3	6.5
20	35	45	5.5	29.5	39.5	45	55	5.5	39.5	49.5	36	8	4	1.5	M4X0.7	16	2.8	7.5	-
25	37	47	6	31	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	-

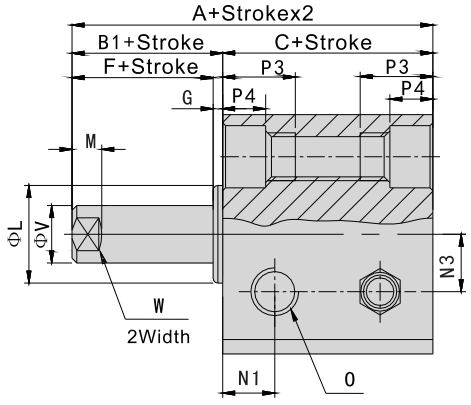
Bore \ Sign	O	P1	P3	P4	R	S	T1	T2	U	V	W	X	Y
12	M5X0.8	Double Side:Φ6.5 Thread:M5X0.8 Through Hole:Φ4.2	12	4.5	-	25	16.2	23	1.6	6	5	-	-
16	M5X0.8	Double Side:Φ6.5 Thread:M5X0.8 Through Hole:Φ4.2	12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	M5X0.8	Double Side:Φ6.5 Thread:M5X0.8 Through Hole:Φ4.2	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	M5X0.8	Double Side:Φ8.2 Thread:M6X1.0 Through Hole:Φ4.6	15	5.5	2	40	28	-	3.1	10	8	12	10
32	G1/8	Double Side:Φ8.5 Thread:M6X1.0 Through Hole:Φ4.6	16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	G1/8	Double Side:Φ10 Thread:M8X1.25 Through Hole:Φ6.5	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16

SDA Series Compact Cylinder

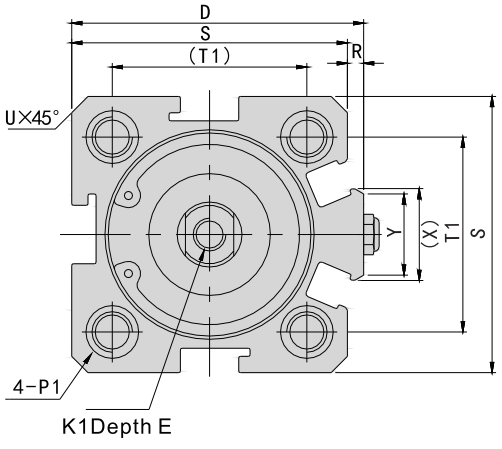
Main Dimensions STA/STAS (Single Acting Spring Return)

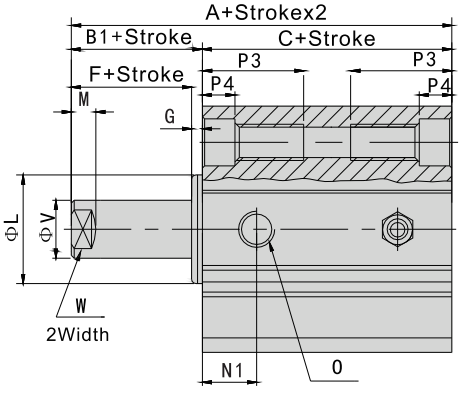
Φ12-Φ16





Φ20-Φ40



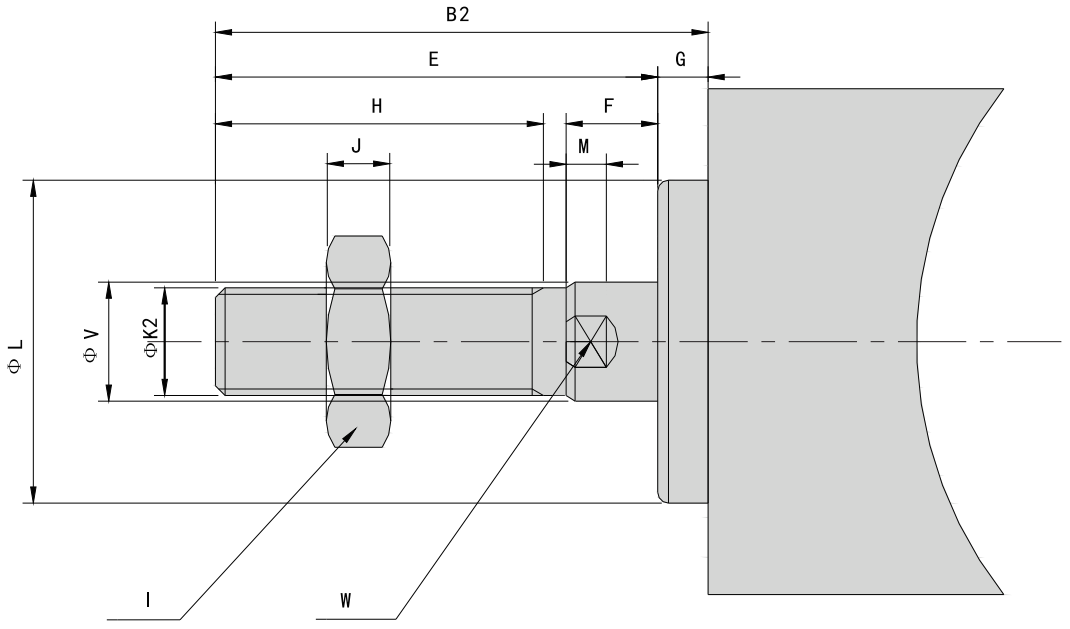


Model	Standard					With Magnet					D	E	F	G	K1	L	M	N1	N3
Bore/Sign Stroke	A		B1	C		A		B1	C										
	≤10	>10		≤10	>10	≤10	>10		≤10	>10									
12	32	42	5	27	37	42	52	5	37	47	-	6	4	1	M3X0.5	10.2	2.8	6.3	6
16	34	44	5.5	28.5	38.5	44	54	5.5	38.5	48.5	-	6	4	1.5	M3X0.5	11	2.8	7.3	6.5
20	35	45	5.5	29.5	39.5	45	55	5.5	39.5	49.5	36	8	4	1.5	M4X0.7	15	2.8	7.5	-
25	37	47	6	31	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 \ Sign	O	P1	P3	P4	R	S	T1	T2	U	V	W	X	Y
12	M5X0.8	Double Side: Φ6.5 Thread: M5X0.8 Through Hole: Φ4.2	12	4.5	-	25	16.2	23	1.6	6	5	-	-
16	M5X0.8	Double Side: Φ6.5 Thread: M5X0.8 Through Hole: Φ4.2	12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	M5X0.8	Double Side: Φ6.5 Thread: M5X0.8 Through Hole: Φ4.2	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	M5X0.8	Double Side: Φ8.2 Thread: M6X1.0 Through Hole: Φ4.6	15	5.5	2	40	28	-	3.1	10	8	12	10
32	G1/8	Double Side: Φ8.2 Thread: M6X1.0 Through Hole: Φ4.6	16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	G1/8	Double Side: Φ10 Thread: M8X1.25 Through Hole: Φ6.5	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16

SDA Series Compact Cylinder

Main Dimensions SDA SSA STA

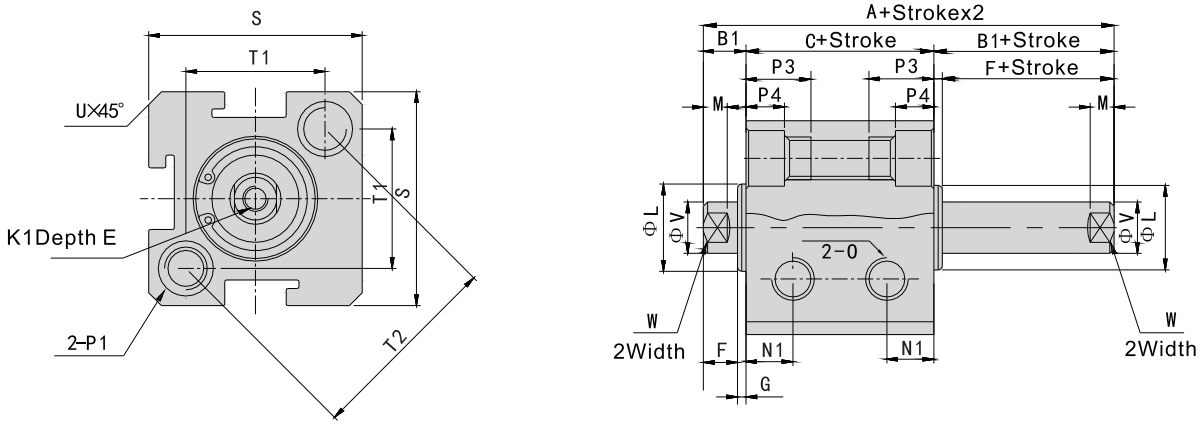


Bore \ Sign	B2	E	F	G	H	I	J	K2	L	M	V	W
12	17	16	4	1	10	8	4	M5X0.8	10.2	2.8	6	5
16	17.5	16	4	1.5	10	8	4	M5X0.8	11	2.8	6	5
20	20.5	19	4	1.5	13	10	5	M6X1.0	15	2.8	8	6
25	23	21	4	2	15	12	6	M8X1.25	17	2.8	10	8
32	25	22	4	3	15	17	6	M10X1.25	22	2.8	12	10
40	35	32	4	3	25	19	8	M14X1.5	28	2.8	16	14
50	37	33	5	4	25	27	11	M18X1.5	38	2.8	20	17
63	37	33	5	4	25	27	11	M18X1.5	40	2.8	20	17
80	44	39	6	5	30	32	13	M22X1.5	45	4	25	22
100	50	45	7	5	35	36	13	M26X1.5	55	4	32	27

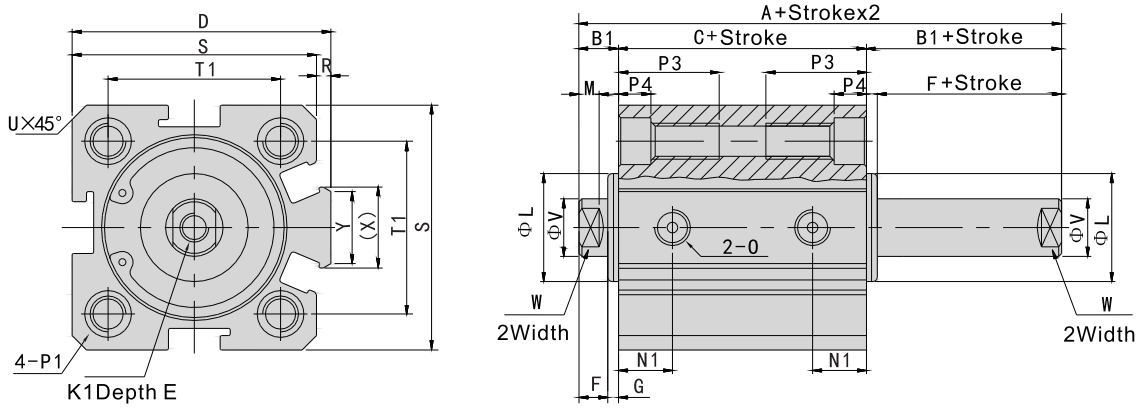
SDA Series Compact Cylinder

Main Dimensions SDAD/SDADS (Double Shaft Acting Adjustable Type)

Φ12-Φ16



Φ20-Φ100



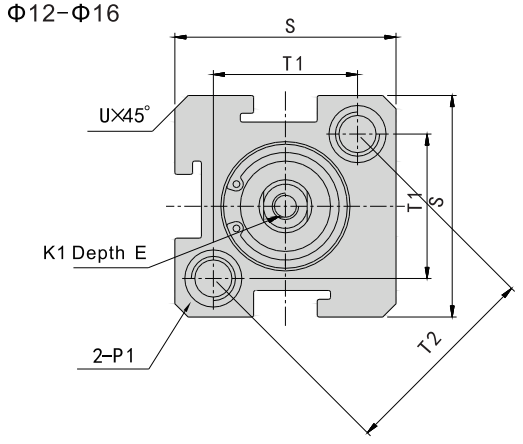
Model	Standard			With Magnet			D	E		F	G	K1	L	M	N1		N3
Bore/Sign	A	B1	C	A	B1	C		S≤10	S>10						S=5	S>5	
12	27	5	17	37	5	27	-	6		4	1	M3X0.5	10.2	2.8	6.3		6
16	29.5	5.5	18.5	39.5	5.5	28.5	-	6		4	1.5	M3X0.5	11	2.8	7.3		6.5
20	30.5	5.5	19.5	40.5	5.5	29.5	36	8(S=5 6.5)		4	1.5	M4X0.7	15	2.8	7.5		-
25	33	6	21	43	6	31	42	10(S=5 7)		4	2	M5X0.8	17	2.8	8		-
32	38.5	7	24.5	48.5	7	34.5	50	8	12	4	3	M6X1	22	2.8	9		-
40	40	7	26	50	7	36	58.5	8	12	4	3	M8X1.25	28	2.8	10		-
50	46	9	28	56	9	38	71.5	8	15	5	4	M10X1.5	38	2.8	10.5		-
63	50	9	32	60	9	42	84.5	10	15	5	4	M10X1.5	40	2.8	9.5	11.8	-
80	63	11	41	73	11	51	104	13	20	6	5	M14X1.5	45	4	11.5	14.5	-
100	75	12	51	85	12	61	124	18	20	7	5	M18X1.5	55	4	16	20.5	-

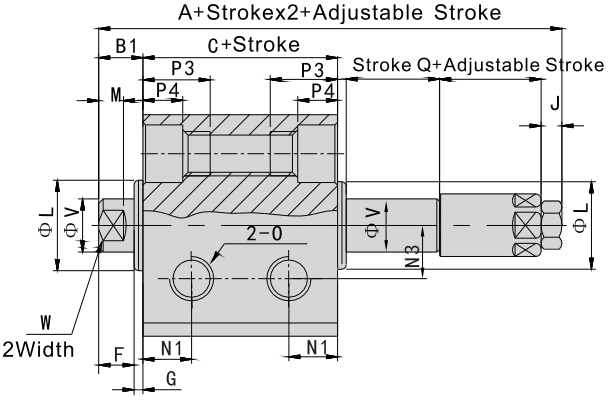
Bore \ Sign	O	P1	P3	P4	R	S	T1	T2	U	V	W	X	Y
12	M5X0.8	Double Side: Φ6.5 Thread:M5X0.8 Through Hole:Φ4.2	12	4.5	–	25	16.2	23	1.6	6	5	–	–
16	M5X0.8	Double Side: Φ6.5 Thread:M5X0.8 Through Hole:Φ4.2	12	4.5	–	29	19.8	28	1.6	6	5	–	–
20	M5X0.8	Double Side: Φ6.5 Thread:M5X0.8 Through Hole:Φ4.2	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	M5X0.8	Double Side: Φ8.2 Thread:M6X1.0 Through Hole:Φ4.6	15	5.5	2	40	28	-	3.1	10	8	12	10
32	G1/8	Double Side: Φ8.2 Thread:M6X1.0 Through Hole:Φ4.6	16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	G1/8	Double Side: Φ10 Thread:M8X1.25 Through Hole:Φ6.5	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16
50	G1/4	Double Side: Φ11 Thread:M8X1.25 Through Hole:Φ6.5	25	8.5	9.5	62	48	-	4.15	20	17	30	20
63	G1/4	Double Side: Φ11 Thread:M8X1.25 Through Hole:Φ6.5	25	8.5	9.5	75	60	-	3.15	20	17	28.7	20
80	G3/8	Double Side: Φ14 Thread:M12X1.75 Through Hole:Φ9.2	25	10.5	10	94	74	-	3.65	25	22	36	26
100	G3/8	Double Side: Φ17.5 Thread:M14X2 Through Hole:Φ11.3	30	13	10	114	90	-	3.65	32	27	35	26

SDA Series Compact Cylinder

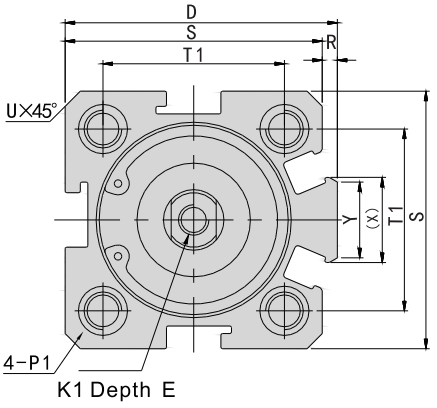
Main Dimensions SDAJ/SDAJS (Double Shaft Adjustable Stroke Type)

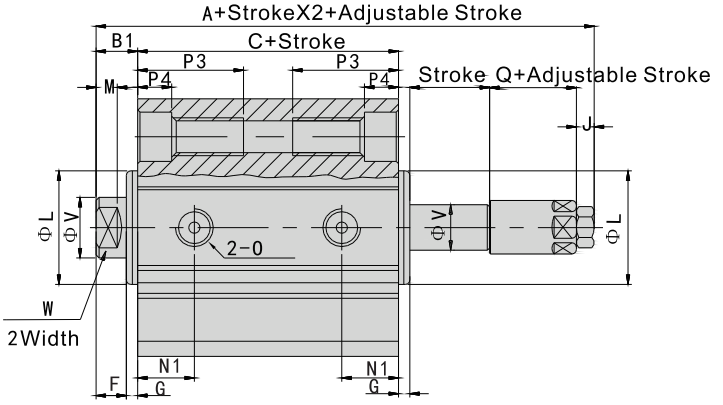
Φ12-Φ16





Φ20-Φ100





Model	Standard			With Magnet			D	E		F	G	J	K1	L	M	N1	
Bore/Sign	A	B1	C	A	B1	C		S≤10	S>10							S=5	S>5
12	40	5	17	50	5	27	-	6		4	1	4	M3X0.5	10.2	2.8	6.3	
16	42.5	5.5	18.5	52.5	5.5	28.5	-	6		4	1.5	4	M3X0.5	11	2.8	7.3	
20	47.5	5.5	19.5	57.5	5.5	29.5	36	8(S=5 6.5)		4	1.5	5	M4X0.7	15	2.8	7.5	
25	55	6	21	65	6	31	42	10(S=5 7)		4	2	6	M5X0.8	17	2.8	8	
32	61.5	7	24.5	71.5	7	34.5	50	8	12	4	3	6	M6X1	22	2.8	9	
40	65	7	26	75	7	36	58.5	8	12	4	3	8	M8X1.25	28	2.8	10	
50	73	9	28	83	9	38	71.5	8	15	5	4	11	M10X1.5	38	2.8	10.5	
63	77	9	32	87	9	42	84.5	10	15	5	4	11	M10X1.5	40	2.8	9.5	11.8
80	94	11	41	104	11	51	104	13	20	6	5	13	M14X1.5	45	4	11.5	14.5
100	105	12	51	115	12	61	124	18	20	7	5	13	M18X1.5	55	4	16	20.5

Bore \ Sign	N3	O	P1		P4	Q	R	S	T1	T2	U	V	W	X	Y
12	6	M5X0.8	Double Side:Φ6.5 Thread: M5X0.8 Through Hole:Φ4.2	12	4.5	13	-	25	16.2	23	1.6	6	5	-	-
16	6.5	M5X0.8	Double Side:Φ6.5 Thread: M5X0.8 Through Hole:Φ4.2	12	4.5	13	-	29	19.8	28	1.6	6	5	-	-
20	-	M5X0.8	Double Side:Φ6.5 Thread: M5X0.8 Through Hole:Φ4.2	14	4.5	16	2	34	24	-	2.1	8	6	11.3	10
25	-	M5X0.8	Double Side:Φ8.2 Thread: M6X1.0 Through Hole:Φ4.6	15	5.5	19	2	40	28	-	3.1	10	8	12	10
32	-	G1/8	Double Side:Φ8.2 Thread: M6X1.0 Through Hole:Φ4.6	16	5.5	21	6	44	34	-	2.15	12	10	18.3	15
40	-	G1/8	Double Side:Φ10 Thread: M8X1.25 Through Hole:Φ6.5	20	7.5	21	6.5	52	40	-	2.25	16	14	21.3	16
50	-	G1/4	Double Side:Φ11 Thread: M8X1.25 Through Hole:Φ6.5	25	8.5	21	9.5	62	48	-	4.15	20	17	30	20
63	-	G1/4	Double Side:Φ11 Thread: M8X1.25 Through Hole:Φ6.5	25	8.5	21	9.5	75	60	-	3.15	20	17	28.7	20
80	-	G3/8	Double Side:Φ14 Thread: M12X1.75 Through Hole:Φ9.2	25	10.5	24	10	94	74	-	3.65	25	22	36	26
100	-	G3/8	Double Side:Φ17.5 Thread: M14X2 Through Hole:Φ11.3	30	13	24	10	114	90	-	3.65	32	27	35	26