

ISO Cylinder: Standard Double Acting, Single/Double Rod Series C96

ø32, ø40, ø50, ø63, ø80, ø100, ø125

How to Order

Without auto switch

C96S B 32 100 W

With auto switch

C96SD B 32 100 W M9BW S

Built-in magnet

Mounting

B	Basic/Without bracket
L	Axial foot
F	Rod end flange
G	Head end flange
C	Single clevis
D	Double clevis
T	Center trunnion

Bore size

32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm
125	125 mm

Stroke (mm)

Refer to "Standard Stroke" on page 20.

Auto switch

Nil Without auto switch
* For applicable auto switch model, refer to the below table.

Number of auto switches

Nil	2 pcs.
S	1 pc.
3	3 pcs.
n	"n" pcs.

Rod

Nil	Single rod
W	Double rod

Applicable Auto Switches/Tie-rod Mounting

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model		Lead wire length (m)				Pre-wired connector	Applicable load									
					DC	AC	Tie-rod mounting	Band mounting	0.5 (Nil)	1 (M)	3 (L)	5 (Z)											
Solid state switch	—	Grommet		3-wire (NPN)	24 V	5 V, 12 V	—	** M9N	—	●	●	●	○	○	IC	Relay, PLC							
				3-wire (PNP)				** M9P	—	●	●	●	○	○									
				2-wire				—	—	100 V, 200 V	J51	—	●	—			●	○	—				
		Terminal conduit		3-wire (NPN)	24 V	5 V, 12 V	—	—	G39	—	—	—	—	—	IC								
	2-wire		—	K39				—	—	—	—	—	—										
	Grommet	3-wire (NPN)	M9NW	—				●	●	●	○	○	IC										
		3-wire (PNP)	M9PW	—				●	●	●	○	○											
		2-wire	M9BW	—				●	●	●	○	○		—									
		3-wire (NPN)	M9NA	—				○	○	●	○	○		IC									
		3-wire (PNP)	M9PA	—				○	○	●	○	○	—										
		2-wire	M9BA	—				○	○	●	○	○											
		4-wire (NPN)	F59F	—	●	—	●	○	○	IC													
		2-wire (Non-polar type)	P4DW	—	—	—	●	●	○	—													
	Diagnosis indication (2-color)	Grommet	Yes																				

* Lead wire length symbols: 0.5 m Nil (Example) M9NW
1 m M (Example) M9NWM
3 m L (Example) M9NWL
5 m Z (Example) M9NWX

* Solid state switches marked with "○" are produced upon receipt of order.

* Since there are other applicable auto switches than listed, refer to SMC "Best Pneumatics 2004" Vol.7/8/9/10 catalog.

* For details about auto switches with pre-wired connector, refer to SMC "Best Pneumatics 2004" Vol.6 catalog.

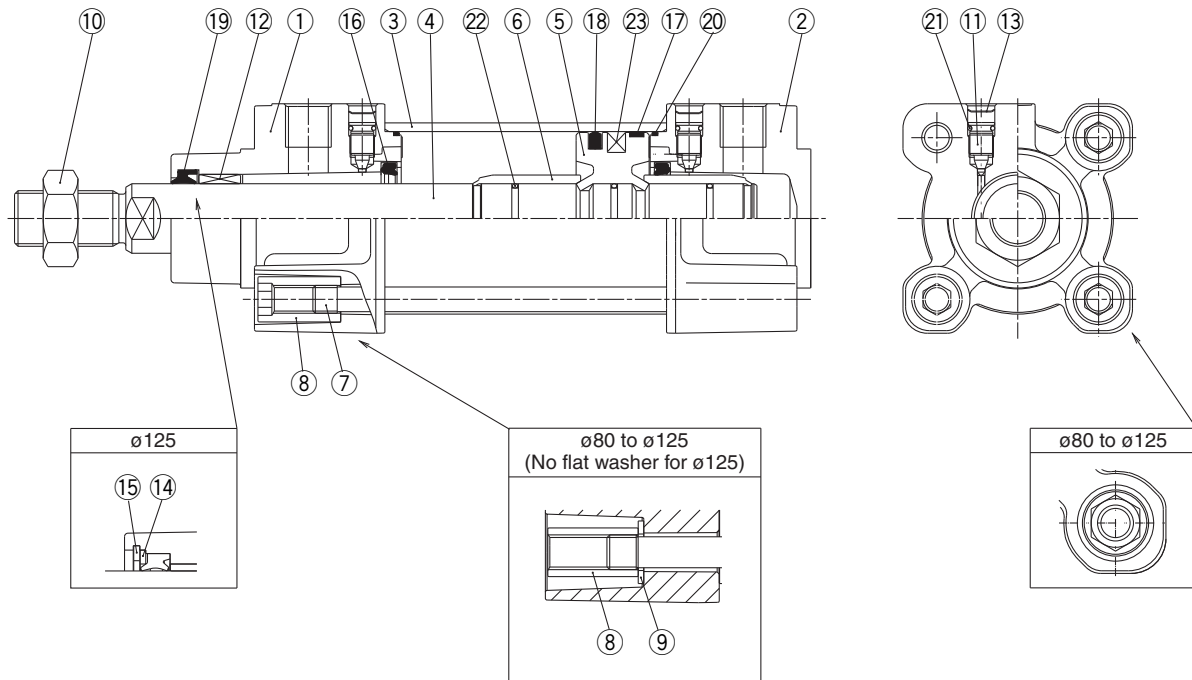
* D-A9□, M9□, M9□W, M9□AL are shipped together, (but not assembled).

(Switch mounting bracket is only assembled at the time of shipment.)

** D-M9BM, M9NM, M9PM type (product of 1 m in length of the lead wire) are applicable from the shipment in May, 2008.

Construction

[First angle projection]



Component Parts

No.	Description	Material	Note
①	Rod cover	Aluminum die-casted	
②	Head cover	Aluminum die-casted	
③	Cylinder tube	Aluminum alloy	
④	Piston rod	Carbon steel	
⑤	Piston	Aluminum alloy	
⑥	Cushion ring	Brass	
⑦	Tie-rod	Carbon steel	
⑧	Tie-rod nut	Steel	
⑨	Flat washer	Steel	ø80 and ø100
⑩	Rod end nut	Steel	
⑪	Cushion valve	Steel wire	
⑫	Bushing	Sintered metal	
⑬	Snap ring	Steel for spring	ø40 to ø125
⑭	Rod seal holder	Stainless steel	ø125
⑮	Snap ring	Steel for spring	ø125
⑯	Cushion seal	Urethane rubber	
⑰	Wearing	Resin	
⑱	Piston seal	NBR	
⑲	Rod seal	NBR	
⑳	Cylinder tube gasket	NBR	
㉑	Cushion valve seal	NBR	
㉒	Piston gasket	NBR	
㉓	Magnet		

Replacement Parts: Seal Kit

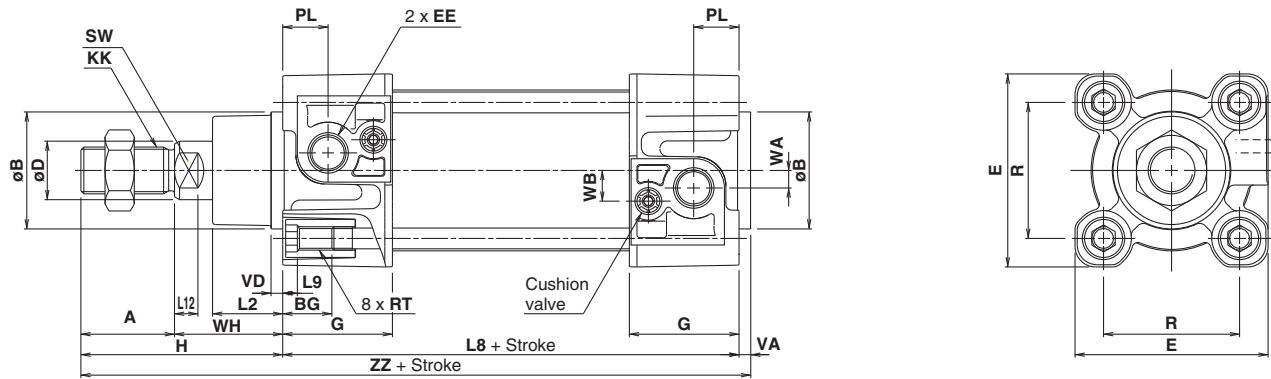
Bore size (mm)	Kit no.	Contents
32	CS95-32	Kits include items ⑯ to ㉑.
40	CS95-40	
50	CS95-50	
63	CS95-63	
80	CS95-80	
100	CS96-100	
125	CS96-125	

* Seal kits consist of items ⑯ to ㉑ contained in one kit, and can be ordered using the number for each respective tube bore size.

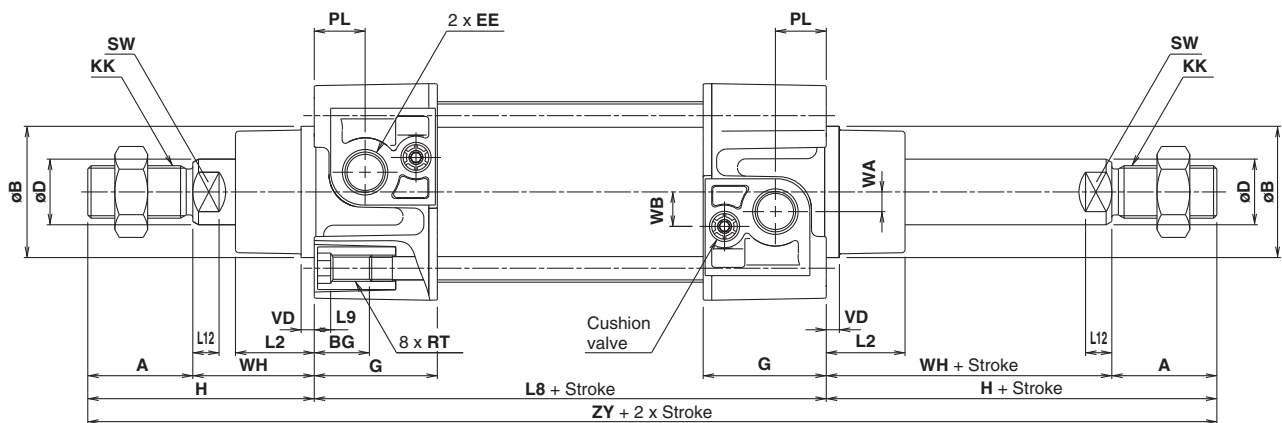
Dimensions: Without Mounting Bracket

[First angle projection]

C96S(D)B Bore size Stroke



C96S(D)B Bore size Stroke



Bore size (mm)	A	øB d11	øD	EE	PL	RT	L12	KK	SW	G	BG	L8	VD	VA	WA	WB	WH	ZZ	ZY	E	R	L2	L9	H
32	22	30	12	G 1/8	13	M6 x 1	6	M10 x 1.25	10	32	16	94	4	4	4	7	26	146	190	47	32.5	15	4	48
40	24	35	16	G 1/4	14	M6 x 1	6.5	M12 x 1.25	13	37.5	16	105	4	4	5	9	30	163	213	54	38	17	4	54
50	32	40	20	G 1/4	15.5	M8 x 1.25	8	M16 x 1.5	17	37.5	16	106	4	4	6	10.5	37	179	244	66	46.5	24	5	69
63	32	45	20	G 3/8	16.5	M8 x 1.25	8	M16 x 1.5	17	45	16	121	4	4	9	12	37	194	259	77	56.5	24	5	69
80	40	45	25	G 3/8	19	M10 x 1.5	10	M20 x 1.5	22	45	17	128	4	4	11.5	14	46	218	300	99	72	30	—	86
100	40	55	25	G 1/2	19	M10 x 1.5	10	M20 x 1.5	22	50	17	138	4	4	17	15	51	233	320	118	89	32	—	91
125	54	60	32	G 1/2	19	M12 x 1.75	13	M27 x 2	27	58	20	160	6	6	17	15	65	285	398	144	110	40	—	119