

Klübertemp HB 53-391, 392

High-temperature and long-term greases for rolling bearings subject to high temperatures in continuous presses

Benefits for your application

- High profitability due to long service life of machines
- Approved and recommended for continuous presses in the wood working industry
- Less maintenance due to longer relubrication intervals

Description

Klübertemp HB 53-391 and Klübertemp HB 53-392 are synthetic long-term greases based on perfluorinated polyether oils. They were especially designed for the lubrication of roller bearings subject to high loads and temperatures in continuous presses. Klübertemp HB 53 greases ensure a good oil supply to the bearing throughout the entire service interval and offer high thermal stability as well as corrosion protection. Problematic interaction with aggressive chemicals like glues have not been reported.

Application

Subsequent to extensive tests carried out on roller test rigs and field tests in continuous presses, the Klübertemp HB 53 greases were approved by the company Siempelkamp, Krefeld/ Germany. For the initial lubrication in the plant Klübertemp HB 53-391 is used. For more detailed information on the application, please refer to the maintenance instructions of the press manufacturers.

Compatibility with materials

Klübertemp HB 53 greases can be generally regarded as neutral towards elastomers and plastics. However, prior to series applications, the compatibility of the lubricant with the materials used should be checked.

Application notes

Klübertemp HB 53 greases can be applied by means of grease metering systems or automatic small-quantity metering devices as are used for continuous presses. For optimum lubrication results, we recommend cleaning the friction points with white spirit 180/210. For initial lubrication, the friction points must be dry, bright and free of contaminants. To remove lubricants based on polyether oils like Klübertemp HB 53 greases, use Klüberalfa XZ 3-1. Klübertemp HB 53 greases can be mixed with lubricants having the same type of base oil.

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 HB 53-391	Klübertemp HB 53-392
Bucket 10 kg	+	+
Bucket 45 kg	+	+

Product data	Klübertemp HB 53-391	Klübertemp HB 53-392
Article number	090096	090095
Chemical composition, type of oil	PFPE	PFPE
Chemical composition, solid lubricant	PTFE	PTFE
Lower service temperature	-20 °C / -4 °F	-20 °C / -4 °F
Upper service temperature	260 °C / 500 °F	260 °C / 500 °F
Colour space	white	white
Density at 20 °C	approx. 1.95 g/cm ³	approx. 1.95 g/cm ³
Worked penetration, DIN ISO 2137, 25 °C, lower limit value	330 x 0.1 mm	280 x 0.1 mm



Product information



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High-temperature and long-term greases for rolling bearings subject to high temperatures in continuous presses

Product data	Klübertemp HB 53-391	Klübertemp HB 53-392
Worked penetration, DIN ISO 2137, 25 °C, upper limit value	350 x 0.1 mm	310 x 0.1 mm
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 $^\circ\text{C}$	approx. 420 mm²/s	approx. 420 mm ² /s
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 $^\circ\mathrm{C}$	approx. 40 mm ² /s	approx. 40 mm ² /s
Shear viscosity at 25 °C, shear rate 300 s-1, equipment: rotational viscometer, lower limit value	4 000 mPas	7 000 mPas
Shear viscosity at 25°C, shear rate 300 s-1, equipment:rotational viscometer, upper limit value	8 000 mPas	11 000 mPas
Flow pressure of lubricating greases, DIN 51805, test temperature: -20 °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	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 any time without notice.

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