

# Klübertemp HM 83-271

Long-term lubricating grease for rolling bearings operating under elevated temperatures



## Benefits for your application

- Long maintenance intervals in applications subject to high temperatures
- Soft texture for easy relubrication
- Suitable as lubricant for gas fittings and actuators according to DIN EN 377, category E

## Description

Klübertemp HM 83-271 is a high-temperature and long-term lubricating grease based on perfluorinated polyether oil and a PTFE thickener offering good resistance to churning. Special additives offer highly effective wear and corrosion protection as well as extended relubrication intervals. Its very good resistance to aggressive media facilitates its use in components for gas transport and regulation.

## Application

Klübertemp HM 83-271 was developed for rolling bearings operating under high temperatures, e.g. in heated calenders, oven bearings, transport chains. As this grease is dynamically light, it is especially suitable for

- machine start-up without preheating and
- application via automatic or manual lubricant dispensers.

Furthermore, the grease's good churning stability minimises the risk of lubricant flowing from unsealed bearings. Please note, however, that due to the many different configurations of installations, the grease's pumpability should be checked with the installation manufacturer prior to use. We will be pleased to be of assistance in this respect. Klübertemp HM 83-271 is approved as special grease for gas fittings within a temperature range from 0 °C to 160 °C according to DIN EN 377, category E.

## Behaviour towards elastomers and plastics

Greases based on fluorinated polyether oils and PTFE are normally neutral to most elastomer and plastic materials (possible exception: perfluorinated rubber). Nevertheless, we recommend testing compatibility with the material to be used, especially prior to series application.

## Application notes

For optimum lubrication results, we recommend cleaning the friction point with white spirit and then with Klüberalfa XZ 3-1 prior to first application. The friction point should be bright (i.e. free of oil, grease or perspiration) and free of contaminants. Please consult our technical sales departments to ensure maximum service life.

## Material safety data sheets

Material safety data sheets can be requested via our website [www.klueber.com](http://www.klueber.com). You may also obtain them through your contact person at Klüber Lubrication.

Pack sizes	Klübertemp HM 83-271
Can 1 kg	+
Bucket 10 kg	+
Cartridge 800 g	+

  

Product data	Klübertemp HM 83-271
Article number	090124
Chemical composition, solid lubricant	PTFE
Chemical composition, type of oil	PFPE
Lower service temperature	-40 °C / -40 °F



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Product data	Klübertemp HM 83-271
Upper service temperature	240 °C / 464 °F
Density at 20 °C	approx. 2.00 g/cm <sup>3</sup>
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 280 mm <sup>2</sup> /s
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 40 mm <sup>2</sup> /s
Shear viscosity at 25 °C, shear rate 300 s <sup>-1</sup> , equipment: rotational viscometer, lower limit value	2 000 mPas
Shear viscosity at 25 °C, shear rate 300 s <sup>-1</sup> , equipment: rotational viscometer, upper limit value	8 000 mPas
Corrosion inhibiting properties of lubricating greases, DIN 51802, (SKF-EMCOR), test duration: 1 week, distilled water	<= 1 corrosion degree
Flow pressure of lubricating greases, DIN 51805, test temperature: -40 °C	<= 1 400 mbar
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	60 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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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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