

## STABURAGS NBU 4 MF, STABURAGS NBU 12 MF

High-performance lubricating greases for the long-term lubrication of rolling and plain bearings



## Benefits for your application

- Good pressure resistance in bearings subject to high loads
- Long component life due to good wear protection
- Trouble-free operation due to good sealing and corrosion protection
- Less maintenance due to long-term lubrication
- Emergency lubricating properties for improved functionality in the case of starved lubrication

#### Description

STABURAGS NBU 4 MF and STABURAGS NBU 12 MF are black lubricating greases based on mineral oil for rolling and plain bearings subject to high loads. The barium complex soap thickener ensures good adhesion of the grease to the lube point and thus good resistance to moisture and aggressive media. Both greases contain special solid lubricants based on MoS<sub>2</sub>, which improve emergency lubrication properties under high temperatures or loads.

## Application

STABURAGS NBU 4 MF has proven successful for the lubrication of high-speed rolling bearings in rolls, spindles, cam rollers and tensioning rollers. The grease is also used for bearings in compressors and deep drilling machines.

STABURAGS NBU 12 MF is used for highly loaded bearings, e.g. joints, spline shafts, couplings as well as pumps and electric motors, for example in wood drying chambers.

Both greases are also suitable for steel-on-steel material combinations in slideways and plain bearings.

#### Application notes

STABURAGS NBU 4 MF / 12 MF are applied by brush, spatula or grease gun. For application via central lubrication systems, pumpability should be checked with the manufacturer beforehand. The friction points can be cleaned with standard detergents.

### 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.

Pack sizes	STABURAGS NBU 4 MF	STABURAGS NBU 12 MF
Cartridge 400 g	+	+
Can 1 kg	+	+
Bucket 25 kg	+	+



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Product data	STABURAGS NBU 4 MF	STABURAGS NBU 12 MF
Article number	017063	017065
Lower service temperature	-20 °C / -4 °F	-15 °C / 5 °F
Upper service temperature	130 °C / 266 °F	130 °C / 266 °F
Worked penetration, DIN ISO 2137, 25 °C, upper limit value	275 x 0.1 mm	275 x 0.1 mm
Worked penetration, DIN ISO 2137, 25 °C, lower limit value	245 x 0.1 mm	245 x 0.1 mm
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 47 mm <sup>2</sup> /s	approx. 220 mm <sup>2</sup> /s
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 7 mm <sup>2</sup> /s	approx. 19 mm <sup>2</sup> /s
Copper corrosion, DIN 51811, (lubricating grease), 24h/100°C	1 - 100 corrosion degree	
Corrosion inhibiting properties of lubricating greases, DIN 51802, (SKF-EMCOR), test duration: 1 week, distilled water	<= 1 corrosion degree	0 corrosion degree
Copper corrosion, DIN 51811, (lubricating grease), 24h/120 °C		1 - 120 corrosion degree
Drop point, DIN ISO 2176	>= 220 °C	>= 220 °C
Colour space	black	black
Chemical composition, solid lubricant	molybdenum disulphide	molybdenum disulphide
Chemical composition, thickener	barium complex soap	barium complex soap
Chemical composition, type of oil	mineral oil	mineral oil
Four-ball tester, welding load, DIN 51350 pt. 04	approx. 4 000 N	>= 4 500
Water resistance, DIN 51807 pt. 01, 3 h/90 °C, rating	<= 1 - 90	<= 1 - 90
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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