

# ISO Standard (15552)

## Air Cylinder: Standard Type Double Acting, Single/Double Rod

# CP96 Series

ø32, ø40, ø50, ø63, ø80, ø100



The CP96 series, standard type, ø125 is the same as the previous model. For details, refer to the **Web Catalog**.

### How to Order

**CP96S** **B** **32** - **100** **C** **J** **W** - [ ]

**With auto switch** **CP96SD** **B** **32** - **100** **C** **J** **W** - **M9BW** **S** - [ ]

**With auto switch** (Built-in magnet)

**Mounting**

<b>B</b>	Basic
<b>L</b>	Axial foot
<b>F</b>	Rod flange
<b>G</b>	Head flange
<b>C</b>	Single clevis
<b>D</b>	Double clevis

\* Mounting brackets are shipped together, but not assembled.

**Bore size**

<b>32</b>	32 mm
<b>40</b>	40 mm
<b>50</b>	50 mm
<b>63</b>	63 mm
<b>80</b>	80 mm
<b>100</b>	100 mm

**Cylinder stroke [mm]**  
Refer to "Standard Strokes" on page 130.

**Air cushion on both ends + Bumper cushion**

**Rod boot**

<b>Nil</b>	Without rod boot
<b>J</b>	Nylon tarpaulin (One end)
<b>JJ</b>	Nylon tarpaulin (Both ends)
<b>K</b>	Heat-resistant tarpaulin (One end)
<b>KK</b>	Heat-resistant tarpaulin (Both ends)

**Number of auto switches**

<b>Nil</b>	2
<b>S</b>	1
<b>3</b>	3
<b>n</b>	n

**Auto switch**

<b>Nil</b>	Without auto switch
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\* For applicable auto switches, refer to the table below.

**Rod**

<b>Nil</b>	Single rod
<b>W</b>	Double rod

**Made to Order**  
Refer to page 130 for details.

### Applicable Auto Switches/Refer to the Web Catalog or Best Pneumatics for further information on auto switches.

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		0.5 (Nil)	1 (M)	3 (L)	5 (Z)						
Solid state auto switch	—	Grommet	No	3-wire (NPN)	24 V	5 V, 12 V	—	<b>M9N</b>	●	●	●	○	○	IC circuit	Relay, PLC		
				3-wire (PNP)				<b>M9P</b>	●	●	●	○	○				
				2-wire				<b>M9B</b>	●	●	●	○	○				
	Diagnostic indication (2-color indicator)	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	<b>M9NW</b>	●	●	●	○	○	IC circuit	Relay, PLC		
				3-wire (PNP)				<b>M9PW</b>	●	●	●	○	○				
				2-wire				<b>M9BW</b>	●	●	●	○	○				
	Water-resistant (2-color indicator)	Grommet	No	3-wire (NPN)	24 V	5 V, 12 V	—	<b>M9NA</b> *1	○	○	●	○	○	IC circuit	Relay, PLC		
				3-wire (PNP)				<b>M9PA</b> *1	○	○	●	○	○				
				2-wire				<b>M9BA</b> *1	○	○	●	○	○				
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	24 V	5 V	100 V or less	<b>A96</b>	●	—	●	—	—	IC circuit	Relay, PLC		
				2-wire				12 V	100 V	<b>A93</b>	●	●	●			●	—
										<b>A90</b>	●	—	●			—	—

\*1 Water-resistant type auto switches can be mounted on the above models, but SMC cannot guarantee water resistance.

\* Lead wire length symbols: 0.5 m ..... Nil (Example) M9NW  
1 m ..... M (Example) M9NWM  
3 m ..... L (Example) M9NWL  
5 m ..... Z (Example) M9NWZ

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

\* Since there are other applicable auto switches than listed above, refer to page 146 for details.

\* The D-A9□/M9□/M9□W/M9□A auto switches are shipped together, but not assembled. (Only the auto switch mounting brackets are assembled before shipment.)

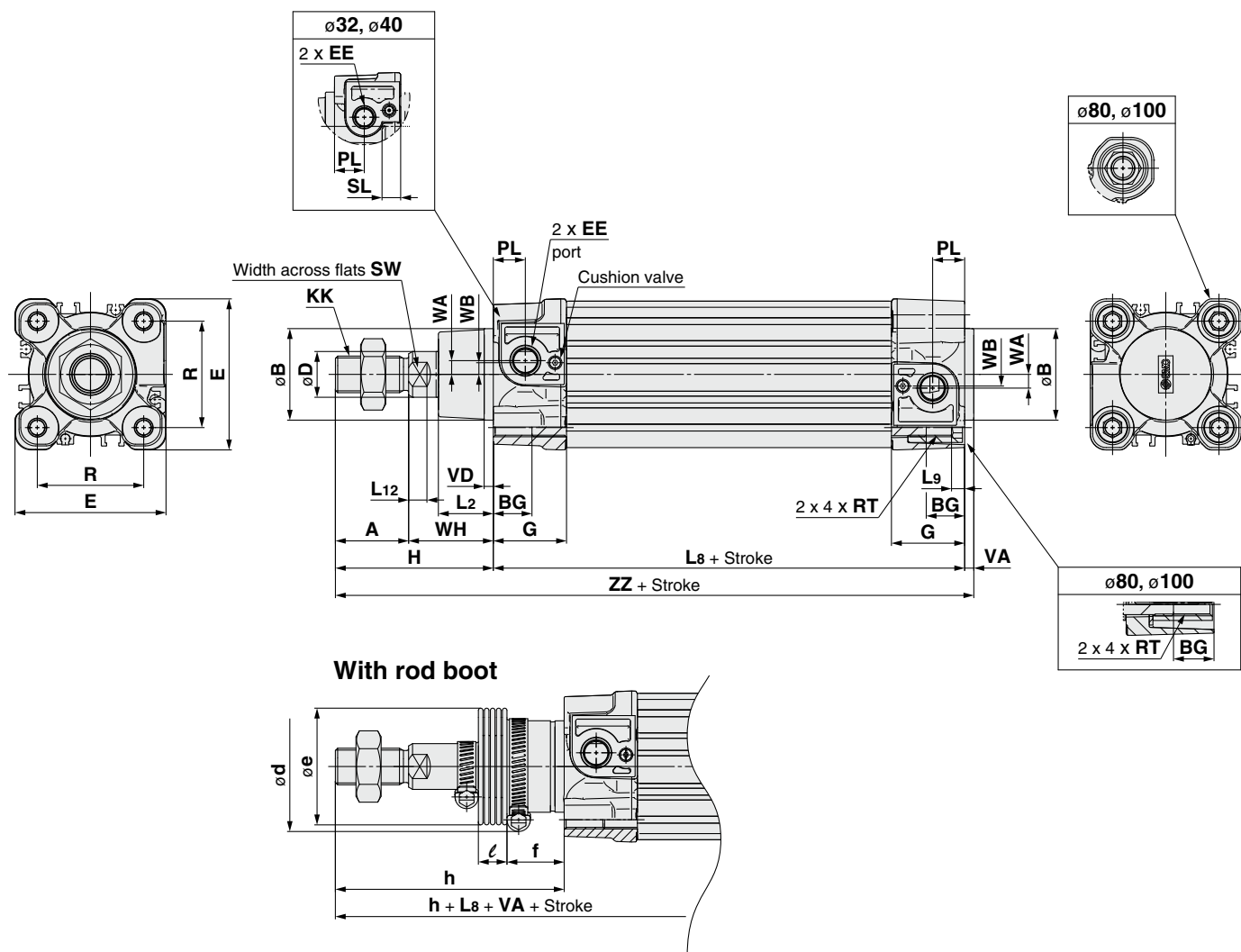
\* The D-Y59A, Y69A, Y7P, Y7□W, Z7□, Z80 cannot be mounted on the CP96 series.

Moreover, the D-M9□□ and A9□ auto switches cannot be mounted on square groove of the CP96 series.

# CP96 Series

## Dimensions

Basic: CP96S (D) B Bore size - Stroke C (J)



Bore size [mm]	Stroke range [mm]		A	øB d11	BG	øD	E	EE	G	H	KK	L2	L8	L9	L12	PL	R	RT	SL	SW	VA	VD	WA	WB	WH	ZZ
	Without rod boot	With rod boot																								
32	Up to 2000	Up to 1000	22	30	16	12	47	G 1/8	28.9	48	M10 x 1.25	15	94	4	6	13	32.5	M6 x 1	8	10	4	4	4	7	26	146
40	Up to 2000	Up to 1000	24	35	16	16	54	G 1/4	32.6	54	M12 x 1.25	17	105	4	6.5	14	38	M6 x 1	8	13	4	4	5	8.9	30	163
50	Up to 2000	Up to 1000	32	40	16	20	66	G 1/4	32	69	M16 x 1.5	24	106	5	8	14	46.5	M8 x 1.25	—	17	4	4	6	5.1	37	179
63	Up to 2000	Up to 1000	32	45	16	20	77	G 3/8	38.6	69	M16 x 1.5	24	121	5	8	16	56.5	M8 x 1.25	—	17	4	4	9	6.3	37	194
80	Up to 2000	Up to 1000	40	45	17	25	99	G 3/8	38.4	86	M20 x 1.5	30	128	—	10	16	72	M10 x 1.5	—	22	4	4	11.5	6	46	218
100	Up to 2000	Up to 1000	40	55	17	25	118	G 1/2	42.9	91	M20 x 1.5	32	138	—	10	18	89	M10 x 1.5	—	22	4	4	17	10	51	233

Bore size [mm]	H	ød	øe	f	ℓ										h													
					1 to 50	51 to 100	101 to 150	151 to 200	201 to 300	301 to 400	401 to 500	501 to 600	601 to 700	701 to 800	801 to 900	901 to 1000	1 to 50	51 to 100	101 to 150	151 to 200	201 to 300	301 to 400	401 to 500	501 to 600	601 to 700	701 to 800	801 to 900	901 to 1000
32	48	54	36	23	12.5	25	37.5	50	75	100	125	150	175	200	225	250	75	88	100	113	138	163	188	213	238	263	288	313
40	54	54	36	23	12.5	25	37.5	50	75	100	125	150	175	200	225	250	75	88	100	113	138	163	188	213	238	263	288	313
50	69	64	51	25	12.5	25	37.5	50	75	100	125	150	175	200	225	250	87	100	112	125	150	175	200	225	250	275	300	325
63	69	64	51	25	12.5	25	37.5	50	75	100	125	150	175	200	225	250	87	100	112	125	150	175	200	225	250	275	300	325
80	86	68	56	30	12.5	25	37.5	50	75	100	125	150	175	200	225	250	103	116	128	141	166	191	216	241	266	291	316	341
100	91	76	56	32	12.5	25	37.5	50	75	100	125	150	175	200	225	250	103	116	128	141	166	191	216	241	266	291	316	341