Hilliard® Brake Model M700SH

Technical Data Sheet

**M700SH Brake Caliper**

The Hilliard M700SH brake caliper is a spring applied, hydraulically released brake for use in heavy duty industrial applications. The brake caliper is suitable for outdoor applications and has been designed for use in many different extreme environments. The M700SH 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>Full Retraction Pressure</th>
<th>Maximum Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>M700SH360</td>
<td>81,500 lbf (363 kN)</td>
<td>3,300 psi (228 bar)</td>
<td>6,792 psi (468 bar)</td>
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<tr>
<td>M700SH310</td>
<td>69,600 lbf (310 kN)</td>
<td>2,765 psi (191 bar)</td>
<td>5,800 psi (400 bar)</td>
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<tr>
<td>M700SH280</td>
<td>63,000 lbf (280 kN)</td>
<td>2,580 psi (178 bar)</td>
<td>5,250 psi (362 bar)</td>
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<tr>
<td>M700SH230</td>
<td>51,496 lbf (229 kN)</td>
<td>1,700 psi (117 bar)</td>
<td>4,292 psi (296 bar)</td>
</tr>
<tr>
<td>M700SH180</td>
<td>40,464 lbf (180 kN)</td>
<td>1,450 psi (100 bar)</td>
<td>3,372 psi (232 bar)</td>
</tr>
</tbody>
</table>

Minimum Disc Size: 60 in (1524 mm) • Minimum Disc Thickness 1 1/2in (38mm)
Mounting Dimensions

(2X) BLEED SCREW

2 MINIMUM DISC THICKNESS

(2X) "HYDRAULIC SUPPLY" FOR SIDE
Ø 1/2" NO SAE ORB
(Ø 3/4-16 THREAD)

DIMENSIONS ARE IN INCHES
DIMENSIONS [ ] IN MILLIMETERS
Brake Weight: 753 lb (341.5 kg) per spring module assembly
1506 lb (683 kg) total
Friction Pad Area: 131 in² [332.75 cm²] (Each Pad)
Recommended Oil
Mineral Oil or Automatic Transmission Fluid (ATF) is recommended for use with the M700 SH brake caliper. Do not use automotive brake fluid as this will cause seal failure.

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.

- **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.
SEALS, O-RINGS AND WEAR RINGS AVAILABLE AS A KIT.