

# ISOFLEX LDS 18 SPECIAL A

Dynamically light, long-term lubricating grease



## Benefits for your application

- Long service life due to good corrosion protection as well as ageing and oxidation stability, hence cost savings
- Tried-and-tested for many years, especially at high speeds and low temperatures
- Low heating-up of bearings due to low lubricant friction leading to longer service lives

## Description

ISOFLEX LDS 18 SPECIAL A is a dynamically light long-term grease for plain and rolling bearings. It consists of ester oil, mineral oil and lithium soap. The product is resistant to ageing, oxidation and water, and it protects reliably against corrosion.

## Application notes

The lubricant is applied by brush, spatula, grease gun or grease cartridge. Owing to the different compositions of elastomers and plastic materials, compatibility tests are indispensable before series application.

## Application

ISOFLEX LDS 18 SPECIAL A is suitable for plain and rolling bearings operating at low temperatures and/or high speeds, for example in grinding spindles, machine tool spindles, spindle bearings, textile spindles, bearings in OE-spinning turbines, bearings in precision and optical equipment.

## 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	ISOFLEX LDS 18 SPECIAL A
Tube 45 g	+
Cartridge 400 g	+
Can 1 kg	+
Bucket 25 kg	+
Drum 180 kg	+

Product data	ISOFLEX LDS 18 SPECIAL A
Article number	004013
Chemical composition, thickener	lithium soap
Chemical composition, type of oil	mineral oil
Chemical composition, type of oil	ester oil
Lower service temperature	-50 °C / -58 °F
Upper service temperature	120 °C / 248 °F
Colour space	yellow
Texture	homogeneous
Texture	short-fibred
Density at 20 °C	approx. 0.88 g/cm <sup>3</sup>
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. 15 mm <sup>2</sup> /s



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Product data	ISOFLEX LDS 18 SPECIAL A
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 3.5 mm <sup>2</sup> /s
Shear viscosity at 25°C, shear rate 300 s <sup>-1</sup> , equipment:rotational viscometer, upper limit value	4 000 mPas
Shear viscosity at 25 °C, shear rate 300 s <sup>-1</sup> , equipment: rotational viscometer, lower limit value	2 000 mPas
Corrosion inhibiting properties of lubricating greases, DIN 51802, (SKF-EMCOR), test duration: 1 week, distilled water	0 corrosion degree
Speed factor (n x dm)	approx. 1 000 000 mm/min
Low-temperature torque, IP 186, - 60 °C, start	<= 1 000 mNm
Low-temperature torque, IP 186, -60 °C, running	<= 100 mNm
Drop point, DIN ISO 2176, IP 396	>= 190 °C
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 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 at any time without notice.

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