

# Klüberlectric KR 44-402

Special grease for the lubrication of electrical switches, contacts and sensors



### Benefits for your application

- Wide service temperature range
- Good corrosion protection of copper and silver contacts
- Ageing and oxidation stability
- Good compatibility with plastics
- Damping effect
- Contains a UV indicator

### Description

Klüberlectric KR 44-402 is a special grease for the lubrication of electrical switches, contacts and sensors. It consists of a synthetic hydrocarbon oil and lithium complex soap incorporating a UV indicator for quality inspection when locally applied in small quantities. A special additive combination makes Klüberlectric KR 44-402 particularly suitable for the lubrication of electrical contacts. It is intended especially for the protection and lubrication of copper, tin and silver surfaces against corrosion. Further positive effects are: reduction of plugin and switching forces, reduction of fretting corrosion, extended connecting and switching cycles, constantly low contact resistance and smoother switching transitions.

# Application

For electrical components in the automotive, industrial engineering and installations sector. Due to its specific base oil viscosity, Klüberlectric KR 44-402 works particularly well under medium to high contact forces and at low temperatures. It is compatible with most plastic materials and hence can be used for the lubrication of plastic/plastic material combinations. Klüberlectric KR 44-402 minimises contact resistance values under lifetime operating requirements subject to varying electrical and mechanical loads.

## Application notes

To utilise this special grease's full performance capacity, component parts to be greased should be cleaned to remove all foreign substances such as corrosion protection oils, waxes, etc. Electrical contacts should be bright and clean. The lubricant can be applied by spatula, tampon printing or via automatic dosing equipment. Due to the many different material compositions, in terms of elastomers and plastics, compatibility with the selected materials should always be tested 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	Klüberlectric KR 44-402
Can 1 kg	+
Bucket 25 kg	+

Product data	Klüberlectric KR 44-402
Article number	091021
Lower service temperature	-40 °C / -40 °F
Upper service temperature	150 °C / 302 °F
Colour space	beige



# Klüberlectric KR 44-402

Special grease for the lubrication of electrical switches, contacts and sensors

Product data	Klüberlectric KR 44-402
Texture	homogeneous
Texture	long-fibred
Density at 20 °C	approx. 0.85 g/cm <sup>3</sup>
Worked penetration, DIN ISO 2137, 25 °C, lower limit value	280 x 0.1 mm
Worked penetration, DIN ISO 2137, 25 °C, upper limit value	310 x 0.1 mm
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 415 mm <sup>2</sup> /s
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 42 mm²/s
Drop point, DIN ISO 2176, IP 396	> 220 °C
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 80 years.

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