

Mobil Polyrex EM

Electric Motor Bearing Grease

Product Description

Super-premium Mobil Polyrex EM Series grease is 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.

Features and Benefits

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

| Features | Advantages and Potential Benefits |
|--------------------------------|--|
| Outstanding grease life | Outstanding long-life, high-temperature lubrication of ball and roller bearings, particularly in sealed-for-life applications |
| Advanced polyurea thickener | Increased durability versus conventional polyurea greases when subjected to mechanical shear forces |
| Excellent corrosion resistance | Mobil Polyrex EM and Mobil Polyrex EM 103 provide protection against rust and corrosion. Mobil Polyrex EM provides additional protection under mild salt-water wash conditions versus Polyrex EM 103 |
| Low-noise properties | Mobil Polyrex EM is suitable for lubrication of ball bearings in many noise-sensitive applications |

Applications

Mobil Polyrex EM greases are recommended by many major bearing and electric motor manufacturers for long-life lubrication of electric motor ball and roller bearings. Mobil Polyrex EM 103 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 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 high temperatures where low oil separation is required
- Polyrex EM for ball or roller bearings operating in noise sensitive environments



Typical Properties

| | Mobil Polyrex EM | Mobil Polyrex EM 103 |
|--|------------------|----------------------|
| NLGI Grade | 2 | 3 |
| Color | Blue | Blue |
| Base Oil Viscosity, ASTM D 445 | | |
| cSt @ 40°C | 115 | 115 |
| cSt @ 100°C | 12.2 | 12.2 |
| Mineral Oil Viscosity Index, ASTM D 2270 | 95 | 95 |
| Penetration, ASTM D217 worked, 60x, mm/10 | 285 | 250 |
| Penetration Change after 100.000 strokes, ASTM D217, 40 mm/10 | | 40 |
| Dropping Point, ASTM D 2265, °C (°F) | 260 | 270 |
| Oil separation test, ASTM D 1742, % | 0.5 | 0.1 |
| High Temperature Grease Life, ASTM D 3336, Hours @ 177°C | 750+ | 750+ |
| 4-Ball Wear Scar, ASTM D 2266, @ 40kg, 1200 rpm, 75°C, 1 hr, mm | 0.41 | 0.6 |
| Low Temperature Torque, ASTM D 1478, g-cm @ -29°C | | |
| Starting | 7500 | 9300 |
| Running | 800 | 1000 |
| EMCOR Corrosion Performance, 10% Synthetic Sea Water ASTM D 6138 (Prepared As Per ASTM D 665B) | 0,1 (No Rust) | |
| Rust Protection, ASTM D 1743, Distilled Water | Pass | Pass |
| Copper Corrosion Resistance, ASTM D 4048 | 1A | 1A |
| Water Washout, ASTM D 1264, % | 1.9 | 0.8 |

Health and Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and when the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

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