Stopper Cylinder / Fixed Mounting Height

Series RSQ

ø12, ø16, ø20, ø32, ø40, ø50

How to Order

Standard RSQ B 20 ☐ – 15 D ☐ – ☐

With auto switch RSDQ B 20 ☐ – 15 D ☐ – M9BW ☐ – ☐

With auto switch
(Built-in magnet)

Mounting bracket

B	Through-hole (Standard)
A	Both ends tapped style

Note 1) Since ø12 uses a common tube for both A and B, only B is used for part no. denotation.

Bore size

12	12 mm
16	16 mm
20	20 mm
32	32 mm
40	40 mm
50	50 mm

Port thread type

Nil	M thread	ø12, ø16
	Rc	ø20 to ø50
TN	NPT	
TF	G	
F	Built-in One-touch fittings (2)	

Note 2) Bore sizes available w/ One-touch fittings are ø20 to ø50.
Note 3) TF for ø20 indicates M5.

Cylinder stroke (mm)

12	10
16	10, 15
20	10, 15, 20
32	10, 15, 20
40	20, 25, 30
50	20, 25, 30

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.

Rod end configuration

Symbol	Configuration	Application
Nil	Rounde bar type	—
K	Chamfered type	—
R	Roller type	—
L	Lever type (Non-adjustable) (4)	Basic style
B	Lever type (4) (Energy absorbing / Adjustable deformation)	—
C		With cancel cap
D		With lock menchanism
E		With lock & cancel

Note 4) The lever types are applicable only to bore sizes ø32, ø40 and ø50.

Action

D	Double acting
B	Double acting with spring loaded
T	Single acting (Spring extend)

Made to Order Specifications
For details, refer to page 1374.

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) RSDQB32-15D

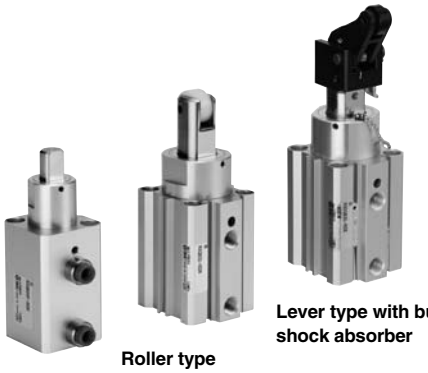
Applicable Auto Switch
/Refer to pages 1719 to 1827 for further information on auto switches.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage DC	Load voltage AC	Auto switch model: Perpendicular ø12	Perpendicular ø16, ø20, ø32 to ø50	In-line ø12	In-line ø16, ø20, ø32 to ø50	Lead wire length (m): 0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)	Pre-wired connector	Applicable load	
Solid state switch	——	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	M9NV		M9N		●	●	●	○	—	○	IC circuit	Relay, PLC
				3-wire (PNP)			M9PV		M9P		●	●	●	○	—	○		
				2-wire		12 V	M9BV		M9B		●	●	●	○	—	○	—	
		Connector					—	J79C	—		●	—	●	●	●	—		
	Diagnostic indication (2-color indication)	Grommet		3-wire (NPN)		5 V, 12 V	M9NWV		M9NW		●	●	●	○	—	○	IC circuit	
				3-wire (PNP)			M9PWV		M9PW		●	●	●	○	—	○		
				2-wire		12 V	M9BWV		M9BW		●	●	●	○	—	○	—	
	Water resistant (2-color indication)			3-wire (NPN)		5 V, 12 V	M9NAV		M9NA		○	○	●	○	—	○	IC circuit	
				3-wire (PNP)			M9PAV		M9PA		○	○	●	○	—	○		
				2-wire		12 V	M9BAV		M9BA		○	○	●	○	—	○	—	
	With diagnostic output (2-color indication)			4-wire		5 V,12 V	—		—	F79F	●	—	●	○	—	○	IC circuit	
Reed switch	——	Grommet	Yes	3-wire (NPN equivalent)	—	5V	A96V		A96		●	—	●	—	—	—	IC circuit	—
				2-wire		—	—	200 V	—	A72	—	A72H	●	—	●	—	—	—	—	Relay, PLC
			No		24 V	12 V	100 V	A93V		A93		●	—	●	—	—	—	
						5 V,12 V	100 V or less	A90V		A90		●	—	●	—	—	—	IC circuit
		Connector	Yes			12 V	—	—	A73C	—		●	—	●	●	●	—	—
			No			5 V,12 V	24 V or less	—	A80C	—		●	—	●	●	●	—	IC circuit
	Diagnostic indication (2-color indication)	Grommet	Yes			—	—	—	A79W	—		●	—	●	—	—	—	—

∗ 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
None ····· N (Example) J79CN

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

∗ Since there are other applicable auto switches than listed, refer to page 1386 for details.
∗ For details about auto switches with pre-wired connector, refer to pages 1784 and 1785.
∗ When D-A9□(V)/M9□(V)/M9□W(V)/M9□A(V)L types with ø32 to ø50 are mounted on a side other than the port side, order auto switch mounting brackets separately. Refer to page 1386 for details.



Roller type

Lever type with built-in shock absorber

Round bar

Model

Bore size (mm)		12	16	20	32	40	50
Mounting	Through-hole	● Note1)	●	●	●	●	●
	Both ends tapped style		●	●	●	●	●
Built-in magnet		●	●	●	●	●	●
Piping	Screw-in type	M5 x 0.8		1/8 Note2)			
	Built-in One-touch fittings	—		ø6/4			ø8/6
Action		Double acting, Single acting (Spring extend), Double acting with spring loaded					
Rod end configuration	Round bar	●		●			
	Chamfered	●		●			
	Roller type	●		●			
	Lever type	—		●			

Note 1) ø12 tubes can have both through-hole and tap mountings in the same tube.
Note 2) TF (G thread) for ø20 indicates M5 x 0.8.

Specifications

Action	Double acting, Double acting with spring loaded, Single acting (Spring extend)
Fluid	Air
Proof pressure	1.5 MPa
Maximum operating pressure	1.0 MPa
Ambient and fluid temperature	Without auto switch: –10 to 70°C With auto switch: –10 to 60°C
Lubrication	Not required (Non-lube)
Cushion	Rubber bumper
Stroke length tolerance	$^{+1.4}_{0}$
Mounting	Through-hole/Both ends tapped
Auto switch	Mountable

∗ No freezing (for cylinders with or without an auto switch)

Made to Order

Made to Order Specifications

(For details, refer to pages 1836 and 1872.)

Symbol	Specifications
–XA□	Change of rod end shape
–XC3	Special port location

Bore Size/Standard Stroke

(mm)

Bore size (mm)	Rod end configuration		
	Round bar, Chamfered type	Roller type	Lever type with shock absorber
12	10	10	—
16	10, 15	10, 15	—
20	10, 15, 20	10, 15, 20	—
32			10, 15, 20
40	20, 25, 30	20, 25, 30	20, 25, 30
50			

Spring Force (Single acting)

(N)

Bore size (mm)	Extended	Compressed
12	3.9	9.6
16	4.9	14.9
20	3.4	14.9
32	8.8	18.6
40, 50	13.7	27.5

∗ Applicable only to round bar type, chamfered type and roller type end configurations.

Mass

(kg)

Action	Bore size (mm)	Rod end configuration	Cylinder stroke (mm)				
			10	**15**	**20**	**25**	**30**
Double acting Single acting, Spring extend Double acting with spring loaded	**12**	Round bar, Chamfered, Roller	0.07	—	—	—	—
	16	Round bar, Chamfered, Roller	0.14	0.15	—	—	—
	20	Round bar, Chamfered, Roller	0.23	0.24	0.25	—	—
	32	Round bar, Chamfered, Roller	0.42	0.44	0.46	—	—
		Lever with built-in shock absorber	0.51	0.53	0.55	—	—
	40	Round bar, Chamfered, Roller	—	—	0.74	0.80	0.86
		Lever with built-in shock absorber	—	—	0.97	1.01	1.05
	50	Round bar, Chamfered, Roller	—	—	1.03	1.07	1.11
		Lever with built-in shock absorber	—	—	1.26	1.30	1.34