Klübertemp HM 83

High-temperature long-term greases

Your benefits at a glance

- High plant availability and reduced maintenance
  - in case of very high operating temperatures up to 260 °C
  - when exposed to aggressive chemical and vapours
- Good compatibility with most plastics and elastomers

Your requirements - our solution

Klübertemp HM greases are long-term lubricating greases 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 greases are particularly suitable for the initial and relubrication of medium-speed rolling bearings subject to high temperatures and loads.

Application

Klübertemp HM greases have proven effective for lubrication points requiring regular maintenance at temperatures up to 260 °C. Klübertemp HM greases contribute to reliable machine operation in many industries as they are available in three consistency grades which make them suitable for a wide range of applications.

Typical applications are:

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

Klübertemp HM greases are 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.

MOSH-MOAH Hint

The chromatographic measurement of MOSH can also detect saturated hydrocarbons of form other sources than mineral oil so it may be possible for chromatographic MOSH peaks to be detected in some Klüber Lubrication H1 products.

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.

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	Klübertemp HM 83-401	Klübertemp HM 83-402	Klübertemp HM 83-403
Cartrigde 800 g	+	+	
Can 1 kg	+	+	+
Bucket 10 kg	+	+	+

Klübertemp HM 83

High-temperature long-term greases

Pack sizes	Klübertemp HM 83-401	Klübertemp HM 83-402	Klübertemp HM 83-403
Bucket 30 kg		+	

Characteristics	Klübertemp HM 83-401	Klübertemp HM 83-402	Klübertemp HM 83-403
Article number	090090	090081	090163
Composition, solid lubricant	PTFE	PTFE	PTFE
Composition, type of oil	PFPE	PFPE	PFPE
Mineral Oils associated with MOSH (Mineral Oil Saturated Hydrocarbons) / MOAH (Mineral Oil Aromatic Hydrocarbons), (Information based on recipe. The presence of impurities, cannot be ruled out.)	Not intentionally added	Not intentionally added	-
Colour space	white	white	white
Service temperature, lower limit	-40 °C	-30 °C	-30 °C
Service temperature, upper limit	260 °C	260 °C	260 °C
Density, Klüber method: PN 024, 20°C	approx. 1.95 g/cm³	approx. 1.96 g/cm³	approx. 1.96 g/cm³
NLGI grade, DIN 51818	1	2	3
Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s^{-1}, lower limit	4000 mPas	7000 mPas	11000 mPas
Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s^{-1}, upper limit	8000 mPas	13000 mPas	17000 mPas
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	approx. 39 mm²/s	approx. 40 mm²/s	approx. 40 mm²/s
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approx. 420 mm²/s	approx. 420 mm²/s	approx. 420 mm²/s
SKF-EMCOR, DIN 51802, Klüber method: distilled water, 168 h	≤ 1 corrosion degree	≤ 1 corrosion degree	≤ 1 corrosion degree
Flow pressure, DIN 51805-2, -30°C	-	≤ 1400 mbar	≤ 1400 mbar
Flow pressure, DIN 51805-2, -40°C	≤ 1400 mbar	-	-
Four-ball tester, welding load, DIN 51350-4	≥ 7000 N	≥ 8000 N	≥ 8000 N
Speed factor (n x dm)	-	-	approx. 300000 mm/min
Water resistance, DIN 51807-1, 3 h, 90°C	-	0 - 90 rating	0 - 90 rating
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	60 months	60 months	60 months

Klübertemp HM 83

High-temperature long-term greases

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 95 years.

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