

SDA Series Compact Cylinder

SDA Compact Cylinder



Ordering Code

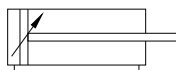
SDA - 20 X 50 - S - 25

- SDA** - Double Acting Cylinder
- SSA** - Single Acting Cylinder Normally Retracted
- STA** - Single Acting Cylinder Normally Extended
- SDAD** - Double Acting Thru Rod Cylinder

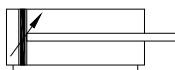
- 20** - Bore Diameter (mm)
- 50** - Stroke (mm)
- S** - Magnetic Piston **Blank** - Non-Magnetic Piston
- B** - Female Thread **N** - Male Thread
- 25** - Adjustable Stroke Length (mm)

SDA/SSA Pneumatic Cylinder head, piston and barrel made of aluminum alloy; piston rod made of chromed plated high carbon steel; seals are made of NBR for standard working temperature; for higher working temperature seals are made of viton or teflon.

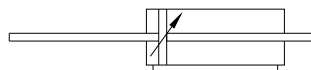
With Cushioning



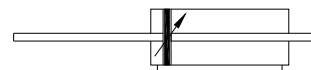
W/ Cushioning & Magnet



Thru Rod w/ Cushioning



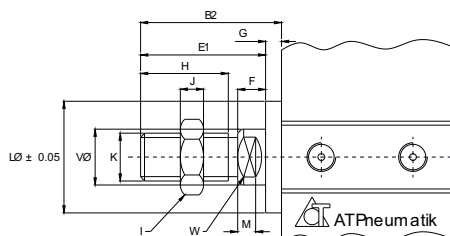
Thru Rod w/ Cushioning & Magnet



SDA Compact Specification

SDA Compact Specification												
Bore Diameter		12	16	20	25	32	40	50	63	80	100	
Type of Cylinder	Double Acting											
	Single Acting							-				
Working Medium		Air										
Working Pressure	Double Acting	1~9.0 kg/cm ²						-				
	Single Acting	2~9 kg/cm ²						-				
Maximum Working Pressure		10.5 kg/cm ²										
Working Temperature		0~70 °C										
Operating Speed mm/s	Double Acting	30~500						30~350		30~250		
	Single Acting	100~500						-				
Port Size		M05 X 0.8				G 1/8"		G 1/4"		G 3/8"		

SDA Male Piston Rod



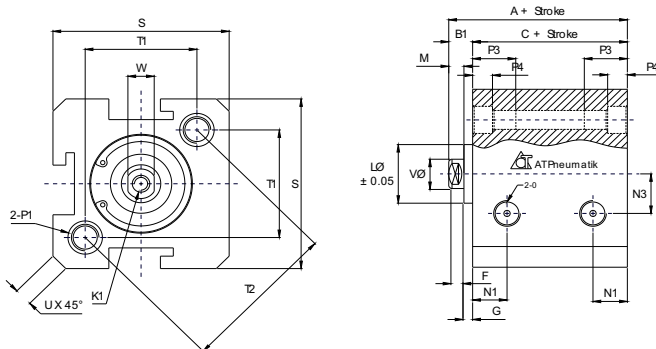
SDA Cylinder Dimension

SDA Cylinder Dimension												
Bore Diameter	B2	E1	F	G	H	I	J	K2	L	M	W	V
12	17	16	4	1	10	8	4	M05 X 0.8	10.2	2.8	5	5
16	17.5	16	4	1.5	10	8	4	M05 X 0.8	11	2.8	5	5
20	20.5	19	4	1.5	13	10	5	M06 X 1.0	16	2.8	6	6
25	23	21	4	2	15	12	6	M10 X 1.25	17	2.8	8	8
32	25	22	4	3	15	17	6	M14 X 1.5	22	2.8	10	10
40	35	32	4	3	25	19	8	M18 X 1.5	28	2.8	14	14
50	37	33	5	4	25	24	11	M18 X 1.5	38	2.8	17	17
63	37	33	5	4	25	24	11	M22 X 1.5	40	2.8	17	17
80	44	39	6	5	30	32	13	M22 X 1.5	45	4	22	22
100	50	45	7	5	35	36	13	M26 X 1.5	55	4	27	27

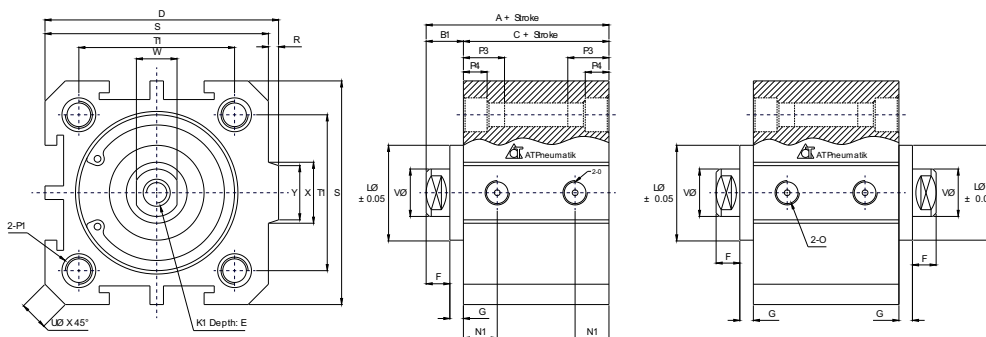
Dimensions are in mm

SDA Series Compact Double Acting Cylinder

SDA 12 ~ 16 Double Acting cylinder



SDA 20 ~ 100 Double Acting cylinder



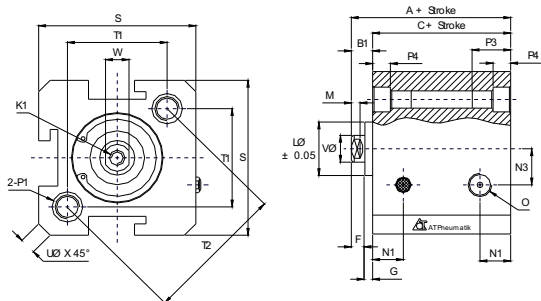
SDA Compact Double Acting Cylinder Dimension																
Bore Diameter	Without Magnet			With Magnet			D	E	F	G	K1	L	M	N1	N3	O
	A	B1	C	A	B1	C										
12	22	5	17	32	5	27	-	6	4	1	M03 X 0.5	10.2	2.8	6.3	6	M05X0.8
16	24	5.5	18.5	34	5.5	28.5	-	6	4	1.5	M03 X 0.5	11	2.8	7.3	6.5	M05X0.8
20	25	5.5	19.5	35	5.5	29.5	36	8	4	1.5	M04 X 0.7	16	2.8	7.5	-	M05X0.8
25	27	6	21	37	6	31	42	10	4	2	M05 X 0.8	17	2.8	8	-	M05X0.8
32	31.5	7	24.5	41.5	7	34.5	50	12	4	3	M06 X 1.0	22	2.8	9	-	G 1/8"
40	33	7	26	43	7	36	58.5	12	4	3	M08 X 1.25	28	2.8	10	-	G 1/8"
50	37	9	28	47	9	38	71.5	15	5	4	M10 X 1.5	38	2.8	10.5	-	G 1/4"
63	41	9	32	51	9	42	84.5	15	5	4	M10 X 1.5	40	2.8	11.8	-	G 1/4"
80	52	11	41	62	11	51	104	15	6	5	M14 X 1.5	45	4	14.5	-	G 3/8"
100	63	12	51	73	12	61	124	18	7	5	M18 X 1.5	55	4	20.5	-	G 3/8"

SDA Compact Double Acting Cylinder Dimension																
Bore Diameter	P1			P3	P4	R	S	T1	T2	U	V	W	X	Y		
	Counter Bore	Thread	Center Hole													
12	6.5 Ø	M05 x 0.8	4.2 Ø	12	4.5	-	25	16.2	23	1.6	6	5	-	-		
16	6.5 Ø	M05 x 0.8	4.2 Ø	12	4.5	-	29	19.8	28	1.6	6	5	-	-		
20	6.5 Ø	M05 x 0.8	4.2 Ø	14	4.5	2	34	24	-	2.1	8	6	11.3	10		
25	8.2 Ø	M06 x 1.0	4.6 Ø	15	5.5	2	40	28	-	3.1	10	8	12	10		
32	8.2 Ø	M06 x 1.0	4.6 Ø	16	5.5	6	44	34	-	2.15	12	10	18.3	15		
40	10 Ø	M08 x 1.25	6.5 Ø	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16		
50	10 Ø	M08 x 1.25	6.5 Ø	25	8.5	9.5	62	48	-	4.15	20	17	30	20		
63	11Ø	M08 x 1.25	6.5 Ø	25	8.5	9.5	75	60	-	3.15	20	17	28.7	20		
80	14 Ø	M12 x 1.75	9.2 Ø	25	10.5	10	94	74	-	3.65	25	22	36	26		
100	17.5 Ø	M12 x 1.75	11.3 Ø	30	13	10	114	90	-	3.65	32	27	35	26		

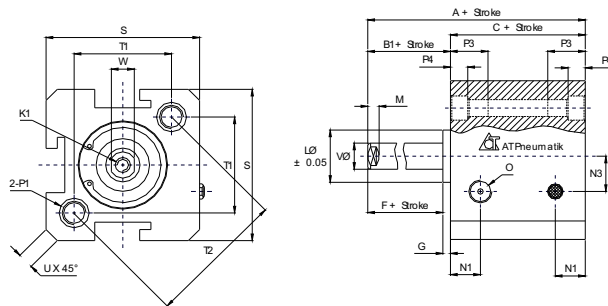
Dimensions are in mm

SSA / STA Series Compact Single Acting Cylinder

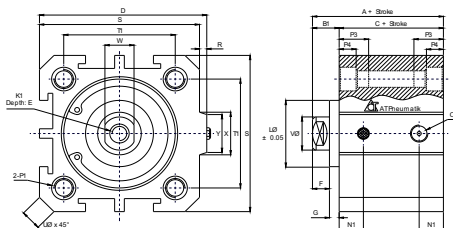
SSA 12~16 Single Acting Cylinder Normally Retracted



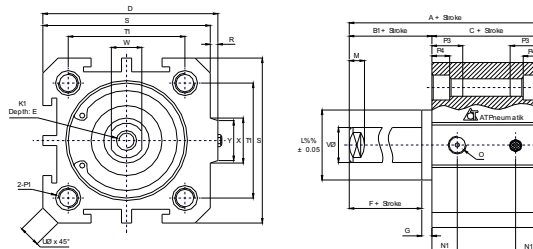
STA 12~16 Single Acting Cylinder Normally Extended



SSA 20~100 Single Acting Cylinder Normally Retracted



STA 20~100 Single Acting Cylinder Normally Extended



SSA / STA Compact Single Acting Cylinder Dimension

Bore	Stroke	Without Magnet			With Magnet			D	E	F	G	K1	L	M	N1	N3				
		A	B1	C	A	B1	C													
12		32	42	5	27	37	42	52	5	37	47	-	6	4	1	M03 X 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	M03 X 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	M04 X 0.7	16	2.8	7.5	-
25		37	47	6	34	41	47	57	6	41	51	42	10	4	2	M05 X 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	M06 X 1.0	22	2.8	9	-
40		43	53	7	36	46	53	63	7	46	56	58.5	12	4	3	M8 X 1.25	28	2.8	10	-

SSA / STA Compact single Acting Cylinder Dimension

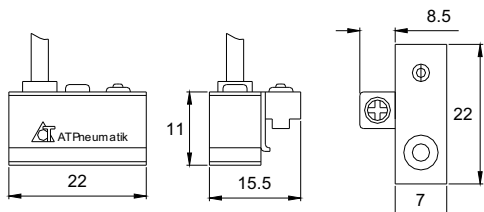
Bore	O	P1			P3	P4	R	S	T1	T2	U	V	W	X	Y
		Counter Bore	Thread	Center Hole											
12	M05 X 0.8	6.5 Ø	M05 x 0.8	4.2 Ø	12	4.5	-	25	16.2	23	1.6	6	5	-	-
16	M05 X 0.8	6.5 Ø	M05 x 0.8	4.2 Ø	12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	M05 X 0.8	6.5 Ø	M05 x 0.8	4.2 Ø	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	M05 X 0.8	8.2 Ø	M06 x 1.0	4.6 Ø	15	5.5	2	40	28	-	3.1	10	8	12	10
32	G 1/8"	8.2 Ø	M06 x 1.0	4.6 Ø	16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	G 1/8"	10 Ø	M08 x 1.25	6.5 Ø	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16

SDA / SSA / STA Series Magnetic Switch



AL-11 Magnetic Switch

Dimension



Reed Switch Specification

Model	Output	Current	Response	Indicator	Wire
AL-11-R	Contact	5-240Vac	5-60mA	1msec max.	LED
		5-110Vdc			
AL-11-NPN	NPN	5-30Vdc			
AL-11-PNP	PNP				

Dimensions are in mm