

PETAMO GHY 133 N

Long-term and high-temperature grease for rolling bearings



Benefits for your application

- **Reduced maintenance due to lifetime lubrication**
- **Wide service temperature range allows a variety of applications**
- **Reliable operation and long service life due to excellent protection against wear and corrosion, especially in water pump bearings and clutch release bearings**

Description

PETAMO GHY 133 N is a high-performance lubricating grease for rolling bearings subject to high temperatures. It has the following advantages:

- Resistance to high temperatures
- High resistance to oxidation
- Efficient wear protection even at high temperatures
- Good corrosion protection
- Good water resistance

The high performance level of PETAMO GHY 133 N is achieved by means of selected product constituents such as polyurea thickener, mineral oil, synthetic hydrocarbon oil and additives, as well as the production technology.

Application

PETAMO GHY 133 N is suitable for long-term and lifetime lubrication in a variety of applications including:

- Rolling bearings in
 - electric motors
 - fan heaters
 - drying installations
 - textile machines
 - paper machines
- Automotive components, e.g.

- belt tensioning rollers (rotating outer ring)
- couplings
- water pumps
- fans
- wheel bearings

In component tests PETAMO GHY 133 N achieves excellent results in terms of service life.

In water pump bearings PETAMO GHY 133 N offers excellent compatibility with coolants containing glycol.

Application notes

PETAMO GHY 133 N can be applied by means of appropriate automatic or conventional lubrication systems in a clean working environment.

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	PETAMO GHY 133 N
Cartridge 400 g	+
Can 1 kg	+
Drum 180 kg	+

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Product data	PETAMO GHY 133 N
Article number	094061
Lubricating greases -K, DIN 51825 in connection with DIN 51502	KHC2P-30
Chemical composition, type of oil	synthetic hydrocarbon oil
Chemical composition, type of oil	mineral oil
Chemical composition, thickener	polyurea
Lower service temperature	-40 °C / -40 °F
Upper service temperature	160 °C / 320 °F
Colour space	brown
Density at 20 °C	approx. 0.90 g/cm ³
Worked penetration, DIN ISO 2137, 25 °C, lower limit value	265 x 0.1 mm
Worked penetration, DIN ISO 2137, 25 °C, upper limit value	295 x 0.1 mm
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 165 mm ² /s
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 18 mm ² /s
Corrosion inhibiting properties of lubricating greases, DIN 51802, (SKF-EMCOR), test duration: 1 week, distilled water	<= 1 corrosion degree
Drop point, DIN ISO 2176, IP 396	>= 250 °C
Flow pressure of lubricating greases, DIN 51805-2, test temperature: -30 °C	<= 1 400 mbar
Testing of lubricating greases on FAG FE9 rolling bearing tester, DIN 51821 pt. 02, speed:6000 min-1, axial load:1500 N, temperature: 160 °C, service life F50:	>= 100 h
Low-temperature torque, IP 186, -40 °C, running	<= 250 mNm
Low-temperature torque, IP 186, -40 °C, start	<= 1 000 mNm
Speed factor (n x dm)	approx. 500 000 mm/min
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	24 months



Compatibility with elastomers and plastics

The following elastomers were tested for resistance to PETAMO GHY 133 N over a period of 168 hours at 100 or 130 °C.

The listed values are the results of sample testing with PETAMO GHY 133 N, closely related to DIN ISO 1817, and are not subject to regular revision. The stated values serve for orientation only and may vary according to the material used and the pretreatment it has undergone. Fixed product data cannot be derived from the test data.

Owing to the many different elastomer compositions we recommend checking their compatibility on the complete component prior to series application.

Material	75 FKM 585	72 NBR 902	70 ACM 121433
Test temperature	130 °C	100 °C	130 °C
Change in volume (%), approx.	+ 1	+ 6	+ 7
Change in hardness (SHA), approx.	- 1	- 2	- 8
Tensile strength (%), approx.	- 10	+ 5	- 11
Elongation at tear (%), approx.	- 4	- 11	+ 10



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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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