

## BEKAMAX EP-1

The EP-1 is an electrically actuated pump with up to 3 lubrication outlets. The EP-1 is able to deliver commercial lubricants from NLGI-000 up to NLGI-2 at a working pressure of maximum 280 bar. Therefore this system is the ultimate solution for different applications in onroad, construction, agriculture and port equipment.

- A versatile solution for most mobile and stationary applications
- Suitable for all common lubricants
- Springless pump elements with desmodromic drive for highest reliability

### System overview



#### Level monitor

The EP-1 can be equipped with an electronic grease level controller to control the minimum grease level.

#### Reservoir

The EP-1 reservoir is made of transparent plastic and contains an agitator blade. The agitator blade enables a visual check of the lubricant volume in the reservoir.

EP-1 is available with different reservoir capacities.

#### Pressure relief valve

#### Pump element

The EP-1 has up to a maximum of 3 lubricant outlets. A separate pump element is required for each outlet. Three pump elements with different flow rates are available, as well as a flow-adjustable pump element.

#### Filling zerk

The pump can be filled with a standard filling gun. The filling zerk can be replaced by a filler coupling.

#### Control unit

The EP-1 series differ in control type. EP-1 can be controlled externally or with an integrated control unit with:

- 3 control functions: time, stroke or revolutions
- Electronic monitoring of grease level, pump function, distributor function, line rupture, lubricant feeding
- Selection of operating conditions: easy, medium or heavy
- Integrated data logger with diagnosis module DiSys

### Pump elements

Three pump elements with different flow rates are available, as well as a flow-adjustable pump element. All pump elements are marked either with a groove or with a notch for a better differentiation.



PE 60 PLV  
0.06 cc/stroke



PE 120 PLV  
0.12 cc/stroke



PE 120 V PLV  
Max. 0.12 cc/stroke  
Adjustable output

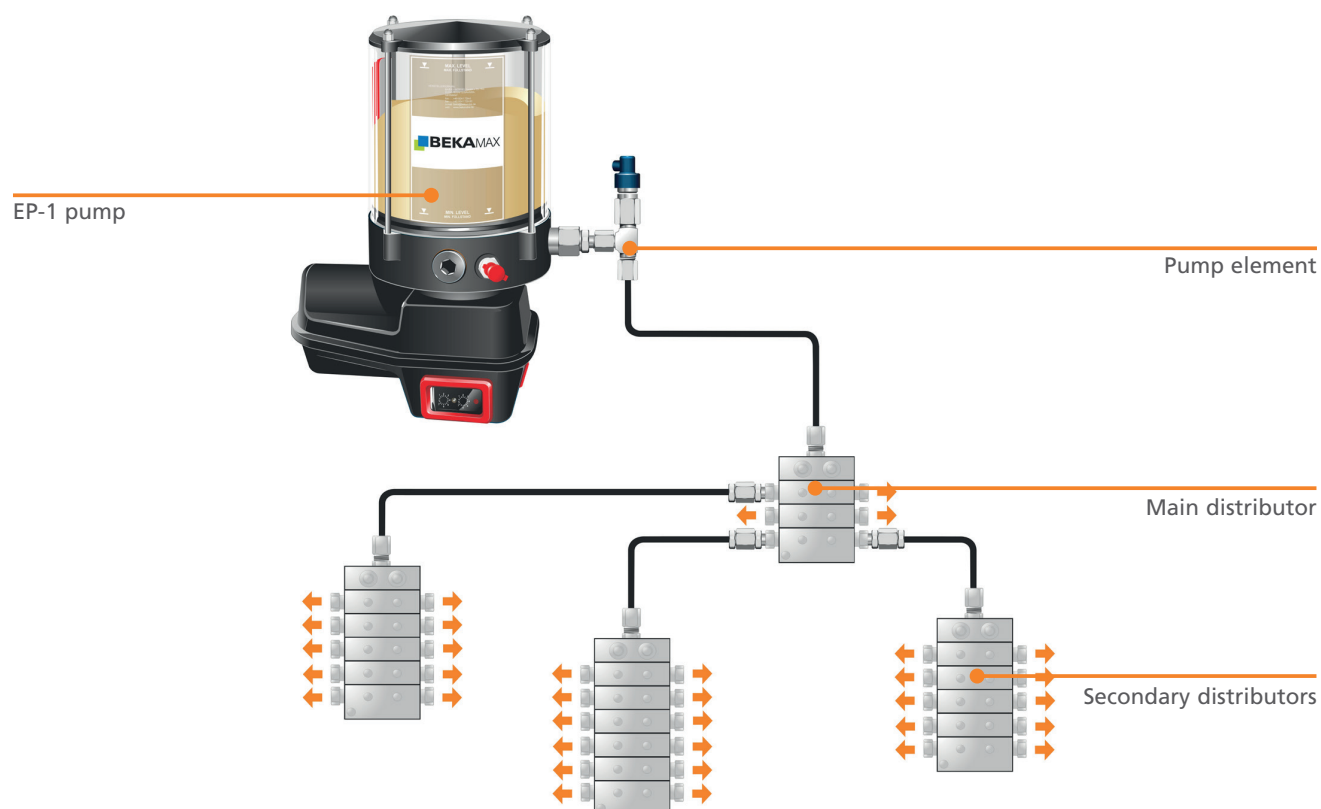


PE 170 PLV  
0.17 cc/stroke

Pressure: Max. 350 bar  
Pressure limiting valve: adjusted to 280 bar

## Working principle

When the pump is activated, grease is pumped through the pump elements. The pump elements transfer the grease to the main and secondary progressive distributors.



## Technical information

Pump type	Electric
Supply voltage	12 or 24V
No. of outlets	Max. 3
Maximum operating pressure	350 bar (5100 psi)
Pressure limiting valve	Adjusted to max. 280 bar (4000 psi)
Number of revolutions	15 min <sup>-1</sup>
Reservoir capacity	1.9, 2.5, 4, 8, 12 and 16 litre
Grease class	Greases up to NLGI-2
Temperature range	-20 up to +70 °C (-4 up to 158 °F)
Protection class	IP5K9K

## Applications

The BEKAMAX EP-1 can be used for a wide variety of applications but is most commonly used for low loaders, sweepers, refuse trucks, construction equipment, port and agricultural equipment.



Low loaders



Refuse trucks

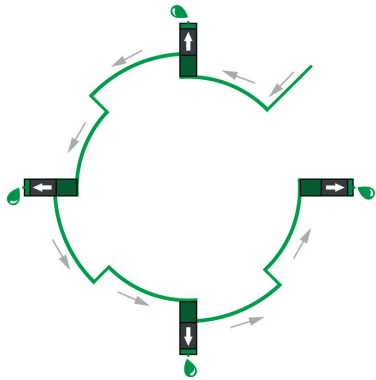


Wheel loaders



Reachstackers

## Progressive systems



A progressive system uses lubricant flow to cycle individual metering valves and valve assemblies. The valves consist of dispensing pistons moving back and forth in a specific bore. Each piston depends on flow from the previous piston to shift and displace lubricant. This ensures that each lubrication point is supplied with the correct and defined amount of grease.

Groeneveld-BEKA offers a wide range of progressive automatic lubrication systems. From the smaller ZEPTO system up to the dedicated TriPlus or GIGA with three independently controlled lubrication circuits.

Also a wide range of progressive distribution blocks is available to meet the requirements of different kinds of applications.

## Progressive systems for all kinds of applications



Trucks & Trailers



Refuse trucks



Buses



Mobile cranes



Wheel loaders (<50 tons)



Excavators (<100 tons)



Agricultural machines



Reachstackers



Attachments