

# Klüberalfa BF 83-102

Lubricating grease for high temperatures and speeds



## Your benefits at a glance

- Allows new applications in high-speed bearings lubricated with grease
  - due to better thermal stability than conventional high-speed greases
  - due to better speed characteristics than conventional PFPE/PTFE high-temperature greases
  - due to NSF-H1 registration

## Your requirements - our solution

Klüberalfa lubricants based on perfluorinated polyether (PFPE) have been developed for specific applications where optimum performance under lifetime lubrication conditions is required.

Klüberalfa BF 83-102 has been designed to ensure long service life of rolling bearings subject to high speeds and very high permanent temperatures.

The calculated speed factor sets new standards in the formulation of high-temperature PFPE greases with PTFE thickeners.

Klüberalfa BF 83-102 is NSF H1 registered and therefore complies with FDA 21 CFR § 178.3570. The lubricant was developed for incidental contact with products and packaging materials in the food-processing, cosmetics, pharmaceutical or animal feed industries. The use of Klüberalfa BF 83-102 can contribute to increase reliability of your production processes. We nevertheless recommend conducting an additional risk analysis, e.g. HACCP.

## Application

Klüberalfa BF 83-102 is suitable, e.g. for fan bearings in turbochargers, small turbines, generator bearings etc. Even at low temperatures the consistency of Klüberalfa BF 83-102 is low enough for use in low-torque drives.

Klüberalfa BF 83-102 is registered as NSF H1 and complies with FDA 21 CFR § 178.3570.

### *Compatibility with plastics and elastomers*

Lubricating greases based on perfluorinated polyether oils (PFPE) are generally regarded as neutral towards standard elastomers and plastics and therefore allow the use of a wide range of different materials in construction (exception: fluorinated rubber). Nevertheless compatibility with the materials should be tested, especially prior to series application.

## Application notes

For optimum lubrication results, we recommend cleaning the friction point with white spirit 180/210 and then with Klüberalfa XZ 3-1 prior to initial lubrication.

The friction point has to be bright (i.e. free of oil, grease and perspiration) and free of contamination particles.

To optimise service life, please contact our technical sales staff.

## 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

Can 1 kg

### Klüberalfa BF 83-102

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### Characteristics

Article number

### Klüberalfa BF 83-102

090127

# Klüberalfa BF 83-102

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Characteristics	Klüberalfa BF 83-102
Composition, solid lubricant	PTFE
Composition, type of oil	PFPE
Service temperature, lower limit	-50 °C
Service temperature, upper limit	200 °C
NSF H1 registration number	139418
Density, Klüber method: PN 024, 20°C	approx. 1.9 g/cm <sup>3</sup>
NLGI grade, DIN 51818	2
Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s <sup>-1</sup> , lower limit	3500 mPas
Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s <sup>-1</sup> , upper limit	5500 mPas
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C	approx. 26.5 mm <sup>2</sup> /s
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C	approx. 110 mm <sup>2</sup> /s
SKF-EMCOR, DIN 51802, Klüber method: distilled water, 168 h	≤ 1 corrosion degree
Flow pressure, DIN 51805-2, -50°C	≤ 1400 mbar
Speed factor (n x dm)	approx. 1000000 mm/min
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 90 years.

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