

**ACE miniature shock absorbers** are maintenance-free, self-contained hydraulic components. The design of the **SC<sup>2</sup>-Series** units combines the piston and inner tube into a single component and **provides more than double the energy capacity of previous units in the same envelope size**. They have an integrated mechanical stop and are ideal for use on handling equipment, linear transfers, rodless cylinders, pneumatic pick and place systems and rotation modules etc. The smaller sizes up to type SC<sup>2</sup>190, have a dynamic membrane seal which allows direct installation into the end cover of pneumatic cylinders (for end position damping max. 7 bar). The greatly increased energy capacity coupled with overlapping effective weight ranges covering from 1 kg up to 6350 kg makes the SC<sup>2</sup>-Series units ideal for rotary actuators. With the optional side load adaptor fitted they can cope with the side loads up to 25°.

*"Combined piston and inner tube – increased energy capacity up to 200 %!"*



**Impact velocity range:** Ensure that effective weight of application is within the range of the unit chosen. Special range units available on request.

**Material:** Shock absorber body: Nitride hardened steel. Accessories: Steel with black oxide finish or nitride hardened. Piston rod: Hardened stainless steel.

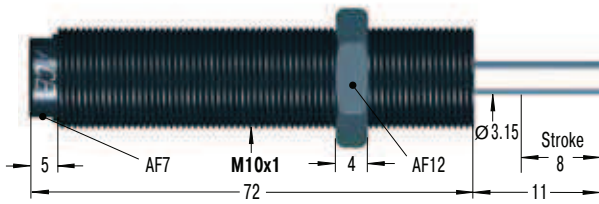
**Mounting:** In any position. If precise end position datum is required consider use of the optional stop collar type AH.

**Operating temperature range:** 0 °C to 66 °C

**On request:** Weartec finish (seawater resistant). Other special finishes available to special order.

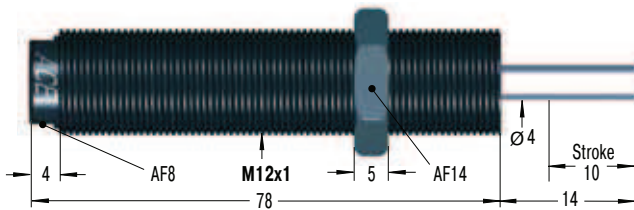


### SC25EUM



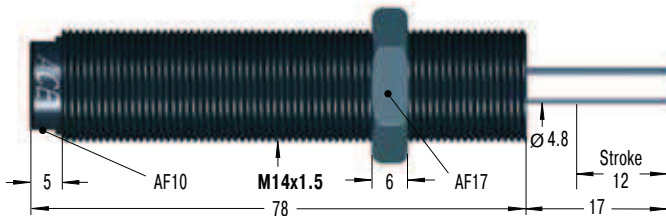
Accessories, mounting, installation ... see pages 34 to 39.

### SC75EUM



Accessories, mounting, installation ... see pages 35 to 39.

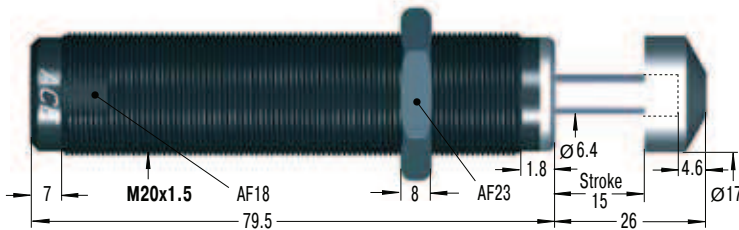
### SC190EUM



M14x1 also available to special order

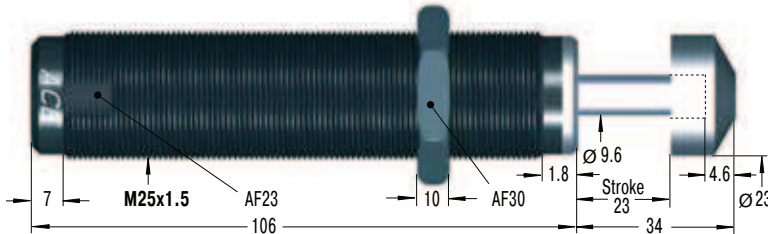
Accessories, mounting, installation ... see pages 35 to 39.

### SC300EUM



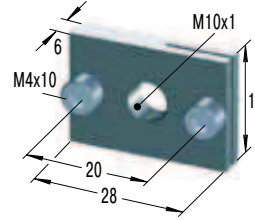
Accessories, mounting, installation ... see pages 36 to 39.

### SC650EUM



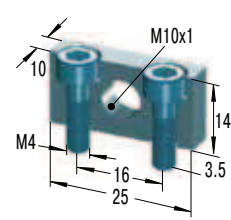
Accessories, mounting, installation ... see pages 36 to 39.

### RF10



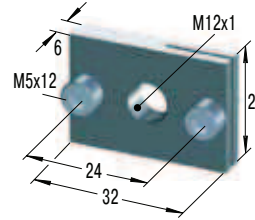
Rectangular Flange

### MB10SC2



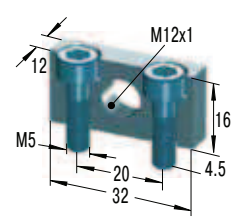
Mounting Block

### RF12



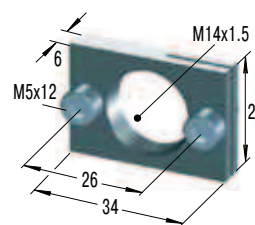
Rectangular Flange

### MB12SC2



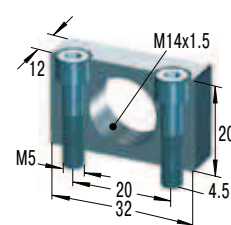
Mounting Block

### RF14



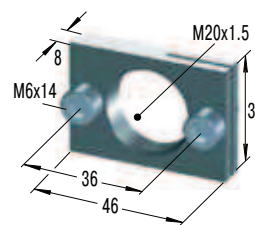
Rectangular Flange

### MB14SC2



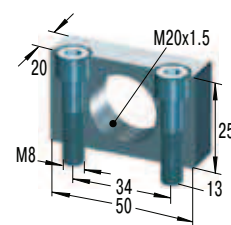
Mounting Block

### RF20



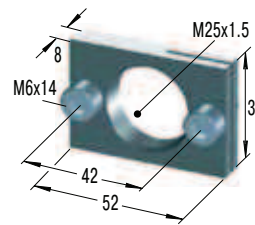
Rectangular Flange

### MB20SC2



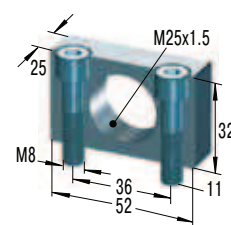
Mounting Block

### RF25



Rectangular Flange

### MB25SC2



Mounting Block

Issue 1.2013. Specifications subject to change

### Capacity Chart

Type	Max. Energy Capacity		Effective Weight me					Min. Return Force N	Max. Return Force N	Rod Reset Time s	1 Max. Side Load Angle °	Weight kg	
	W <sub>3</sub> Nm/Cycle	W <sub>4</sub> Nm/h	Soft		Hard								
			min. kg	max. kg	-5 min. kg	-6 min. kg	-7 min. kg						-8 min. kg
SC25EUM	10	16 000	1	5	4	44	42	500	4.5	14	0.3	2	0.027
SC75EUM	16	30 000	1	8	7	78	75	800	6	19	0.3	2	0.045
SC190EUM	31	50 000	2	16	13	140	136	1 550	6	19	0.4	2	0.060
SC300EUM	73	45 000	11	45	34	136	91	181	8	18	0.2	5	0.164
SC650EUM	210	68 000	23	113	90	360	320	1 090	11	33	0.3	5	0.315

1 For applications with higher side load angles consider using the side load adaptor (BV) pages 34 to 38.