

PETAMO® GHY 133 N US

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**
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Application

PETAMO GHY 133 N US 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 US achieves excellent results in terms of service life.

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

Description

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

- thermal stability up to 160 °C
- 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 US 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 notes

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

Minimum shelf life

The minimum shelf life is approx. 12 months if the product is stored in its unopened original container in a dry, frost-free place.

Pack sizes

25 kg bucket
180 kg drum
1 kg can
400 g cartridge

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.



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Compatibility with elastomers and plastics

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

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

* The listed values are the results of sample testing with PETAMO GHY 133 N US, closely related to DIN 53521, 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.

Prior to series application we recommend testing the compatibility of the grease and the pertinent materials. (Our test results were obtained with random samples and cannot substitute your own in-house tests.)

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Product data	PETAMO GHY 133 N US
Base oil / thickener	mineral oil, synth. hydrocarbon oil, polyurea
Service temperature range*, DIN 51 825/51 821/2, [°C], approx.	- 30 to 160
FAG-FE 9 test, DIN 51 821/2, $F_a = 1500 \text{ N}$, $n = 6000 \text{ min}^{-1}$, 160 °C, L_{50} running time, [h]	> 100
Flow pressure, DIN 51 805, at - 30 °C, [mbar]	< 1400
Low-temperature torque, acc. to IP 186/85 at - 30 °C starting torque, [Nmm] running torque, [Nmm]	< 1000 < 100
Base oil viscosity, DIN 51 562, part 01 at 40 °C, [mm ² /s], approx. at 100 °C, [mm ² /s], approx.	160 18
Worked penetration, DIN ISO 2137, at 25 °C; 0.1 mm	265 – 295
Speed factor** for deep groove ball bearings ($n \times dm$), [mm x min ⁻¹], approx.	500,000
Drop point, DIN ISO 2176, [°C]	> 250
Corrosion protection (Emcor test), DIN 51 802, 1 week, distilled water, corrosion degree	1
Density, DIN 51 757 at 20 °C, [g/cm ³], approx.	0.9
Color	light beige to light brown

* Service temperatures are guide values which depend on the lubricant's composition, the intended use and the application method. Lubricants change their consistency, apparent dynamic viscosity or viscosity depending on the mechano-dynamical loads, time, pressure and temperature. These changes in product characteristics may affect the function of a component.

** Speed factors are guide values which depend on the type and size of the rolling bearing type and the local operating conditions, which is why they have to be confirmed in tests carried out by the user in each individual case

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The data in this product information is based on our general experience and knowledge at the time of printing 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 tests with the selected product. We recommend contacting our Technical Consulting Staff to discuss your specific application. If required and possible we will be pleased to provide a sample for testing. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this product information at any time without notice.



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