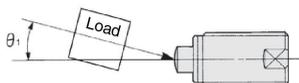


Shock Absorber: Short Type

RBQ Series

Allowable eccentric angle is 5°



Allowable eccentric angle $\theta_1 \leq 5^\circ$

Ideal for absorption of rotating energy



With bumper
RBQC series

Basic type
RBQ series

Specifications

Specifications	Model	RBQ1604	RBQ2007	RBQ2508	RBQ3009	RBQ3213
	Basic type With bumper	RBQC1604	RBQC2007	RBQC2508	RBQC3009	RBQC3213
Max. energy absorption (J) ^{Note)}		1.96	11.8	19.6	33.3	49.0
Thread O.D. size		M16 x 1.5	M20 x 1.5	M25 x 1.5	M30 x 1.5	M32 x 1.5
Stroke absorption (mm)		4	7	8	8.5	13
Collision speed (m/s)		0.05 to 3				
Max. operating frequency (cycle/min)		60	60	45	45	30
Max. allowable thrust (N)		294	490	686	981	1177
Ambient temperature (C°)		-10 to 80				
Spring force (N)	Extended	6.08	12.75	15.69	21.57	24.52
	Retracted	13.45	27.75	37.85	44.23	54.23
Weight (g)		28	60	110	182	240
Option/Stopper nut		RBQ16S	RB20S	RBQ25S	RBQ30S	RBQ32S

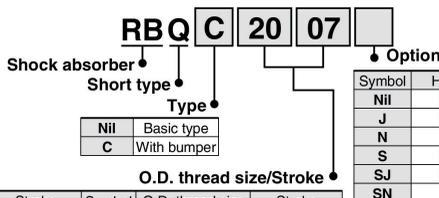
Note) The maximum energy absorption and maximum operating frequency are measured at room temperature (20 to 25°C).

How to Order

Replacement part no./Bumper	
RBQC 16 C	
Applicable model	
16 RBQC1604	30 RBQC3009
20 RBQC2007	32 RBQC3213
25 RBQC2508	
	Bumper

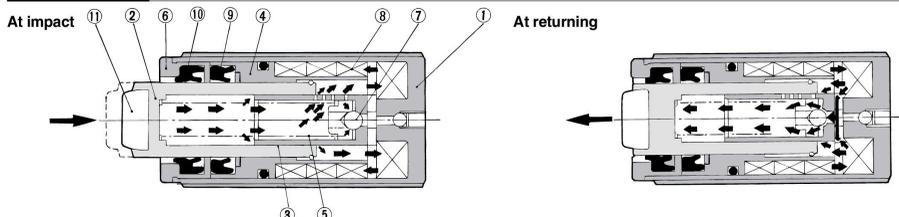
* 2 mounting hexagon nuts are attached as standard.

Symbol	O.D. thread size	Stroke	Symbol	O.D. thread size	Stroke
1604	16 mm	4 mm	3009	30 mm	9 mm
2007	20 mm	7 mm	3213	32 mm	13 mm
2508	25 mm	8 mm			



Construction

Bumper cannot be mounted for basic type. Please place an order with bumper type from the beginning.



An impact object that strikes against the piston rod end pressurizes oil inside the piston. Thus, pressurized oil jets out through the orifice inside the piston, thereby generating hydraulic resistance to absorb the energy of the impacting object.

The oil jetted out through the orifice is collected inside the outer tube by means of the stretching action of the accumulator.

When the impact object is removed, the return spring pushes out the piston rod, and negative pressure, generated at the same time, opens the check ball to permit oil to return to the inside of the piston rod and the piston, making the shock absorber ready for the next impact.

Component Parts

No.	Description	Material	Treatment
1	Outer tube	Rolled steel	Black electroless nickel plated
2	Piston rod	Special steel	Heat treated, Hard chrome plated
3	Piston	Special steel	Heat treated
4	Bearing	Special bearing material	
5	Return spring	Piano wire	Zinc chromated
6	Stopper	Carbon steel	Zinc chromated

No.	Description	Material	Treatment
7	Check ball	Bearing steel	
8	Accumulator	Fluororubber	Foam rubber
9	Rod seal	NBR	
10	Scraper	NBR	
11	Bumper	Polyurethane	Only with bumper