automatic lubrication
Prevent Bearing Failure with Economical and Reliable Lubricators from FAG

In the fast-paced world of manufacturing, mechanical failure is an operator’s worst nightmare. It interrupts production, reduces operating efficiency and ultimately affects the bottom line with increased operating costs. Mechanical breakdowns are very often caused by bearing failure. And the most common cause of bearing failure? Improper lubrication.

FAG has the solution — lubrication devices that are both cost-effective and easy to install. These devices guarantee a lubrication schedule that reliably introduces fresh lubricant based on the precise needs of the application. They reduce maintenance costs by eliminating the need for manual lubrication and improving bearing service life. FAG’s automatic lubricators are ideal for a variety of applications from electric motors, pumps and compressors to fans, blowers and conveyors. And all are suitable for any industry, such as food processing and paper- and steel-making, mining, construction, power generation and more.
FAG Compact Lubricators Provide Continuous Lubrication

Regular discharge of lubrication is a key factor in uninterrupted mechanical performance. FAG's electrochemical automatic lubricator provides precise and continuous lubrication using a practical bladder principle. The bladder expands inside its housing through the formation of gas. A triggering screw in the rear of the unit drops an activating pellet into a liquid electrolyte to create pressure through a chemical reaction. This pressure causes the bladder to push a piston forward and continuously dispense grease into the lubrication point. The length of time it takes to empty the unit (which holds approximately 100 shots of grease) is controlled by the use of different triggering screws for 1, 3, 6 or 12 months. The activation screw and pellet along with the ambient temperature determine how rapidly the chemical reaction builds up pressure to regulate how quickly the lubricant is dispensed.

**COMPACT**
- Reliability: Continuous lubrication throughout the set period of time
- Indicates when fully discharged
- Lubricates up to 12 months depending on type and conditions
- Can be replaced by hand, without tools
- Operates in any position, even under water
- Metal container prevents gas from escaping, providing more accurate lubrication
- Safe, environmentally friendly chemicals used to generate the drive gas

**COMPACT POLAR**
- Designed specifically for low temperatures ranging from 13°F / -25°C to 50°F / 10°C
- Metal housing prevents gas from permeating through housing, which can cause unit to lose pressure prematurely and not fully discharge lubricant
- The discharge periods are 1 and 3 months

**COMPACT CLEAR**
- Transparent plastic housing suitable for use in pharmaceuticals (i.e., cosmetics and drugs), chemicals, food processing and other areas with a high risk of corrosion

**APPLICATIONS**
- Fans
- Blowers
- Electric Motors
- Conveyors
- Shaker Screens
- Chains
- Gear Boxes
- Pumps
- Compressors

**ACTIVATION KEYS**
- 1 month yellow
- 3 months green
- 6 months red
- 12 months gray
FAG’s Champion Lubricators Offer Temperature-Independent Lubrication

FAG proudly offers the electromechanical Champion line of automatic lubricators for precise performance. The effects of ambient temperature on the lubrication schedule are eliminated because the Champion lubricators use electronics to drive by motor rather than gas.

The Champion consists of a reusable, battery-powered motor unit and a replaceable lubrication cartridge. Each of these units can be easily set for different discharge periods and be turned on and off with a switch. The electromechanical units are temperature independent and have very precise discharge periods. Once the lubricator is switched on, the motor activates the gear set, which, in turn, is connected to a threaded spindle on which a piston rides. The piston immediately builds to 75-psi pressure and begins dispensing the grease. The reusable motor will drive any of FAG’s three lubrication cartridges – 60, 120 and 250cc – and can be set to different discharge periods. The motor has two dip-switches: one for determining the volume of grease that is attached to the device (60, 120 or 250cc), and the second for regulating the discharge time period (1, 3, 6 or 12 months). Once the unit is set and turned on, a red light will appear, followed by a green light indicating the unit is on and operating error free.

CHAMPION ELECTROMECHANICAL
- Temperature-independent
- Precise discharge
- Three sizes: 60, 120 and 250cc
- Reusable drive
- LED performance indicator advises user if unit is functioning properly
FAG Takes the Lead with Champion MC Lubricators

The Champion MC is a state-of-the-art lubrication system. The unit's ON/OFF function is directly wired to the machine or equipment on which it is installed. As soon as the machine operates, it supplies power to the Champion MC. The functional status can be monitored via a PLC-control system and is also displayed by the lubricator's LED signals. When the lubricator works in the "impulse mode" (120cc LC-unit only), the discharge may be regulated via the PLC. In this setting, the PLC is programmed to control the unit's lubrication schedule. When in the "regular discharge mode," the Champion MC will discharge the pre-set amount of lubrication per 100 hours of operation based on the settings chosen.

FAG Offers More Accessory and Grease Options

Every application is unique and presents different challenges, from difficult-to-reach lubrication areas to points where extremely high vibration or high ambient temperatures exist. To address these problems, FAG provides an extensive line of accessories that are easy to install, including a wide range of adapters, mounting plates, connectors, tubing, and other devices to assist in successfully meeting all of your mounting needs. In addition, we offer specialty applicators that allow you to enjoy the benefits of automatic lubrication for non-bearing applications, such as open gears, rails and chains. We also offer over 195 different greases from 32 top manufacturers, with the option for more choices on request.

Accessories

- brackets, clamps, springs and angles
- check valves
- bushings
- oil brushes
- elbows
- reducing adapters
- tube connectors
- tubing and hydraulic hose
- specialty applicators
- open gear lubricators
- rail applicator
- oil box for chain lubrication

INDUSTRIES
- Pulp & Paper
- Metals (Steel, Aluminum)
- Mining
- Power Generation
- Water and Waste Water Management
- Facility Management
- Aggregate
- Agriculture
- Wind Power
- Phosphate
- HVAC
- Chemical
- Cement
- Petrochemical
- Automotive
- Food Processing
- Oil
- Textile
## Specifications

<table>
<thead>
<tr>
<th>Material</th>
<th>COMPACT</th>
<th>COMPACT POLAR</th>
<th>COMPACT CLEAR</th>
<th>CHAMPION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Mechanism</td>
<td>electro-chemical reaction</td>
<td>electro-chemical reaction</td>
<td>electro-chemical reaction</td>
<td>gear motor and drive spindle</td>
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<tr>
<td>Discharge Periods</td>
<td>1, 3, 6, 12 months at 78°F/25°C</td>
<td>1 or 3 months at 25°F/-4°C</td>
<td>1, 3, 6, 12 months at 78°F/25°C</td>
<td>1, 3, 6, 12 months or machine controlled</td>
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<tr>
<td>Lubricant Volume</td>
<td>120 cc</td>
<td>120 cc</td>
<td>100 cc</td>
<td>60, 120, 250 cc</td>
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<tr>
<td>Pressure Build-up</td>
<td>4 bar (65psi)</td>
<td>4 bar (65psi)</td>
<td>4 bar (65psi)</td>
<td>5 bar (75psi)</td>
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<tr>
<td>Ambient Temperature</td>
<td>32°F/0°C up to 104°F/+40°C</td>
<td>13°F/-25°C up to 50°F/10°C</td>
<td>32°F/0°C up to 104°F/+40°C</td>
<td>14°F/-10°C up to 122°F/+50°C</td>
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<tr>
<td>Dimensions (without adapters or activation keys)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max Height</td>
<td>99 mm</td>
<td>99 mm</td>
<td>99 mm</td>
<td>60cc</td>
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<tr>
<td>Max Width</td>
<td>70 mm</td>
<td>70 mm</td>
<td>70 mm</td>
<td>70 mm</td>
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<tr>
<td>Discharge Rates (cc/day)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 month</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
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<tr>
<td>3 month</td>
<td>1.33</td>
<td>1.33</td>
<td>1.33</td>
<td>1.67</td>
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<tr>
<td>6 month</td>
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<td>NA</td>
<td>.67</td>
<td>.33</td>
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<tr>
<td>12 month</td>
<td>.33</td>
<td>NA</td>
<td>.33</td>
<td>.17</td>
</tr>
</tbody>
</table>

### Notes
Discharge rates for Compact and Compact Clear are based on operating in environment with average ambient temperature of 78°F/25°C.

Discharge rates for Compact Polar based on operating in environment with average ambient temperature of 25°F/-4°C.