

Shock Absorber Series RB

Impact and noise absorption

Dampening to meet the high speed requirements of the modern world.

Shock Absorber: Series RB
Coolant Resistant: Series RBL

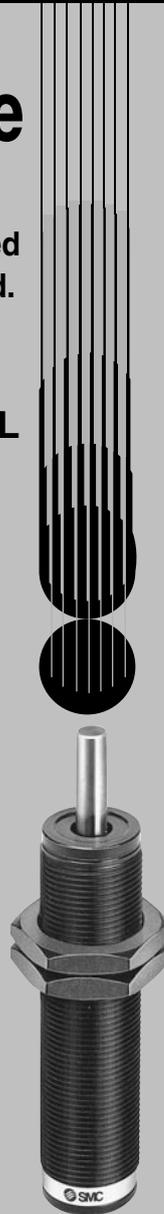
Usable without a stopper nut
The strong body can be positioned directly.

Short Style
Shock Absorber: Series RBQ

A compact style that has been shortened lengthwise

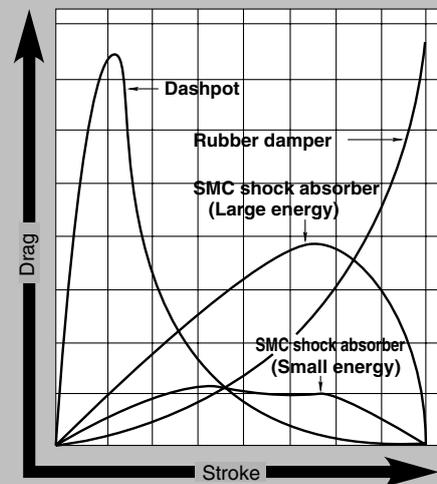
Allowable eccentric angle 5°
Suitable for absorption of rotation energy.

Usable without a stopper nut
The strong body can be positioned directly.



Automatic adjustment to the most appropriate absorption performance

Specially designed orifice can absorb energy comprehensively and most appropriately in many different applications. This ranges from high speed low loads, to low speed high loads; without requiring additional adjustment of the shock absorber.



Variations

Series	Basic	With cap or bumper (Option)	Lock nut*	Stopper nut (Option)	Foot bracket	Page
Series RB 	Series RB	●	●	●	●	5.1-2
	Coolant resistant Series RBL (Except 08 type)	●	●	●	●	5.1-7
Series RBQ 	Series RBQ	●	●	●		5.1-10

*2 lock nuts are attached for series RB and standard models RBQ.

Shock Absorber Series *RB*

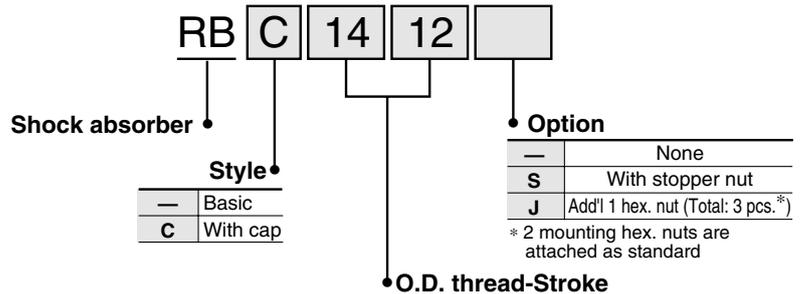


Specifications

Model	Basic	RB0805	RB0806	RB1006	RB1007	RB1411	RB1412	RB2015	RB2725	
	With cap	RBC0805	RBC0806	RBC1006	RBC1007	RBC1411	RBC1412	RBC2015	RBC2725	
Max. energy absorption (J)		0.98	2.94	3.92	5.88	14.7	19.6	58.8	147	
Stroke absorption (mm)		5	6	6	7	11	12	15	25	
Impact speed (m/s)	0.05 to 5									
Max. operation* (cycle/min)		80	80	70	70	45	45	25	10	
Max. allowable thrust energy (N)		245	245	422	422	814	814	1961	2942	
Allowable temp. range (°C)	-10 to 80 (No freezing)									
Spring force (N)	Extended	1.96	1.96	4.22	4.22	6.86	6.86	8.34	8.83	
	Compressed	3.83	4.22	6.18	6.86	15.30	15.98	20.50	20.01	
Weight (g)		15	15	25	25	65	65	150	360	
Option	Stopper nut	Basic	RB08S		RB10S		RB14S		RB20S	RB27S
		With cap	RBC08S		RBC10S		RBC14S		RBC20S	RBC27S

* At max. energy absorption per cycle. Max. operation cycle/min can increase in proportion to energy absorption.

How to Order



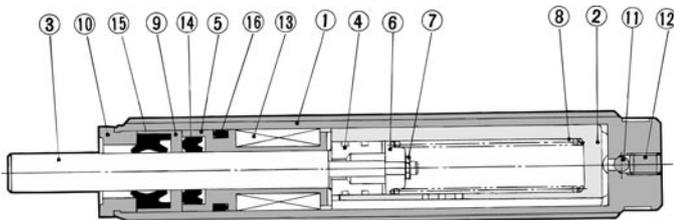
Replacement Part No./Cap (Resin part only) **RBC 08 C**

Applicable model	
08	RBC0805, 0806
10	RBC1006, 1007
14	RBC1411, 1412
20	RBC2015
27	RBC2725

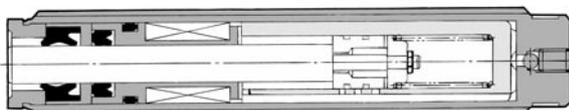
Cap

Construction

Extended



Compressed



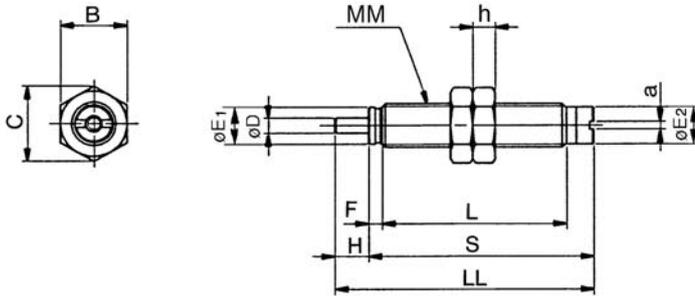
Component Parts

No.	Description	Material	Note
①	Outer tube	Rolled steel	Gray coated
②	Inner tube	Special steel	Heat treatment
③	Piston rod	Special steel	Hard chrome plated
④	Piston	Special steel	Heat treatment
⑤	Bearing	Special bearing material	
⑥	Spring guide	Rolled steel	Zinc chromated
⑦	Pushing nut	Steel for spring	
⑧	Return spring	Piano wire	Zinc chromated
⑨	Seal holder	Copper alloy	
⑩	Stopper	Carbon steel	Zinc chromated
⑪	Steal ball	Bearing steel	
⑫	Set screw	Special steel	
⑬	Accumulator	NBR	Foam rubber
⑭	Rod seal	NBR	
⑮	Scraper	NBR	
⑯	Gasket	NBR	

Series RB

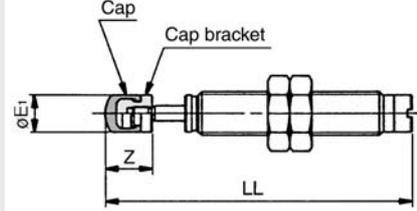
Dimensions

Basic/RB0805, RB0806, RB1006, RB1007



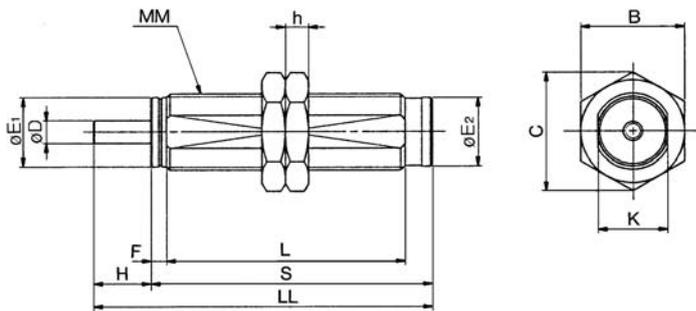
With cap/RBC0805, RBC0806 RBC1006, RBC1007

* Other dimensions are the same as the basic style.



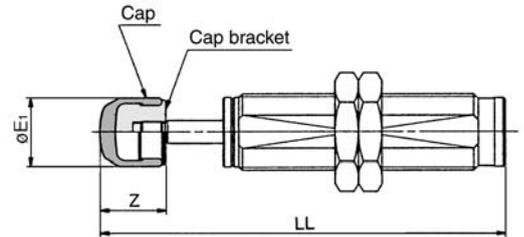
Model		Basic									With cap*			Hexagon nut			
Basic	With cap	D	E1	E2	F	H	a	L	LL	MM	S	E1	LL	Z	B	C	h
RB0805	RBC0805	2.8	6.8	6.8	2.4	5	1.4	33.4	45.8	M8 X 1.0	40.8	6.8	54.3	8.5	12	13.9	4
RB0806	RBC0806	2.8	6.8	6.8	2.4	6	1.4	33.4	46.8	M8 X 1.0	40.8	6.8	55.3	8.5	12	13.9	4
RB1006	RBC1006	3	8.8	8.6	2.7	6	1.4	39	52.7	M10 X 1.0	46.7	8.7	62.7	10	14	16.2	4
RB1007	RBC1007	3	8.8	8.6	2.7	7	1.4	39	53.7	M10 X 1.0	46.7	8.7	63.7	10	14	16.2	4

Basic/RB1411, RB1412, RB2015, RB2725



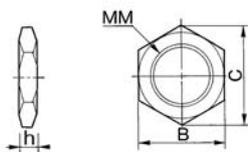
With cap/RBC1411, RBC1412 RBC2015, RBC2725

* Other dimensions are the same as the basic style.



Model		Basic									With cap*			Hexagon nut			
Basic	With cap	D	E1	E2	F	H	K	L	LL	MM	S	E1	LL	Z	B	C	h
RB1411	RBC1411	5	12.2	12	3.5	11	12	58.8	78.3	M14 X 1.5	67.3	12	91.8	13.5	19	21.9	6
RB1412	RBC1412	5	12.2	12	3.5	12	12	58.8	79.3	M14 X 1.5	67.3	12	92.8	13.5	19	21.9	6
RB2015	RBC2015	6	18.2	18	4	15	18	62.2	88.2	M20 X 1.5	73.2	18	105.2	17	27	31.2	6
RB2725	RBC2725	8	25.2	25	5	25	25	86	124	M27 X 1.5	99	25	147	23	36	41.6	6

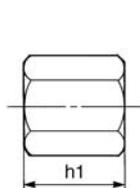
Hexagon Nut (2 pcs. as standard)



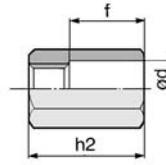
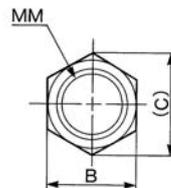
Option

Stopper nut

For basic style



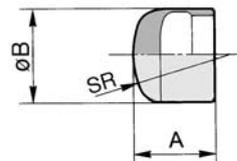
For cap style



Replacement Part

Cap

* (These are the replacement parts for the cap style. Not available for the basic style.)



Part No.	Dimensions			
	MM	h	B	C
RB08J	M8 X 1.0	4	12	13.9
RB10J	M10 X 1.0	4	14	16.2
RB14J	M14 X 1.5	6	19	21.9
RB20J	M20 X 1.5	6	27	31.2
RB27J	M27 X 1.5	6	36	41.6

Part No.	Dimensions							
	Basic	With cap	B	C	h1	h2	MM	d
RB08S	RBC08S	12	13.9	6.5	23	M8 X 1.0	9	15
RB10S	RBC10S	14	16.2	8	23	M10 X 1.0	11	15
RB14S	RBC14S	19	21.9	11	31	M14 X 1.5	15	20
RB20S	RBC20S	27	31.2	16	40	M20 X 1.5	23	25
RB27S	RBC27S	36	41.6	22	51	M27 X 1.5	32	33

Material: Polyurethane

Part No.	Dimensions		
	A	B	R1
RBC08C	6.5	6.8	6
RBC10C	9	8.7	7.5
RBC14C	12.5	12	10
RBC20C	16	18	20
RBC27C	21	25	25