



Hilliard® Brake Model M500SH

Technical Data Sheet



M500SH Brake Caliper

The Hilliard M500SH brake caliper is a spring applied, hydraulically released brake for use in heavy duty industrial applications. The brake comes standard with marine grade epoxy paint suitable for outdoor environments. The M500SH is available with standard force ratings

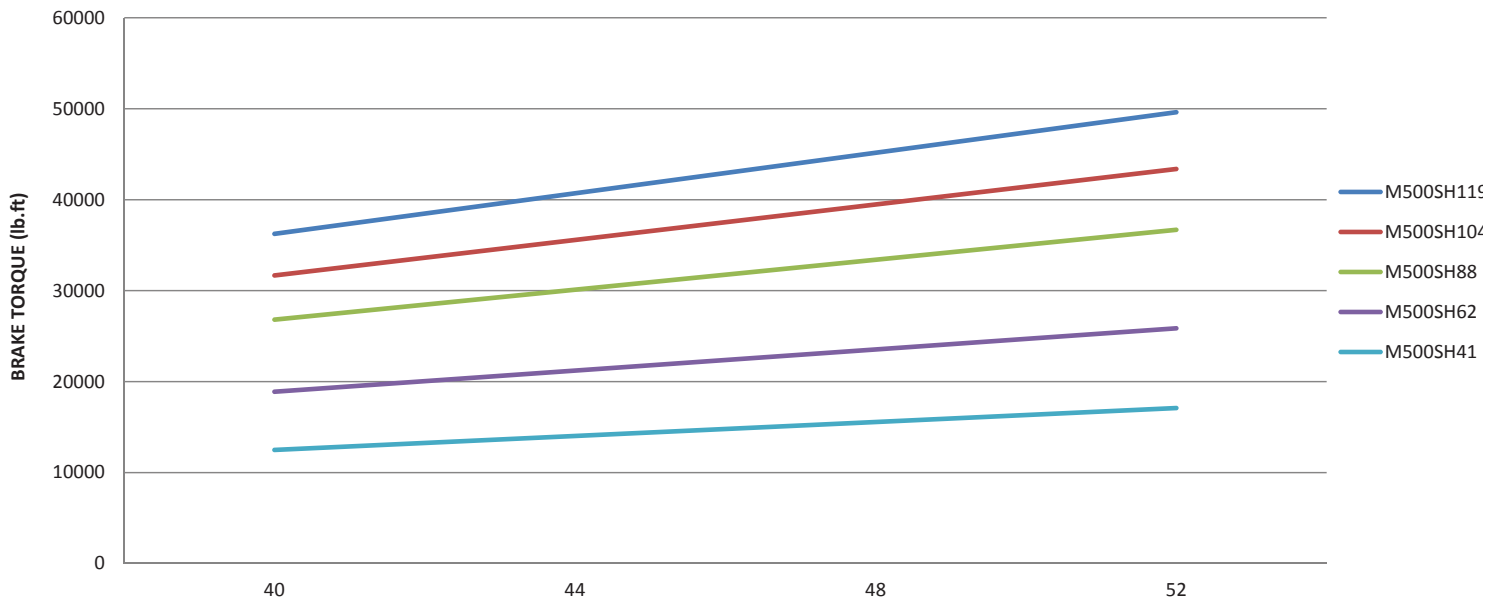
which when paired with the correct disc size produces an exact braking torque for the application. The caliper features "Maintenance Mode" which removes all stored spring energy within the cylinder assembly. This allows for brake pad replacement, monitor unit adjustment and seal replacement without the need to remove the brake from service.

Model	Braking Force (F _b)	Touch Pressure	Full Retraction Pressure	Maximum Pressure
M500SH119	26,750 lbf (119 Kn)	1,800 psi (124 Bar)	2,000 psi (138 Bar)	2,450 psi (169 Bar)
M500SH104	23,380 lbf (104 Kn)	1,800 psi (124 Bar)	1,800 psi (124 Bar)	2,250 psi (155 Bar)
M500SH88	19,780 lbf (88 Kn)	1,350 psi (93 Bar)	1,600 psi (110 Bar)	2,025 psi (140 Bar)
M500SH62	13,930 lbf (62 Kn)	950 psi (65 Bar)	1,200 psi (83 Bar)	1,675 psi (116 Bar)
M500SH41	9,210 lbf (41 Kn)	600 psi (41 Bar)	700 psi (48 Bar)	1,150 psi (79 Bar)

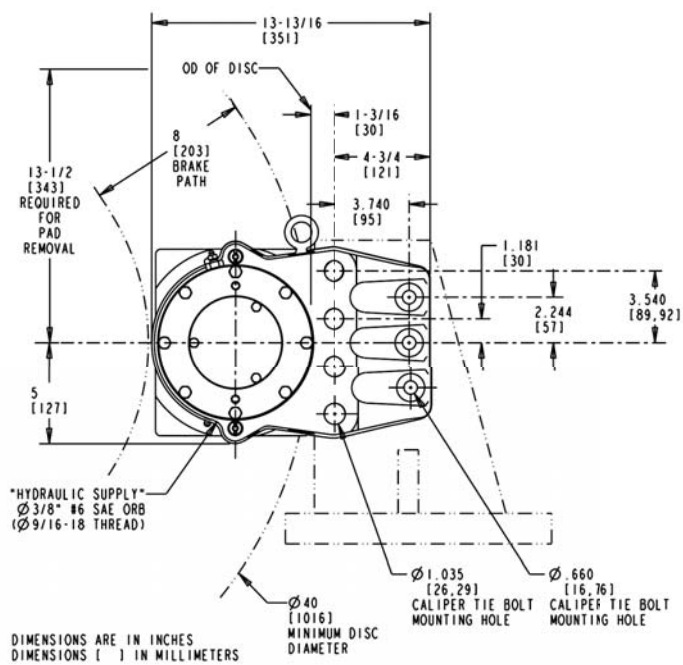
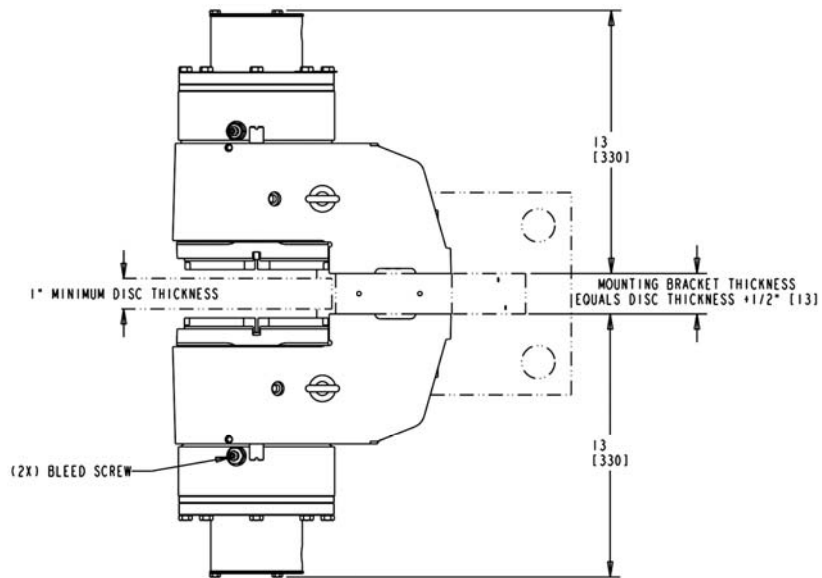
Minimum Disc Size: 40in (1016mm) • Minimum Disc Thickness 1in (25mm)

$$\text{Braking Torque (lb-ft)} = \frac{\text{Braking Force (lb)} \times (\text{Disc Radius (in)} - 3.74")}{12}$$

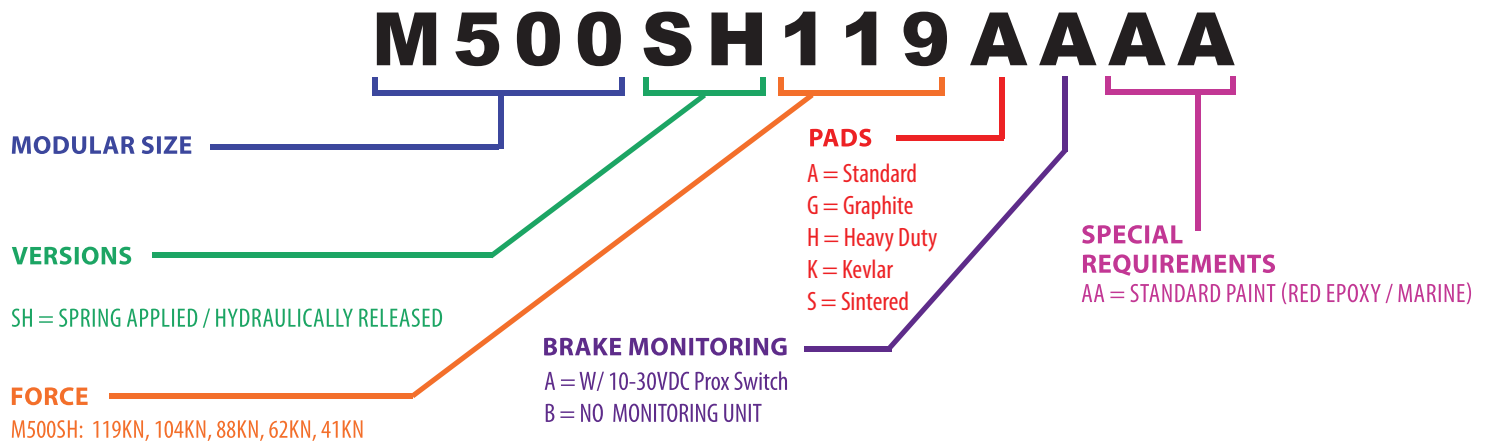
M500 SH



Mounting Dimensions



Modular Model Number



Brake Weight: 380 lb (173 kg)

Brake Path: 8 in (203 mm)

Friction Pad Area: 53.6 in² [346 cm²] (Each Pad)

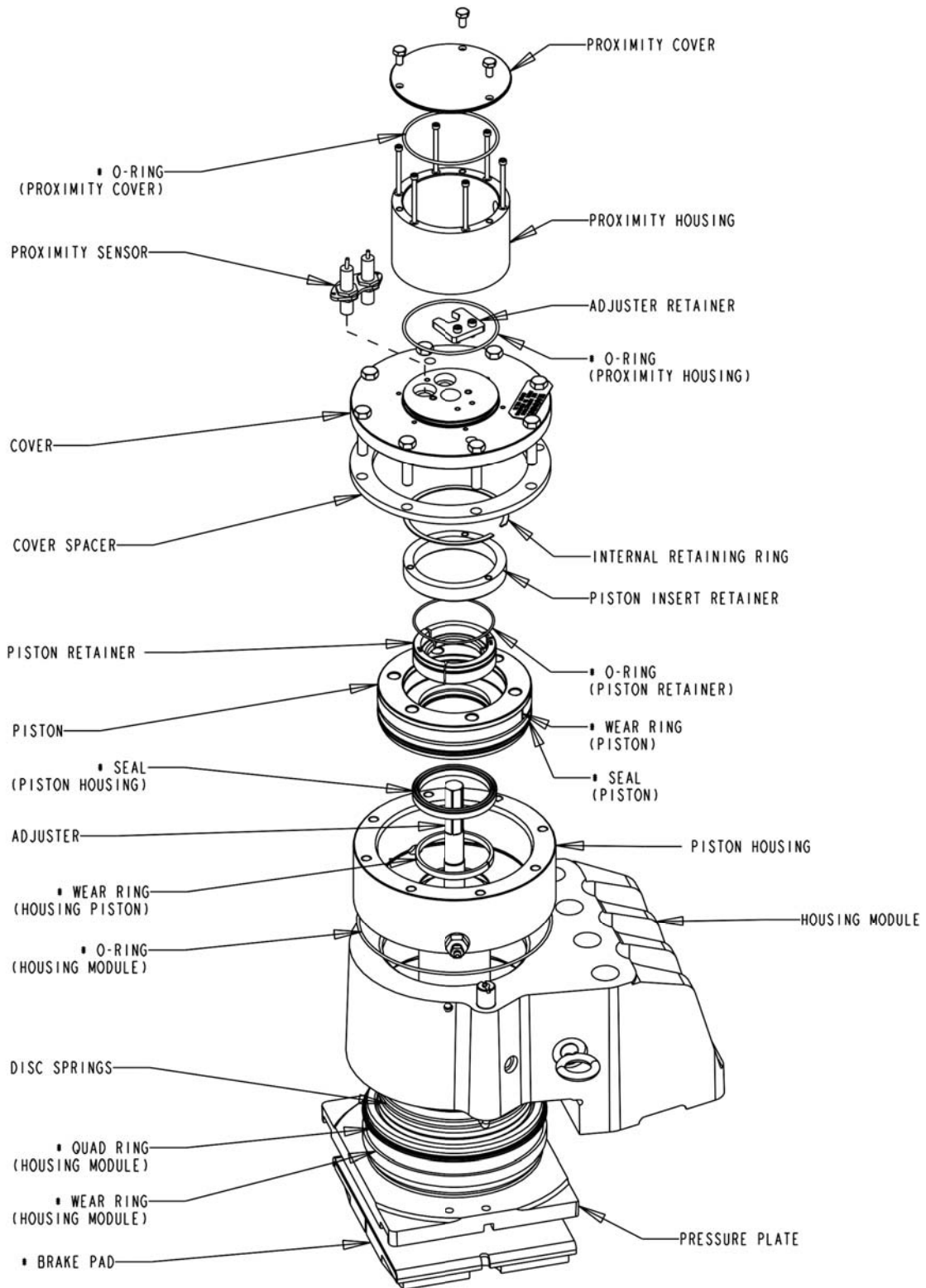
Recommended Oil

Mineral Oil or Automatic Transmission Fluid (ATF) is recommended for use with the M500 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.
- **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.

M500SH Exploded View



ONE MODULE SHOWN
 ▪ RECOMMENDED SPARE PART (SEALS, O-RINGS AND WEAR RINGS AVAILABLE AS A KIT)

The Hilliard Corporation
 100 West 4th St.
 Elmira, NY 14902-1504 USA
 PH: 607-733-7121 FAX: 607-737-1108
www.hilliardbrakesystems.com
hilliard@hilliardcorp.com



YOUR LOCAL REPRESENTATIVE:

