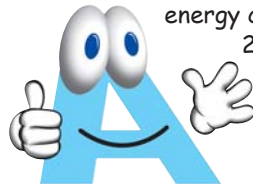
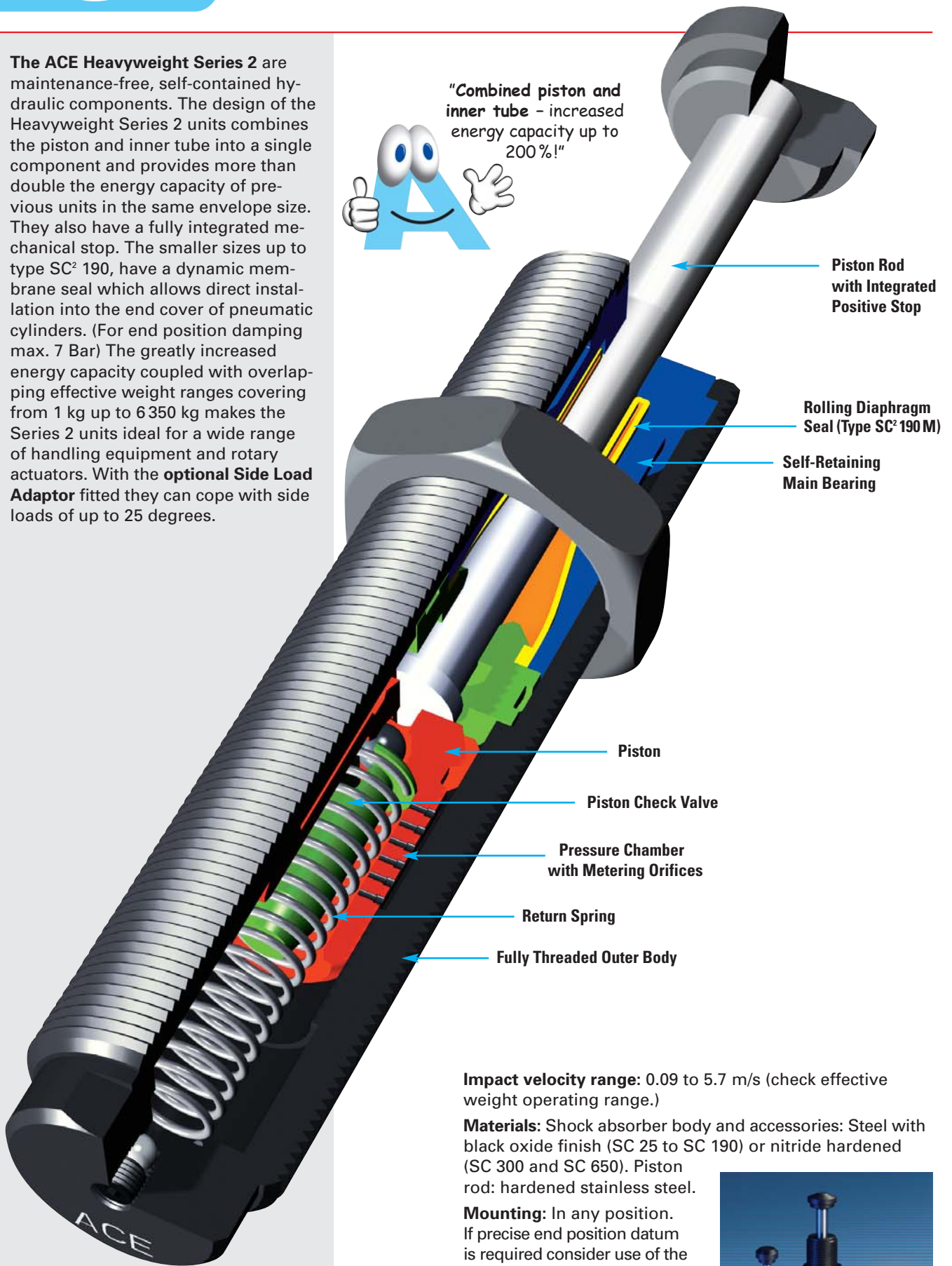


The ACE Heavyweight Series 2 are maintenance-free, self-contained hydraulic components. The design of the Heavyweight Series 2 units combines the piston and inner tube into a single component and provides more than double the energy capacity of previous units in the same envelope size. They also have a fully integrated mechanical stop. The smaller sizes up to type SC² 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 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 SC² 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.

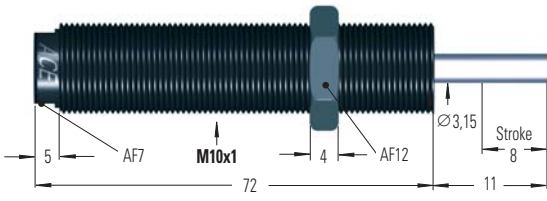
Mounting: In any position. If precise end position datum is required consider use of the optional stop collar type AH.

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

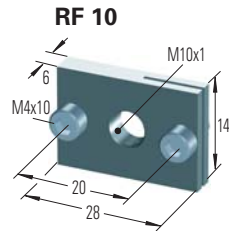
On request: Weartec finish (seawater resistant). Other special finishes available to special order.



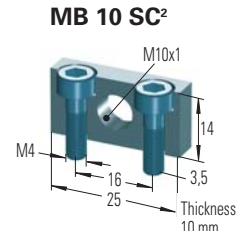
Part Number SC ... SC 25 M



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

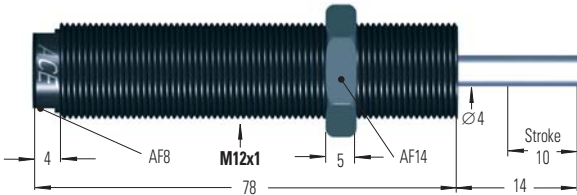


Rectangular Flange

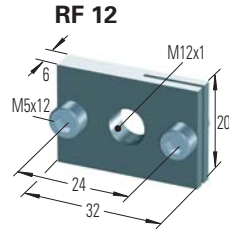


Mounting Block

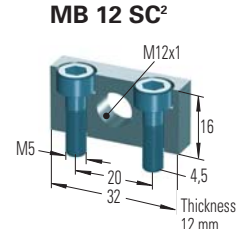
SC 75 M



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

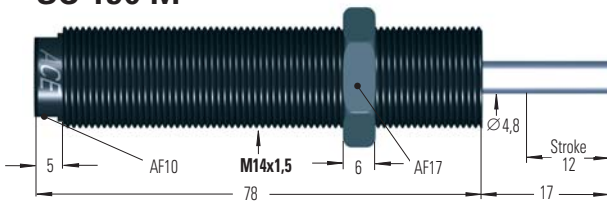


Rectangular Flange



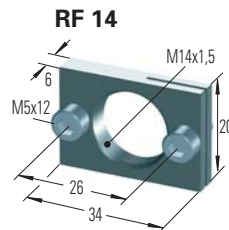
Mounting Block

SC 190 M

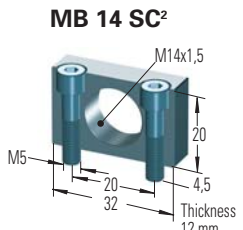


M14x1 also available to special order

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

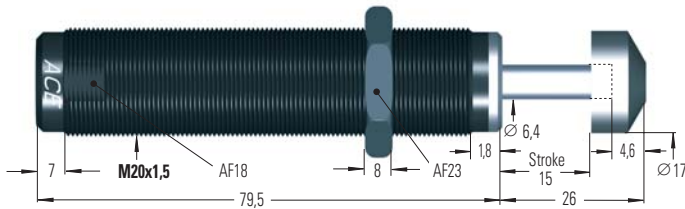


Rectangular Flange

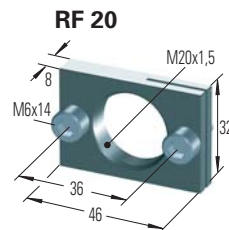


Mounting Block

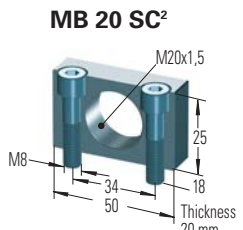
SC 300 M



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

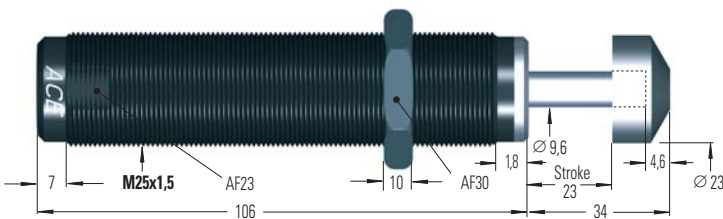


Rectangular Flange

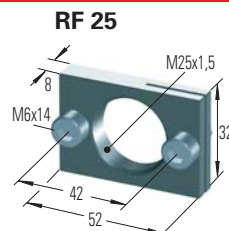


Mounting Block

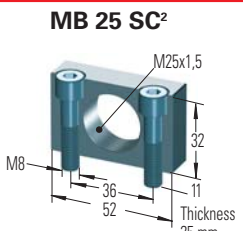
SC 650 M



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 ... SC² must be used with Stop Collar AH ... & MB ... SC² in high velocity applications

Capacity Chart

Type	Max. Energy Capacity Nm		Effective Weight me					Return Force N	Rod Reset Time s	*Max. Side Load Angle °	Weight kg		
	per Cycle W ₃	per Hour W ₄	soft									min	max
			5 min kg max	6 min kg max	7 min kg max	8 min kg max	9 min kg max						
SC 25 M	10	16 000	1 - 5	4 - 44	42 - 500			4.5 - 14	0.3	2	0.03		
SC 75 M	16	30 000	1 - 8	7 - 78	75 - 800			6 - 19	0.3	2	0.045		
SC 190 M	31	50 000	2 - 16	13 - 140	136 - 1550			6 - 19	0.4	2	0.06		
SC 300 M	73	45 000	11 - 45	34 - 136	91 - 181	135 - 680	320 - 1950	8 - 18	0.2	5	0.15		
SC 650 M	210	68 000	23 - 113	90 - 360	320 - 1090	770 - 2 630	1 800 - 6 350	11 - 33	0.3	5	0.35		

* For applications with higher side load angles consider using the Side Load Adaptor (BV) pages 30 to 34.