

SC190 to SC925

Long stroke and soft impact

Self-Compensating, Soft-Contact

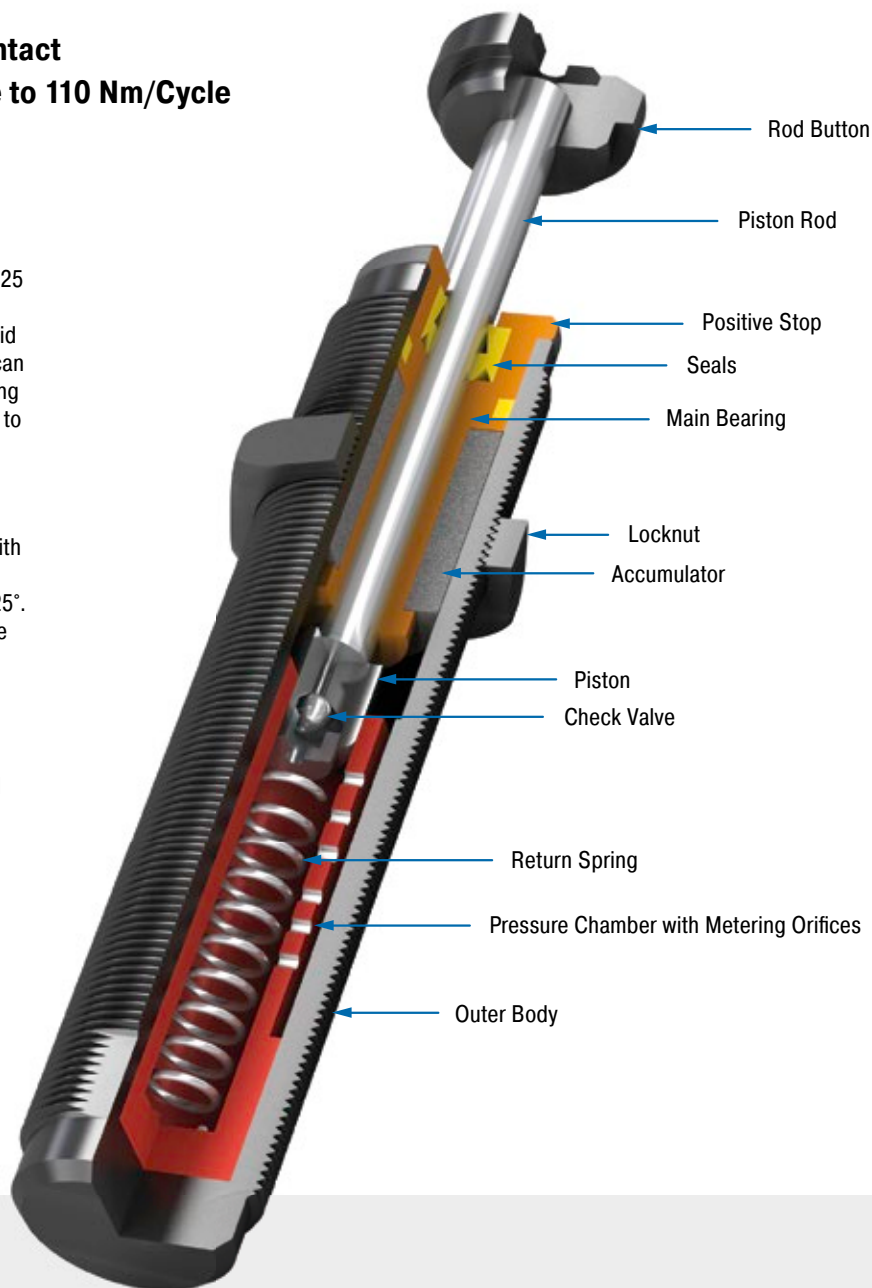
Energy capacity 25 Nm/Cycle to 110 Nm/Cycle

Stroke 16 mm to 40 mm

Ideal for soft damping: The SC found in the model code from the ACE series SC190 to 925 stands for 'soft contact'. These miniature shock absorbers manufactured from one solid piece are designed in such a way that they can be setup with a linear or a progressive braking curve. The soft damping character is thanks to the special, long strokes producing smooth deceleration and low reaction forces.

These maintenance-free, ready-to-install hydraulic machine elements are equipped with an integrated positive stop. The use of side load adapter allows impact angles of up to 25°. Thanks to the designed overlapping effective weight ranges, these dampers cover an effective load range of below 1 kg to more than 2,000 kg!

The miniature shock absorbers from the SC190 to 925 series are used in mechanical engineering and primarily in the areas of handling and automation.



Technical Data

Energy capacity: 25 Nm/Cycle to 110 Nm/Cycle

Impact velocity range: 0.15 m/s to 3.66 m/s. Other speeds on request.

Operating temperature range: 0 °C to 66 °C

Mounting: In any position

Positive stop: Integrated

Material: Outer body, Accessories: Steel corrosion-resistant coating; Piston rod: hardened stainless steel

Damping medium: Oil, temperature stable

Application field: Linear slides, Pneumatic cylinders, Handling modules, Machines and plants, Finishing and processing centres,

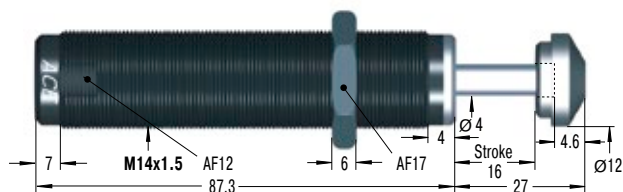
Measuring tables, Tool machines, Machining centres

Note: If precise end position datum is required consider use of the stop collar type AH.

Safety instructions: External materials in the surrounding area can attack the seal components and lead to a shorter service life. Please contact ACE for appropriate solution suggestions. Do not paint the shock absorbers due to heat emission.

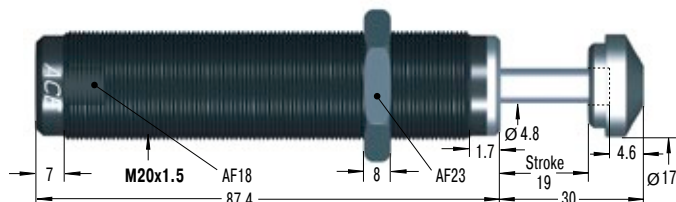
On request: Nickel-plated or weartec finish (seawater resistant) or other special finishes available to special order. Models without rod end button.

SC190EUM; 0 to 4



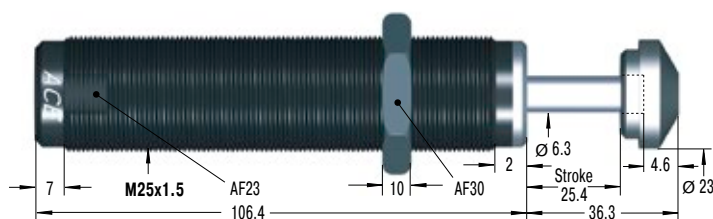
M14x1 and M16x1 also available to special order

SC300EUM; 0 to 4



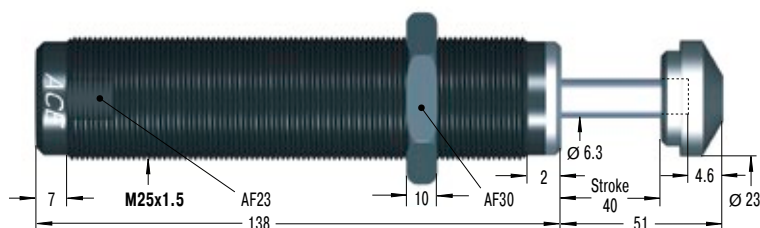
M22x1.5 also available to special order

SC650EUM; 0 to 4

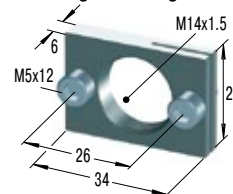


M26x1.5 also available to special order

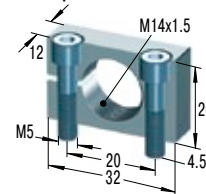
SC925EUM; 0 to 4



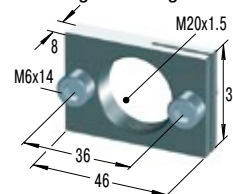
RF14 Rectangular Flange



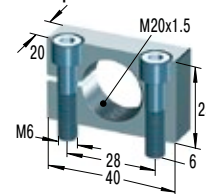
MB14 Clamp Mount



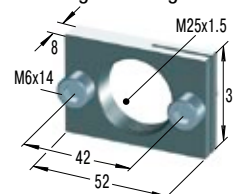
RF20 Rectangular Flange



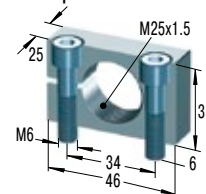
MB20 Clamp Mount



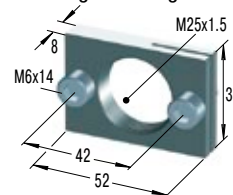
RF25 Rectangular Flange



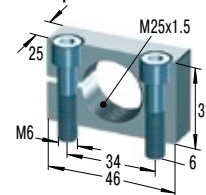
MB25 Clamp Mount



RF25 Rectangular Flange



MB25 Clamp Mount



Additional accessories, mounting, installation ... see from page 36.

Performance

TYPES	Max. Energy Capacity		Effective Weight									
	W ₃ Nm/cycle	W ₄ Nm/h	Soft-Contact		Self-Compensating			Return Force min. N	Return Force max. N	Return Time s	¹ Side Load Angle max. °	Weight kg
			me min. kg	me max. kg	me min. kg	me max. kg	Hardness					
SC190EUM-0	25	34,000	-	-	0.7	4	-0	4	9	0.25	5	0.08
SC190EUM-1	25	34,000	2.3	6	1.4	7	-1	4	9	0.25	5	0.08
SC190EUM-2	25	34,000	5.5	16	3.6	18	-2	4	9	0.25	5	0.08
SC190EUM-3	25	34,000	14	41	9.0	45	-3	4	9	0.25	5	0.08
SC190EUM-4	25	34,000	34	91	23.0	102	-4	4	9	0.25	5	0.08
SC300EUM-0	33	45,000	-	-	0.7	4	-0	5	10	0.10	5	0.18
SC300EUM-1	33	45,000	2.3	7	1.4	8	-1	5	10	0.10	5	0.18
SC300EUM-2	33	45,000	7	23	4.5	27	-2	5	10	0.10	5	0.18
SC300EUM-3	33	45,000	23	68	14.0	82	-3	5	10	0.10	5	0.18
SC300EUM-4	33	45,000	68	181	32.0	204	-4	5	10	0.10	5	0.18
SC650EUM-0	73	68,000	-	-	2.3	14	-0	11	32	0.20	5	0.34
SC650EUM-1	73	68,000	11	36	8.0	45	-1	11	32	0.20	5	0.34
SC650EUM-2	73	68,000	34	113	23.0	136	-2	11	32	0.20	5	0.34
SC650EUM-3	73	68,000	109	363	68.0	408	-3	11	32	0.20	5	0.34
SC650EUM-4	73	68,000	363	1,089	204.0	1,180	-4	11	32	0.20	5	0.34
SC925EUM-0	110	90,000	8	25	4.5	29	-0	11	32	0.40	5	0.42
SC925EUM-1	110	90,000	22	72	14.0	90	-1	11	32	0.40	5	0.42
SC925EUM-2	110	90,000	59	208	40.0	227	-2	11	32	0.40	5	0.42
SC925EUM-3	110	90,000	181	612	113.0	726	-3	11	32	0.40	5	0.42
SC925EUM-4	110	90,000	544	1,952	340.0	2,088	-4	11	32	0.40	5	0.42

For applications with higher side load angles consider using the side load adaptor (BV) pages 38 to 45.