

Klübertemp HM 83-402

High-temperature long-term grease



Benefits for your application

- **High thermal stability**
- **Good pressure absorption capacity**
- **Good compatibility with most plastics and elastomers**
- **Excellent resistance to aggressive media**

Description

Klübertemp HM 83-402 is a long-term lubricating grease based on perfluoropolyether oil and PTFE which has been specifically designed for high-temperature lubrication. Owing to the base oil viscosity and the high load-carrying capacity, Klübertemp HM 83-402 is particularly suitable for the initial and relubrication of medium-speed rolling bearings subject to high temperatures and loads.

Application

Klübertemp HM 83-402 has proven effective for lubrication points requiring regular maintenance at temperatures up to 260°C. Klübertemp HM 83-402 contributes to optimum machine operation and allows long relubrication intervals. For automatic lubrication systems the product is available in a lower viscosity (NLGI grade 1).

Typical applications are:

- Conveyors
- Corrugating machines
- Plastics industry
- Textile industry
- Printing industry.

Klübertemp HM 83-402 is listed in the maintenance and lubrication charts of many leading manufacturers.

Compatibility with plastics and elastomers

Lubricating greases based on fluorinated polyether oils and PTFE are generally regarded as neutral towards elastomers and plastics (with the exception of perfluorinated rubber). Nevertheless compatibility with the materials should be tested, especially prior to series application.

Application notes

For optimum lubrication results, we recommend cleaning the friction points first with white spirit 180/210 and then with Klüberalfa XZ 3-1. For initial lubrication, the friction points must be clean and bright (i.e. free from oil, grease or perspiration) and free from contaminants. The various technical sales departments at Klüber Lubrication may be contacted at any time to ensure optimum results with this special lubricating grease.

Minimum shelf life

The minimum shelf life is approx. 60 months if the product is stored in its unopened original container in a dry, frost-free place.

Material safety data sheets

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

Pack sizes	Klübertemp HM 83-402
Can 1 kg	+
Cartridge 800 g	+
Bucket 10 kg	+



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Product data	Klübertemp HM 83-402
Article number	090081
Upper service temperature	260 °C / 500 °F
Lower service temperature	-30 °C / -22 °F
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 420 mm ² /s
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 40 mm ² /s
Shear viscosity at 25 °C, shear rate 300 s ⁻¹ ; equipment:rotational viscometer	approx. 10 000 mPas
Colour space	white
Chemical composition, type of oil	PFPE
Chemical composition, solid lubricant	PTFE
Density at 20 °C	approx. 1.96 g/cm ³
Corrosion inhibiting properties of lubricating greases, DIN 51802, (SKF-EMCOR), test duration: 1 week, distilled water	<= 1 corrosion degree
Four-ball tester, welding load, DIN 51350 pt. 04	>= 8 000
Shear viscosity at 25°C, shear rate 300 s ⁻¹ , equipment:rotational viscometer, upper limit value	13 000 mPas
Shear viscosity at 25 °C, shear rate 300 s ⁻¹ , equipment: rotational viscometer, lower limit value	7 000 mPas

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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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.

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