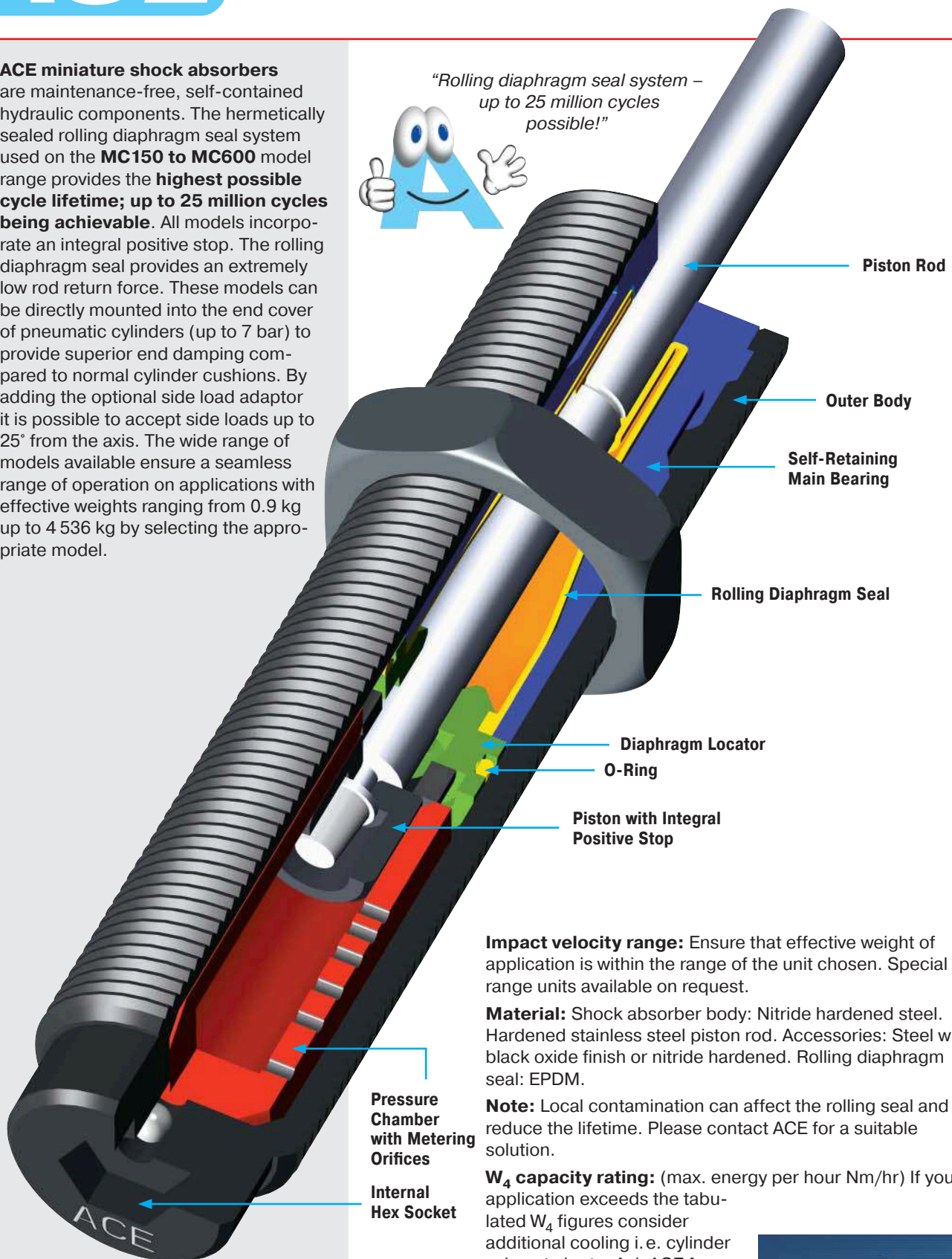


ACE miniature shock absorbers are maintenance-free, self-contained hydraulic components. The hermetically sealed rolling diaphragm seal system used on the **MC150 to MC600** model range provides the **highest possible cycle lifetime; up to 25 million cycles being achievable**. All models incorporate an integral positive stop. The rolling diaphragm seal provides an extremely low rod return force. These models can be directly mounted into the end cover of pneumatic cylinders (up to 7 bar) to provide superior end damping compared to normal cylinder cushions. By adding the optional side load adaptor it is possible to accept side loads up to 25° from the axis. The wide range of models available ensure a seamless range of operation on applications with effective weights ranging from 0.9 kg up to 4 536 kg by selecting the appropriate model.



"Rolling diaphragm seal system – up to 25 million cycles possible!"



Piston Rod

Outer Body

Self-Retaining Main Bearing

Rolling Diaphragm Seal

Diaphragm Locator

O-Ring

Piston with Integral Positive Stop

Pressure Chamber with Metering Orifices

Internal Hex Socket

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. Hardened stainless steel piston rod. Accessories: Steel with black oxide finish or nitride hardened. Rolling diaphragm seal: EPDM.

Note: Local contamination can affect the rolling seal and reduce the lifetime. Please contact ACE for a suitable solution.

W₄ capacity rating: (max. energy per hour Nm/hr) If your application exceeds the tabulated W₄ figures consider additional cooling i.e. cylinder exhaust air etc. Ask ACE for further details.

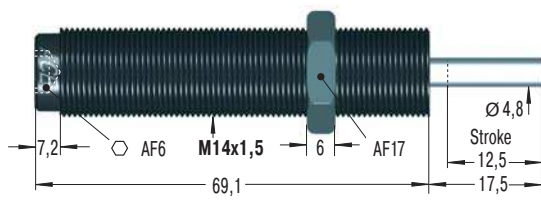
Mounting: In any position. If precise end position datum is required consider use of the optional stop collar type AH.

Operating temperature range: 0 °C to 66 °C

On request: Stainless steel outer body. Weartec finish (sea-water resistant). Other finishes available to special order.

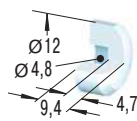


MC150EUM



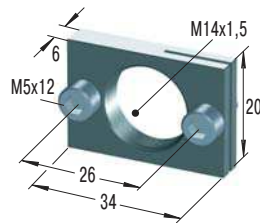
M14x1 also available to special order
Accessories, mounting, installation ... see pages 31 to 35.

PP150



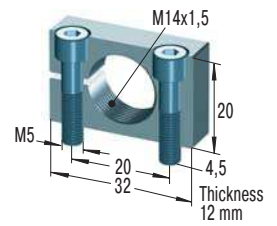
Nylon Button
 W_3 max. = 14 Nm

RF14



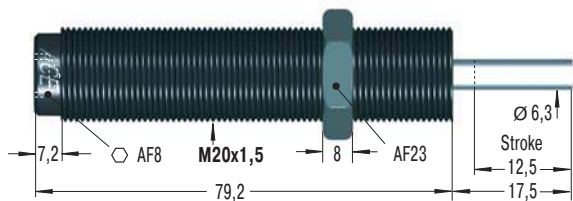
Rectangular Flange

MB14



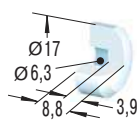
Clamp Mount

MC225EUM



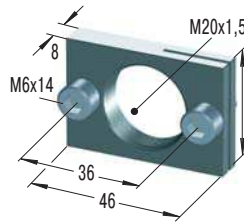
Accessories, mounting, installation ... see pages 32 to 35.

PP225



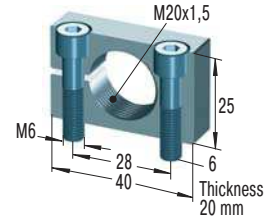
Nylon Button
 W_3 max. = 33 Nm

RF20



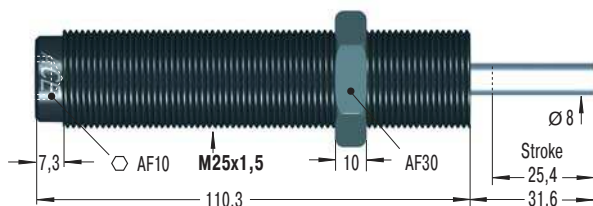
Rectangular Flange

MB20



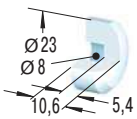
Clamp Mount

MC600EUM



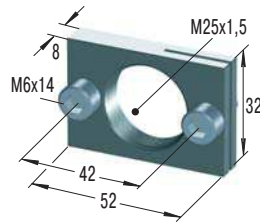
M27x3 also available to special order
Accessories, mounting, installation ... see pages 32 to 35.

PP600



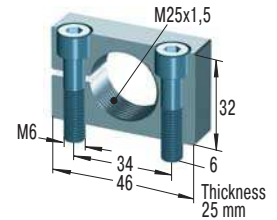
Nylon Button
 W_3 max. = 68 Nm

RF25



Rectangular Flange

MB25



Clamp Mount

Capacity Chart

Type Part Number	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_3 Nm/Cycle	W_4 Nm/h	me min. kg	me max. kg					
MC150EUM	20	34 000	0.9	10	3	8	0.4	4	0.06
MC150EUMH	20	34 000	8.6	86	3	8	0.4	4	0.06
MC150EUMH2	20	34 000	70	200	3	8	0.4	4	0.06
MC150EUMH3	20	34 000	181	408	3	8	1	4	0.06
MC225EUM	41	45 000	2.3	25	4	9	0.3	4	0.15
MC225EUMH	41	45 000	23	230	4	9	0.3	4	0.15
MC225EUMH2	41	45 000	180	910	4	9	0.3	4	0.15
MC225EUMH3	41	45 000	816	1 814	4	9	0.3	4	0.15
MC600EUM	136	68 000	9	136	5	10	0.6	2	0.26
MC600EUMH	136	68 000	113	1 130	5	10	0.6	2	0.26
MC600EUMH2	136	68 000	400	2 300	5	10	0.6	2	0.26
MC600EUMH3	136	68 000	2 177	4 536	5	10	0.6	2	0.26

¹ For applications with higher side load angles consider using the side load adaptor (BV) pages 31 to 34.