Klübersynth 50 KV, 80 KV, 100 KV

Synthetic high-performance gear oils for weaving machines

Your benefits at a glance

- Exclusively recommended for Leonardo weaving machines from ITEMA. With Klübersynth 50 KV, 80KV, 100 KV oils, these weaving machines attain an optimum service life. Oil change every 20,000 operating hours only.
- Cost reduction due to very good friction behaviour of the polyglycol base oil reducing power losses and improving efficiency.
- Reduced maintenance costs due to high scuffing load strength and good antiwear effect protecting gears and other lubricated components sufficiently against scuffing even at high peak loads.
- Excellent viscosity-temperature behaviour enables higher operational reliability due to sufficient component lubrication even at elevated or high machine temperatures.

Your requirements - our solution

In modern weaving machines, high-performance gear oils are expected to enable longer maintenance intervals at high production speeds.

It is with this trend in mind that we developed our Klübersynth 50 KV, 80 KV and 100 KV oils. These are synthetic high-performance gear oils based on polyglycol. They are resistant to ageing, protect reliably against wear and offer an excellent load-carrying capacity as well as viscosity-temperature behaviour. With Klübersynth 50 KV, 80 KV and 100 KV oils, oil change intervals of up to 20,000 operating hours are realistic, which can lead to considerably lower operating costs.

Application

Klübersynth 50 KV, 80 KV and 100 KV are exclusively recommended by the Italian textile machine OEM ITEMA for the lubrication of gears, bearings and other sliding friction points in Leonardo-type weaving machines. For Leonardo-type weaving machines with oil coolers, ITEMA recommends Klübersynth 50 KV, and for the R 9500-type machines Klübersynth 80 KV.

Application notes

Klübersynth 50 KV, 80 KV and 100 KV oils can be applied by immersion, immersion circulation or injection. When using automatic lubricating systems, please note the manufacturer's instructions regarding the maximum permissible viscosity. Klübersynth 50 KV, 80 KV and 100 KV oils are not miscible with mineral oil or synthetic hydrocarbons. Prior to changeover, we recommend cleaning the lubrication points or rinsing the gears or enclosed lubrication systems with Klübersynth 50 KV, 80 KV or 100 KV.

Klübersynth 50 KV, 80 KV and 100 KV oils are neutral towards ferrous metals and almost all nonferrous metals. There may be increased wear when the contact surfaces of design elements made of aluminium or aluminium alloys are exposed to dynamic loads. If necessary, preliminary wear tests should be carried out. Depending on the temperature and time of exposure, synthetic lubricants based on polyglycol can affect the function of rubber-elastic sealing materials. For permanent temperatures up to 100 °C (corresponds to the temperature limit of Klübersynth 50 KV, 80 KV and 100 KV), seals made of NBR (butadiene-acrylonitrile rubber) can be used. It should be noted that elastomers from one or several manufacturers can behave differently.

When applying Klübersynth 50 KV, 80 KV and 100 KV oils, we recommend the use of two-component paints (reaction paints) for interior coating. Oil gauge glasses should preferably be made of natural glass or polyamide materials. Other transparent plastics, e.g. Plexiglas, have a tendency to crack under stress. We recommend to check compatibility of the materials with the lubricant used, especially prior to series application.

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.

Klübersynth 50 KV, 80 KV, 100 KV , 012201, 012310, 012031, en-GB
Edition 30.11.2023 - replaces edition 16.10.2023

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Synthetic high-performance gear oils for weaving machines

Pack sizes	Klübersynth 50 KV	Klübersynth 80 KV	Klübersynth 100 KV
Can 20 kg		+	+
Canister 20 kg	+	+	+
Drum 180 kg	+		+

Characteristics	Klübersynth 50 KV	Klübersynth 80 KV	Klübersynth 100 KV
Article number	012031	012310	012201
Colour space	yellow	yellow	yellow
Service temperature, lower limit	-30 °C	-30 °C	-30 °C
Service temperature, upper limit	100 °C	100 °C	100 °C
Density, DIN 51757, 20°C	approx. 1.03 g/cm³	approx. 1.04 g/cm³	approx. 1.04 g/cm³
Flash point, DIN EN ISO 2592, Cleveland open cup	≥ 190 °C	≥ 200 °C	≥ 200 °C
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C	approx. 10 mm²/s	approx. 16 mm²/s	approx. 20.5 mm²/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C	approx. 50 mm²/s	approx. 80 mm²/s	approx. 100 mm²/s
Viscosity index, DIN ISO 2909	≥ 170	≥ 190	≥ 210
Copper corrosion, DIN EN ISO 2160, 24 h, 100°C	1 - 100 - 24 corrosion degree	1 - 100 - 24 corrosion degree	1 - 100 - 24 corrosion degree
Pour point, DIN ISO 3016	≤ -40 °C	≤ -40 °C	≤ -40 °C
FZG scuffing test, DIN ISO 14635-1, A / 8.3 / 90, failure load stage	≥ 12	≥ 12	≥ 12
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	24 months	24 months	24 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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