ACE Miniature Shock Absorbers are maintenance free, self-contained hydraulic components. If you prefer a fully adjustable shock absorber rather than a self-compensating model on your application then the FA and MA Series provide a directly interchangeable alternative. The adjustable series include an integrated mechanical stop from the Model MA 225 upwards. These adjustable units have long stroke lengths (MA 925 with 40 mm Superstroke) to provide smooth deceleration and low reaction forces. The MA 150 incorporates the proven rolling diaphragm seal (used on the MC 150 to MC 600 range) and shares all the advantages of that technology. The stepless adjustment range of the FA and MA Series covers an effective weight range from 0.2 kg up to 2040 kg.

Install a mechanical stop 0.5 to 1 mm before end of stroke on models up to the MA 150.

Adjustment: On models MA 35 up to MA150: by turning the adjustment screw at rear. On the larger sizes: by turning the adjustment knob against the scale marked 0 to 9. After installation cycle the machine a few times and turn the adjustment knob until optimum deceleration is achieved (i.e. smooth deceleration throughout stroke). Hard impact at start of stroke → Turn adjuster towards “9” Hard setdown at end of stroke → Turn adjuster towards “0”

Impact velocity range: MA series 0.3 to 3.6 m/s (check effective weight calculation.). FA units max. 2 m/s.

Materials: Steel body with black oxide finish. Piston rod hardened stainless steel.

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

Mounting: In any position.

Operating temperature range:
Up to MA 150: 0 to 65°C.
From MA 225: -12 to 90°C.

On request: Weartec finish (seawater resistant) other special finishes available to special order.
Miniature Shock Absorbers FA and MA

Adjustable

Part Number FA, MA...
FA 1008 V-B (VD-B)

MA 35 M
Adjuster screw

MA 150 M-B
Adjuster screw

MA 225 M

MA 600 M

MA 900 M

Available without rod end button on request. Models MA 600 M/MA 900 M available with clevis mounting (see page 26).

Capacity Chart

<table>
<thead>
<tr>
<th>Type</th>
<th>Max. Energy capacity Nm</th>
<th>Effective weight mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>per cycle W3</td>
<td>per hour W4</td>
</tr>
<tr>
<td>FA 1008 V-B</td>
<td>1.5</td>
<td>3600</td>
</tr>
<tr>
<td>FA 1008 VD-B</td>
<td>1.8</td>
<td>3600</td>
</tr>
<tr>
<td>MA 35 M</td>
<td>4</td>
<td>6000</td>
</tr>
<tr>
<td>MA 150 M-B</td>
<td>17.5</td>
<td>35000</td>
</tr>
<tr>
<td>MA 225 M</td>
<td>25</td>
<td>45000</td>
</tr>
<tr>
<td>MA 600 M</td>
<td>88</td>
<td>68000</td>
</tr>
<tr>
<td>MA 900 M</td>
<td>100</td>
<td>90000</td>
</tr>
</tbody>
</table>

* For applications with higher side load angles consider using the Side Load Adaptor (BV) pages 24 to 27.