

# **Single Point Lubricators**

A safe, effective and long term economical lubrication solution



## **Groeneveld-BEKA**

Reducing customers' operational costs and at the same time increasing uptime, productivity, efficiency and safety of their vehicles and machines. That is what it's all about at Groeneveld-BEKA. We accomplish this by developing, producing, supplying and servicing industry-leading automatic lubrication, fluid control and safety support systems.

Groeneveld-BEKA, part of The Timken Company, is the world's second largest producer of automatic lubrication systems, fluid management and safety support systems. Groeneveld-BEKA products improve equipment lifetime and reliability, while reducing the total cost of ownership.

Groeneveld-BEKA was formed through the merger of two well-established companies: Groeneveld and BEKA. Groeneveld was founded in 1971 and acquired by Timken in 2017. BEKA was founded in 1927 and acquired by Timken in late 2019. Groeneveld has also incorporated Interlube into their brand. Interlube was acquired by Timken in 2013.

Groeneveld-BEKA products are supplied for ex-factory installs to leading manufacturers of trucks, trailers, buses, wind turbines, industrial applications, agricultural, mining and construction equipment. In addition Groeneveld-BEKA systems are installed in the after-market for a wide variety of transport, construction, agricultural, port equipment and industrial applications. Groeneveld-BEKA strives to develop and manufacture all of its products in-house according to World Class Manufacturing principles.

## **Automatic Lubrication Systems**

Groeneveld-BEKA offers dedicated automatic lubrication systems for all kinds of equipment in a wide variety of market segments, from the smallest excavator to the largest trucks and industrial applications. The application of our high-end systems leads to decreased wear and tear of critical components resulting in extended lifetime, less downtime and reduced repair and maintenance costs. In short: higher productivity and lower operational costs. As maintenance technicians no longer have to climb on or crawl under the equipment, Groeneveld-BEKA's automatic lubrication systems also contribute to safety.

For optimal greasing in all circumstances Groeneveld-BEKA also offers the right type of grease for every application and every system. This is your guarantee for many years of trouble-free operation of your system and perfect lubrication of your valuable equipment.

#### **Fluid Control**

Groeneveld-BEKA's fluid management systems reduce daily maintenance and minimize the risk of unexpected downtime by controlling engine oil levels or removing contamination. Next to the oil management systems, Groeneveld-BEKA also offers systems which easily convey hydraulic power from fixed to moving points.

# **Safety Support Systems**

For many years, Groeneveld-BEKA supplies safety support systems for a wide range of applications. Speedlimiters as well as obstacle detection and camera systems by Groeneveld-BEKA increase safety in many segments from road transport to construction, port, terminal and internal transport.

#### The World of Lubrication

Groeneveld-BEKA is a global enterprise with a worldwide coverage. In many countries, the company is also represented by independent distributors and dealers – all just as driven as our own organisation to offer added value to the customer's company.



With decades of experience providing reliability services to a range of industries, Groeneveld-BEKA offers complete automated maintenance solutions for all your needs. Groeneveld-BEKA's reliability products maintain your equipment, helping you increase uptime and improve profitability.

Visit the Groeneveld-BEKA website for contact details of our subsidiaries, distributors and service dealers.

# Less maintenance, improved efficiency and lower costs

Approximately 60 to 80 % of bearing failures are caused by lubrication issues. Insufficient lubrication, use of unsuitable lubricants, contamination or the use of aged lubricants are among the main reasons for these lubrication issues.

Premature wear of bearings can cause unwanted downtimes. Proper lubrication influences the service-life of bearings and machine performances, and helps extend the lifespan of your equipment and increase uptime. Contamination from liquids, dirt and dust speeds up the wear and shortens bearing life. By applying fresh lubricant to bearings ingress of liquids, dirt and dust is being prevented and bearing life will be increased.

### **Benefits**

#### **Reduce costs**

- Higher equipment availability
- Reduction in repair and maintenance costs
- Schedule maintenance intervals during downtimes

## Improve safety

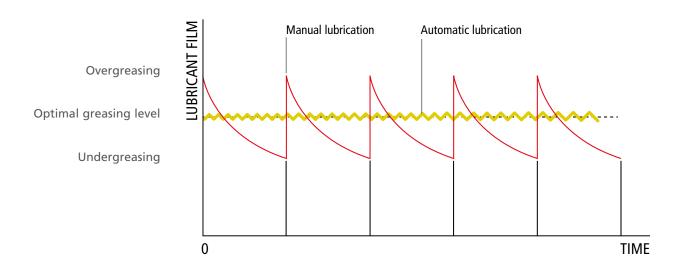
- Reduce time spent in dangerous or hard-to-reach areas
- Reduce accidents caused by lubricant failures
- Prevent contact with dangerous areas or hazardous lubricants

## Protect the environment

- Reduced lubricant consumption
- No lubricant contamination due to the closed system
- Minimize energy and material costs due to the reusable components

#### **Effectiveness of Automatic Lubrication**

When lubricating manually, you basically overgrease your lubrication point. At the time you start relubricating, the lubrication point doesn't have enough lubricant in it which can cause wear. By automating the lubrication process, you make sure that each lubrication point is continuously lubricated at the optimal level.



# Why use single point lubricators?



Single point lubricators are installed on single lubrication points and automatically dispense the right amount of lubricant at the right time. Especially when lubrication points are difficult to access for safety reasons or their location, single point lubricators can offer the solution.

A single point lubricator is designed to deliver a small amount of lubricant to a specific area. They are most commonly used to lubricate bearings, but can also be used to lubricate pumps, electric motors, fans, chains, linear guides, open gears and conveyors, amongst other applications.

A single point lubricator is a great alternative for a centralized lubrication system if there are few lubrication points spread over a wide area or specific points in hard to access areas.

## The solution for all kind of industries



**Asphalt mixing plants** 



**Automotive industry** 



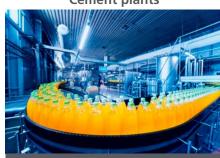
**Cement plants** 



Sewage treatment plants



**Power plants** 



**Food & Beverage industry** 



**Recycling industry** 



Mining & heavy industry



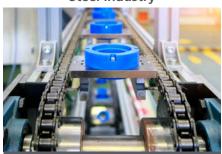
**Steel industry** 



Wind industry



**Pulp & Paper industry** 



Other industries

# **BEKA ONE**

**Better performance at low costs** 



## **BEKA ONE**

The BEKA ONE is an electromechanical lubricator designed to supply lubricant to single lubrication points. The BEKA ONE is the ideal solution to supply lubricant in a safe, precise and reliable way. The lubricators can be mounted on the lubrication point directly or remote.

The BEKA ONE ensures reliable lubrication for 1 up to 24 months per filling. The best part is, the system can be refilled as often as needed. Due to the exchangeable batteries, there's a one-time acquisition for the BEKA ONE.

There are two versions of the BEKA ONE, one with a grease cartridge and one with a refillable reservoir. Whether you need to lubricate with oil or grease, the BEKA ONE can do it. It's an environmental friendly and economical solution, easy to install wherever lubrication is necessary.

- Works with batteries, no special battery pack necessary
- Operating pressure of max, 20 bar
- Suitable for oil and grease
- Remote mounting up to 10 meters
- Can be used wherever there are lubrication points

## System overview





#### 1. Magnetic cap

The magnetic cap is the key component of the BEKA ONE. With this cap you can set the operation time of the system and power the system on and off without contaminating the pumps inside.

#### 2. Protective cover

The BEKA ONE has a protective cover to make sure the system is protected from dirt, dust and liquids. Due to the IP-rating of the system, you don't have to worry about cleaning with a high pressure washer.

#### 3. Grease cartridge

The cartridge version of the BEKA ONE is equipped with a 120 ml grease cartridge. You can easily replace the cartridge when it's empty and be assured that the right grease is used without any contaminations.

#### 4. Lubricant reservoir

The refillable version of the BEKA ONE is equipped with a 120 ml reservoir, suitable for oil and grease.

The reservoir can easily and quickly be refilled with a grease gun or oil press, using the grease fitting. Replacement of the reservoir is not necessary. Because the grease fitting is located behind the cover it's protected from dirt, dust and liquids, preventing contamination of the lubricant during refilling.

#### 5. Batteries

The BEKA ONE is driven by two 1.5V AA-batteries which are safely covered and replaceable when low on power. There's no special battery pack needed, you can use standard batteries.

To achieve functionality at a certain pressure and below a certain temperature, it's recommended to use Lithium-ion batteries.

#### 6. Activation zone

The activation zone is used to activate and set-up the system in combination with the magnetic cap. The settings can easily be changed any time.

The delivered amount of lubricant varies on the selected month settings.

#### 7. Indication LEDs

Bright LEDs indicate the system operation. Green LEDs show the remaining lubrication cycles for the filling, while a bright red LED starts flashing when an error occurs or the batteries are running low.

The LEDs also indicate the backpressure of the system after each lubrication cycle.

#### 8. Outlet

The BEKA ONE has a metal outlet thread to mount the system directly on a lubrication point. If necessary an adapter can be used. Remote mounting of the system with a polyamide tube is also possible.

## How does it work?

After installing the lubricator on or near the lubrication point and the batteries are placed, the lubricator has to be activated with the activation cap. With the same activation cap the operation time has to be set. When the operation time is set, the system is ready for operation. The delivered amount of lubricant varies on the selected month settings.

The BEKA ONE is operated by electromechanical actuation and stands out due to the precise metering and wide temperature range of use.

# Filling cycles

The delivered amount of lubricant varies on the selected month settings.



Month setting	Amount per month	Amount per week
1	120 сс	27.5 сс
3	40 cc	9.2 cc
6	20 cc	4.6 cc
12	10 cc	2.3 cc
24	5 cc	1.1 cc

## **Technical information**

Drive	Electromechanical	
Power supply	3V (2x 1.5V) batteries Rechargeable NIMI batteries or standard alkaline batteries possible. At a pressures >10 bar or temperatures <15 °C lithium-ion batteries are recommended.	
Housing	Transparent plastic	
Discharge settings	1, 3, 6, 12 or 24 months	
Lubricant volume	Depending on month settings, vary from 5 up to 120 cc per month	
Temperature range <sup>1)</sup>	+15°C up to +60°C (Alkaline) -20°C up to + 60°C (Lithium)	
Operating pressure	Max. 20 bar	
Number of outlets	1	
Max. tube length <sup>2)</sup>	10 meters	
Connection threath	1/4" conical	
Lubricants <sup>3)</sup>	Oil: ISO VG 31 – 680 mm²/s Grease: up to NLGI-2	
Reservoir volume	120 ml	
Measurement	H. 180 mm, Ø 86 mm	
Weight - empty	460 g	
Protection class	IP65	

<sup>1)</sup> Depending on lubricant and ambient temperature

<sup>&</sup>lt;sup>2)</sup> Based on use of NLGI-2 grease at room level temperature

<sup>3)</sup> Using solid lubricants can reduce the lifetime of the motor unit



# **Accessories**

# **Product accessories**

Magnetic cap Article number 10100765 Protective cover Article number 10175984





## Fixing brackets & adapters

Fixing bracket G1/4 connection Article number 10100581



2x adapter with direct connection R1/4 Article number 10100956



4x adapter with direct connection R1/4 Article number 10100948



# **Adapters**

Thread adapter G1/4 - G1/8 Article number 10100305



Thread adapter G1/4 - G3/8 Article number 10100306



Thread adapter G1/4 - G1/2 Article number 10100307



Thread adapter G1/4 - G3/2 Article number 10100308



Thread adapter G1/4 - M8 Article number 10100270



Thread adapter G1/4 - M8x1 Article number 10100271



Thread adapter G1/4 - M10 Article number 10100272



Thread adapter G1/4 - M10x1 Article number 10100275



Thread adapter G1/4 - M12 Article number 10100276







## **Extensions**

Thread extension G1/3 13mm Article number 10100468



Thread extension G1/4 27mm Article number 10100470

Thread extension G1/4 50mm Article number 10100471



# Plug-type connections

Plug-type connection 90° Ø8 – G1/4 Article number 10100301 Plug-type connection straight - Ø8 – G1/4 Article number 10100303 Plug-type connection 90° Ø8 – G1/8 Article number 10100299 Plug-type connection straight - Ø8 – G1/8 Article number 10100304









# **Assembling kits**

Reducer Article number 10100598



Sealing ring Article number 10100611



# Filling accessories

Grease cartridge 120 ml filled with EP-2 grease Article number 10180773



Zerk R1/4 Article number 10100499



Zerk G1/4 with plug-type connection Ø8 Article number 10100674



Polyamide tube 8x1 Article number 100120140



Manual grease gun Article number 21590080007



Oil press Article number 10106849



## **Brushes**

Brush Ø30 with holder and plug-type connection straight Article number 10100668



Brush Ø30 with holder and plug-type connection 90° Article number 10100669



Brush Ø20 with holder and plug-type connection straight Article number 10100670



Brush Ø20 with holder and plug-type connection 90° Article number 10100671



Brush Ø30 with fixing bracket Article number 10100673



Brush Ø20 with fixing bracket Article number 10100672



Brush Ø30 - G1/8 Article number 10100600















Further accessories are available on request



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