

# Klüberlectric B 42-72

## Electroconductive rolling bearing grease



### Description:

Klüberlectric B 42-72 is a fully synthetic lubricating grease based on ester oil, synthetic hydrocarbon oil, special lithium soap and solid lubricants. Due to its special composition, static electricity in rolling bearings are conducted through the grease, thus preventing local voltage discharge which would severely damage the bearing raceways and rolling elements. In addition to the electroconductive properties, Klüberlectric B 42-72 offers

- a wide service temperature range
- good corrosion protection, and
- a long service life.

### Application:

Klüberlectric B 42-72 has been designed for the long-term lubrication of rolling bearings in which static electricity may occur, such as in electric motors, paper-making machines, copying machines, film-stretching stenters and fans. The grease has proven efficient for applications subject to electric currents < 1 A and especially for ball bearings.

The electric conductivity of Klüberlectric B 42-72 has been determined in tests based on DIN 53 482. On the rolling bearing test rig FAG-FE9, DIN 51 821, axial load of 1,500 N, 6,000 rpm, open mounting position A, 140 °C, the product achieved a medium service life of > 200 h, failure probability 50%.

### Minimum shelf life:

The minimum shelf life is approx. 36 months when stored in a dry place and in closed original containers.

### Pack sizes:

- 1 kg can
- 25 kg bucket

### Klüberlectric B 42-72

- Electroconductive rolling bearing grease
- Wide service temperature range
- Good corrosion protection
- Long service life

### Product data:

Base oil / thickener	ester oil, synthetic hydrocarbon oil, special lithium soap, solid lubricant
Colour, aspect	black, homogeneous
Service temperature range*, DIN 51 825, 51 821/2, °C	approx. – 40 to 140 °C
Worked penetration, DIN ISO 2137, at 25 °C, 0.1 mm	265 – 295
Drop point, DIN ISO 2176, °C	approx. 300
Flow pressure acc. to DIN 51 805 at – 40 °C, mbar	< 1,400
Water resistance acc. to DIN 51 807, pt. 1, 3 h / 90 °C, rating	1 – 90
Copper corrosion DIN 51 811, 24 h / 140 °C, corrosion degree	1 – 140
Corrosion-protective properties (Emcor test), DIN 51 802, 1 week, distilled water, corrosion degree	≤ 1
Density at 20 °C, g/cm <sup>3</sup> ,	approx. 0.92
Base oil viscosity, DIN 51 561 at 40 °C, mm <sup>2</sup> /s at 100 °C, mm <sup>2</sup> /s	approx. 70 approx. 10
FAG-FE9-test run acc. to DIN 51 821, part 2, F <sub>a</sub> 1,500 N, n = 6,000 rpm, 140 °C	L <sub>50</sub> -running time > 200 h
Electric resistance acc. to DIN 53 482, electrode spacing cm, electrode surface 1 cm <sup>2</sup> , Ω x cm	max. 20.000
Speed factor for deep-groove ball bearings** (n x d <sub>m</sub> ) mm x min <sup>-1</sup>	approx. 350,000

\* Service temperatures are guide values which depend on the lubricant's composition, the intended use and the application method. Lubricants change their consistency, apparent dynamic viscosity or viscosity depending on the mechano-dynamical loads, time, pressure and temperature. These changes in product characteristics may affect the function of a component.

The upper service temperature was determined acc. to DIN 51 825 and DIN 51 821/2.

The lower service temperature was determined acc. to DIN 51 825 and 51 805 as well as IP 186/85.

\*\* Speed factors are guide values which depend on the type and size of the rolling bearing and the local operating conditions, which is why they have to be confirmed in tests carried out by the user in each individual case.

The data in this product information is based on our general experience and knowledge at the time of printing and is intended to give information of possible applications to a reader with technical experience. It constitutes neither an assurance of product properties nor does it release the user from the obligation of performing preliminary tests with the selected product. We recommend contacting our Technical Consulting Staff to discuss your specific application. If required and possible we will be pleased to provide a sample for testing. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this product information at any time without notice.



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