

Klübersynth BR 46-82

Low and high-temperature grease for drive-by-wire technology in the automotive sector



Your benefits at a glance

- Low-cost alternative to greases based on perfluorinated oils for high-temperature applications
- Reliable operation over a wide temperature range
- Lifetime lubrication also at permanent high temperatures
- Good wear protection in steel-steel material pairings allowing reliable component operation

Your requirements - our solution

Klübersynth BR 46-82 consists of a mixture of polyglycol and ester oil and a lithium complex soap with good media resistance. Due to the low viscosity of the base oil, components run smoothly also at low temperature. The lubricant also contains highly effective antiwear additives. The base oil can be mixed with brake fluid DOT 3, DOT 4 and DOT 5.1. It is compatible with EPDM elastomer materials. It should be noted that elastomers supplied by one or different manufacturers may perform differently in practice. Consequently, a general compatibility with the materials used cannot be assumed and must be checked individually.

Application

Klübersynth BR 46-82 is a special grease development for the long-term lubrication of automotive brake system components. The product ensures problem-free operation at temperatures from -40 °C to +180 °C, with short-term peaks up to 250 °C. For the

development of this new lubricant, the special requirements of drive-by-wire technology were taken into account, e.g. operation in ball screws, vertically mounted rolling bearings and drive gears. As a result, lubrication of several points in a module can be accommodated via the application of a single grease type.

Application notes

The lubricant is applied by spatula, brush or grease gun. If automatic lubrication systems are to be used, please check pumpability beforehand. We suggest compatibility checks be undertaken with contact materials in particular prior to series application.

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	Klübersynth BR 46-82
Can 1 kg	+
Bucket 25 kg	+

Characteristics	Klübersynth BR 46-82
Article number	012033
Composition, thickener	lithium complex soap
Composition, type of oil	polyalkylenglycol
Colour space	beige
Service temperature, lower limit	-40 °C
Service temperature, upper limit	180 °C

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Characteristics	Klübersynth BR 46-82
Service temperature, DIN 51825, upper limit, rolling bearing	140 °C
Density, Klüber method: PN 024, 20°C	approx. 1.00 g/cm ³
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, lower limit	280 0.1 mm
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, upper limit	310 0.1 mm
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C	approx. 13 mm ² /s
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C	approx. 82 mm ² /s
Copper corrosion, DIN 51811, 24 h, 100°C	1 - 100 - 24 corrosion degree
SKF-EMCOR, DIN 51802, Klüber method: distilled water, 168 h	0 corrosion degree
Flow pressure, DIN 51805-2, -40°C	≤ 1000 mbar
Dropping point, DIN ISO 2176 / IP 396	≥ 250 °C
Speed factor (n x dm)	approx. 1000000 mm/min
Water resistance, DIN 51807-1, 3 h, 90°C	≤ 1 - 90 rating
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	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.

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