



Compact cylinder——SDA Series

■ Installation and application

- 1、When load changes in the work, the cylinder with abundant output capacity shall be selected;
- 2、Relative cylinder with high temperature resistance or corrosion resistance shall be chosen under the condition of high temperature or corrosion;
- 3、Necessary protection measure shall be taken in the environment with larger humidity, much dust or water drops, oil dust and welding dregs;
- 4、Dirty substances in the pipe must be cleared away before cylinder is connected with pipeline to prevent the entrance of sundries into the cylinder;
- 5、The medium used by cylinder shall be filtered by the filter core of above 40um;
- 6、As both of the front cover and piston of the cylinder are short, typically too large stroke can not be selected;
- 7、Anti-freezing measure shall be adopted under low temperature environment to prevent moisture freezing;
- 8、The cylinder shall avoid the influence of side load in operation to maintain the normal work of cylinder and extend the service life;
- 9、If the cylinder is dismantled and stored for a long time, please conduct anti-rust treatment to the surface.
Anti-dust jam cap shall be added in air intake and outlet orifices. The front and back cover can not be dismantled, which shall be especially noticed.

■ Criteria for selection: Cylinder thrust

Unit: Newton (N)

Bore size (mm)	Rod size (mm)	Acting type	Pressure area (mm ²)	Operating pressure MPa						
				0.1	0.2	0.3	0.4	0.5	0.6	0.7
12	6	Single acting—Push type	113.1	—	12.6	23.9	35.2	46.5	57.9	69.2
		Single acting—Pull type	84.8	—	7.0	15.4	23.9	32.4	40.9	49.4
		Double acting Push side	113.1	—	22.6	33.9	45.2	56.5	67.9	79.2
		Double acting Pull side	84.8	—	17.0	25.4	33.9	42.4	50.9	59.4
16	6	Single acting—Push type	201.1	—	20.2	40.3	60.4	80.5	100.6	120.7
		Single acting—Pull type	172.8	—	14.6	31.8	49.1	66.4	83.7	101.0
		Double acting Push side	201.1	—	40.2	60.3	80.4	100.5	120.6	140.7
		Double acting Pull side	172.8	—	34.6	51.8	69.1	86.4	103.7	121.0
20	8	Single acting—Push type	314.2	—	39.8	71.2	102.7	134.1	165.5	196.9
		Single acting—Pull type	263.9	—	29.8	56.2	82.6	108.9	135.3	161.7
		Double acting Push side	314.2	—	62.8	94.2	125.7	157.1	188.5	219.9
		Double acting Pull side	263.9	—	52.8	79.2	105.6	131.9	158.3	184.7
25	10	Single acting—Push type	490.9	—	69.7	118.8	167.8	216.9	266.0	315.1
		Single acting—Pull type	412.3	—	54.0	95.2	136.4	177.7	218.9	260.1
		Double acting Push side	490.9	—	98.2	147.3	196.3	245.4	294.5	343.6
		Double acting Pull side	412.3	—	82.5	123.7	164.9	206.2	247.4	288.6
32	12	Single acting—Push type	804.2	—	105.3	185.8	266.2	346.6	427.0	507.5
		Single acting—Pull type	691.2	—	82.7	151.8	221.0	290.1	359.2	428.3
		Double acting Push side	804.2	—	160.8	241.3	321.7	402.1	482.5	563.0
		Double acting Pull side	691.2	—	138.2	207.3	276.5	345.6	414.7	483.8
40	16	Single acting—Push type	1256.6	—	168.6	294.3	420.0	545.6	671.3	796.9
		Single acting—Pull type	1055.6	—	128.4	234.0	339.5	445.1	550.6	656.2
		Double acting Push side	1256.6	125.7	251.3	377.0	502.7	628.3	754.0	879.6
		Double acting Pull side	1055.6	105.6	211.1	316.7	422.2	527.8	633.3	738.9
50	20	Single acting—Push type	1963.5	89.3	285.7	482.0	678.4	874.7	1071.1	1267.4
		Single acting—Pull type	1649.3	57.9	222.9	387.8	552.7	717.7	882.6	1047.5
		Double acting Push side	1963.5	196.3	392.7	589.0	785.4	981.7	1178.1	1374.4
		Double acting Pull side	1649.3	164.9	329.9	494.8	659.7	824.7	989.6	1154.5
63	20	Single acting—Push type	3117.2	135.7	447.4	759.2	1070.9	1382.6	1694.3	2006.1
		Single acting—Pull type	2803.1	104.3	384.6	664.9	945.2	1225.5	1505.9	1786.2
		Double acting Push side	3117.2	311.7	623.4	935.2	1246.9	1558.6	1870.3	2182.1
		Double acting Pull side	2803.1	280.3	560.6	840.9	1121.2	1401.5	1681.9	1962.2
80	25	Double acting Push side	5026.5	502.7	1005.3	1508.0	2010.6	2513.3	3015.9	3518.6
		Double acting Pull side	4535.7	453.6	907.1	1360.7	1814.3	2267.8	2721.4	3175.0
100	32	Double acting Push side	7854.0	785.4	1570.8	2356.2	3141.6	3927.0	4712.4	5497.8
		Double acting Pull side	7049.7	705.0	1409.9	2114.9	2819.9	3524.9	4229.8	4934.8

■ Product series

Series name	Single acting type: SSA, STA 	Double rod type: SDAD 	Adjustable stroke type: SDAJ 	Duplex type: SDAT Duplex-end type: SDAW 	Double acting type: SDA 	Page					
Acting type	Single acting		Double acting			V-16					
Bore size	121620253240506380100										VI-39
Collocation of sensor switch	CS1-J	●	●	●	●	●	●	●	●		
	CS1-JX	●	●	●	●	●	●	●	●		
	CS1-JN	●	●	●	●	●	●	●	●		
	CS1-JP	●	●	●	●	●	●	●	●		
	CS1-G	●	●	●	●	●	●	●	●		
	CS1-GX	●	●	●	●	●	●	●	●		
	CS1-GN	●	●	●	●	●	●	●	●		
	CS1-GP	●	●	●	●	●	●	●	●		



Compact cylinder

SDA Series

AIRTAC



Specification

Bore size (mm)		12	16	20	25	32	40	50	63	80	100
Acting type		Double acting type									
		Single acting-Push type、Single acting-Pull type									-
Fluid		Air (to be filtered by 40um filter element)									
Operating pressure	Double acting	0.1~1.0MPa(14~145Psi)									
	Single acting	0.2~1.0MPa(28~145Psi)									
Proof pressure		1.5MPa(215Psi)									
Temperature ℃		-20~80									
Speed range mm/s		Double acting type: 30~500					Single acting type: 50~500				
Stroke tolerance		+1.0 0									
Cushion type		Bumper									
Port size ①		M5 x 0.8				1/8"		1/4"		3/8"	

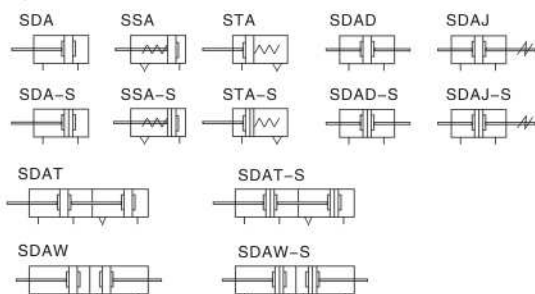
① PT thread, NPT thread and G thread are available;
Add: Refer to PVI-39~VI-50 for detail of sensor switch.

Stroke

Bore size (mm)			Standard stroke (mm)	Max. stroke	Available stroke
12 16	Double acting	With magnet	5 10 15 20 25 30 35 40 45 50 55	65	70
		Without magnet	5 10 15 20 25 30 35 40 45 50 55 60 65	65	80
	Single acting type		5 10 15 20 25 30	30	—
20	Double acting	With magnet	5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90	100	130
		Without magnet	5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100	100	130
	Single acting type		5 10 15 20 25 30	30	—
25 32 40 50 63	Double acting	With magnet	5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 110 120	130	150
		Without magnet	5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 110 120 130	130	150
	Single acting type		5 10 15 20 25 30	30	—
80 100	Double acting	With magnet	5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 110 120	130	150
		Without magnet	5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 110 120 130	130	150

Note: 1. Within allowable stroke scope, when the stroke is larger than the maximum value, it shall be treated as non-standard one. Please contact the company for other special strokes.
2. The non-standard stroke within the scope of maximum stroke is transformed according to the standard stroke of the upper grade and its shape and dimension are equal to that of standard stroke cylinder of the upper grade. For instance, the non-standard stroke cylinder whose stroke is 23 is transformed from the standard cylinder whose standard stroke is 25, and their shape and dimension are the same.

Symbol



Product feature

1. Manufactured by our enterprise;
2. Riveted structure is adopted to connect the cylinder body and back cover, and piston and piston rod to make it compact and reliable;
3. The inner diameter of the body is treated with rolling followed by the treatment of hard anodizing, forming an excellent abrasion resistance and durability;
4. The seal of piston adopts heterogeneous two-way seal structure. It has compact dimension and the function of oil reservation;
5. Compact structure can effectively save installation space;
6. There are magnetic switch slots around the cylinder body, which is convenient to install sensor switch;
7. Mounting accessories with various specifications are optional.

Ordering code

SDA	S	20	x	30	—	B	—	P
SDAD	S	20	x	30	—	B	—	P
SDAJ	S	20	x	30	— 30	—	B	— P

Model	Bore size	Stroke	Adjustable stroke	Magnet	Rod type	Thread type
SDA: Compact cylinder(Double acting type)	10: 10mm	10: 10mm	10: 10mm	S: With magnet	Blank: Female thread	P: PT
SSA: Compact cylinder(Single acting-Push type)	20: 20mm	20: 20mm	20: 20mm	Blank: Without magnet	B: Male thread	T: NPT
STA: Compact cylinder(Single acting-Pull type)	30: 30mm	30: 30mm	30: 30mm		N: No thread	G: G
SDAD: Compact cylinder(Double rod type)	40: 40mm	40: 40mm	40: 40mm			
SDAJ: Compact cylinder(Adjustable stroke type)	50: 50mm	50: 50mm	50: 50mm			

① When it is M5 thread, it is blank here.

SDAT		S	20	x	30	x	10	—	B	—	P
			Bore size		Stroke 1		Stroke 2				① Thread type
Model					Magnet						P: PT
	SDAT: Compact cylinder(Duplex type)				S: With magnet						T: NPT
	SDAW: Compact cylinder(Duplex—end type)				Blank: Without magnet				Rod type		G: G
									Blank: Female thread		
									B: Male thread		
									N: No thread		

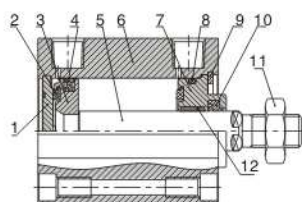
① When it is M5 thread, it is blank here.

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Compact cylinder

SDA Series

Inner structure and material of major parts

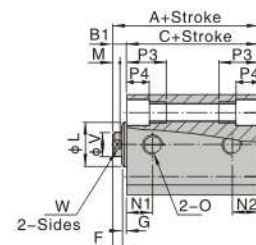
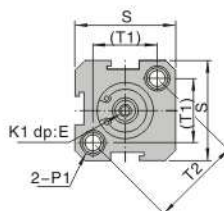


NO.	Item	Material
	Bore size	12, 16 20, 25-40 50-100
1	Back cover	Aluminum alloy
2	Bumper	NBR
3	Piston	Brass
4	Piston O-ring	Aluminum alloy
5	Piston rod	NBR
6	Body	Carbon steel (with 20um hard chrome plated)
7	Front cover	Brass
8	O-ring	Aluminum alloy
9	C clip	NBR
10	Front cover packing	Spring steel
11	Piston nut	NBR
12	Bushing	Carbon steel
		Wear resistant material

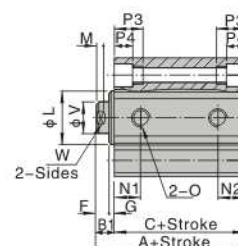
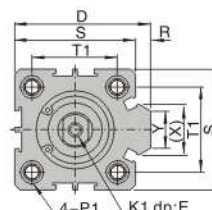
Dimensions

SDA

φ12 φ16



φ20~φ100



Model	Without magnet		With magnet		B1	D	E	F	G	K1	L	M	N1		N2	
Bore size/Item	A	C	A	C									S=5	S>5	S=5	S>5
12	22	17	32	27	5	-	6	4	1	M3 × 0.5	10.2	3	7.5		5	
16	24	18.5	34	28.5	5.5	-	6	4	1.5	M3 × 0.5	11	3	8		5.5	
20	25	19.5	35	29.5	5.5	36	8	4	1.5	M4 × 0.7	13	3	9		5.5	
25	27	21	37	31	6	42	10	4	2	M5 × 0.8	17	3	9.2		5.5	
32	31.5	24.5	41.5	34.5	7	50	12	4	2.4	M6 × 1	22	3	9	6.5	9	
40	33	26	43	36	7	58.5	12	4	3	M8 × 1.25	28	3	9.5		7.5	
50	37	28	47	38	9	71.5	15	5	4	M10 × 1.5	38	3	8	10.5	8	10.5
63	41	32	51	42	9	84.5	15	5	4	M10 × 1.5	40	3	9.5	12	9.5	11
80	52	41	62	51	11	104	20	6	5	M14 × 1.5	45	4	11.5	14.5	11.5	14.5
100	63	51	73	61	12	124	20	7	5	M18 × 1.5	55	4	16	20.5	16	20.5

Bore size/Item	O	P1	P3	P4	R	S	T1	T2	V	W	X	Y
12	M5 × 0.8	2-Sides: φ6.5Thread:M5 × 0.8Thru.hole: φ4.2	12	4.5	-	25	16.3	23	6	5	-	-
16	M5 × 0.8	2-Sides: φ6.5Thread:M5 × 0.8Thru.hole: φ4.2	12	4.5	-	29	19.8	28	6	5	-	-
20	M5 × 0.8	2-Sides: φ6.5Thread:M5 × 0.8Thru.hole: φ4.2	14	4.5	2	34	24	-	8	6	11.3	10
25	M5 × 0.8	2-Sides: φ8.2Thread:M6 × 1.0Thru.hole: φ4.6	15	5.5	2	40	28	-	10	8	12	10
32	1/8"	2-Sides: φ8.2Thread:M6 × 1.0Thru.hole: φ4.6	16	5.5	6	44	34	-	12	10	18.3	15
40	1/8"	2-Sides: φ10Thread:M8 × 1.25Thru.hole: φ6.5	20	7.5	6.5	52	40	-	16	14	21.3	16
50	1/4"	2-Sides: φ11Thread:M8 × 1.25Thru.hole: φ6.5	25	8.5	9.5	62	48	-	20	17	30	20
63	1/4"	2-Sides: φ11Thread:M8 × 1.25Thru.hole: φ6.5	25	8.5	9.5	75	60	-	20	17	28.7	20
80	3/8"	2-Sides: φ14Thread:M12 × 1.75Thru.hole: φ9.2	25	10.5	10	94	74	-	25	22	36	26
100	3/8"	2-Sides: φ17.5Thread:M14 × 2Thru.hole: φ11.3	30	13	10	114	90	-	32	27	35	26

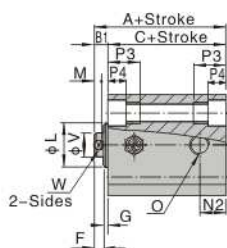
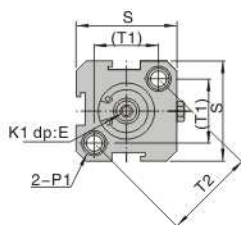
Compact cylinder

SDA Series

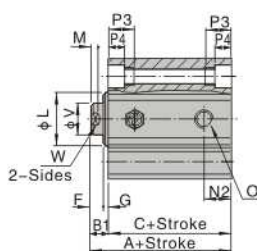
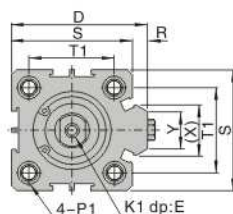
AIRTAC

SSA

φ 12 φ 16

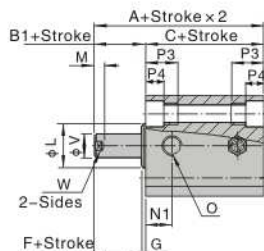
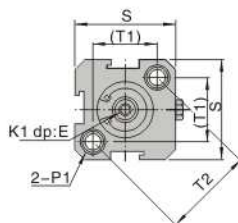


φ 20~φ 63

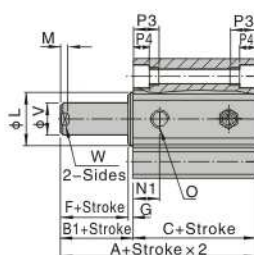
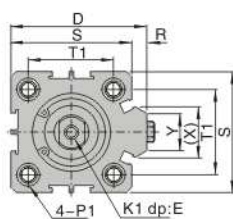


STA

φ 12 φ 16



φ 20~φ 63



Model	Without magnet				With magnet			
Bore size\Item	A		C		A		C	
Stroke	≤10	>10	≤10	>10	≤10	>10	≤10	>10
12	32	42	27	37	42	52	37	47
16	34	44	28.5	38.5	44	54	38.5	48.5
20	35	45	29.5	39.5	45	55	39.5	49.5
25	37	47	31	41	47	57	41	51
32	41.5	51.5	34.5	44.5	51.5	61.5	44.5	54.5
40	43	53	36	46	53	63	46	56
50	47	57	38	48	57	67	48	58
63	51	61	42	52	61	71	52	62

Bore size\Item	B1	D	E	F	G	K1	L	M	N1	N2
12	5	—	6	4	1	M3 × 0.5	10.2	3	7.5	5
16	5.5	—	6	4	1.5	M3 × 0.5	11	3	8	5.5
20	5.5	36	8	4	1.5	M4 × 0.7	13	3	9	5.5
25	6	42	10	4	2	M5 × 0.8	17	3	9.2	5.5
32	7	50	12	4	2.4	M6 × 1	22	3	9	9
40	7	58.5	12	4	3	M8 × 1.25	28	3	9.5	7.5
50	9	71.5	15	5	4	M10 × 1.5	38	3	10.5	10.5
63	9	84.5	15	5	4	M10 × 1.5	40	3	12	11

Bore size\Item	O	P1
12	M5 × 0.8	2-Sides: φ 6.5 Thread M5 × 0.8 Thru.hole: φ 4.2
16	M5 × 0.8	2-Sides: φ 6.5 Thread M5 × 0.8 Thru.hole: φ 4.2
20	M5 × 0.8	2-Sides: φ 6.5 Thread M5 × 0.8 Thru.hole: φ 4.2
25	M5 × 0.8	2-Sides: φ 8.2 Thread M6 × 1.0 Thru.hole: φ 4.6
32	1/8"	2-Sides: φ 8.2 Thread M6 × 1.0 Thru.hole: φ 4.6
40	1/8"	2-Sides: φ 10 Thread M8 × 1.25 Thru.hole: φ 6.5
50	1/4"	2-Sides: φ 11 Thread M8 × 1.25 Thru.hole: φ 6.5
63	1/4"	2-Sides: φ 11 Thread M8 × 1.25 Thru.hole: φ 6.5

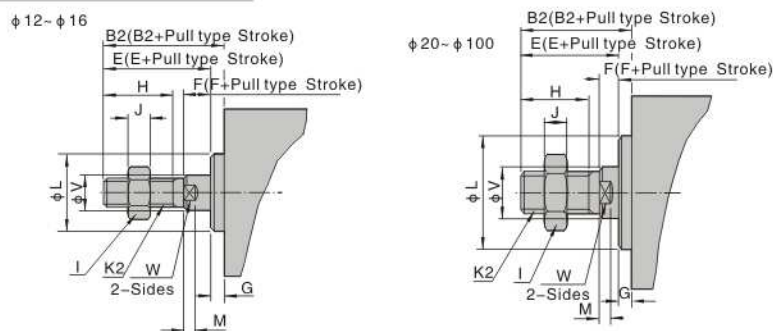
Bore size\Item	P3	P4	R	S	T1	T2	V	W	X	Y
12	12	4.5	—	25	16.2	23	6	5	—	—
16	12	4.5	—	29	19.8	28	6	5	—	—
20	14	4.5	2	34	24	—	8	6	11.3	10
25	15	5.5	2	40	28	—	10	8	12	10
32	16	5.5	6	44	34	—	12	10	18.3	15
40	20	7.5	6.5	52	40	—	16	14	21.3	16
50	25	8.5	9.5	62	48	—	20	17	30	20
63	25	8.5	9.5	75	60	—	20	17	28.7	20



Compact cylinder

SDA Series

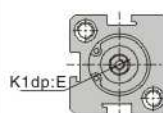
Dimensions of male thread



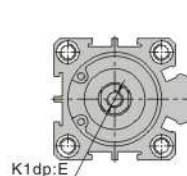
Item Bore size	B2	E	F	G		H	I	J	K2	L	M	V	W
				Others	SDAD\SDAJ								
12	17	16	4	1		10	8	4	M5×0.8	10.2	3	6	5
16	17.5	16	4	1.5		10	8	4	M5×0.8	11	3	6	5
20	20.5	19	4	1.5		13	10	5	M6×1.0	13	3	8	6
25	23	21	4	2		15	12	6	M8×1.25	17	3	10	8
32	25	22	4	2.4	3	15	17	6	M10×1.25	22	3	12	10
40	35	32	4	3		25	19	8	M14×1.5	28	3	16	14
50	37	33	5	4		25	27	11	M18×1.5	38	3	20	17
63	37	33	5	4		25	27	11	M18×1.5	40	3	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

SDAJ

φ12 φ16

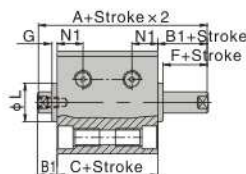
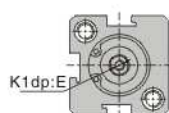


φ20~φ100



SDAD

φ12 φ16



Model Bore size/Item	Without magnet		With magnet		B1	E		Q	J1
	A	C	A	C		S≤10	S>10		
12	40	17	50	27	5	6		17	4
16	42.5	18.5	52.5	28.5	5.5	6		17	4
20	47.5	19.5	57.5	29.5	5.5	8(S=5 is 6.5)		21	5
25	54	21	64	31	6	10(S=5 is 7)		25	6
32	61.5	24.5	71.5	34.5	7	8	12	27	6
40	64	26	74	36	7	8	12	28	7
50	70	28	80	38	9	8	15	29	8
63	74	32	84	42	9	10	15	29	8
80	92.5	41	102.5	51	11	13	20	35.5	10
100	110.5	51	120.5	61	12	18	20	42.5	13.5

Bore size/Item Stroke	G	K1	K3	L	N1	
					S=5	S>5
12	1	M3×0.5	M5X0.8	10.2	5.5	6.3
16	1.5	M3×0.5	M5X0.8	11	6.5	7.3
20	1.5	M4×0.7	M6X1.0	15	7.5	
25	2	M5×0.8	M8X1.25	17	8	
32	3	M6×1	M10X1.25	22	8	9
40	3	M8×1.25	M12X1.25	28	8	10
50	4	M10×1.5	M16X1.5	38	8	10.5
63	4	M10×1.5	M16X1.5	40	9.5	11.8
80	5	M14×1.5	M20X1.5	45	11.5	14.5
100	5	M18×1.5	M27X2.0	55	16	20.5

Remark: 1、The unmarked dimension is the same as SDA standard type;
2、Please refer to PV-19 for the dimension of male thread.

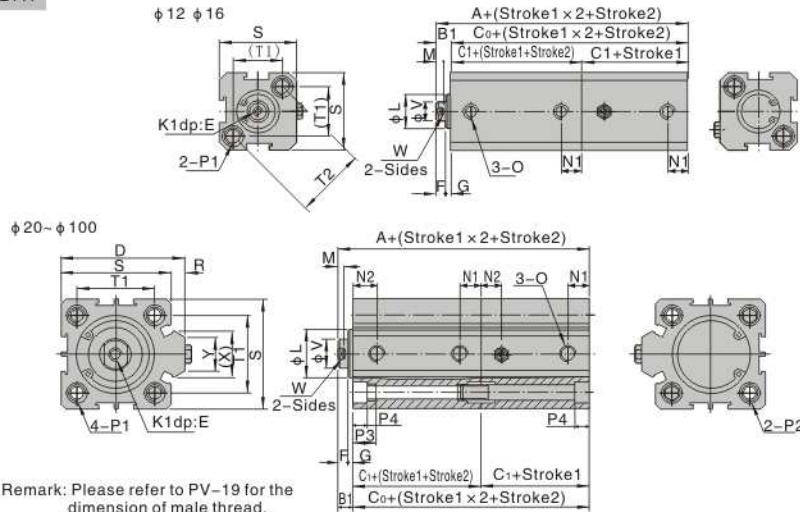
Model Bore size/Item	Without magnet		With magnet		E		B1	F	G	K1	L	N1	
	A	C	A	C	S≤10	S>10						S=5	S>5
12	27	17	37	27	6		5	4	1	M3×0.5	10.2	5.5	6.3
16	29.5	18.5	39.5	28.5	6		5.5	4	1.5	M3×0.5	11	6.5	7.3
20	30.5	19.5	40.5	29.5	8 (S=5 is 6.5)		5.5	4	1.5	M4×0.7	15	7.5	
25	33	21	43	31	10 (S=5 is 7)		6	4	2	M5×0.8	17	8	
32	38.5	24.5	48.5	34.5	8	12	7	4	3	M6×1	22	8	9
40	40	26	50	36	8	12	7	4	3	M8×1.25	28	8	10
50	46	28	56	38	8	15	9	5	4	M10×1.5	38	8	10.5
63	50	32	60	42	10	15	9	5	4	M10×1.5	40	9.5	11.8
80	63	41	73	51	13	20	11	6	5	M14×1.5	45	11.5	14.5
100	75	51	85	61	18	20	12	7	5	M18×1.5	55	16	20.5

Remark: 1、The unmarked dimension is the same as SDA standard type;
2、Please refer to PV-19 for the dimension of male thread.

Compact cylinder

SDA Series

SDAT



Remark: Please refer to PV-19 for the dimension of male thread.

Model	Without magnet			With magnet			B1	D	E	F	G	K1	L	M	N1		N2		O
Bore size/Item	A	C ₀	C1	A	C ₀	C1									S=5	S>5	S=5	S>5	
12	39	34	17	59	54	27	5	—	6	4	1	M3×0.5	10.2	3	5	7.5	—	M5×0.8	
16	42.5	37	18.5	62.5	57	28.5	5.5	—	6	4	1.5	M3×0.5	11	3	5.5	8	—	M5×0.8	
20	44.5	39	19.5	64.5	59	29.5	5.5	36	8	4	1.5	M4×0.7	13	3	5.5	9	—	M5×0.8	
25	48	42	21	68	62	31	6	42	10	4	2	M5×0.8	17	3	5.5	9.2	—	M5×0.8	
32	56	49	24.5	76	69	34.5	7	50	12	4	2.4	M6×1	22	3	6.5	9	9	1/8"	
40	59	52	26	79	72	36	7	58.5	12	4	3	M8×1.25	28	3	7.5	9.5	—	1/8"	
50	65	56	28	85	76	38	9	71.5	15	5	4	M10×1.5	38	3	8	10.5	8	10.5	1/4"
63	73	64	32	93	84	42	9	84.5	15	5	4	M10×1.5	40	3	9.5	11	9.5	12	1/4"
80	93	82	41	113	102	51	11	104	20	6	5	M14×1.5	45	4	11.5	14.5	11.5	14.5	3/8"
100	114	102	51	134	122	61	12	124	20	7	5	M18×1.5	55	4	16	20.5	16	20.5	3/8"

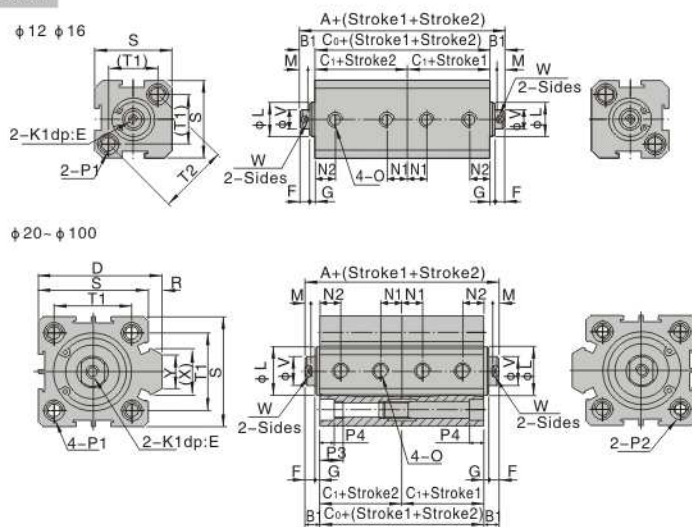
Item	Bore size	X	Y	W	P1				P2				P3	P4	R	S	T1	T2	V
					2-Sides	φ6.5 Thread	M5 × 0.8 Thru.hole	φ4.2	2-Sides	φ6.5 Thru.hole	φ5.2	14							
12	—	—	—	5	2-Sides	φ6.5 Thread	M5 × 0.8 Thru.hole	φ4.2	—	—	—	—	12	4.5	—	25	16.2	23	6
16	—	—	—	5	2-Sides	φ6.5 Thread	M5 × 0.8 Thru.hole	φ4.2	—	—	—	—	12	4.5	—	29	19.8	28	6
20	11.3	10	6	6	2-Sides	φ6.5 Thread	M5 × 0.8 Thru.hole	φ4.2	2-Sides	φ6.5 Thru.hole	φ5.2	14	4.5	2	34	24	—	—	8
25	12	10	8	8	2-Sides	φ8.2 Thread	M6 × 1.0 Thru.hole	φ4.6	2-Sides	φ8.2 Thru.hole	φ6.2	15	5.5	2	40	28	—	—	10
32	18.3	15	10	10	2-Sides	φ8.2 Thread	M6 × 1.0 Thru.hole	φ4.6	2-Sides	φ8.2 Thru.hole	φ6.2	16	5.5	6	44	34	—	—	12
40	21.8	16	14	14	2-Sides	φ10 Thread	M8 × 1.25 Thru.hole	φ6.5	2-Sides	φ10 Thru.hole	φ8.2	20	7.5	6.5	52	40	—	—	16
50	30	20	17	17	2-Sides	φ11 Thread	M8 × 1.25 Thru.hole	φ6.5	2-Sides	φ11 Thru.hole	φ8.5	25	8.5	9.5	62	48	—	—	20
63	28.7	20	17	17	2-Sides	φ11 Thread	M8 × 1.25 Thru.hole	φ6.5	2-Sides	φ11 Thru.hole	φ8.5	25	8.5	9.5	75	60	—	—	20
80	36	26	22	22	2-Sides	φ14 Thread	M12 × 1.75 Thru.hole	φ9.2	2-Sides	φ14 Thru.hole	φ12.3	25	10.5	10	94	74	—	—	25
100	35	26	27	27	2-Sides	φ17.5 Thread	M14 × 2 Thru.hole	φ11.3	2-Sides	φ17.5 Thru.hole	φ14.2	30	13	10	114	90	—	—	32

Model	Without magnet			With magnet			B1
	A	C ₀	C1	A	C ₀	C1	
12	44	34	17	64	54	27	5
16	48	37	18.5	68	57	28.5	5.5
20	50	39	19.5	70	59	29.5	5.5
25	54	42	21	74	62	31	6
32	63	49	24.5	83	69	34.5	7
40	66	52	26	86	72	36	7
50	74	56	28	94	76	38	9
63	82	64	32	102	84	42	9
80	104	82	41	124	102	51	11
100	126	102	51	146	122	61	12

Bore size\Item	D	E	F	G	K1	L	M
12	—	6	4	1	M3 × 0.5	10.2	3
16	—	6	4	1.5	M3 × 0.5	11	3
20	36	8	4	1.5	M4 × 0.7	13	3
25	42	10	4	2	M5 × 0.8	17	3
32	50	12	4	2.4	M6 × 1	22	3
40	58.5	12	4	3	M8 × 1.25	28	3
50	71.5	15	5	4	M10 × 1.5	38	3
63	84.5	15	5	4	M10 × 1.5	40	3
80	104	20	6	5	M14 × 1.5	45	4
100	124	20	7	5	M18 × 1.5	55	4

Bore size\Item	N2		N1		O	X	Y
	S=5	S>5	S=5	S>5			
12	7.5	—	5	—	M5 × 0.8	—	—
16	8	—	5.5	—	M5 × 0.8	—	—
20	9	—	5.5	—	M5 × 0.8	11.3	10
25	9.2	—	5.5	—	M5 × 0.8	12	10
32	9	6.5	9	—	1/8"	18.3	15
40	9.5	7.5	—	—	1/8"	21.3	16
50	8	10.5	8	10.5	1/4"	30	20
63	9.5	12	9.5	11	1/4"	28.7	20
80	11.5	14.5	11.5	14.5	3/8"	36	26
100	16	20.5	16	20.5	3/8"	35	26

SDAW



Remark: Please refer to PV-19 for the dimension of male thread.

Bore size\Item	P1				P2			
	W	P3	P4	R	S	T1	T2	V
12	5	12	4.5	—	25	16.2	23	6
16	5	12	4.5	—	29	19.8	28	6
20	6	14	4.5	2	34	24	—	8
25	8	15	5.5	2	40	28	—	10
32	10	16	5.5	6	44	34	—	12
40	14	20	7.5	6.5	52	40	—	16
50	17	25	8.5	9.5	62	48	—	20
63	17	25	8.5	9.5	75	60	—	20
80	22	25	10.5	10	94	74	—	25
100	27	30	13	10	114	90	—	32

Bore size\Item	P1				P2			
	W	P3	P4	R	S	T1	T2	V
12	5	12	4.5	—	25	16.2	23	6
16	5	12	4.5	—	29	19.8	28	6
20	6	14	4.5	2	34	24	—	8
25	8	15	5.5	2	40	28	—	10
32	10	16	5.5	6	44	34	—	12
40	14	20	7.5	6.5	52	40	—	16
50	17	25	8.5	9.5	62	48	—	20
63	17	25	8.5	9.5	75	60	—	20
80	22	25	10.5	10	94	74	—	25
100	27	30	13	10	114	90	—	32