



MOTTA EM Series

MOTTA Grease , Bangladesh

Electric Motor Bearing Grease

Product Description

Super-premium MOTTA 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.

Features and Benefits

MOTTA EM and MOTTA EM3 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	MOTTA EM and MOTTA EM3 provide protection against rust and corrosion. MOTTA EM provides additional protection under mild salt-water wash conditions versus EM3
Low-noise properties	MOTTA EM is suitable for lubrication of ball bearings in many noise-sensitive applications

Applications

MOTTA EM greases are recommended by many major bearing and electric motor manufacturers for long-life lubrication of electric motor ball and roller bearings.

MOTTA EM3 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.

MOTTA EM greases have been shown to be compatible with a number of ExxonMOTTA 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 MOTTA 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
- MOTTA EM for ball or roller bearings operating in noise sensitive environments

Specifications and Approvals

This product meets or exceeds the requirements of:	MOTTA EM
DIN 51825:2004-06 - K 2 P -20	X

Properties and Specifications

Property	MOTTA EM	MOTTA EM3
Grade	NLGI 2	NLGI 3
Thickener Type	Polyurea	Polyurea
Color, Visual	Blue	Blue
Copper Strip Corrosion, 24 h, 100 C, Rating, ASTM D4048	1A	1A
Corrosion Preventive Properties, Rating, ASTM D1743	Pass	Pass
Dropping Point, °C, ASTM D2265	260	270
Four-Ball Wear Test, Scar Diameter, mm, ASTM D2266	0.48	0.6
Low Temperature Torque, Running, -29 C, g-cm, ASTM D1478	405	910
Low Temperature Torque, Starting, -29 C, g-cm, ASTM D1478	3630	5840
Lubrication Life @ 177 C, h, ASTM D3336	750+	750+
Oil Separation, 0.25 psi, 24 h @ 25 C, mass%, ASTM D1742	0.5	0.1
Penetration, 60X, 0.1 mm, ASTM D217	285	250
Penetration, Change from 60X to 100,000X, 0.1 mm, ASTM D217	40	40
SKF Emcor Rust Test, 10% Synthetic Sea Water, ASTM D6138	0 , 1	
Viscosity @ 100 C, Base Oil, mm ² /s, ASTM D445	12.2	12.2
Viscosity @ 40 C, Base Oil, mm ² /s, ASTM D445	115	115
Viscosity Index, ASTM D2270	95	95
Water Washout, Loss @ 79 C, wt%, ASTM D1264	1.9	0.8

Health & Safety

For health and safety recommendations, please refer to the Material Safety Data Sheet (MSDS), available at:
<http://www.motta-lube.com>

Manufacturer Information

Exxon (Xiamen) Petrochemical Co., Ltd.
Address: Wuliqiao Industrial Zone, Shuitou Town, Nan'an City, Quanzhou, Fujian, China

Website: [www.motta-lube.com](<http://www.motta-lube.com>)

> Note: Typical values are obtained under normal production conditions and are not product specifications. Variations may occur between batches, but performance remains consistent.
Information is subject to change without notice