

ISO/VDMA Cylinder: Large Bore Size Type Double Acting, Single Rod

Series C95

ø160, ø200, ø250, ø320

How to Order

Without auto switch

C95S **B** **160** **100**

With auto switch

C95SD **B** **160** **100** **A53** **S**

Built-in magnet

Mounting style

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

Bore size

160	160 mm
200	200 mm
250	250 mm
320	320 mm

Stroke (mm)
Refer to "Standard Stroke" on page 6-12-35.

Number of auto switches

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

Auto switch

Nil Without auto switch

* For the applicable auto switch model, refer to the table below.

Applicable Auto Switches/Refer to the **Web Catalog** 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	Tie-rod mounting	Band mounting	0.5 (Nil)	1 (M)	3 (L)	5 (Z)				
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9N	—	●	●	●	○	○	IC circuit	Relay, PLC	
				3-wire (PNP)				M9P	—	●	●	●	○	○			
				2-wire		12 V		M9B	—	●	●	●	○	○			
	Terminal conduit	3-wire (NPN)			5 V, 12 V	—		G39	—	—	—	—	—	IC circuit			
		2-wire			12 V	—		K39	—	—	—	—	—				
		3-wire (NPN)			24 V	5 V, 12 V		M9NW	—	●	●	●	○	○	IC circuit		
	3-wire (PNP)	5 V, 12 V		M9PW		—		●	●	●	○	○					
	2-wire	12 V		M9BW		—		●	●	●	○	○	—				
	Diagnostic indication (2-color indicator)	Grommet		3-wire (NPN)	24 V	5 V, 12 V		M9NA*1	—	○	○	●	○	○	IC circuit		
				3-wire (PNP)		5 V, 12 V		M9PA*1	—	○	○	●	○	○			
2-wire				12 V		M9BA*1		—	○	○	●	○	○	—			
Water resistant (2-color indicator)				4-wire (NPN)	5 V, 12 V	F59F		—	●	—	●	○	○	IC circuit			
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	—	5 V	—	A96	—	●	—	●	—	—	IC circuit	Relay, PLC	
				2-wire	24 V	12 V	100 V	A93	—	●	●	●	—	—			
						5 V, 12 V	100 V or less	A90	—	●	—	●	—	—			
						12 V	100 V, 200 V	A54	—	●	—	●	—	—			
							200 V or less	A64	—	●	—	●	—	—			
		Terminal conduit		Yes	2-wire	24 V	—	—	A33	—	—	—	—	—	—		PLC
							—	—	A34	—	—	—	—	—	Relay, PLC		
							100 V, 200 V	—	A44	—	—	—	—	—			
							DIN terminal			—	—	A59W	—	●	—		●
	Diagnostic indication (2-color indicator)	Grommet				—	—	—	—	—	—	—	—				

*1 Water-resistant type auto switches can be mounted on the above models, but SMC cannot guarantee water resistance. Please contact SMC regarding water-resistant types with the above model numbers.

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

* Solid state auto switches marked with a "O" are produced upon receipt of order.

* Since there are applicable auto switches other than those listed above, refer to page 6-12-41-2 for details.

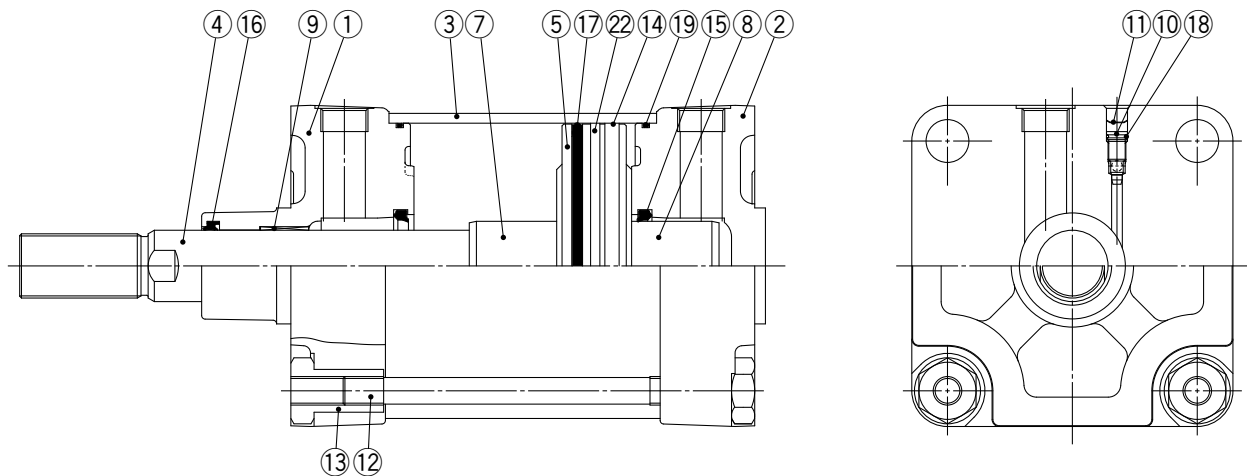
* Auto switches other than the D-G39/K39/A3/A44 are shipped with the cylinder, but are not mounted to the cylinder. (Only the auto switch mounting brackets are assembled before shipment.)

* D-G39/K39/A3/A44 auto switches (band mounting type) can only be mounted on ø160 and ø200.

Series C95

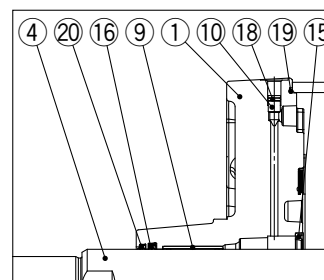
Construction

[First angle projection]

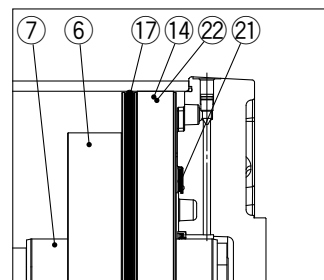


Component Parts

No.	Description	Material	Qty.	Note
1	Rod cover	Aluminum casting	1	
2	Head cover	Aluminum casting	1	
3	Cylinder tube	Aluminum alloy	1	
4	Piston rod	Carbon steel	1	
5	Piston	Aluminum alloy	1	
6	Piston spacer	Aluminum alloy	1	ø320
7	Cushion ring A	Rolled steel	1	
8	Cushion ring B	Rolled steel	1	
9	Bushing	Bearing alloy	1	
10	Cushion valve	Steel wire	2	
11	Snap ring	Steel for spring	2	ø160 to ø250
12	Tie rod	Carbon steel	4	
13	Tie rod nut	Carbon steel	8	
14	Wear ring	Resin	1	
15	Cushion seal	Urethane	2	ø160 to ø250
		NBR	2	ø320
16	Rod seal	NBR	1	
17	Piston seal	NBR	1	
18	Cushion valve seal	NBR	2	
19	Cylinder tube gasket	NBR	2	
20	Scraper	NBR	1	ø320
21	Bumper	Urethane	2	ø320
22	Magnet		(1)	



In case of ø320



In case of ø320

Replacement Parts: Seal Kit

Bore size (mm)	Kit no.	Contents
160	CS95-160	Set of the nos. 14,
200	CS95-200	15, 16, 17, 19
250	CS95-250	In case of ø320,
320	CS95-320	also add 20

* Seal kits consist of items 14 to 20 contained in one kit, and can be ordered using the order number for each respective tube bore size.