



Synthetic long-term oils



### Your benefits at a glance

- Synthetic long-term oils
- Wide service temperature range
- Low pour point
- Good viscosity-temperature behaviour
- Oxidation and ageing stability
- Good corrosion protection

### Your requirements - our solution

ISOFLEX PDP oils are synthetic long-term oils based on ester oil. They show a good viscosity-temperature behaviour, a high flash point, a low pour point, good aging and oxidation stability as well as corrosion protection. Compared to mineral oils, they hardly change their viscosity at low or high temperatures thus ensuring less decrease in performance and reduced power consumption.

# Application

ISOFLEX PDP oils are ideally suited for lubrication points which have to meet high demands and show a long service life. They can be used for rolling bearings subject to high thermal and static loads, even at high speeds, plain bearings, guides in communication equipment, radio-probes, precision and measuring instruments, control systems, turbines, synchronous motors and elements with exacting tolerance in the fields of telecommunication, data systems and cryotechnology. Furthermore, ISOFLEX PDP oils are suitable for the impregnation of sintered bearings and sintered compacts.

# **Application notes**

ISOFLEX PDP oils are neutral towards metals. Due to the great variety of different elastomers and plastics, their compatibility with these oils has to be checked prior to series application.

ISOFLEX PDP oils are miscible with mineral oils. However, we recommend removing the used oil from the lubrication point in order to fully utilize the performance of these oils.

# 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	ISOFLEX PDP 10	ISOFLEX PDP 38	ISOFLEX PDP 48	ISOFLEX PDP 61 A FERNSCHREIB.K
Canister 1 I	+	+	+	+
Canister 20 I	+	+	+	+
Drum 200 l				

Pack sizes	ISOFLEX PDP 65
Canister 1 I	+
Canister 20 I	+





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Pack sizes	ISOFLEX PDP 65
Drum 200 l	+

Characteristics	ISOFLEX PDP 10	ISOFLEX PDP 38	ISOFLEX PDP 48	ISOFLEX PDP 61 A FERNSCHREIB.K
Article number	025006	025007	025010	025011
Appearance	clear	clear	clear	clear
Colour space	yellow	yellow	yellow	red
Service temperature, lower limit	-65 °C	-65 °C	-50 °C	-45 °C
Service temperature, upper limit	100 °C	100 °C	100 °C	100 °C
Density, DIN 51757, 20°C	approx. 0.93 g/cm³	approx. 0.92 g/cm³	approx. 0.92 g/cm³	approx. 0.92 g/cm <sup>3</sup>
Flash point, DIN EN ISO 2592, Cleveland open cup	approx. 200 °C	≥ 200 °C	approx. 200 °C	≥ 180 °C
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C	approx. 2.3 mm²/s	approx. 3.2 mm²/s	approx. 7.9 mm²/s	approx. 12 mm²/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C	approx. 8 mm²/s	approx. 12 mm²/s	approx. 30 mm²/s	approx. 50 mm²/s
Viscosity index, DIN ISO 2909	approx. 110	approx. 125	approx. 240	≥ 220
Pour point, DIN ISO 3016	approx70 °C	≤ -70 °C	approx50 °C	≤ -50 °C
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	60 months	60 months

container, approx.

Characteristics	ISOFLEX PDP 65
Article number	025012
Appearance	clear
Colour space	yellow
Service temperature, lower limit	-50 °C
Service temperature, upper limit	100 °C
Density, DIN 51757, 20°C	approx. 0.92 g/cm <sup>3</sup>
Flash point, DIN EN ISO 2592, Cleveland open cup	approx. 180 °C
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C	approx. 16 mm²/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C	approx. 68 mm²/s
Viscosity index, DIN ISO 2909	≥ 240
Pour point, DIN ISO 3016	≤ -55 °C





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# Characteristics ISOFLEX PDP 65 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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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

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