

ISO/VDMA Cylinder: Non-rotating Rod Type Double Acting, Single/Double Rod

Series C95K

ø32, ø40, ø50, ø63, ø80, ø100

How to Order

Without auto switch

C95K

B **32** **100** **W**

With auto switch

C95KD

B **32** **100** **W** **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

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

Rod

Nil	Single rod
W	Double rod

Auto switch

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

Number of auto switches

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

Stroke (mm)

Refer to "Standard Stroke" on page 6-12-14.

Applicable Auto Switch/Tie-rod Mounting

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model		Lead wire length (m)			Applicable load		
					DC	AC	Tie-rod mounting	Band mounting	0.5 (Nil)	3 (L)	5 (Z)			
Reed switch	—	Grommet	Yes	3-wire (Equiv. to NPN)	—	5 V	—	A56	—	●	●	—	IC	—
				2-wire	24 V	12 V	—	A53	—	●	●	●	—	Relay, PLC
			5 V, 12 V			—	A67	—	●	●	—	IC		
			12 V			200 V or less	A64	—	●	●	—	—		
	Diagnostic indication (2-color)		Yes	3-wire	—	5 V	—	Z76	—	●	●	—	IC	—
				2-wire	24 V	12 V	AC 100	Z73	—	●	●	●	—	Relay, PLC
		5 V, 12 V	100 V or less			Z80	—	●	●	—	IC	—		
		Terminal conduit	Yes			2-wire	24 V	12 V	—	—	A33	—	—	—
				100 V, 200 V	—			A34	—	—	—	—	Relay, PLC	
		DIN terminal												
Solid state switch	—	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	F59	—	●	●	○	IC	Relay, PLC
				3-wire (PNP)		—	100 V, 200 V	F5P	—	●	●	○	—	
				2-wire	—	12 V	—	J51	—	●	●	○	—	
				3-wire (NPN)		5 V, 12 V	—	J59	—	●	●	○	—	
	Diagnostic indication (2-color)			3-wire (PNP)	—	12 V	—	F59W	—	●	●	○	IC	
				3-wire (PNP)	—	5 V, 12 V	—	F5PW	—	●	●	○	—	
	Water resistant (2-color)			2-wire	—	12 V	—	J59W	—	●	●	○	—	
				3-wire (NPN)	—	5 V, 12 V	—	F5BAL	—	—	●	○	—	
	With timer			4-wire (NPN)	—	5 V, 12 V	—	F5NTL	—	—	●	○	IC	
				2-wire	—	—	—	P5DW	—	—	●	●	—	
	Diagnostic output (2-color)			3-wire (NPN)	24 V	5 V, 12 V	—	Y59A	—	●	●	○	IC	
				2-wire	—	—	—	Y59B	—	●	●	○	—	
	Strong magnetic field resistant (2 color)			3-wire (PNP)	—	5 V, 12 V	—	Y7P	—	●	●	○	IC	
				3-wire (NPN)		5 V, 12 V	—	Y7NW	—	●	●	○		
	—			3-wire (PNP)		—	—	—	Y7PW	—	●	●		○
				2-wire	—	—	—	Y7BW	—	●	●	○	—	
	Diagnostic indication (2-color)	Grommet	Yes	2-wire	24 V	5 V, 12 V	—	Y7BAL	—	—	●	○	—	
						—	—	—	—	—	—	—	—	
						5 V, 12 V	—	—	—	—	—	—	—	
						—	—	—	—	—	—	—	—	
Water resistant (2-color)	Terminal conduit	No	3-wire (NPN)	24 V	5 V, 12 V	—	—	G39	—	—	—	IC		
					12 V	—	—	K39	—	—	—	—		

* Lead wire length symbols: 0.5 m Nil (Example) A53
3 m L (Example) A53L
5 m Z (Example) A53Z

○: Manufactured upon receipt of order.

Refer to page 6-16-1 for details of applicable auto switches in addition to those listed above.

Auto Switch Mounting Bracket Part No.

Bore size (mm)	32	40	50	63	80	100
D-A3/A4/K3/G3	BMB2-032	BMB2-040	BMB1-050	BMB1-063	BMB1-080	BMB1-100
D-A5/A6/F5/J5	BT-03		BT-05		BT-06	
D-Z□/Y□	BMB4-032		BMB4-050		BMB4-063	
D-P5DWL	BMB3T-040		BMB3T-050		BMB3T-080	

Series C95K

Standard Stroke

Bore size (mm)	Standard stroke (mm)
32	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500
40	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500
50	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600
63	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600
80	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600, 700, 800
100	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600, 700, 800

Intermediate strokes are available.

Minimum Stroke for Auto Switch Mounting

Refer to page 6-12-16 on "Minimum Strokes for Auto Switch Mounting".

Theoretical Output

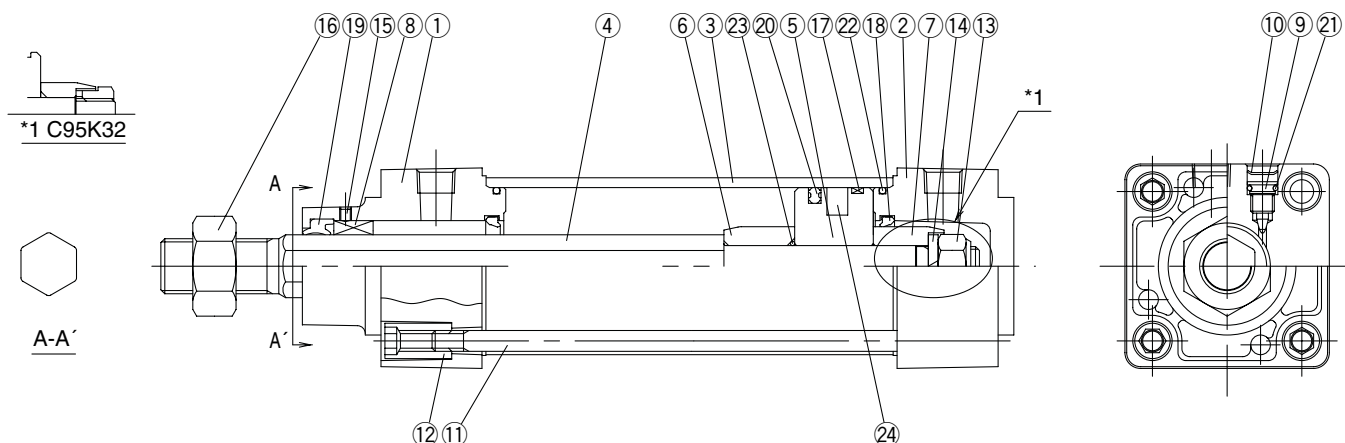
OUT side is identical to double acting single rod. Refer to table below for IN side.

Bore size (mm)	Piston area (mm ²)	Bore size (mm)	Piston area (mm ²)
32	675	63	2804
40	1082	80	4568
50	1651	100	7223

Theoretical output (N) = Pressure (MPa) x Piston area (mm²)

Construction

[First angle projection]



Component Parts

No.	Description	Material
①	Rod cover	Aluminum die-casted
②	Head cover	Aluminum die-casted
③	Cylinder tube	Aluminum alloy
④	Piston rod	Stainless steel
⑤	Piston	Aluminum alloy
⑥	Cushion ring A	Rolled steel
⑦	Cushion ring B	Rolled steel
⑧	Bushing	Oil impregnated sintered alloy
⑨	Cushion valve	Steel
⑩	Snap ring	Steel for spring
⑪	Tie-rod	Carbon Steel
⑫	Tie-rod nut	Steel
⑬	Piston nut	Steel

No.	Description	Material
⑭	Spring washer	Steel wire
⑮	Set screw	Chrome-molybdenum steel
⑯	Rod end nut	Steel
⑰	Wear ring	Resin
⑱	Cushion seal	Urethan rubber
⑲	Rod seal	NBR
⑳	Piston seal	NBR
㉑	Cushion valve seal	NBR
㉒	Cylinder tube gasket	NBR
㉓	Piston gasket	NBR
㉔	Magnet	

Replacement Parts: Seal Kit

Bore size (mm)	Kit no.	Contents
32	CK95-32	Kits include items ⑰ to ㉔ and ㉔.
40	CK95-40	
50	CK95-50	
63	CK95-63	
80	CK95-80	
100	CK95-100	

* Seal kits consist of items ⑰ to ㉔ and ㉔ contained in one kit, and can be ordered using the order number for each respective tube bore size.

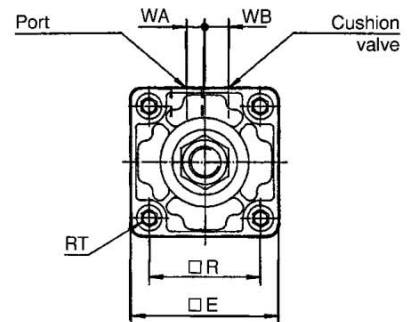
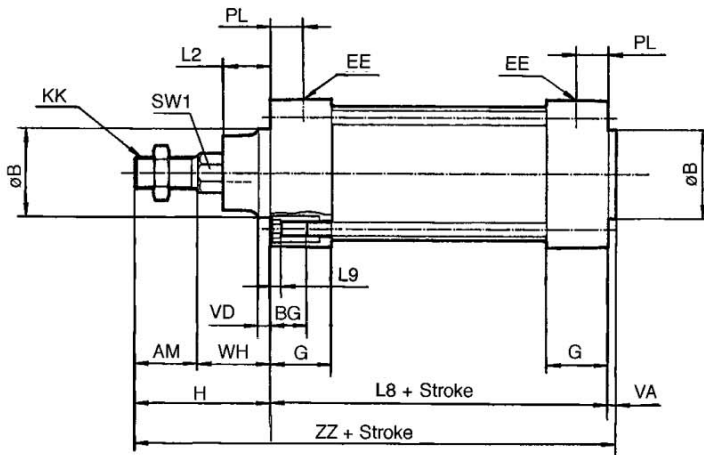
ISO/VDMA Cylinder: Non-rotating Rod Type

Double Acting, Single/Double Rod Series C95K

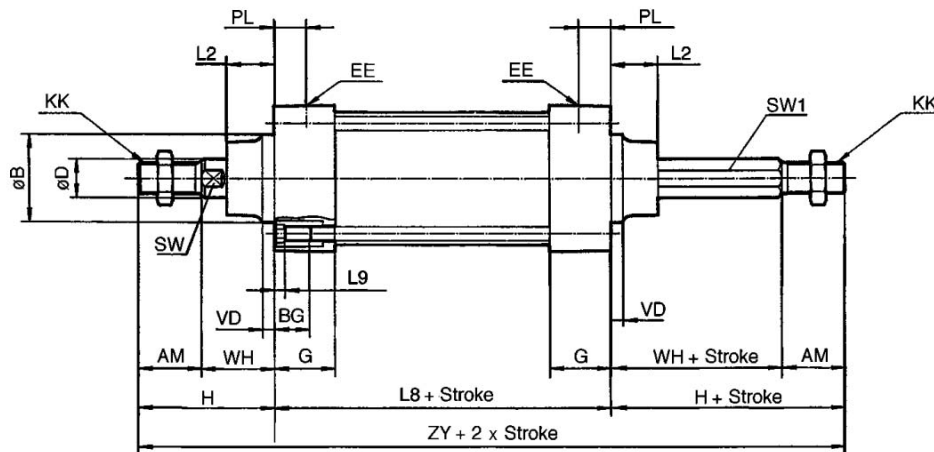
Dimensions: Without Mounting Bracket

[First angle projection]

C95KB Bore size Stroke



C95KB Bore size Stroke W



Bore size (mm)	AM	øB e11	øD	EE	PL	RT	KK	SW1	SW	G	BG	L8	VD	VA	WA	WB	WH	ZZ	ZY	□E	□R	L2	L9
32	22	30	12	G 1/8	13	M6 x 1.0	M10 x 1.25	12.2	10	27	16	94	4	4	4	6.5	26	146	190	46	32.5	15	4
40	24	35	16	G 1/4	14	M6 x 1.0	M12 x 1.25	14.2	13	27	16	105	4	4	4	9	30	163	213	52	38	17	4
50	32	40	20	G 1/4	15.5	M8 x 1.25	M16 x 1.5	19	16	31.5	16	106	6	4	5	10.5	37	179	244	65	46.5	24	5
63	32	45	20	G 3/8	16.5	M8 x 1.25	M16 x 1.5	19	16	31.5	16	121	6	4	9	12	37	194	259	75	56.5	24	5
80	40	45	25	G 3/8	19	M10 x 1.5	M20 x 1.5	23	21	38	16	128	8	4	11.5	14	46	218	300	95	72	30	5
100	40	55	30	G 1/2	19	M10 x 1.5	M20 x 1.5	27	21	38	16	138	8	4	17	15	51	233	320	114	89	32	5

* Refer to pages 6-12-8 to 6-12-11 for dimensions with mounting bracket and accessories.