

# Klüberlectric BQ 72-72

Electroconductive low-noise rolling bearing grease for long-term lubrication



#### Your benefits at a glance

- · Innovative lubricant containing ionic liquids to provide electroconductivity
- Excellent behaviour at high and low temperatures
- Especially for lifetime lubrication of capped or sealed deep groove ball bearings
- Very good low-noise characteristics

#### Your requirements - our solution

Do your rolling bearings have to meet challenging performance requirements in the face of long relubrication intervals or even lifetime lubrication? Do they have to operate over a wide service temperature range? Is there a risk of unwanted electric discharge which might lead to electric erosion and the formation of micro-craters? Do you operate rolling bearings in electric components such as generators or electric motors with continuously adjustable speed enabled by frequency converters and expect them to work reliably throughout the component's lifetime with only a minimum of noise?

The right lubricant can make a substantial contribution to meeting these taxing requirements. Klüberlectric BQ 72-72 was developed as an electroconductive rolling bearing grease with added excellent low-noise characteristics. Due to the use of selected additives based on ionic liquids, the lubricant's electroconductivity was increased, attaining resistance characteristics resembling those of semiconductors. Another challenge exists in the form of high or low temperatures in combination with long-term or lifetime lubrication. When developing this product, we attached particular importance to the combination of electroconductivity, long-term performance and

low-noise operation so as to provide you with a maximised range of applications.

#### **Application**

Klüberlectric BQ 72-72 is primarily used for the long-term lubrication of capped or sealed ball bearings. Many of them are components of speed-controlled electric motors, generators or fans, or they operate in automobile applications where long service life has to be attained at above-average permanent temperatures and noise must be kept under control.

### **Application notes**

Klüberlectric BQ 72-72 may be applied by brush, spatula, grease gun or grease cartridge. We recommend testing the pumpability of Klüberlectric BQ 72-72 in automatic lubrication systems prior to use.

#### Material safety data sheets

Material safety data sheets can be requested via our website www.klueber.com. You may also obtain them through your contact person at Klüber Lubrication.

Pack sizes	Klüberlectric BQ 72-72
Cartridge 400 g	+
Can 1 kg	+
Bucket 25 kg	+

Characteristics	Klüberlectric BQ 72-72
Article number	094140



## Klüberlectric BQ 72-72

Electroconductive low-noise rolling bearing grease for long-term lubrication



Characteristics	Klüberlectric BQ 72-72
Composition, thickener	polyurea
Composition, type of oil	ester oil
Colour space	beige
Texture	homogeneous, short fibrous
Service temperature, lower limit	-45 °C
Service temperature, upper limit	180 °C
Density, Klüber method: PN 024, 20°C	approx. 0.96 g/cm <sup>3</sup>
Specific resistance, DIN EN 62361-3-1, based on standard, Klüber method: PN 036 / equipment: distance between electrodes 1 cm / quantity 1 cm <sup>3</sup>	$\leq 1*10^7 \Omega \text{cm}$
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, lower limit	265 0.1 mm
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, upper limit	295 0.1 mm
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C	approx. 9.5 mm²/s
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C	approx. 72 mm²/s
SKF-EMCOR, DIN 51802, Klüber method: distilled water, 168 h	≤ 1 corrosion degree
Flow pressure, DIN 51805-2, -45°C	≤ 1400 mbar
FAG FE9 rolling bearing test, DIN 51821-2, 1500 / 6000-180, service life F50	≥ 100 h
Noise test, BeQuiet+, ÖNorm M 8127-2, equipment: SKF grease noise test rig, noise class	≥ GN 3
R0F rolling bearing test, Klüber method: axial load: 100 N / radial load: 50 N / 10000 min <sup>-1</sup> / 1.5 cm³, equipment: SKF grease testing maschine, 170°C, service life F50	≥ 1000 h
Speed factor (n x dm), equipment: high speed test rig, precision bearing 7008 / 27000 $min^{-1}$ / max. axial load: 2000 N	1450000 mm/min
Water resistance, DIN 51807-1, 3 h, 90°C	0 - 90 rating
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	d 36 months

### Klüber Lubrication – your global specialist

Innovative tribological solutions are our passion. Through personal contact and consultation, we help our customers to be successful worldwide, in all industries and markets. With our ambitious technical concepts and experienced, competent staff we have been fulfilling increasingly demanding requirements by manufacturing efficient high-performance lubricants for more than 90 years.

Klüber Lubrication München GmbH & Co. KG / Geisenhausenerstraße 7 / 81379 München / Germany / phone +49 89 7876-0 / fax +49 89 7876-333.

The data in this document is based on our general experience and knowledge at the time of publication 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 field tests with the product selected for a specific application. All data are guide values which depend on the lubricant's composition, the intended use and the application method. The technical values of lubricants change depending on the mechanical, dynamical, chemical and thermal loads, time and pressure. These changes may affect the function of a component. We recommend contacting us to discuss your specific application. If possible we will be pleased to provide a sample for testing on request. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this document at any time without notice.

Publisher and Copyright: Klüber Lubrication München GmbH & Co. KG. Reprints, total or in part, are permitted only prior consultation with Klüber Lubrication München GmbH & Co. KG and if source is indicated and voucher copy is forwarded.