

Klüberalfa IR 83-22

Long-term and low-temperature lubricating grease for application points subject to aggressive media



Benefits for your application

- **Long component life**
 - in contact with aggressive chemical agents
 - where sensitive plastic materials are used
- **High component performance**
 - due to low friction values
 - also at low temperatures
 - due to low stick-slip tendency

Description

Klüberalfa IR 83-22 is a fully synthetic long-term lubricating grease based on a perfluorinated polyether oil and PTFE. With a consistency class mid way between NLGI 1 and NLGI 2, Klüberalfa IR 83-22 is especially formulated as a dynamically light grease.

Klüberalfa IR 83-22 is extremely compatible with plastic materials and offers unparalleled resistance to aggressive chemical media (with the exception of fluorinated fluids).

Application

Klüberalfa IR 83-22 has been especially developed for long-term / lifetime lubrication of plain and rolling bearings as well as for friction points in contact with plastics and elastomers where both low temperature and aggressive media are prevalent.

Due specifically to its dynamically light formulation Klüberalfa IR 83-22 is especially suitable for applications requiring low starting and running torque.

Klüberalfa IR 83-22 can also be considered for applications in the automotive industry, for example the lubrication of door locks, plastic guides and small gear drives.

Compatibility with elastomers and plastics

Lubricating greases based on polyether oils and PTFE are neutral towards most elastomers and plastics with the exception of perfluorinated rubber, however, we recommend compatibility with these materials be tested prior to series application.

Application notes

For optimum results we recommend cleaning all friction points with white spirit 180/210 and then with Klüberalfa XZ 3-1.

Thereafter the surfaces should be dried using clean dry compressed air, or hot air, in order to remove all white spirit residues, prior to initial lubrication.

All application points should be bright (i.e. free of oils, greases, perspiration and contaminants).

The various technical sales departments at Klüber Lubrication may be contacted at any time to ensure the correct methods of preparation and application are employed and optimum results with this special lubricating grease are achieved.

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	Klüberalfa IR 83-22
Can 1 kg	+
Bucket 10 kg	+



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Product data	Klüberalfa IR 83-22
Article number	090092
Chemical composition, type of oil	PFPE
Chemical composition, solid lubricant	PTFE
Lower service temperature	-40 °C / -40 °F
Upper service temperature	80 °C / 176 °F
Colour space	white
Density at 20 °C	approx. 1.99 g/cm ³
Worked penetration, DIN ISO 2137, 25 °C, lower limit value	290 x 0.1 mm
Worked penetration, DIN ISO 2137, 25 °C, upper limit value	310 x 0.1 mm
Shear viscosity at 25 °C, shear rate 300 s ⁻¹ , equipment:rotational viscometer	<= 3 000 mPas
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 25 mm ² /s
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 5 mm ² /s
Low-temperature torque, IP 186, -40 °C, start	< 1 000 mNm
Low-temperature torque, IP 186, -40 °C, running	< 100 mNm
Flow pressure of lubricating greases, DIN 51805, test temperature: -40 °C	<= 1 000 mbar
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.

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