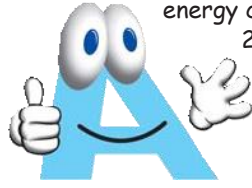
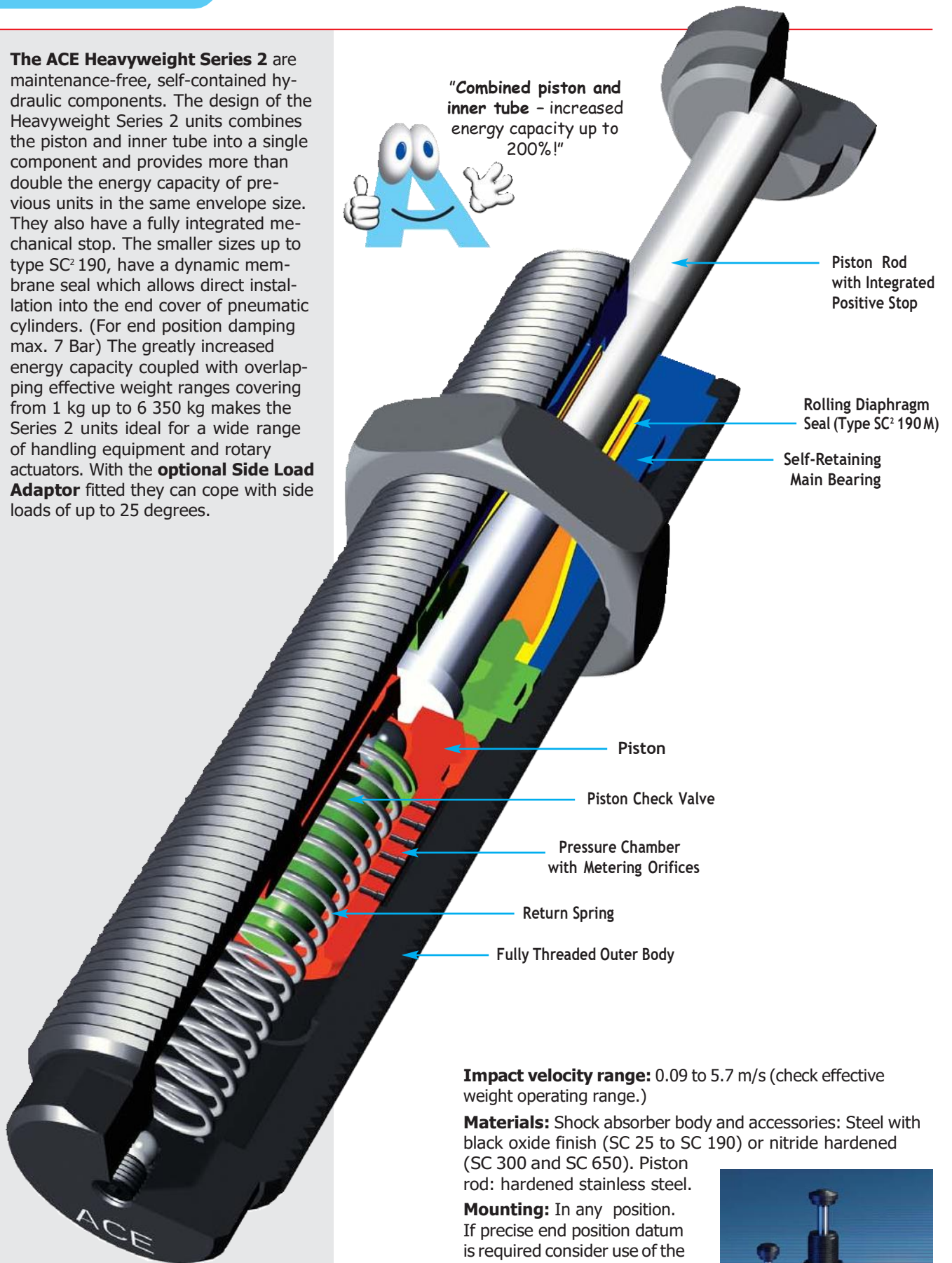


The ACE Heavyweight Series 2 are maintenance-free, self-contained hydraulic components. The design of the Heavyweight Series 2 units combines the piston and inner tube into a single component and provides more than double the energy capacity of previous units in the same envelope size. They also have a fully integrated mechanical stop. 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 6 350 kg makes the Series 2 units ideal for a wide range of handling equipment and rotary actuators. With the **optional Side Load Adaptor** fitted they can cope with side loads of up to 25 degrees.



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



Piston Rod with Integrated Positive Stop

Rolling Diaphragm Seal (Type SC<sup>2</sup> 190 M)

Self-Retaining Main Bearing

Piston

Piston Check Valve

Pressure Chamber with Metering Orifices

Return Spring

Fully Threaded Outer Body

**Impact velocity range:** 0.09 to 5.7 m/s (check effective weight operating range.)

**Materials:** Shock absorber body and accessories: Steel with black oxide finish (SC 25 to SC 190) or nitride hardened (SC 300 and SC 650). Piston rod: hardened stainless steel.

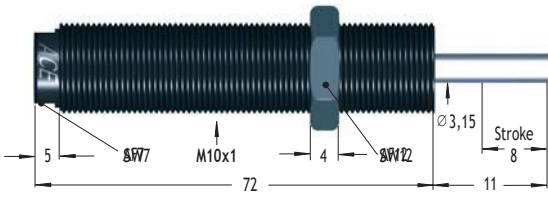
**Mounting:** In any position. If precise end position datum is required consider use of the optional stop collar type AH.

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

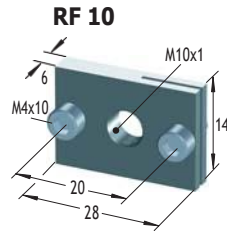
**On request:** Weartec finish (seawater resistant). Other special finishes available to special order.



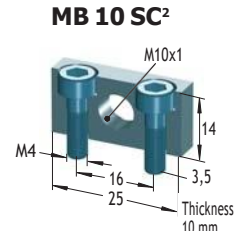
### Part Number SC . . . SC 25 M



Accessories, mounting, installation... see pages 30 to 35.

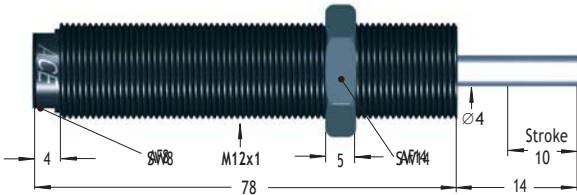


Rectangular Flange

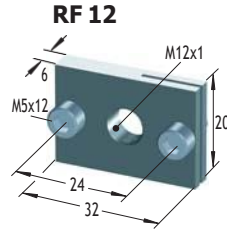


Mounting Block

### SC 75 M



Accessories, mounting, installation... see pages 30 to 35.

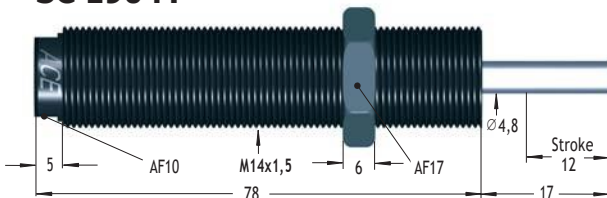


Rectangular Flange



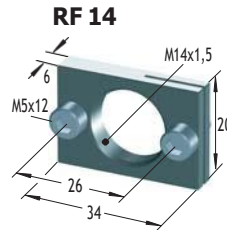
Mounting Block

### SC 190 M

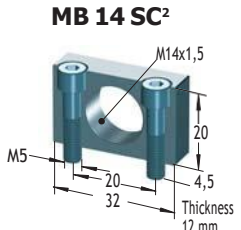


M14x1 also available to special order

Accessories, mounting, installation... see pages 31 to 35.

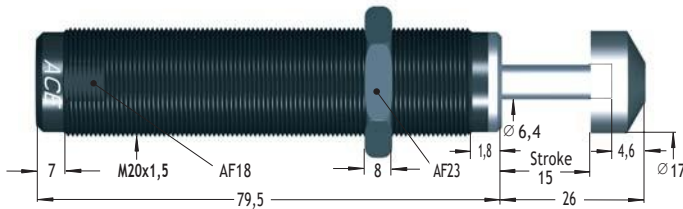


Rectangular Flange

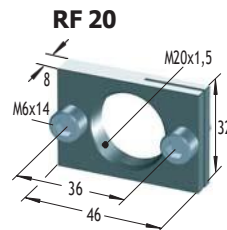


Mounting Block

### SC 300 M



Accessories, mounting, installation... see pages 31 to 35.

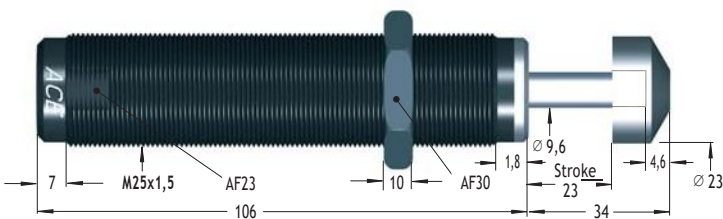


Rectangular Flange

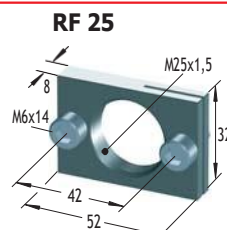


Mounting Block

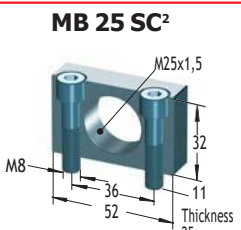
### SC 650 M



Accessories, mounting, installation... see pages 32 to 35.



Rectangular Flange



Mounting Block

### AH Stop Collar



### BV Side Load Adaptor



### PB Steel Shroud



### AS Switch Stop Collar



Mounting, installation... see pages 31 to 35.

Note: Locknut KM ... SC<sup>2</sup> must be used with Stop Collar AH ... & MB ... SC<sup>2</sup> in high velocity applications

## Capacity Chart

Type	Max. Energy Capacity Nm		Effective Weight me					Return Force N	Rod Reset Time s	*Max. Side Load			
	per Cycle W <sub>3</sub>	per Hour W <sub>4</sub>	soft → hard							min	max	Angle °	Weight kg
			min kg max	min kg max	min kg max	min kg max	min kg max						
SC 25 M	10	16000	1 - 5	4 - 44	42 - 500			4.5 - 14	0.3	2	0.03		
SC 75 M	16	30000	1 - 8	7 - 78	75 - 800			6 - 19	0.3	2	0.045		
SC 190 M	31	50000	2 - 16	13 - 140	136 - 1550			6 - 19	0.4	2	0.06		
SC 300 M	73	45000	11 - 45	34 - 136	91 - 181	135 - 680	320 - 1950	8 - 18	0.2	5	0.15		
SC 650 M	210	68000	23 - 113	90 - 360	320 - 1090	770 - 2630	1800 - 6350	11 - 33	0.3	5	0.35		