

BARRIERTA KM 192, KL 092

High-temperature and long-term lubricants with good resistance to low temperatures



Your benefits at a glance

- · Long component life
 - o over a wide service temperature range
 - · when exposed to aggressive chemical agents
 - due to a long calculated grease life
- Improved component performance
 - due to low starting torques even at low temperatures
 - due to resistance to high speeds
 - due to friction values being largely independent of temperature

Your requirements - our solution

BARRIERTA is Europe's oldest high-quality brand of high-temperature lubricants based on perfluorinated polyether oil (PFPE). Today the name of BARRIERTA is widely regarded as synonymous with long-term stability and thermal resistance. BARRIERTA greases are the first choice of lubrication experts in many sectors worldwide. BARRIERTA K greases enable long-term use under high temperatures and influence of media, while at the same time requiring low running torques at low temperatures. This was made possible by Klüber's careful selection of raw materials and the specifically developed thickener.

Application

Rolling bearings and guideways

BARRIERTA K greases are highly suitable for the long-term lubrication of rolling and plain bearings, where only low driving power is available and where long-term stability is required under changing environmental loads. Even at extremely low temperatures, BARRIERTA K greases are soft enough so as not to overload low-power drive units, while on the other hand they withstand temperatures as high as 200°C and beyond. BARRIERTA K greases are used for a wide range of applications as for-life lubricants in automotive, electrical and precision engineering.

Valves and seals

The BARRIERTA K greases good temperature resistance and their compatibility with plastics and elastomers – which is typical of PFPE lubricants – make them highly suitable for the lubrication of engine

valves and seals as are found in hydraulic cylinders. BARRIERTA K greases enable long runtimes with low noise generation and low friction coefficients. The resistance of BARRIERTA KM 192 against brake fluids, type DOT 3, 4, 5 and 5.1, has been confirmed in an individual test.

Compatibility with elastomers and plastics

BARRIERTA K grease stand out for their neutral behaviour towards elastomers and plastics. Owing to the many different varieties of elastomers and plastics and varying operating conditions, we recommend checking their compatibility with the component material prior to series application.

Application notes

For optimum lubrication results, we recommend cleaning the friction points with white spirit 180/210 and then Klüberalfa XZ 3-1. Upon cleaning apply clean dry compressed air or hot air to remove any remaining white spirit residues. For initial lubrication, the friction point must be clean and bright (i.e. free from oil, grease or perspiration) and free from particles. The various technical sales departments at Klüber Lubrication may be contacted at any time to ensure optimum results with this special lubricating grease.

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.



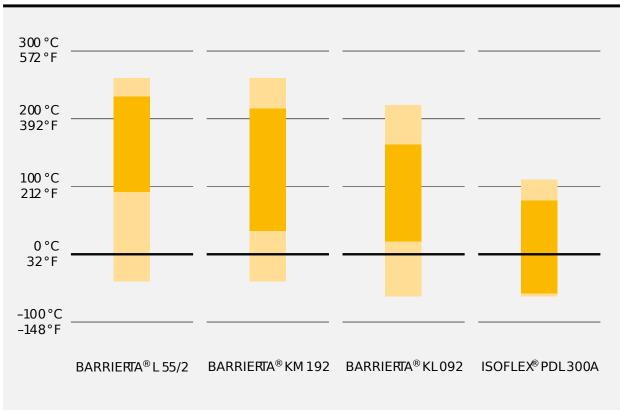


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Service and optimum operating temperature range of BARRIERTA K greases in comparison with designated high and low-temperature lubricants



| Pack sizes | BARRIERTA KM 192 | BARRIERTA KL 092 |
|-----------------|------------------|------------------|
| Cartrigde 800 g | + | |
| Can 1 kg | + | + |
| Can 180 g | | + |
| Bucket 10 kg | + | + |
| Bucket 30 kg | + | |

| Characteristics | BARRIERTA KM 192 | BARRIERTA KL 092 |
|----------------------------------|------------------|------------------|
| Article number | 090122 | 090242 |
| Composition, solid lubricant | PTFE | PTFE |
| Composition, type of oil | PFPE | PFPE |
| Service temperature, lower limit | -50 °C | -65 °C |



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| Characteristics | BARRIERTA KM 192 | BARRIERTA KL 092 |
|---|--------------------------------|--------------------------------|
| Service temperature, upper limit | 260 °C | 220 °C |
| Density, Klüber method: PN 024, 20°C | approx. 1.9 g/cm ³ | approx. 1.94 g/cm ³ |
| NLGI grade, DIN 51818 | 2 | 2 |
| Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s ⁻¹ , lower limit | 4000 mPas | 2000 mPas |
| Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s ⁻¹ , upper limit | 8000 mPas | 5000 mPas |
| Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C | approx. 34 mm ² /s | approx. 26 mm²/s |
| Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C | approx. 190 mm ² /s | approx. 90 mm²/s |
| SKF-EMCOR, DIN 51802, Klüber method: distilled water, 168 h | ≤ 1 corrosion degree | ≤ 1 corrosion degree |
| Flow pressure, DIN 51805-2, -50°C | ≤ 1400 mbar | |
| Flow pressure, DIN 51805-2, -60°C | | ≤ 1400 mbar |
| Low temperature torque, IP 186, based on standard, equipment: IP 186 / LT3, -65°C, running torque | | ≤ 100 mNm |
| Low temperature torque, IP 186, based on standard, equipment: IP 186 / LT3, -65°C, starting torque | | ≤ 1000 mNm |
| Low temperature torque, IP 186, -40°C, running torque | ≤ 100 mNm | |
| Low temperature torque, IP 186, -40°C, starting torque | ≤ 1000 mNm | |
| Speed factor (n x dm) | approx. 600000 mm/min | 300000 mm/min |
| 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 90 years.

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