# THORDON GRADES AND CONFIGURATIONS







### ThorPlas<sup>®</sup> (blue) is a non-elastomeric, homogeneous material developed by Thordon specifically as a full form high pressure bearing.

- maximum dynamic working pressure to 31.0 MPa (4500 psi); static pressures to 45.0 MPa (6500 psi)
- easily machined without affecting low coefficient of friction (typically 0.10 0.17)
- very low wear in non-abrasive environments
- maximum continuous service temperatures of 80°C (176°F) in water and 110°C (230°F) dry
- excellent dry start capability as a vertical pump bearing
- reasonable abrasion resistance less than Thordon elastomer grades, but better than bronze, epoxy phenolics and many other non-metallic bearing materials
- improved chemical resistance in most chemical product categories compared to elastomeric grades

## Thordon SXL (off-white) has excellent dry start capability and a lower coefficient of friction than the other Thordon elastomeric grades.

- low coefficient of friction (typically 0.10-0.20)
- higher dry PV (Pressure Velocity) rating than XL
- higher resistance to abrasion than XL in wet applications; good abrasion resistance operating dry
- dry start-up capability as a vertical pump bearing
- high resistance to shock loading and vibration

**NOTE:** When SXL is used in vertical pumps where dry startup is a consideration, consult with Thordon Bearings regarding bearing design. Thordon will recommend a maximum dry running time based on the peripheral velocity of the shaft and the load on the bearing.

# Thordon XL (black) is used in a variety of industrial applications and has similar abrasion resistance compared to SXL.

- low coefficient of friction (typically 0.20-0.25)
- high resistance to abrasion in dry applications
- high resistance to shock loading and vibration



### Thordon HPSXL (grey) is designed for higher pressure applications as the bearing component in HPSXL TRAXL bearings (HPSXL bonded in a metallic shell).

- maximum dynamic working pressure to 15.0 MPa (2175 psi) in limited motion as a homogeneous material
- HPSXL TRAXL has maximum dynamic working pressure to 55.0 MPa (8000 psi) in limited motion
- lowest coefficient of friction (typically 0.06-0.12)
- moderately abrasion resistant (lower abrasion resistance than XL or SXL)
- high resistance to shock loading and vibration

Thordon Composite (yellow shell, black wear surface is GM2401) is a two-component bearing formulated specifically for use in very abrasive environments.

- used in rotating applications in abrasive water conditions such as pump and dredge bearings
- outstanding abrasion resistance two or more times that of rubber
- significantly lower coefficient of friction than rubber
- higher resilience and stiffness than rubber
- · available with either yellow polymer or metal bearing shells

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#### **OVER 25 YEARS EXPERIENCE INSTALLING BEARINGS ON YACHTS**

With over 25 years experience selling bearings to the yacht market, Thordon Bearings and your local Thordon distributor know how to improve your boating experience with high performance propeller shaft bearings, rudder bearings and deck equipment bushings. Utilizing proprietary polymers, non-metallic Thordon bearings deliver smooth, reliable and quiet operation required for today's modern yachts.

#### **THORDON PROPELLER SHAFT BEARINGS**

Thordon offers different propeller shaft bearing grades for different yacht operating profiles.



COMPAC: Thordon's premium and lowest friction bearing for blue water application



SXL: Low friction bearing for yachts operating up to 20% of the time in abrasive water

Consider these propeller shaft bearing performance benefits:

- Smooth, quiet operation at all speeds
- No high frequency squeal common with rubber bearings at low shaft RPM's like trolling speeds
- Lubricants in the polymer formulation reduce start up friction
- Long wear life reduces maintenance costs
- Absorb more misalignment and deflection from impact than other materials
- Available in a wide variety of sizes to suit various size housings or shafts



Thordon COMPAC Starboard Strut Bearing Installed on Mega Yacht

