



Arcanol LOAD460 Bearing Grease
Engineered to sustain motion

We pioneer motion

SCHAEFFLER

Arcanol LOAD460 overview

Schaeffler Arcanol LOAD460 is a high-performance grease specifically designed for extreme loads, low speeds, and challenging environmental conditions. It is based on highly refined mineral oil and a lithium-calcium soap thickener, supplemented by special additives for maximum performance. Primarily intended for bearing lubrication in wind turbines, LOAD460 also performs well in large rolling bearings.

Resistant to corrosion and water, LOAD460 offers outstanding protection against downtime damage. It also exhibits superior low-temperature behavior, validated by FE8 testing.

Arcanol LOAD460:

- Provides up to three times better wear protection than required by industry standards
- Doubles the grease service life at higher operating temperatures
- Excels in low-temperature performance

Arcanol LOAD460 is suitable for a wide range of applications, such as:



Features and benefits:

Excellent load-carrying capacity

Arcanol LOAD460 can establish a reliable lubricant film even under the harshest conditions. This enables it to handle extreme loads, making it ideal for heavy-duty applications.

Maximum wear protection

Arcanol rolling bearing greases contain special anti-wear and extreme pressure additives (AW and EP additives) that bond strongly to metal surfaces due to their polarity, forming thin protective layers on the friction partners. This enables the grease to provide effective protection against wear.

High corrosion resistance

Arcanol greases are formulated with corrosion inhibitors. These create a protective film on metal surfaces, thereby minimizing the risk of rust and other harmful effects.

Excellent water resistance

Arcanol LOAD460 is resistant to the effects of water. This ensures that the grease collar is not washed away from the surfaces. As a result, consistent protection is provided, even in the presence of water.

Soft NLGI 1 consistency

Arcanol LOAD460's soft consistency optimizes motion within the rolling bearing. It ensures effective lubrication of the friction contacts, especially in pin-type cages used in wind turbine main bearings.

Outstanding mechanical stability of thickener

Arcanol LOAD460 contains an exceptionally stable thickener. This stability prevents the product from significantly softening or leaking, even under mechanical stress or in rolling bearings with line contact.

Technical details

| Features | Value | Tested according to |
|---|-----------------------------------|--------------------------------|
| Operating temperature range | -30 to 130 °C | DIN 51825/ Schaeffler Spec. |
| Continuous limit temperature | 80 °C | |
| Density | 0.93 kg/dm ³ | |
| Thickener | Lithium/calcium | |
| Base oil type | Mineral oil | |
| Base oil viscosity ¹ at 40 °C | 400 mm ² /s | DIN 51562-1 |
| at 100 °C | 25 mm ² /s | DIN 51562-1 |
| Worked penetration | 310-340 mm | DIN ISO 2137 |
| NLGI-Grade | 1 | DIN ISO 2137 |
| Dropping point | ≥ 170 °C | DIN 51818 |
| Behavior towards water | ≤ 1-90 Assess.-Level | DIN 51807-1 |
| Corrosion protection (Emcor) | ≤ 0/0 Corr.-Rating | DIN 51802 |
| Corrosion protection (Emcor) at 1% NaCl | ≤ 0/1 Corr.-Rating | |
| Copper corrosion after 24h/120 °C | ≤ 1 Corr.-Rating | DIN 51811 |
| FE8² test runs for rolling element wear, 500-hour runtime without failure | | |
| 536048 – 75/80 RT | vWk50 = 13 mg | DIN 51819 |
| FE9 test runs grease service life | | |
| B/1500/6000-130 | F50 = 274 h No failure < 100 h | DIN 51821-02 |

Ball bearings and cylindrical roller bearings have a speed rating limit $n \cdot dm$ of 400,000 mm/min, while other roller bearings³ have a limit of 200,000 mm/min.

¹Base oil viscosity: A measure of load-carrying capacity, friction and wear behavior, and flow characteristics

²FE8 test rig: The good low-temperature start-up behavior and wear protection properties at low temperatures were both verified using an FE8-low temperature test (536048 75-50-10).

³ Not suitable for axial cylindrical roller bearings and axial spherical roller bearings

| Available units | SAP-No. | Designation |
|-----------------|-------------------|--------------------------|
| 250-g-tube | – | – |
| 400-g-cartridge | 065825144-0000-10 | ARCANOL-LOAD460-400G#S |
| 1-kg-can | 065825390-0000-10 | ARCANOL-LOAD460-1KG#S |
| 5-kg-bucket | 065826825-0000-10 | ARCANOL-LOAD460-5KG#S |
| 12,5-kg-bucket | 069455864-0000-10 | ARCANOL-LOAD460-12,5KG#S |
| 25-kg-bucket | 065827066-0000-10 | ARCANOL-LOAD460-25KG#S |
| 50-kg-bucket | 065827120-0000-10 | ARCANOL-LOAD460-50KG#S |
| 180-kg-drum | 065827180-0000-10 | ARCANOL-LOAD460-180KG#S |



Thanks to our rigorous quality assessments and control protocols, all Arcanol lubricants are backed by a 60-month limited warranty from the filling date. For more details, please consult your Schaeffler contact person.

Know how and when to lubricate –Free and easy with Schaeffler's Grease App



Arcanol LOAD460 is suitable for use in single-point and multi-point lubrication systems. An overview of our lubricators is available here:



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Every care has been taken to ensure the correctness of the information contained in this publication but no liability can be accepted for any errors or omissions. We reserve the right to make technical changes.

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