



# Hilliard® Brake Model M400SH

Technical Data Sheet



## M400SH Brake Caliper

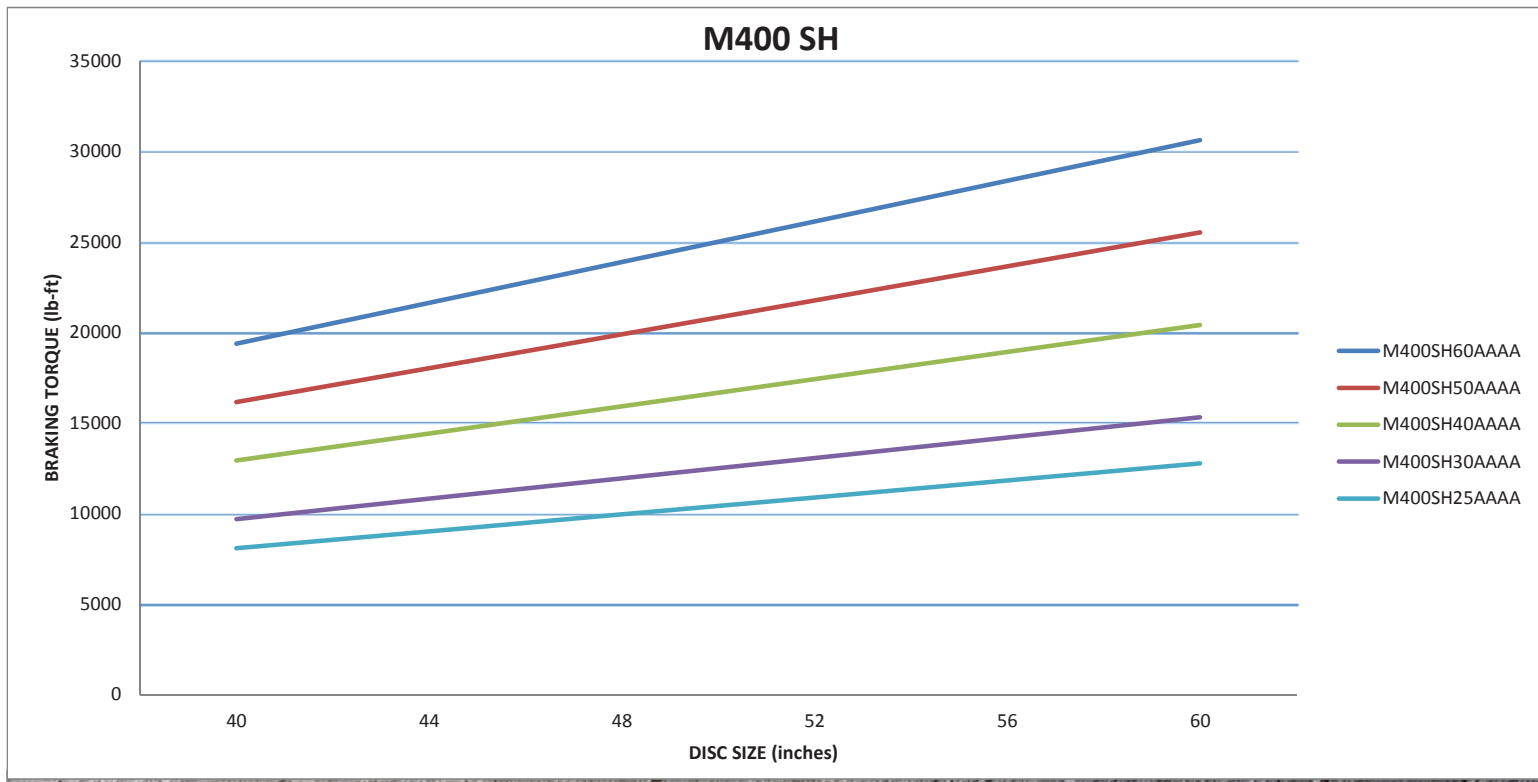
The Hilliard M400SH brake caliper is a spring applied, hydraulically released brake for use in heavy duty industrial applications. The brake comes standard with marine grade epoxy paint suitable for outdoor environments. The M400SH is available with standard force ratings

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.

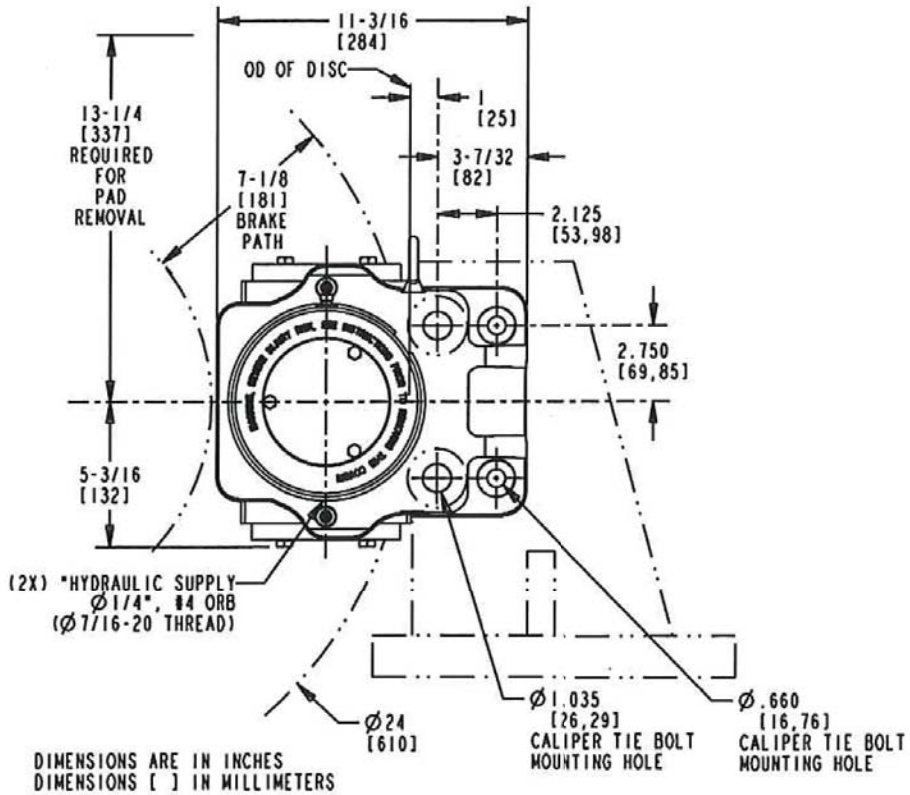
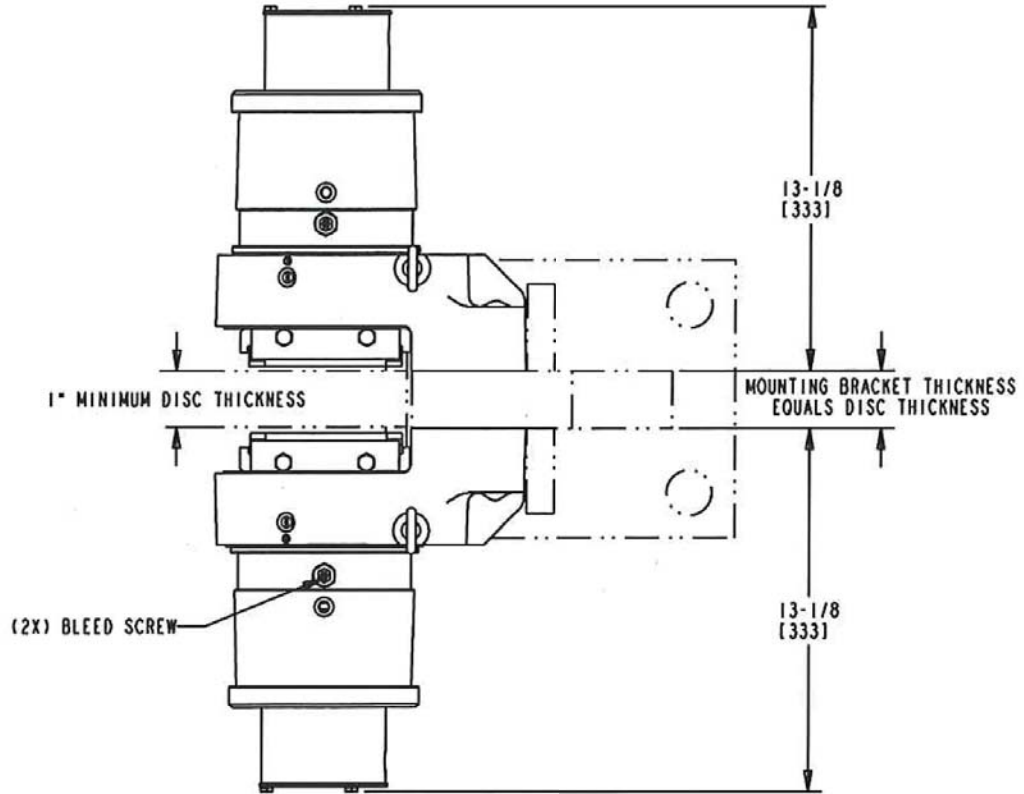
Model	Braking Force (F <sub>b</sub> )	Touch Pressure	Full Retraction Pressure	Maximum Pressure
M400SH60	13,488 lbf (60 kN)	1,900 psi (131 bar)	2,300 psi (158 bar)	2,400 psi (165 bar)
M400SH50	11,240 lbf (50 kN)	1,650 psi (114 bar)	2,000 psi (138 bar)	2,100 psi (145 bar)
M400SH40	8,992 lbf (40 kN)	1,450 psi (100 bar)	1,800 psi (124 bar)	1,900 psi (131 bar)
M400SH30	6,744 lbf (30 kN)	1100 psi (76 bar)	1,500 psi (103 bar)	1,600 psi (110 bar)
M400SH25	5,620 lbf (25 kN)	850 psi (59 bar)	1,300 psi (90 bar)	1,400 psi (97 bar)

Minimum Disc Size: 24 in (610 mm) • Minimum Disc Thickness 1in (25 mm)

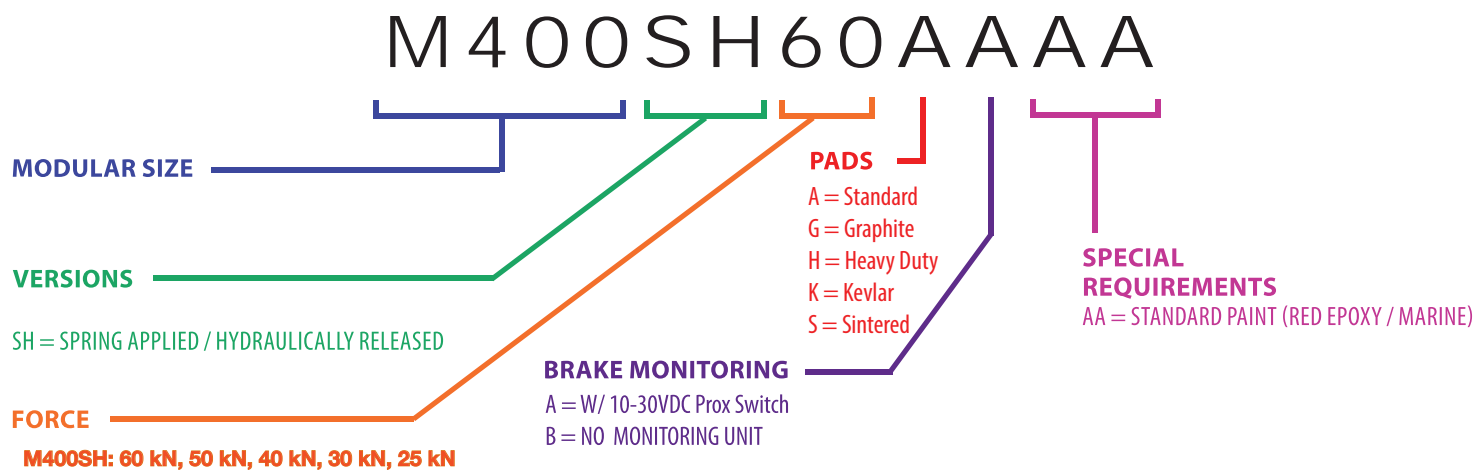
$$\text{Braking Torque (lb-ft)} = \frac{\text{Braking Force (lb)} \times (\text{Disc Radius (in)} - 2.75")}{12}$$



# Mounting Dimensions



## Modular Model Number



Brake Weight: 240 lb (109 kg)

Brake Path: 7.125 in (181 mm)

Friction Pad Area: 43.4 in<sup>2</sup> [280 cm<sup>2</sup>] (Each Pad)

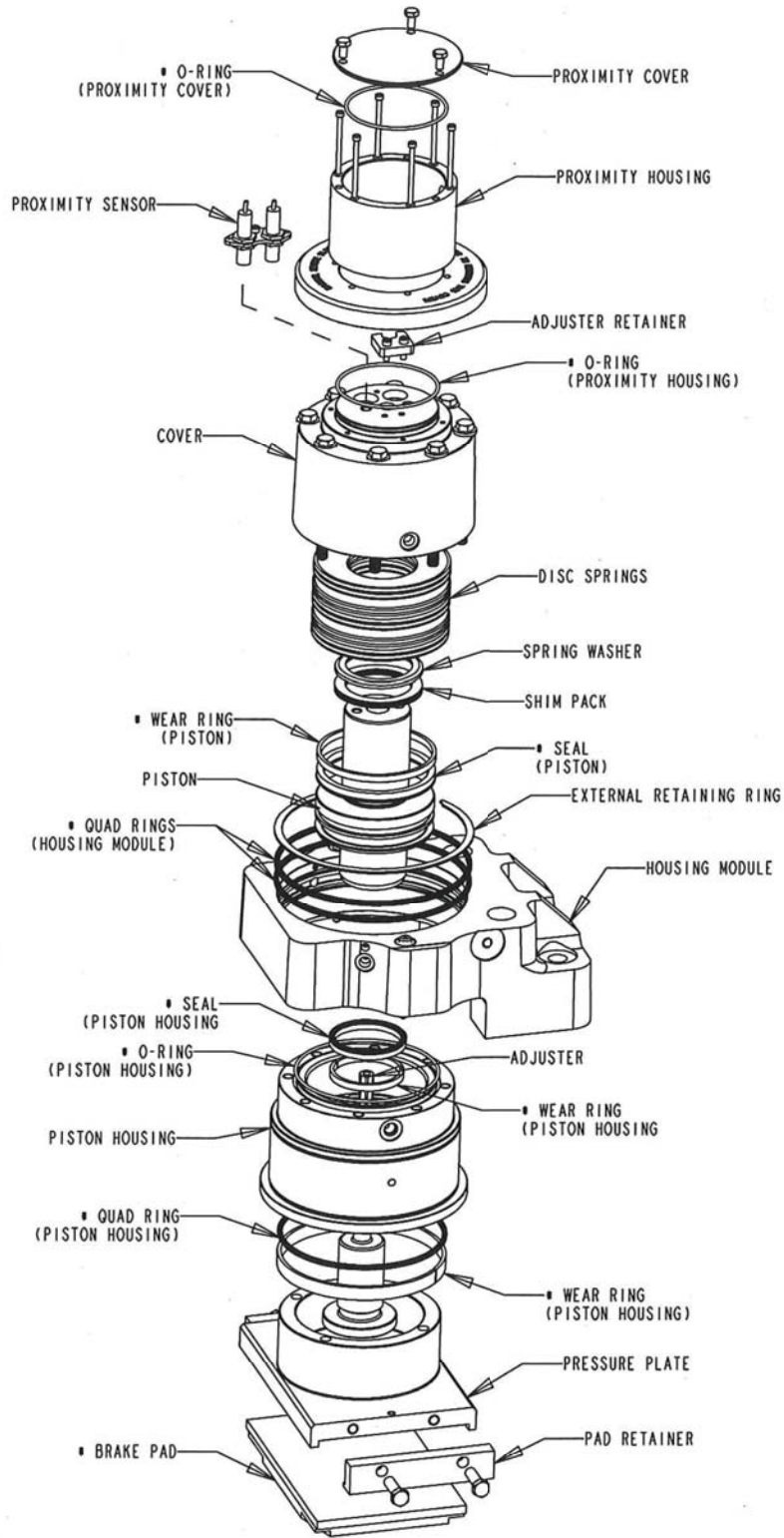
### Recommended Oil

Mineral Oil or Automatic Transmission Fluid (ATF) is recommended for use with the M400 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.

# M400SH Exploded View



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

## The Hilliard Corporation

100 West Fourth Street

Elmira, New York

14902-1504 USA

PH: 607.733.7121 | FAX: 607.737.1108

hilliardcorp.com | hilliard@hilliardcorp.com



YOUR LOCAL REPRESENTATIVE:



08/16 TDS-M400SH