



BP Energrease LS-EP Range

Multi-purpose EP grease

Description

The BP Energrease™ LS-EP range are high quality lithium based multi-purpose greases incorporating solvent refined base oils and oxidation and corrosion inhibitors to ensure long service life and a high level of protection for ferrous surfaces.

Energrease LS-EP greases also incorporate extreme pressure (EP) additives to provide continuous lubrication, even when surfaces are subjected to heavy or shock loading. These grades have multi-purpose capabilities, water-resistant, and are suitable for operating temperatures between -30°C and 120°C.

Application

Energrease LS-EP greases are intended for use in plain and roller bearings of all kinds of machinery – including electric motors, machine tools, woodworking machines as well as industrial, plant, mining and construction equipment. They are recommended for use where surfaces are subjected to heavy or shock loading. The Energrease LS-EP greases meet the British Timken requirements for use in steel mills.

Advantages

- Suitable for highly loaded applications
- Multi-purpose capability
- Long service life
- Resistance to water wash off
- Good pumpability
- Good shear stability and vibration resistance

Typical Characteristics

| | Test Methods | Units | LS-EP 00 | LS-EP 0 | LS-EP 1 | LS-EP 2 | LS-EP 3 |
|---------------------------------------|--------------------------|--------------------|------------|---------|---------|---------|---------|
| Thickener type | - | - | Lithium | Lithium | Lithium | Lithium | Lithium |
| NLGI Classification | ISO 2137 / ASTM D217 | - | 00 | 0 | 1 | 2 | 3 |
| Colour | - | - | brown | brown | brown | brown | brown |
| Texture | - | - | smooth | smooth | smooth | smooth | smooth |
| Drop Point | ISO 2176 / ASTM D2265 | °C | 160 | 160 | 190 | 190 | 190 |
| Base oil viscosity @ 40°C | ISO 3104 / ASTM D445 | mm ² /s | 95 | 180 | 180 | 180 | 180 |
| Worked Penetration, 25°C / 60 strokes | ISO 2137 / ASTM D 217 | 0.1 mm | 400-430 | 355-385 | 310-340 | 265-295 | 220-250 |
| Working Stability 60 / 100000 strokes | ISO 2137 / ASTM D217 | 0.1 mm | - | 20 | 30 | 35 | 40 |
| Oil Separation 168 h / 40 °C | IP 121 / DIN 51817 | %wt | - | 10 | 8 | 3 | 1 |
| Anti-Rust Performance (Emcor) | IP 220 / DIN 51802 | - | 0/1 | 0/0 | 0/0 | 0/0 | 0/0 |
| Copper-Corrosion 24 h / 120°C | ISO 2160 / ASTM D4048 | - | 1 | 1 | 1 | 1 | 1 |
| Oxidation Stability 100 h/100°C | ASTM D942 / DIN 51808 | bar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Water resistance, 3 h/90°C | DIN 51807/1 | - | 1 | 1 | 1 | 1 | 1 |
| Timken OK-load-wear | ASTM D2509 | Lb/ mg | 40/2 | 40/2 | 45/3 | 45/2 | 45/2 |
| 4- Ball Weld Load | ASTM D2783 | N | - | 2600 | 2600 | 2600 | 2600 |
| SKF-R2F-test rig Cond. 'B', 140°C | DIN 51806 | - | - | - | pass | pass | pass |
| Flow pressure: -25°C | DIN 51805 | mbar | <120 | <1000 | 1000 | 1200 | >2000 |
| DIN Classification | DIN 51502 / DIN 51826 | | GLP00 K-30 | KP0K | KP1K | KP2K | KP3K |

Subject to usual manufacturing tolerances.

Additional Information

In order to minimise potential incompatibilities when converting to a new grease, all previous lubricant should be removed as much as possible prior to operation. During initial operation, re-lubrication intervals should be monitored closely to ensure all previous lubricant is purged.

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