Hilliard® Brake Model M400SH

Technical Data Sheet

M400SH Brake Caliper

The Hilliard M400SH brake caliper is a spring applied, hydraulically released brake for use in heavy duty industrial applications. The brake comes standard with red powder coat suitable for outdoor environments. The M400SH is available with standard force ratings which when paired with the correct disc size produces an exact braking torque for the application. The caliper features “Maintenance Mode” which removes all stored spring energy within the cylinder assembly. This allows for brake pad replacement, monitor unit adjustment and seal replacement without the need to remove the brake from service.

<table>
<thead>
<tr>
<th>Model</th>
<th>Braking Force ($F_b$)</th>
<th>Touch Pressure</th>
<th>Full Retraction Pressure</th>
<th>Maximum Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>M400SH60</td>
<td>13,488 lbf (60 kN)</td>
<td>1,900 psi (131 bar)</td>
<td>2,300 psi (159 bar)</td>
<td>1124*(DiscRadius=2.75&quot;)</td>
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<tr>
<td>M400SH50</td>
<td>11,240 lbf (50 kN)</td>
<td>1,650 psi (114 bar)</td>
<td>2,000 psi (138 bar)</td>
<td>937*(DiscRadius=2.75&quot;)</td>
</tr>
<tr>
<td>M400SH40</td>
<td>8,992 lbf (40 kN)</td>
<td>1,450 psi (100 bar)</td>
<td>1,800 psi (124 bar)</td>
<td>750*(DiscRadius=2.75&quot;)</td>
</tr>
<tr>
<td>M400SH30</td>
<td>6,744 lbf (30 kN)</td>
<td>1,100 psi (76 bar)</td>
<td>1,500 psi (103 bar)</td>
<td>562*(DiscRadius=2.75&quot;)</td>
</tr>
<tr>
<td>M400SH25</td>
<td>5,620 lbf (25 kN)</td>
<td>850 psi (59 bar)</td>
<td>1,300 psi (90 bar)</td>
<td>469*(DiscRadius=2.75&quot;)</td>
</tr>
</tbody>
</table>

Minimum Disc Size: 24 in (610 mm) • Minimum Disc Thickness 1in (25 mm)  
Maximum Pressure 2400psi (165 bar)

![Graph](image)

Disc Diameter (inches) vs. Braking Torque (lb. ft)
Optional Accessories (Consult The Hilliard Corporation for part numbers)

- **Mounting Bracket**
  Hilliard supplies a standard line of mounting brackets as well as custom made brackets. Consult The Hilliard Corporation for any special accommodations required.

- **Dust Cover**
  The Hilliard mounting bracket comes standard with holes drilled in the top for a dust cover. The dust cover protects the brake pads and pressure plates from large debris that may impede brake pad travel.

- **Tie Bolt Kit**
  Hilliard can supply a tie bolt kit for the brake caliper. The tie bolt kit will have the correct strength characteristics as well as the correct length depending on disc thickness.

- **Mechanical Retraction Kit**
  Hilliard can supply a mechanical retraction kit to be used in the event of a brake seal or hydraulic power supply failure.