

ISO Cylinder/Standard: Double Acting with Lock

Series C95N

ø32, ø40, ø50, ø63, ø80, ø100

How to Order

Standard C95ND B 32 100 W A53 S

Built-in magnet

Mounting

B	Basic/without bracket
L	Axial foot
G	Rear flange
C	Single rear clevis
D	Double rear clevis
T	Trunion

Bore size

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

Auto switch

—	Without auto switch
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Refer to table below for selection of applicable auto switch.

Number of auto switches

—	2
S	1
3	3
n	n

Rod specifications

—	Hard chrome as standard
W	Double/through rod

Stroke (mm)

Refer to standard stroke table on p.6-23.

Applicable Auto Switches/Tie rod mounting

Style	Special function	Electrical entry	Indicator	Load voltage			Auto switch model	Lead wire (m)			Applicable load		Mounting bracket	
				Wiring (Output)	DC	AC		0.5 (—)	3 (L)	5 (Z)				
Reed switch	—	Grommet	Yes	3 wire (Equiv. to NPN)	—	5V	—	A56	●	●	—	IC	—	ø32,ø40 BT-03
				2 wire	24V	12V	—	A53	●	●	●	—		
			5V,12V			100V,200V	A54	●	●	●				
			5V,12V			—	A67	●	●	—				
	No	12V	200V or less	A64	●	●	—	IC						
Diagnosis indication (2 colour)	Yes	—	—	A59W	●	●	—	—						
Solid state switch	—	Grommet	Yes	3 wire (NPN)	24V	5V,12V	—	F59	●	●	○	IC	—	ø50,ø63 BT-05
				3 wire (PNP)				F5P	●	●	○			
	2 wire			—	100V,200V	J51	●	●	○	—				
						J59	●	●	○					
	3 wire (NPN)			5V,12V	—	F59W	●	●	○	IC	Relay PLC			
						F5PW	●	●	○					
	3 wire (PNP)			2 wire	24V	12V	J59W	●	●	○		—		
	F5BA			—	●	○								
	With timer			3 wire (NPN)	5V,12V	—	F5NT	—	●	○		IC		
							F59F	●	●	○				
	Diagnosis output (2 colour)			4 wire (NPN)	—	—	F5LF	●	●	○	—			
	Latch diagnosis output (2 colour)													

Cylinder

Series C95N

with lock

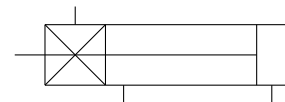
Cylinder Specifications

Bore Size [mm]	32, 40, 50, 63, 80, 100
Fluid	Air
Proof Pressure	1.5MPa
Max. operating pressure	1.0MPa
Min. operating pressure	0.08MPa
Piston speed	50 to 1000mm/s (note)
Ambient and fluid temperature	Without autoswitch : -10°C to 70°C (without freezing) With autoswitch : -10°C to 70°C (without freezing)
Cushion	Double air side cushion
Stroke length tolerance	to 250: $^{+1.0}_0$, 251 to 1000: $^{+1.4}_0$
Bracket type	Basic type, Axial foot type, Front flange type, Rear flange type, Single clevis type, Double clevis type

Note) Load limits exist depending upon piston speed when locked, mounting direction and operating pressure.



Cylinder with lock



Lock Specifications

Lock actuation	Spring lock (exhaust lock)
Unlocking pressure	0.25MPa
Locking pressure	0.20MPa
Max. operating pressure	1.0MPa
Locking direction	2 Two-way

Standard Stroke

Bore Size [mm]	Standard Stroke [mm]	Max. Stroke*
32	25,50,75,100,125,150,175,200,250,300,350,400,450,500	700
40	25,50,75,100,125,150,175,200,250,300,350,400,450,500	800
50	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600	1000
63	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600	
80	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600,700,800	
100	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600,700,800	

Intermediate strokes are available.

* Please consult with SMC for longer strokes.

Stopping Accuracy

[mm]

Locking system	Piston speed [mm/s]			
	100	300	500	1000
Spring lock	0.3	0.6	1.0	2.0

Conditions/Horizontal supply pressure P=0.5MPa

Load weight Upper limit of allowable value

Solenoid valve for locking mounted on the locking pdr

Maximum value of stopping position dispersion from 100 measurements

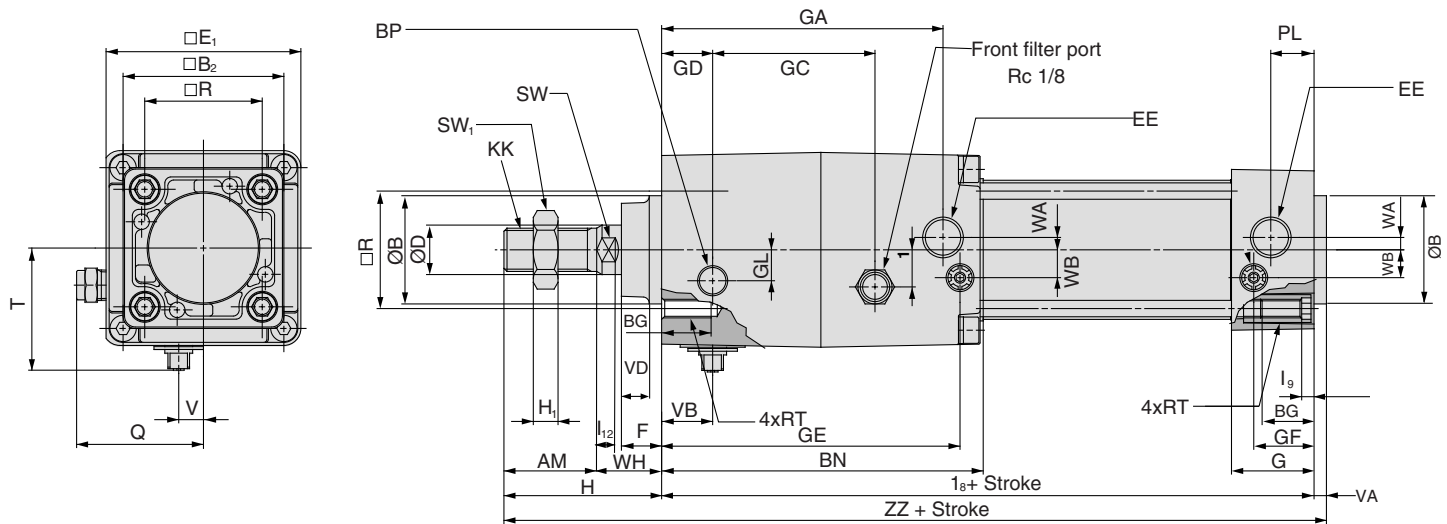
Spring Lock Holding Power (Maximum static Load)

Bore size [mm]	32	40	50	63	80	100
Holding power [N]	552	882	1370	2160	3430	5390

Series C95N

Dimensions

Basic type (B)



Bore size (mm)	AM	ØBe 11	□B ₂	BG	BN	BP	ØD	EE	□E	□E ₁	F	G	GA	GC	GD	GE	GF	GL	GL ₁	H	H ₁
32	22	30	46	16	97	G1/8	12	G1/8	46	54	13	27	83	45.5	13	88.5	18.3	7.5	12	48	6
40	24	35	52	16	104	G1/8	16	G1/4	52	63	13	27	91	52.5	16.5	96.5	19.5	10	12	54	8
50	32	40	65	16	120.5	G1/4	20	G1/4	65	75	14	31.5	104.5	58.5	19	111.2	22.4	11.5	15	69	11
63	32	45	75	16	134.5	G1/4	20	G3/8	75	90	14	31.5	119.5	68	23	123.5	20.7	17.5	12	69	11
80	40	45	95	16	169	G1/4	25	G3/8	95	102	20	38	150	81	33	157	26	22	18	86	13
100	40	55	114	16	189	G1/4	30	G1/2	114	116	20	38	170	96	37.5	177	26	25	20	91	16

Bore size (mm)	KK	I ₈	I ₉	I ₁₂	PL	Q	□R	RT	SW	SW ₁	T	V	VA	VB	VD	WA	WB	WH	ZZ
32	M10 x 1.25	164	4	6	13	37	32.5	M6	10	17	34	6.5	4	13	4	4	6.5	26	216
40	M12 x 1.25	182	4	6.5	14	41.5	38	M6	13	19	39.5	8	4	16.5	4	4	9	30	240
50	M16 x 1.5	195	5	8	15.5	47.5	46.5	M8	16	24	47	9	4	20	6	5	10.5	37	268
63	M16 x 1.5	224	5	8	16.5	55	56.5	M8	16	24	55.5	8.5	4	23	6	9	12	37	297
80	M20 x 1.5	259	5	10	19	61	72	M10	21	30	61.5	10.5	4	33	8	11.5	14	46	349
100	M20 x 1.5	289	5	10	19	68	89	M10	21	30	69.5	10.5	4	37.5	8	17	15	51	384