

CONSTANT OY K

Synthetic impregnating oils for sintered metal plain bearings



Your benefits at a glance

- Innovative product concept with special additives
- Improved high-temperature performance through extended thermal stability—Longer component life due to good ageing and oxidation stability
- Versatile uses due to good corrosion protection
- · Enables energy savings due to low starting and running torques

Your requirements - our solution

In the automotive industry as well as in the production of other industrial and consumer goods, sintered metal plain bearings often have to satisfy a variety of requirements. CONSTANT OY K fully synthetic oils offer a solution matching the needs of sintered metal plain bearings requiring long-term lubrication under arduous conditions.

CONSTANT OY K oils have been designed for both low and hightemperature applications. These oils are availability in any viscosity grade matching your specific requirements.

The special additives allow CONSTANT OY K to be used in a wide temperature range. The oils offer added reserve capacity in the upper service temperature range.

They offer good anticorrosive effect on both iron and bronze bearings. CONSTANT OY K oils can be used for lifetime lubrication of sintered metal plain bearings.

CONSTANT OY K oils are intended for the lubrication of sintered metal plain bearings used in precision engineering, electrical engineering, the automotive sector and household appliances.

Application notes

The pores of sintered metal plain bearings are filled with CONSTANT OY K by means of vacuum immersion. For a longer service life, the ready-to-use product MIKROZELLA G...OY K with the respective base oil viscosity can be applied to the outer surface of the bearing by means of conventional, fully automatic lubricating systems.

We recommend conducting a test with the original lubricating system under practical operating conditions.

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.

Application

Pack sizes	CONSTANT OY 32 K			CONSTANT OY 100 K
Canister 1 I	+	+	+	+
Canister 20 I	+	+	+	+
Drum 200 I	+	+	+	+

Pack sizes	CONSTANT OY 150 K	CONSTANT OY 220 K	CONSTANT OY 390 K
Canister 1 I		+	+
Canister 20 I	+	+	+



CONSTANT OY K

Synthetic impregnating oils for sintered metal plain bearings



Pack sizes	CONSTANT OY 150 K	CONSTANT OY 220 K	CONSTANT OY 390 K
Drum 200 I	+	+	+

Characteristics	CONSTANT OY 32 K	CONSTANT OY 46 K	CONSTANT OY 68 K	CONSTANT OY 100 K
Article number	028101	028102	028103	028104
Composition, type of oil	synthetic hydrocarbon oil	synthetic hydrocarbon oil	synthetic hydrocarbon oil	synthetic hydrocarbon oil
Colour space	yellow	yellow	yellow	yellow
Service temperature, lower limit	-50 °C	-50 °C	-40 °C	-40 °C
Service temperature, upper limit	150 °C	150 °C	150 °C	150 °C
Density, DIN 51757, 20°C	approx. 0.83 g/cm ³	approx. 0.83 g/cm ³	approx. 0.83 g/cm ³	approx. 0.84 g/cm ³
Refractive index, DIN 51423-2 / ASTM 1218, 20°C	approx. 1.461	approx. 1.462	approx. 1.464	approx. 1.467
ISO viscosity grade, DIN ISO 3448, ISO VG	32	46	68	100
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C	approx. 6 mm ² /s	approx. 8 mm ² /s	approx. 10.5 mm ² /s	approx. 14 mm ² /s
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C	approx. 32 mm ² /s	approx. 46 mm ² /s	approx. 68 mm²/s	approx. 100 mm ² /s
Viscosity index, DIN ISO 2909	≥ 120	≥ 130	≥ 130	≥ 130
Pour point, DIN ISO 3016	≤ -50 °C	≤ -50 °C	≤ -45 °C	≤ -40 °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

Characteristics	CONSTANT OY 150 K	CONSTANT OY 220 K	CONSTANT OY 390 K
Article number	028105	028106	028107
Composition, type of oil	synthetic hydrocarbon oil	synthetic hydrocarbon oil	synthetic hydrocarbon oil
Colour space	yellow	yellow	yellow
Service temperature, lower limit	-35 °C	-30 °C	-25 °C
Service temperature, upper limit	150 °C	150 °C	150 °C
Density, DIN 51757, 20°C	approx. 0.84 g/cm ³	approx. 0.84 g/cm ³	approx. 0.85 g/cm ³
Refractive index, DIN 51423-2 / ASTM 1218, 20°C	approx. 1.467	approx. 1.469	approx. 1.470
ISO viscosity grade, DIN ISO 3448, ISO VG	150	220	
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C	approx. 19 mm²/s	approx. 26 mm²/s	approx. 39 mm²/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C	approx. 150 mm ² /s	approx. 220 mm²/s	approx. 390 mm²/s





CONSTANT OY K

Synthetic impregnating oils for sintered metal plain bearings



Characteristics	CONSTANT OY 150 K	CONSTANT OY 220 K	CONSTANT OY 390 K
Viscosity index, DIN ISO 2909	≥ 130	≥ 130	≥ 130
Pour point, DIN ISO 3016	≤ -40 °C	≤ -40 °C	≤ -25 °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

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.

Klüber Lubrication München GmbH & Co. KG / Geisenhausenerstraße 7 / 81379 München / Germany / phone +49 89 7876-0 / fax +49 89 7876-333.

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.

Publisher and Copyright: Klüber Lubrication München GmbH & Co. KG. Reprints, total or in part, are permitted only prior consultation with Klüber Lubrication München GmbH & Co. KG and if source is indicated and voucher copy is forwarded.