



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	mm²/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		GLP 00 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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