Mobil SHC™ Polyrex EM

Mobil Grease , Austria

High Performance Electric Motor Bearing Grease



Product Description

High Performance Mobil SHC™ Polyrex EM Series greases are specially formulated for electric-motor bearings. The advanced thickener formulation and proprietary manufacturing techniques provide improved bearing performance and protection for long electric motor life.

Mobil SHC Polyrex 102 EM Series has demonstrated up to 40% improvement in bearing torque reduction in controlled laboratory testing(*).

The energy efficiency design is a trademark of Exxon Mobil Corporation.

(*) Torque reduction relates solely to the performance of Mobil SHC Polyrex 102 EM when compared to conventional (mineral) reference grease of a similar viscosity grade in a deep grove ball bearing. The technology used allows up to 40 % torque reduction compared to the reference when tested in a bearing under controlled conditions. Efficiency improvements will vary based on operating conditions and equipment.

Features and Benefits

Mobil SHC Polyrex 102 EM and Mobil SHC Polyrex 103 EM offer the following features and benefits:

- Outstanding long-life, extreme high-temperature lubrication of ball and roller bearings, particularly in sealed-for-life applications up to 180 C.
- Reduced bearing torque vs conventional based greases
- Increased stability versus conventional polyurea greases when subjected to mechanical shear forces
- Excellent corrosion resistance and protection against rust and corrosion.
- Low-noise properties suitable for lubrication of ball bearings in many noise-sensitive applications
- Improved low temperature performance vs conventional based greases

Applications

Mobil SHC Polyrex 102 EM greases are recommended by major bearing and electric motor manufacturers for long-life lubrication of electric motor ball and roller bearings.

Mobil SHC Polyrex 103 EM is more specifically recommended for applications such as vertically mounted bearings, or very large motors where a stiffer grease consistency may be required by the OEM, and low noise properties are not required.

Mobil SHC Polyrex EM greases have been shown to be compatible with a number of ExxonMobil lithium complex greases, as well as competitive electric motor mineral polyurea products, as determined by the methodology of ASTM D6185. For specific questions about grease compatibility, contact your Mobil representative.

Key applications include:

- Electric motor bearings

- Fin fan bearings
- High-temperature pump bearings
- Factory-filled, sealed-for-life ball bearings
- Ball or roller bearings operating at extreme high temperatures where low oil separation is required
- Mobil SHC Polyrex EM for ball or roller bearings operating in noise sensitive environments

Specifications and Approvals

This product meets or exceeds the requirements of:	MOBIL SHC POLYREX 102 EM	MOBIL SHC POLYREX 103 EM
DIN 51825:2004-06 KHC2R-30	X	
DIN 51825:2004-06 KHC3R-20		X

Properties and Specifications

Property	MOBIL SHC POLYREX 102 EM	MOBIL SHC POLYREX 103 EM
Grade	NLGI 2	NLGI 3
Thickener Type	Polyurea	Polyurea
Copper Strip Corrosion, Rating, ASTM D4048	1A	1A
Dropping Point, °C, ASTM D2265	253	269
Four-Ball Wear Test, Scar Diameter, mm, ASTM D2266	0.49	0.60
Grease Appearance / Color, Visual	Green	Green
Low Temperature Torque, Running, -40 C, g-cm, ASTM D1478	540	1590
Low Temperature Torque, Starting, -40 C, g-cm, ASTM D1478	4780	6780
Oil Separation, 168 h @ 40 C, mass%, IP 121	0.0	
Oil Separation, 168 h @ 80 C, mass%, IP 121(mod)		0.1
Viscosity @ 100 C, Base Oil, mm2/s, ASTM D445	10.9	10.9
Viscosity @ 40 C, Base Oil, mm2/s, ASTM D445	85	85

Health and Safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ http://www.msds.exxonmobil.com/psims/psims.aspx

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