

Compact Cylinder

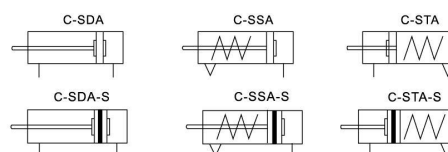
C-SDA/C-SSA/C-STA series



Product Features

- Compact and lightweight
- Easy to install
- Easy to maintain
- Auto switch

Symbol



Specification

Bore Size (mm)		12	16	20	25	32	40	50	63	80	100	
Action		Double acting										
		Single acting-push					Single acting-pull			-		
Fluid		Air										
Operating Pressure Range kgf/cm ²	Double acting						1~9					
	Single acting	2~9								-		
Proof Pressure kgf/cm ²							13.5					
Operating Temperature Range °C		-5~70										
Operating Speed Range mm/s	Double acting	30~500										
	Single acting	50~500										
Cushion		Bumper pad										
Port size		M5×0.8				PT1/8		PT1/4		PT3/8		

Stroke

Bore Size (mm)			Standard Stroke (mm)													Max. Stroke	Allowable Stroke									
12	Double acting	With auto switch	5	10	15	20	25	30	35	40	45	50	55	65	70											
		Without auto switch	5	10	15	20	25	30	35	40	45	50	55			60	65									
16	Single acting	With auto switch	5	10	15	20	25	30	30	-																
		Without auto switch	5	10	15	20	25	30																		
20	Double acting	With auto switch	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	100	130				
		Without auto switch	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90			95	100		
	Single acting	With auto switch	5	10	15	20	25	30	30	-																
		Without auto switch	5	10	15	20	25	30																		
25	Double acting	With auto switch	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 auto switch	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	110	120		
	Single acting	With auto switch	5	10	15	20	25	30	30	-																
		Without auto switch	5	10	15	20	25	30																		
32	Double acting	With auto switch	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 auto switch	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	110	120		
	Single acting	With auto switch	5	10	15	20	25	30	30	-																
		Without auto switch	5	10	15	20	25	30																		
40	Double acting	With auto switch	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 auto switch	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	110	120		
	Single acting	With auto switch	5	10	15	20	25	30	30	-																
		Without auto switch	5	10	15	20	25	30																		
50	Double acting	With auto switch	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 auto switch	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	110	120		
	Single acting	With auto switch	5	10	15	20	25	30	30	-																
		Without auto switch	5	10	15	20	25	30																		
63	Double acting	With auto switch	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 auto switch	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	110	120		
	Single acting	With auto switch	5	10	15	20	25	30	30	-																
		Without auto switch	5	10	15	20	25	30																		

Compact Cylinder

C-SDA/C-SSA/C-STA series



How To Order

C-SDA	S	20	×	30	—	B
Action	Auto Switch	Bore Size		Stroke		Piston Rod Thread
SDA: Double acting SSA: Single acting push STA: Single acting pull	S: With auto switch Nil: Without auto switch					Nil: Female thread B: Male thread N: Without thread

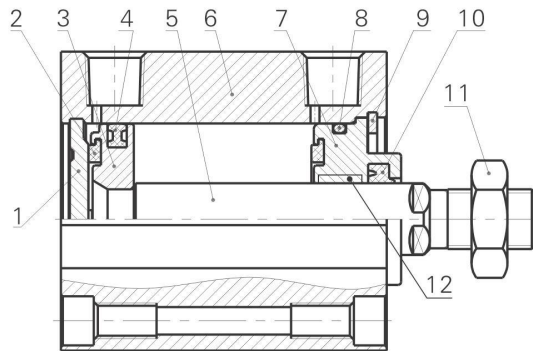
※ N axis length same as Nil

Ordering Sample

- Bore size:50mm, stroke 30mm, with auto switch, piston rod male thread, double acting, the right model: C-SDAS-50x30-B.
- Bore size:20mm, stroke 25mm, withOUT auto switch, piston rod FEmale thread, single acting-pull, the right model: C-STA-20x25.

Structure

C-SDA Type



Item	Name	Material	Item	Name	Material
1	Nuts	Carbon steel	2	Piston rod	Medium carbon steel(Hardchrome plating)
3	Front cover seal ring	NBR	4	C type jump ring	Spring steel
5	Front cover O ring	NBR	6	Front cover	6061-T6
7	Front coverbumper pad	PU	8	Main body	6063-T5
9	Double O type piston	NBR	10	Piston	6061-T6
11	Piston bumper pad	PU	12	Back cover	6060-T5

Replacement Part/Seal Ring

Item	Name	Material	Components									
			Ø12	Ø16	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100
9	Rod seal ring	NBR	PDB-6	PDB-6	PDB-8	PDB-10	PDB-12	PDB-16	PDB-20	PDB-20	PDU-25	PDU-32
10	Piston seal ring		APA-Ø12	APA-Ø16	APA-Ø20	APA-Ø25	APA-Ø32	APA-Ø40	APA-Ø50	APA-Ø63	APA-Ø80	APA-Ø100
11	Front cover O ring		Ø12×1.5	Ø16×1.5	Ø17×1.8	Ø22×1.8	Ø27×1.8	Ø36×1.8	Ø47×1.8	Ø59×1.8	Ø75×1.8	Ø95×1.8
Seal ring model			C-SDA12-PS	C-SDA16-PS	C-SDA20-PS	C-SDA25-PS	C-SDA32-PS	C-SDA40-PS	C-SDA50-PS	C-SDA63-PS	C-SDA80-PS	C-SDA100-PS

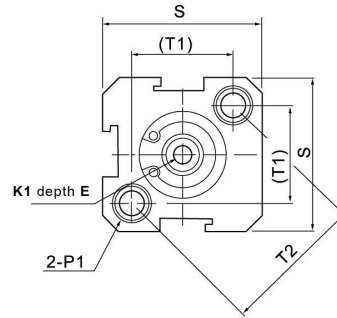
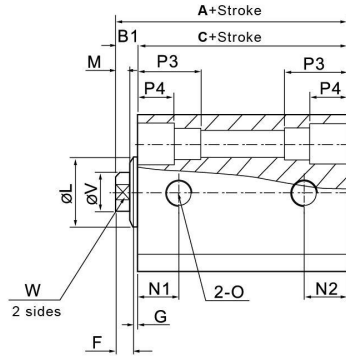
Compact Cylinder

C-SDA/C-SSA/C-STA series

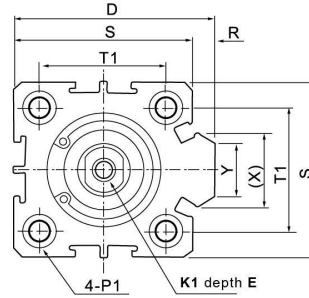
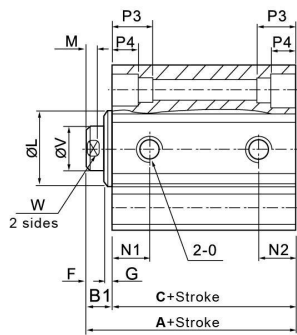
Dimension (mm)

C-SDA, C-SDAS type

Ø10~Ø16



Ø20~Ø100



Form Bore Size /Symbol	Standard		With Auto Switch		B1	D	E	F	G	K1	L	M	N1		N2	
	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	3	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	11.8	9.5	11.8
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	N18×1.5	55	4	16	20.5	16	20.5

Bore Size /Symbol	O	P1	P3	P4	R	S	T1	T2	V	W	X	Y
12	M5×0.8	Both sides: Φ6.5 thread M5x0.8 through-hole: Φ4.2	12	4.5	-	25	16.3	23	6	5	-	-
16	M5×0.8	Both sides: Φ6.5 thread M5x0.8 through-hole: Φ4.2	12	4.5	-	29	19.8	28	6	5	-	-
20	M5×0.8	Both sides: Φ6.5 thread M5x0.8 through-hole: Φ4.2	14	4.5	2	34	24	-	8	6	11.3	10
25	M5×0.8	Both sides: Φ8.2 thread M6x1.0 through-hole: Φ4.6	15	5.5	2	40	28	-	10	8	12	10
32	PT1/8	Both sides: Φ8.2 thread M6x1.0 through-hole: Φ4.6	16	5.5	6	44	34	-	12	10	18.3	15
40	PT1/8	Both sides: Φ10 thread M8x1.25 through-hole: Φ6.5	20	7.5	6.5	52	40	-	16	14	21.3	16
50	PT1/4	Both sides: Φ11 thread M8x1.25 through-hole: Φ6.5	25	8.5	9.5	62	48	-	20	17	30	20
63	PT1/4	Both sides: Φ11 thread M8x1.25 through-hole: Φ6.5	25	8.5	9.5	75	60	-	20	17	28.7	20
80	PT3/8	Both sides: Φ14 thread M12x1.75 through-hole: Φ9.2	25	10.5	10	94	74	-	25	22	36	26
100	PT3/8	Both sides: Φ17.5 thread M14x2 through-hole: Φ11.3	30	13	10	114	90	-	32	27	35	26

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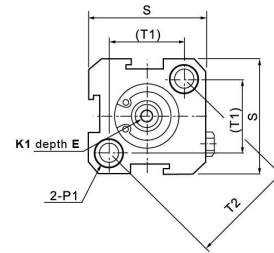
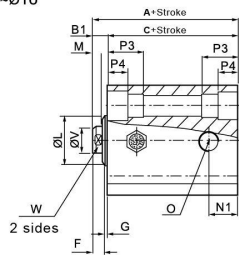
C-SDA/C-SSA/C-STA series

Dimension (mm)

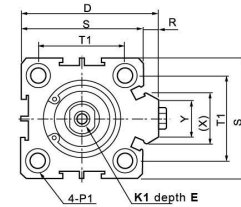
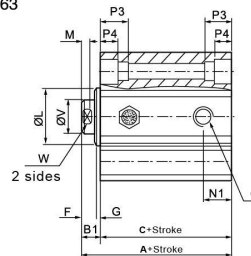
C-SSA, C-SSAS Type



ø12-ø16



ø20-ø63



Form	Without Auto Switch				With Auto Switch				B1	D	E	F	G	K1	L	M	N1
	A		C		A		C										
Bore Size /Symbol	≤10	> 10	≤10	> 10	≤10	> 10	≤10	> 10									
12	32	42	27	37	42	52	37	47	5	-	6	4	1	M3×0.5	10.2	3	5
16	34	44	28.5	38.5	44	54	38.5	48.5	5.5	-	6	4	1.5	M3×0.5	11	3	5.5
20	35	45	29.5	39.5	45	55	39.5	49.5	5.5	36	8	4	1.5	M4×0.7	13	3	5.5
25	37	47	31	41	47	57	41	51	6	42	10	4	2	M5×0.8	17	3	5.5
32	41.5	51.5	34.5	44.5	51.5	61.5	44.5	54.5	7	50	12	4	3	M6×1	22	3	9
40	43	53	36	46	53	63	46	56	7	58.5	12	4	3	M8×1.25	28	3	7.5
50	47	57	38	48	57	67	48	58	9	71.5	15	5	4	M10×1.5	38	3	10.5
63	51	61	42	52	61	71	52	62	9	84.5	15	5	4	M10×1.5	40	3	11

Bore Size /Symbol	O	P1	P3	P4	R	S	T1	T2	V	W	X	Y
12	M5×0.8	Both sides: Φ6.5 thread M5x0.8 through-hole:Φ4.2	12	4.5	-	25	16.2	23	6	5	-	-
16	M5×0.8	Both sides: Φ6.5 thread M5x0.8 through-hole:Φ4.2	12	4.5	-	29	19.8	28	6	5	-	-
20	M5×0.8	Both sides: Φ6.5 thread M5x0.8 through-hole:Φ4.2	14	4.5	2	34	24	-	8	6	11.3	10
25	M5×0.8	Both sides: Φ8.2 thread M6x1.0 through-hole:Φ4.6	15	5.5	2	40	28	-	10	8	12	10
32	PT1/8	Both sides: Φ8.2 thread M6x1.0 through-hole:Φ4.6	16	5.5	6	44	34	-	12	10	18.3	15
40	PT1/8	Both sides: Φ10 thread M8x1.25 through-hole:Φ6.5	20	7.5	6.5	52	40	-	16	14	21.3	16
50	PT1/4	Both sides: Φ11 thread M8x1.25 through-hole:Φ6.5	25	8.5	9.5	62	48	-	20	17	30	20
63	PT1/4	Both sides: Φ11 thread M8x1.25 through-hole:Φ6.5	25	8.5	9.5	75	60	-	20	17	28.7	20

Compact Cylinder

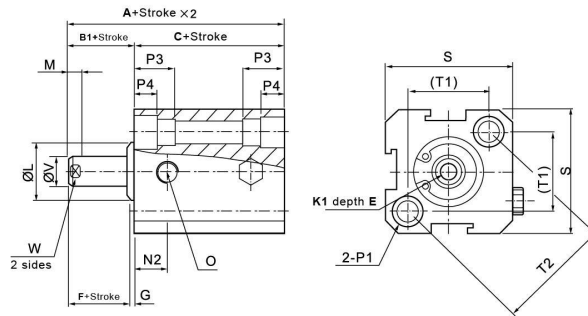
C-SDA/C-SSA/C-STA series

Dimension (mm)

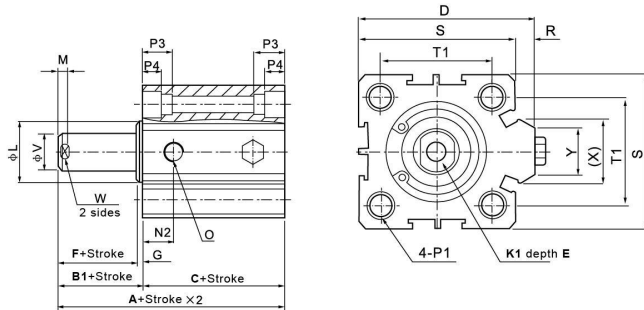
C-STA, C-STAS Type



Ø12-Ø16



Ø20-Ø63



Form	Without Auto Switch				With Auto Switch				B1	D	E	F	G	K1	L	M	N2
	A		C		A		C										
Bore Size /Symbol	≤10	> 10	≤10	> 10	≤10	> 10	≤10	> 10									
Stroke																	
12	32	42	27	37	42	52	37	47	5	-	6	4	1	M3×0.5	10.2	3	7.5
16	34	44	28.5	38.5	44	54	38.5	48.5	5.5	-	6	4	1.5	M3×0.5	11	3	8
20	35	45	29.5	39.5	45	55	39.5	49.5	5.5	36	8	4	1.5	M4×0.7	13	3	9
25	37	47	31	41	47	57	41	51	6	42	10	4	2	M5×0.8	17	3	9.2
32	41.5	51.5	34.5	44.5	51.5	61.5	44.5	54.5	7	50	12	4	3	M6×1	22	3	9
40	43	53	36	46	53	63	46	56	7	58.5	12	4	3	M8×1.25	28	3	9.5
50	47	57	38	48	57	67	48	58	9	71.5	15	5	4	M10×1.5	38	3	10.5
63	51	61	42	52	61	71	52	62	9	84.5	15	5	4	M10×1.5	40	3	12

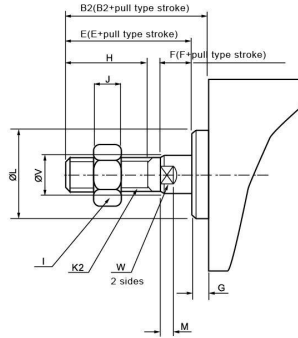
Bore Size /Symbol	O	P1	P3	P4	R	S	T1	T2	V	W	X	Y
12	M5×0.8	Both sides:Φ6.5 thread M5x0.8 through-hole:Φ4.2	12	4.5	-	25	16.2	23	6	5	-	-
16	M5×0.8	Both sides:Φ6.5 thread M5x0.8 through-hole:Φ4.2	12	4.5	-	29	19.8	28	6	5	-	-
20	M5×0.8	Both sides:Φ6.5 thread M5x0.8 through-hole:Φ4.2	14	4.5	2	34	24	-	8	6	11.3	10
25	M5×0.8	Both sides:Φ8.2 thread M6x1.0 through-hole:Φ4.6	15	5.5	2	40	28	-	10	8	12	10
32	PT1/8	Both sides:Φ8.2 thread M6x1.0 through-hole:Φ4.6	16	5.5	6	44	34	-	12	10	18.3	15
40	PT1/8	Both sides:Φ10 thread M8x1.25 through-hole:Φ6.5	20	7.5	6.5	52	40	-	16	14	21.3	16
50	PT1/4	Both sides:Φ11 thread M8x1.25 through-hole:Φ6.5	25	8.5	9.5	62	48	-	20	17	30	20
63	PT1/4	Both sides:Φ11 thread M8x1.25 through-hole:Φ6.5	25	8.5	9.5	75	60	-	20	17	28.7	20

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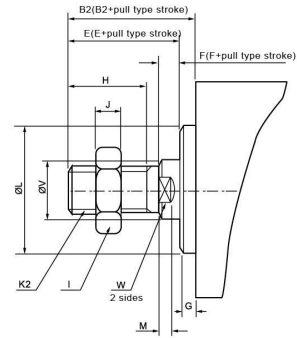
C-SDA/C-SSA/C-STA series

Dimension (mm)

Ø12-Ø16



Ø20-Ø100



Bore Size /Symbol	B2	E	F	G	2	I	J	K2	L	M	V	W
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	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