FAG Motion Guard – the intelligent lubricators

COMPACT, CHAMPION, CONCEPT 6
FAG Motion Guard – the intelligent lubricators

Correctly lubricated rolling bearings are very reliable machine elements with a long service life. Almost 50% of all cases of bearing damage are caused by insufficient or incorrect lubrication. Bearing damage can be very costly. Whether in the steel industry, in wind turbines, in the paper industry, in the mining or in the automotive industry - bearing damage in motors, pumps, generators or rotor systems frequently causes unscheduled downtime. In many cases, this means production loss and repair costs that often amount to tens of thousands of euros.

Safety and economy – prevent damage with FAG Motion Guard

You can prevent such damage by using automatic lubricators from the FAG Motion Guard line.

Your advantages:
- Individual and precise supply to each bearing location with the lubricant most suited to your application
- No costly central lubrication system required
- Fully automatic, maintenance-free operation thanks to constant relubrication
- Longer bearing life and longer maintenance intervals
- Higher level of machine availability
- Considerable cost savings

Be on the safe side with FAG Motion Guard!

Depending on the application and cost situation, you can decide for yourself which lubricator from the FAG Motion Guard line is the most suitable and most economic one for your purposes. With FAG Motion Guard COMPACT, Motion Guard CHAMPION or Motion Guard CONCEPT 6 you are always on the safe side!

Always a good choice – with the FAG Motion Guard Select Manager

The new FAG Motion Guard Select Manager 2.0 makes it easier to select the lubricator most suited to your purposes. Simply order a free copy of the CD-ROM! With the Motion Guard Select Manager you can also select the Arcanol rolling bearing grease most suited to your application and determine the ideal discharge period.
Motion Guard line: maintenance-free, safe and economical

Robust and reliable – FAG Motion Guard COMPACT

This automatic lubricator has an electrochemical drive system. The electrolyte is environmentally friendly citric acid.

- Precise supply to each bearing location
- Maintenance-free and economical
- No manual relubrication required
- Electrochemical drive system
- Adjustable to 4 discharge periods
- Can build up a pressure of up to 4 bar
- Many accessories

The champ among the lubricators – FAG Motion Guard CHAMPION

The automatic lubricator Motion Guard CHAMPION has an electromechanical drive system. The robust, electronically controlled gear motor can be reused.

- Universal usability
- Individually adaptable to each bearing location
- Extremely robust thanks to effective protection from dust and splash water
- Continuous, automatic relubrication
- Electromechanical drive unit
- Electronically controlled gear motor, can be reused
- Battery set can be changed
- Can build up a pressure of up to 5 bar
- Suitable for grease canisters of different sizes and all Arcanol lubricating greases
CONCEPT 6 and Easy Check – the ideal combination for even greater safety

Combined with the FAG EasyCheck rolling bearing monitoring system, the lubrication systems CONCEPT 6 and CONCEPT 6 Control make a complete, reliable safety package for critical bearing locations, either as a single-point or multi-point lubrication system. These independent systems are compatible and can be connected directly to the lubricating point.

FAG Motion Guard CONCEPT 6 – the intelligent lubrication system

This single- and multi-point lubrication system can supply up to six different lubricating points with grease – constantly, precisely and independent of temperature.

- Convenient top quality lubrication system
- For extreme applications, indoors and outdoors
- Discharges precise amounts of lubricant over extended periods
- Operating pressure of up to 25 bar for longer distances
- Easy, user-friendly, menu-guided operation
- High level of variability
- Exact, quick visual information on LED display

2 versions:

- CONCEPT 6: independent, battery-operated lubrication system
- CONCEPT 6 CONTROL: machine-controlled lubrication system; communication with PLC

Both versions are available as a single-point lubrication system and as a multi-point lubrication system.
FAG Motion Guard – automatic lubricators

Designs, technical data

<table>
<thead>
<tr>
<th>FAG Motion Guard</th>
<th>COMPACT</th>
<th>CHAMPION</th>
<th>CONCEPT 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction</strong></td>
<td>metal housing (COMPACT CLEAR has a transparent plastic housing)</td>
<td>transparent plastic housing</td>
<td>drive unit in a robust metal housing</td>
</tr>
<tr>
<td><strong>Drive</strong></td>
<td>electrochemical reaction</td>
<td>electromechanical drive unit with replaceable battery set</td>
<td>electromechanical</td>
</tr>
<tr>
<td><strong>Discharge periods</strong></td>
<td>1,3,6,12 months at 20° C (COMPACT CLEAR 1,3,6 months at 20° C)</td>
<td>1,3,6,12 months (individually adjustable)</td>
<td>discharge volumes can be set as required by entering individual discharge periods</td>
</tr>
<tr>
<td><strong>Volume</strong></td>
<td>120 cm³ (COMPACT CLEAR 100 cm³)</td>
<td>LC-unit (60, 120, 250 cm³)</td>
<td>250 cm³/500 cm³ canisters</td>
</tr>
<tr>
<td><strong>Counter pressure</strong></td>
<td>max. 4 bar</td>
<td>automatic pressure control at 5 bar</td>
<td>max. 25 bar</td>
</tr>
<tr>
<td><strong>Operating temperatures</strong></td>
<td>from 0° to +40° C</td>
<td>from -10° to +50°C</td>
<td>from -20° to +60°C</td>
</tr>
<tr>
<td><strong>Fields of application</strong></td>
<td>rolling bearings, plain bearings, drive chains, guides, conveyor chains, open gears etc.</td>
<td>rolling bearings, plain bearings, drive chains, guides, conveyor chains, open gears etc.</td>
<td>rolling bearings, plain bearings, drive chains, guides, conveyor chains, open gears etc.</td>
</tr>
<tr>
<td><strong>Safety requirements</strong></td>
<td>explosionproof: Zone 1.2.; Group I; Group II. A.B.C GS (tested safety)</td>
<td>CE: Immunity to electromagnetic disturbance, protection against dust and splash water</td>
<td>settings are made using 2 push buttons and a digital display, LED function light, lubricant level display;</td>
</tr>
<tr>
<td><strong>Special features</strong></td>
<td>COMPACT CLEAR units have differently coloured activating screws with pink seals for the different discharge periods</td>
<td>LC–unit (lubrication canister) can be replaced on site, LC-unit can be recycled and is therefore environmentally friendly, corrosion-resistant, protected from dust and splash water; reusable drive motor</td>
<td></td>
</tr>
</tbody>
</table>
FAG Arcanol lubricants

For a longer bearing life:
Arcanol – rolling bearing-tested grease

Arcanol rolling bearing greases ensure that bearings can be used to their full capacity. They ensure a good running behaviour, very safe operation and a long service life. Arcanol offers several times the safety of standard greases even though these special greases at first glance cost a little more. The new CD-ROM “FAG Motion Guard Select Manager 2.0” makes it easier to select the optimal Arcanol grease for your specific application.

<table>
<thead>
<tr>
<th>Arcanol</th>
<th>MULTITOP</th>
<th>MULTI2</th>
<th>MULTI3</th>
<th>LOAD220</th>
<th>LOAD400</th>
<th>LOAD1000</th>
<th>TEMP90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical applications for Arcanol rolling bearing greases</td>
<td>Universal grease for ball and roller bearings in rolling mills, construction machinery, motor vehicles, spinning and grinding spindles at high speeds, high loads, low and high temperatures</td>
<td>Universal grease for ball bearings (ØD ≤ 62 mm) in small electric motors, agricultural and construction machinery, household appliances</td>
<td>Universal grease for ball bearings (ØD &gt; 62 mm) in large electric motors, agricultural and construction machinery, ventilators</td>
<td>Special grease for ball and roller bearings in mining machinery, construction machinery at extremely high loads, medium temperatures, medium speeds</td>
<td>Special grease for ball and roller bearings in mining machinery, construction machinery, particularly suitable for shock-type loads and large bearings at extremely high temperatures, high loads</td>
<td>Special grease for ball and roller bearings in couplings, electric motors, motor vehicles</td>
<td>Special grease for ball and roller bearings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Arcanol</th>
<th>TEMP110</th>
<th>TEMP120</th>
<th>TEMP200</th>
<th>SPEED2,6</th>
<th>VIB3</th>
<th>BID2</th>
<th>FOOD2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical applications for Arcanol rolling bearing greases</td>
<td>Special grease for ball and roller bearings in electric machines, motor vehicles at high temperatures, high speeds</td>
<td>Special grease for ball and roller bearings in continuous casting plants at high temperatures, high loads</td>
<td>Special grease for ball bearings in track rollers in baking machines, piston pins in compressors, kiln trucks, chemical plants at extremely high temperatures, chemically aggressive environments</td>
<td>Special grease for ball bearings in machine tools, instruments at extremely high speeds, low temperatures</td>
<td>Special grease for ball and roller bearings in rotor blade adjusters in wind turbines, packing machines at high temperatures, high loads, oscillating motion</td>
<td>Special grease for ball and roller bearings in environmentally hazardous applications</td>
<td>Special grease for ball and roller bearings in incidental food contact uses, USDA H1</td>
</tr>
</tbody>
</table>

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 changes in the interest of technical progress.

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