

# ESILUB Oil System EOS



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## Introduction

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### Explanation of Symbols Used

The following description standards are used in this manual:

#### Safety Instructions

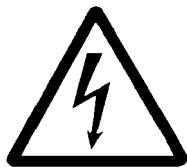
Structure of safety instructions:

- Pictogram
- Signal word
- Danger text
  - Danger note
  - How to avoid danger

The following pictograms are used in this manual and are combined with the corresponding signal words:



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- |             |             |             |
|-------------|-------------|-------------|
| - ATTENTION | - ATTENTION | - NOTE      |
| - CAUTION   | - CAUTION   | - IMPORTANT |
| - WARNING   | - WARNING   |             |

The signal words give the seriousness of danger if the following text will be not observed:

- |                  |  |
|------------------|--|
| <b>ATTENTION</b> | refers to faults or damages on machines.                     |
| <b>CAUTION</b>   | refers to bad damages and possible injuries.                 |
| <b>WARNING</b>   | refers to possible dangerous injuries.                       |
| <b>NOTE</b>      | refers to improvements in handling of systems.               |
| <b>IMPORTANT</b> | refers to considerable disadvantages in handling of systems. |

#### Example:



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#### WARNING!

*When making use of other than the original spare parts, serious damage may affect your device.*

*Therefore, for the operation of your device always use original spare parts made by Lincoln GmbH & Co. KG.*

Furthermore, you will find the following text symbols in this manual:

- Listing
  - Subpoint
- ➞ Procedural instruction

### User's Responsibility

To ensure the safe operation of the unit, the user is responsible for the following:

1. The pump / system shall be operated only for the intended use (see chapter "Safety Instructions", on page 5) and its design shall neither be modified nor transformed.
2. The pump / system shall be operated only if it is in a proper functioning condition and if it is operated in accordance with the maintenance requirements.
3. The operating personnel must be familiar with this Owner Manual and the safety instructions mentioned within and observe these carefully.

The correct installation and connection of tubes and hoses, if not specified by Lincoln GmbH & Co. KG, is the user's responsibility. Lincoln GmbH & Co. KG will gladly assist you with any questions pertaining to the installation.

### Environmental Protection

Waste (e.g. used oil, detergents, lubricants) must be disposed of in accordance with relevant environmental regulations.

### Service

The personnel responsible for the handling of the pump / system must be suitably qualified. If required, Lincoln GmbH & Co. KG offers you full service in the form of advice, on-site installation assistance, training, etc. We will be pleased to inform you about our possibilities to support you purposefully. In the event of inquiries pertaining to maintenance, repairs and spare parts, we require model specific data to enable us to clearly identify the components of your pump / system. Therefore, always indicate the part, model and series number of your pump / system.

## Safety Instructions

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### Appropriate Use

The ESILUB Oil System is a single-line system designed for the lubrication of link chains in agricultural equipment. The oil system is able to supply mineral oils or other chain oils (see page 14, "Technical Data").

### Misuse

Any use of the ESILUB Oil System EOS that is not expressly mentioned in this User Manual will be regarded as misuse. If the EOS is used or operated in a different manner other than specified, any claim for warranty or liability will be null and void.



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#### NOTE

*If personal injury or material damage occurs as a result of inappropriate operation, e.g.*  
– safety instructions are ignored  
– use of inadequate oil  
– incorrect installation of the EOS  
*no claims or legal actions may be taken against Lincoln GmbH & Co. KG.*

### Exclusion of Liability

The manufacturer of the ESILUB Oil System EOS does not accept any liability for damages caused by

- lack of oil
  - due to tardy replacement of suction filter
  - due to wrong (vertical) position of suction filter (see page 12, "Maintenance")
- operation with contaminated oils
- use of oils that are inappropriate or only conditionally appropriate for the lubricating device or which are not pumpable
- inappropriate disposal of used or contaminated oils or components
- arbitrary modification of system parts
- use of unauthorized spare parts
- operation without adhering to the minimum pause time respectively the maximum operating time (see page 14, "Technical Data")

### Accident Prevention Regulations

To prevent accidents, observe all city, state or provincial and federal safety regulations of the country in which the ESILUB Oil System EOS will be used.

### General Safety Instructions

- ESILUB Oil Systems EOS
  - are designed with state-of-the-art technology.
  - can be assembled for safe operation.
- Incorrect use may result in bearing damage caused by insufficient or excessive lubrication.
- Modifications or alterations to an installed system by the customer are subject to prior consultation with the manufacturer of the lubrication system or with its appointed dealer.
- ESILUB Oil Systems are to be installed with the filler cap showing to the top.
- After each transport or filter replacement be sure that the suction filter inside of the reservoir is in a horizontal position. Then make sure that the pump supplies oil.

### Operation, Maintenance and Repair



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#### ATTENTION!

*Before starting any maintenance or repair work, disconnect the ESILUB Oil System EOS from the power supply*



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#### ATTENTION!

*Malfunctions or damages due to contamination!  
Avoid any contamination*

- when opening the lubricating device
- when carrying out maintenance or repair work
- when replacing the filter
- when refilling oil

### Repairs

Repairs are only to be performed by authorized and qualified persons who are familiar with all applicable regulations.

### Operation/ Maintenance

#### ESILUB Oil Systems EOS

- shall regularly be filled with clean oil and through the filter insert (page 10, pos. 11)
- shall regularly be equipped with clean suction filters (see page 12, "Maintenance")
- operate automatically via external time control. However, check at regular intervals (approx. 2 days) whether the pump actually supplies oil (observation).

### Disposal

Dispose of used or contaminated oils according to the legal regulations pertaining to environmental protection.

## Safety Instructions, continuation

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### Installation



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#### ATTENTION!

The use of any spare parts can result in serious damage to your lubrication device.

Therefore, for the operation of your lubrication device use only original spare parts<sup>1)</sup> or spare parts authorized by Lincoln GmbH & Co. KG.

<sup>1)</sup> see as of page 17 "Spare Parts List and Accessories"



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#### IMPORTANT

Observe the installation guidelines and instructions of the machine/unit manufacturer when drilling and welding, as well as the specified minimum distance on vehicle/chassis frames for holes between upper/lower rim of the frame or between two bore holes.

### Installation and Maintenance of Lubricating Hoses



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#### ATTENTION!

The operational safety of the ESILUB Oil System EOS is only guaranteed with a professional installation and maintenance of hydraulic hoses/lines. The following points must be observed!

#### Lubrication lines

- may never be subjected to torsion
- must be installed twist-free
- must not rub against metal components or edges
- are to undergo regular visual checks and exchanged in the case of wear.

Pay attention with non linear installations to allow for as large a bending radius as possible. Kinks are to be avoided. In constricted installation conditions use pipe elbow unions to avoid the danger of kinking behind the hose socket.

## Installation and Start-up

### Installation of the ESILUB Oil Pump EOP

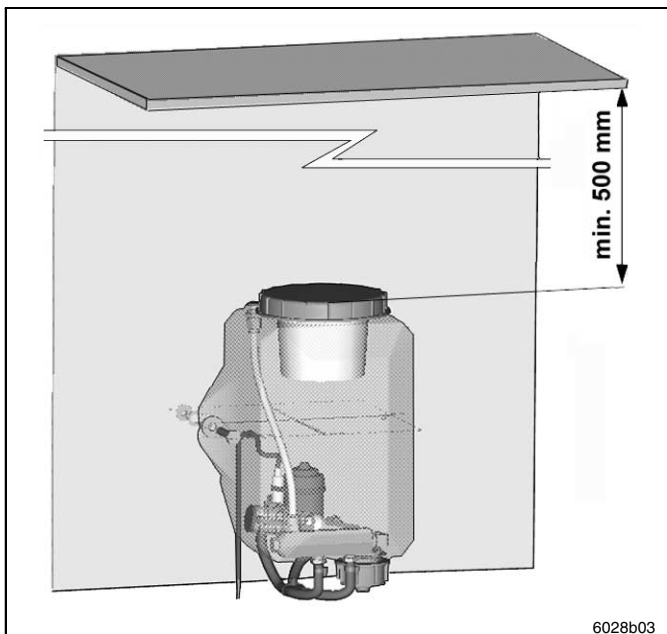
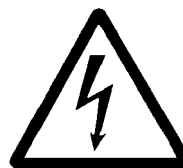


Fig. 1 Installation of the EOP

- Install the EOP vertically
- Provide sufficient space for a later filling of the reservoir from the top (min. 500 mm)

A fastening set consisting of 2 screws, 4 washers and 2 nuts (M8) is included in each EOP supplied.



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#### ATTENTION!

Before starting any installation work, disconnect the pump from the power supply.



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#### IMPORTANT

To install the bulkhead connecting fitting (page 7, pos. 18) the counter tube fitting must be secured inside of the reservoir in order to avoid damages on the reservoir wall.  
(Tightening torque 5 Nm +10%, pasted with Loctite 274)

## Installation and Start-up, continuation

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### Use of QUICKLINC Connecting Elements

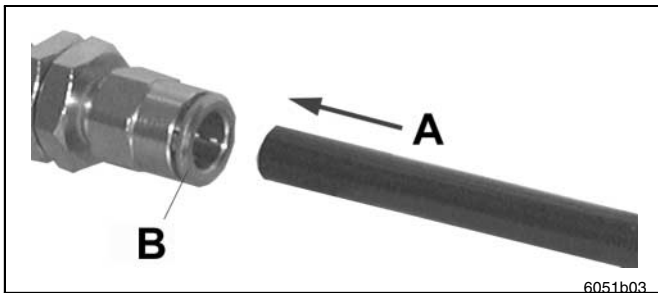


Fig. 2 Connection of QUICKLINC connecting element and line

#### Connect

- Push the line in the direction of arrow A into the QUICKLINC connecting element until it stops.

#### Disconnect

- Press the line together with pliers B in the direction of arrow A into the QUICKLINC connecting element in order to loosen the fastening clamps.
- Hold pliers B tight and pull out the line in the opposite direction to arrow A.

### Start-up of the ESILUB Oil System EOS

#### Filling and Venting of the ESILUB Oil Pump EOP

- Connect the components of your EOS as shown in figure 10 on page 9,
- Make sure that the reservoir is filled with oil.

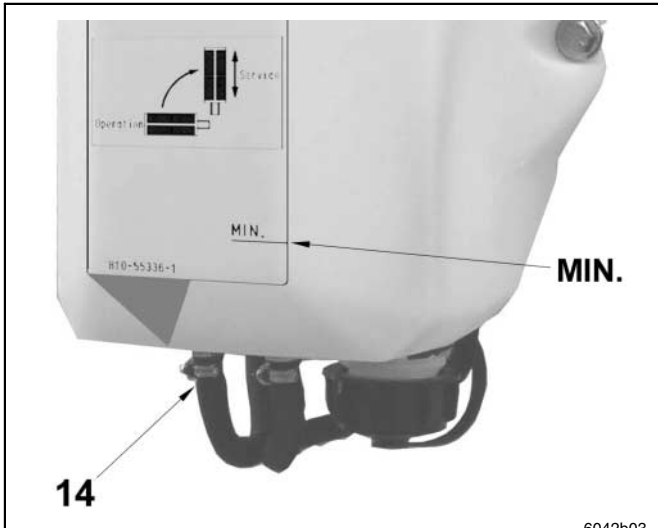


Fig. 3 Filling of the EOP

- Remove the hose (pos. 14) below the red arrow and wait whether oil will leak out.
- If not, trigger an additional lubrication,
- Let the EOP run for 4 seconds several times until oil leaks from the hose end.



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#### ATTENTION!

*Danger of overheating of the electrically driven gear pump due to permanent operation.*

*Adhere to a minimum pause time of 30 seconds after the maximum operating time of 4 seconds.*

- Then, reconnect the hose and fasten it with the hose clamp.

#### Filling of the ESILUB Oil System EOS

The filling of the lubrication lines over 0.5 m in the installed system proceeds very slowly due to the metering elements. The filling time can be reduced by the direct connection to the ESILUB Oil Pump EOP.

##### 1. Preparation:

- Make sure that the ESILUB Oil Pump EOP is filled with lubrication oil.

##### 2. Filling variants:

Depending on the local conditions and the space available for your installed EOS, you can choose between two procedures:

##### - Variant A – Filling via the feedline

- Remove the feedline from the first divider bar (see fig. 8, left side)

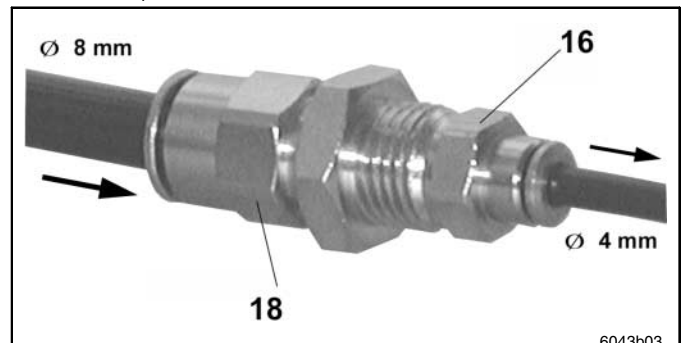


Fig. 4 Filling adapter

16 - male connector GEZ, R1/8,  $\varnothing$  4 mm

18 - bulkhead fitting, inner  $\varnothing$  R1/8

- Connect the filling adapter (fig. 4) to the feedline,

## Installation and Start-up, continuation

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### Start-up of the ESILUB Oil Systems EOS, continuation

#### As to 2. Variant B -Filling from the end of the divider bars

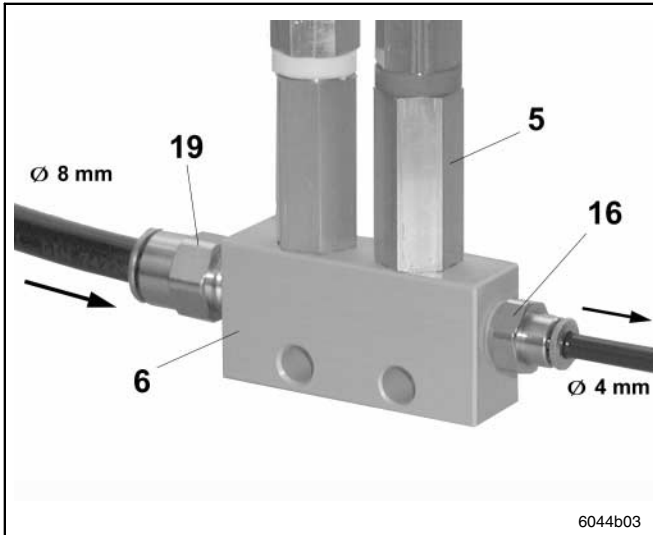


Fig. 5 Filling from the end of the divider bar

- 5 - metering element
- 6 - divider bar
- 16 - male connector GEZ, R 1/8, Ø 4 mm
- 19 - male connector GEZ, R 1/8, Ø 8 mm

- ➔ Remove the closure plug from the last divider bar (see fig. 8, right side).
- ➔ Install a connecting tube fitting for lubrication lines Ø 4 mm (pos. 16).

#### 3. Filling:

- ➔ Connect a lubrication line.
- ➔ Fill the lubrication line by manually triggering additional lube cycles of the EOP until the lubrication line is completely filled with oil.



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#### ATTENTION!

*Danger of overheating of the electrically driven gear pump due to permanent operation.*

*Adhere to a minimum pause time of 30 seconds after the maximum operating time of 4 seconds.*

- ➔ Reconnect the filled line to the metering element.
- ➔ Repeat the filling for each lubrication line.

#### 4. Final works:

##### - Variant A – Filling via the feedline

- ➔ Remove the filling adapter from the feedline.
- ➔ Reconnect the free end of the feedline with the first divider bar.

##### - Variant B – Filling on the end of the divider bar

- ➔ Close the male connector GEZ with a closure plug (see page 17, "Spare Parts List and Accessories")
- or
- ➔ remove the male connector GEZ and close the divider bar with the closure screw again (see page 17, "Spare Parts List and Accessories")

## Identification Code

### Examples of type designations

System	EOP	-	12	-	EOE 141•335	+	Accessories
System	EOP	-	24	-	EOE 33•111•4533	+	Accessories

EOP = ESILUB Oil Pump

Electrically driven gear pump 12 VDC  
Electrically driven gear pump 24 VDC

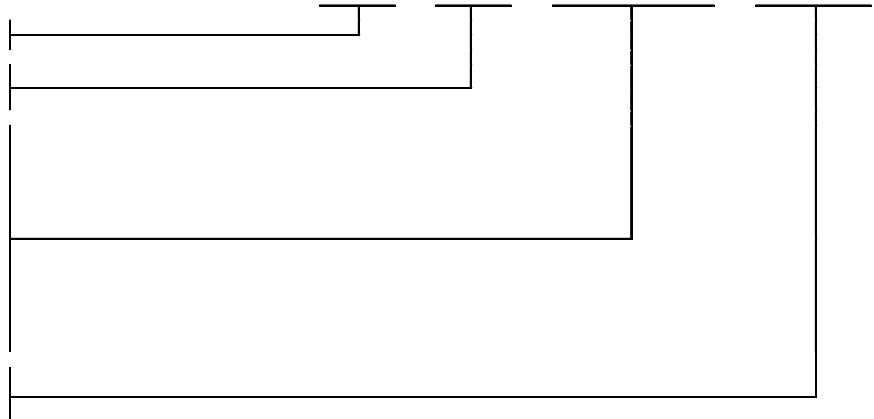
ESILUB metering elements (EOE)  
Code Numbers:

- 1 = 0.1 cm<sup>3</sup> / pulse (white marking)
- 3 = 0.3 cm<sup>3</sup> / pulse (red marking)
- 4 = 0.4 cm<sup>3</sup> / pulse (green marking)
- 5 = 0.5 cm<sup>3</sup> / pulse (blue marking)

Numerical blocks:

- XX• = divider bar for two metering elements
- XXX• = divider bar for three metering elements
- XXXX• = divider bar for four metering elements

To be ordered separately  
(see as of page 17, "Spare Parts and Accessories")





**Description**

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**System**

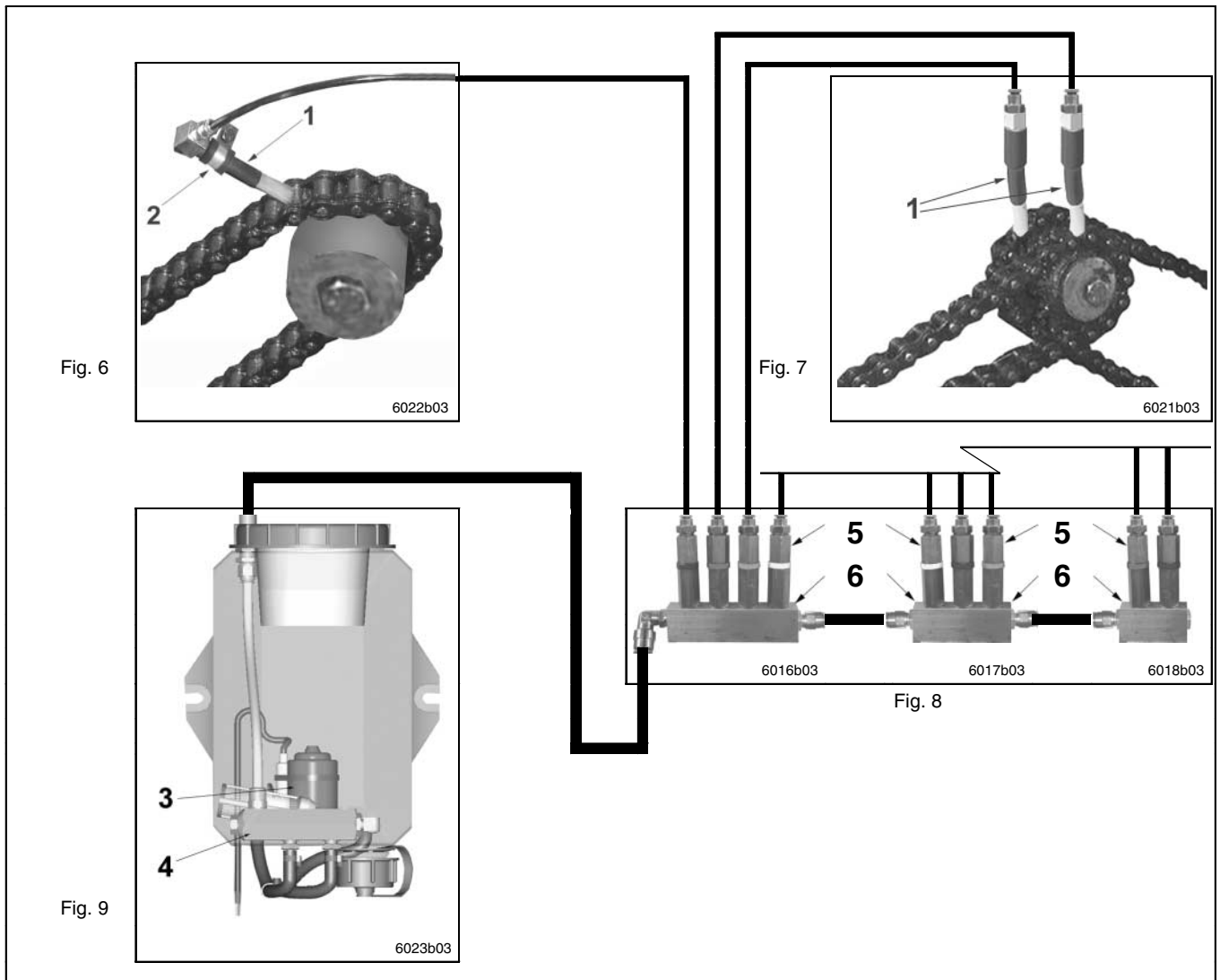


Fig. 10 Schematic structure of the ESILUB Oil System EOS

- As to fig. 6 Application example with brush (pos. 1) and hose clamp (pos. 2) for the infinitely variable follow-up in the case of wear of the brush
- As to fig. 7 Application example with two brushes (pos. 1)
- As to fig. 8 Quadruple, triple and double divider bars (pos. 6) with mounted metering elements (output 0.1 – 0.5 cm<sup>3</sup>) for each lube point
- As to fig. 9 5 l reservoir
  - with attached gear pump (pos. 3)
  - with integrated pressure unit (pos. 4) with integrated pressure relief valve and vent valve
- As to fig. 10 Line material
  - Feedlines between the reservoir outlet (page 10, pos. 9) and the divider bars (pos. 6) => Ø 8 mm
  - Lubrication lines between the metering elements (pos. 5) and the lubrication points (brush, pos. 1) => Ø 4 mm

Subject to modifications

Description, continuation

4.1B-10001-A03

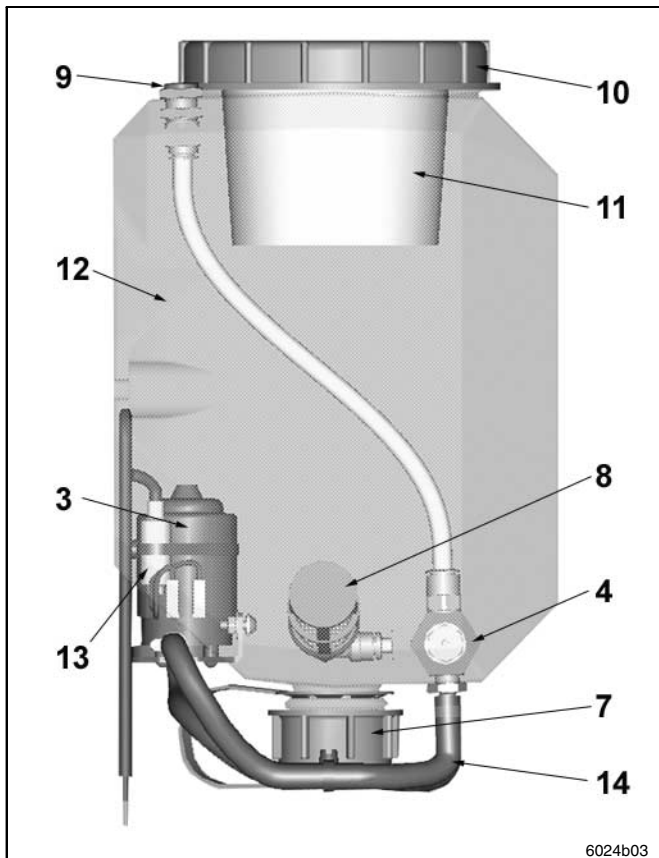


Fig. 11 EOP, View from the left side

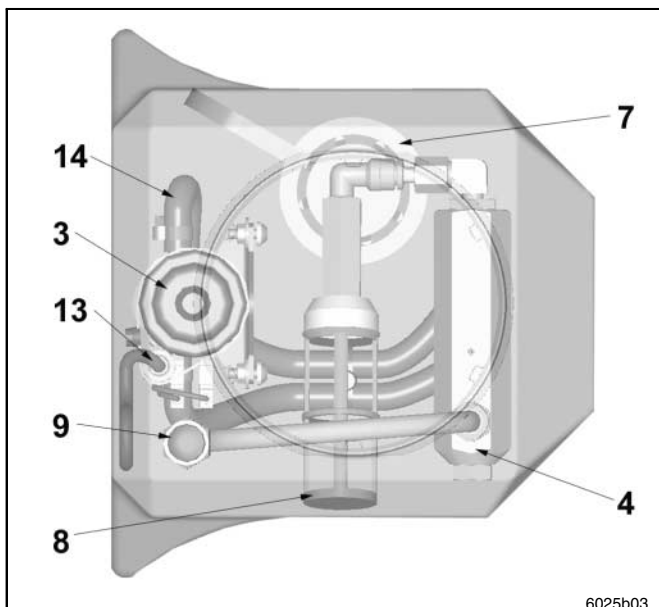


Fig. 12 EOP, View from the top

- 3 - electrically driven gear pump
- 4 - integrated pressure unit consisting of a pressure relief valve and a vent valve
- 7 - screw cap
- 8 - suction filter
- 9 - connection tube fitting (Ø 8mm) to the divider bars (page 9, pos. 6)

**ESILUB Oil System EOS**

**Electrically driven gear pump**

Pump and motor form a unit (pos. 3), the electrically driven gear pump. It is mounted behind the reservoir in a space especially provided therefore. It is driven by a 12 or 24 VDC direct-current motor. The max. operating pressure is approx. 4 bar.



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**IMPORTANT**

*The pump is not suitable for permanent operation.*

**Pressure unit**

The pressure unit (pos. 4) (pressure relief valve and vent valve) rules the oil flow from the reservoir to the lube point and ensures the trouble-free operation of the system.

The pressure relief valve of the pressure unit serves to maintain the pump pressure constant. Whenever the pump is switched off, the vent valve relieves the pressure line completely in order to make the working of the metering elements possible (page 9, pos. 5).

**Divider bars**

The divider bar (page 9, pos. 6) accommodates the metering elements (page 9, pos. 5). There are available divider bars for two, three or four metering elements. The pressure connections are directly connected to the installed metering elements. From each metering element outlet there leads a lube line directly to the brush (page 9, pos. 1) of a lube point.

**Metering element**

The metering element (page 9, pos. 5) supplies oil according to the preset quantity (0.1 cm<sup>3</sup>; 0.3 cm<sup>3</sup>; 0.4 cm<sup>3</sup>; 0.5 cm<sup>3</sup>) via the lube lines directly to the lube point.

**Brush**

The brush (page 9, pos. 1) grazes over the chain and distributes the dispensed oil evenly.

- 10 - filler cap
- 11 - filter insert
- 12 - 5 l reservoir
- 13 - cable with suppression, 0.5 m
- 14 - fuel pipe

1) The standard version includes R 1/8 inner thread only, no QUICKLINC connection (see page 17, "Spare Parts & Accessories")

## Operating Method

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### Pressure Unit

#### Pressurization

The electrically driven gear pump runs via an external time control for a limited period of time.

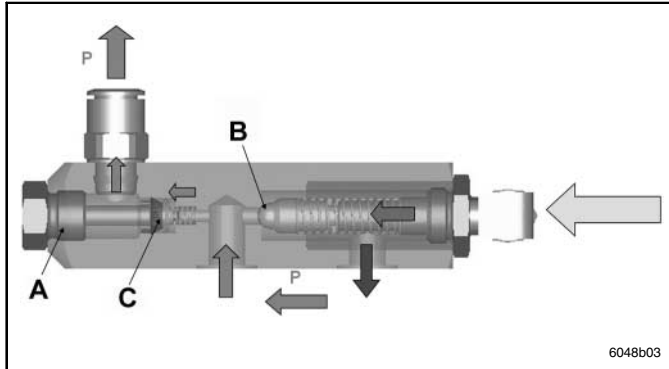


Fig. 13 0 - 4 bar Pressurization

- A - Vent valve
- B - Pressure relief valve
- C - Two-way valve for the pressure relief

The pressure increases quickly whereby the metering elements (page 9, pos. 5) are filled with oil. If all metering elements are charged, the pressure increases to approx. 4 bar.

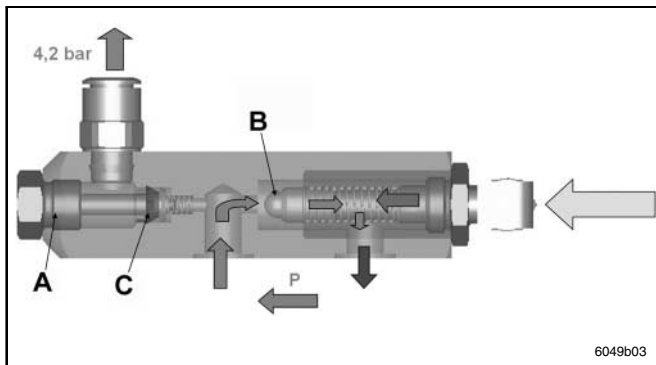


Fig. 14 4,2 bar, Pressure remains constant

If from the pressure line no oil is dispensed any further, the oil circulates in an internal circuit for the rest of the operating time (pressure relief valve B is opened).

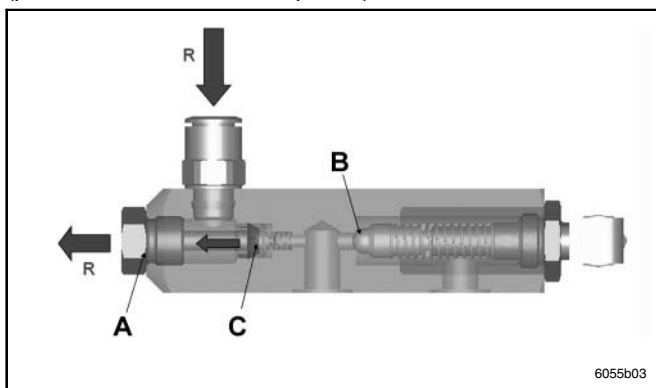


Fig. 15 Venting of the pressure line

At the end of the operating time, the pressure of the oil relieves in the pressure unit and in the pressure line via the two-way valve C and the vent valve A into the reservoir.

### Metering Elements

#### Start of supply

During the operating time, the pressure increases due to a lube pulse in the pressure line and starts filling the metering chamber in front of the metering piston (pos. E) against the spring pressure.

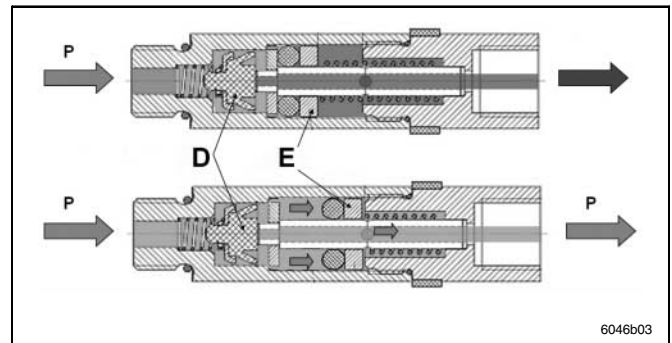


Fig. 16 Start of supply and supply phase in the metering element

- D - Two-way valve for the metering
- E - Metering piston

#### Supply phase

The stored oil behind the metering piston is thereby pressed to the lube point via the lube line.

#### Rearrangement

When the pump operating time has elapsed, the pressure in the pressure line decreases. The two-way valve (pos. C) in the pressure unit opens the return to the reservoir and vents the pressure lines completely.

At this moment, via a two-way valve (pos. D) the oil in the metering chamber (in front of the metering piston) is rearranged and stored behind the metering piston due to the spring force of the pressure spring.

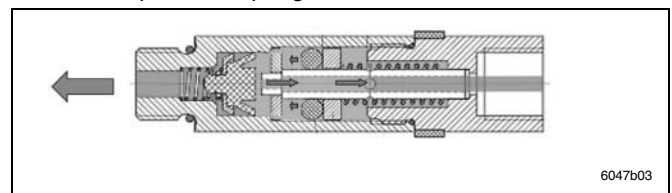


Fig. 17 Rearrangement in the metering element

## Operating Method, continuation

4.1B-10001-A03

### Operating Time and Pause Time

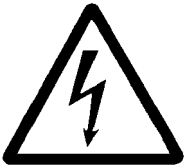
The required operating time of the gear pump for the presurization depends on the following conditions in the ESILUB Oil System EOS:

- number of lube points
- length of the lines to the lube points

If the operating time is increased, the following pause time must be increased correspondingly.

Operating time and pause time are set by the user via the time control unit (see page 14, "Technical Data").

## Maintenance and Repair



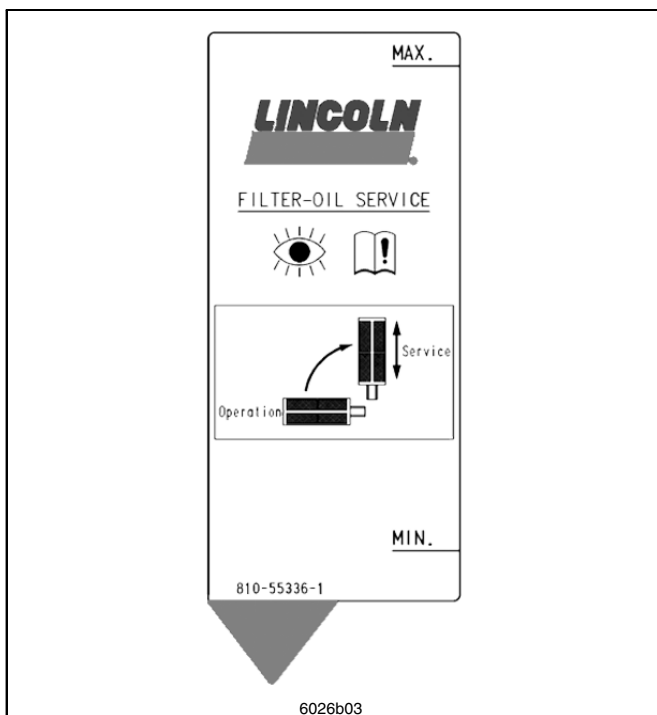
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### CAUTION!

Before starting any maintenance or repair work, disconnect the pump from the power supply.

Maintenance work may be carried out by authorized and qualified personnel only. Be very cautious when working on the open device.

### Maintenance



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Fig. 18 Filter-Oil Service and Level Control of the ESILUB Oil Pump EOP



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### ATTENTION!

Damage of the gear pump due to "dry operation"! Avoid the suction of air through the suction filter. The vertical slewing position (service) is exclusively thought for a replacement of the filter. For operation, the suction filter must be in a horizontal position (operation) (see fig. 18).

To avoid damages on the pump caused by an operation without oil, carry out the following checks:

#### - Suction filter

- Before the first operation and after any transport, control the position of the suction filter on the bottom inside of the reservoir.

#### - Oil level

- Check the oil level of the EOP in regular time intervals (approximately every 2 days)
- Make sure that the oil level does not fall below the minimum (fig. 18, MIN marking).



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### NOTE

If the reservoir is filled over the MAX marking, oil may overflow if ground slopes are > 20°.

### Repair

For repair work on the ESILUB Oil System EOS use only original **Lincoln** spare parts (see page 17, "Spare Parts & Accessories"). Using non-**Lincoln** parts voids the system warranty.

## Troubleshooting

4.1B-10001-A03

### Fault 1: Pump does not run

**Cause:**

- No power supply

**Remedy:**

- Check the power supply of the ESILUB Oil Pump EOP
- If power supply is available, replace the defective electrically driven gear pump (see page 18, pos. 3)

### Fault 2: Pump runs very noisily

**Cause:**

- Oil reservoir empty
- Suction filter in vertical position
- Suction filter contaminated

**Remedy:**

- Refill and vent the ESILUB Oil Pump EOP, see page 7 "Start-up of the ESILUB Oil System EOS"
- If the outlet of the electrically driven gear pump does not supply any oil, the electrically driven gear pump must be replaced (see page 18, pos. 3)
- Slew the suction filter into horizontal position and check the oil level (see page 12, "Maintenance").
- Refill and vent the EOP (see page 7, "Start-up of the ESILUB Oil System EOS")
- Replace the suction filter
- Refill and vent the EOP (see page 7, "Start-up of the ESILUB Oil System EOS")

### Fault 3: At the lube point there is not dispensed any oil

**Cause:**

- See causes for fault 2
- Leakages
- Lube points clogged
- Metering element(s) defective

**Remedy:**

- Proceed as described above
- Check tube fittings and lines, retighten if necessary
- Clean the lubrication nozzles
- Fill the ESILUB Oil System EOS, see page 7 "Start-up of the ESILUB Oil System EOS"
- Fill and vent the EOP, see page 7 "Start-up of the ESILUB Oil System EOS"
- If oil leaks out and the lube points remain dry, the respective metering elements must be replaced

### Fault 4: Insufficient or excessive lubrication

**Cause:**

- See causes for faults 1-3
- Inadequate metering element

**Remedy:**

- Proceed as described above
- Check the output on the color ring of the mounted metering element (see page 14, "Technical Data")
- Replace the mounted metering element by a corresponding one with adequate output

Tab. 1 Troubleshooting

## Technical Data

4.1B-10001-A03

### Rating

#### ESILUB Oil System EOS

Reservoir size .....	5 l
Dimensions:	
- height .....	302 mm
- width .....	205 mm
- depth .....	180 mm
Power supply .....	12 or 24 VDC
Max. power consumption	
- at 12 VDC .....	5 A
- at 24 VDC .....	2.5 A



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#### ATTENTION!

*A drop of voltage below 2 VDC can cause a malfunction of the electrically driven gear pump.*

*Therefore, please adhere to the line lengths for the power supply of the ESILUB Oil System EOS.*

Max. operating pressure .....	approx. 4 bar
Theoretical output at 4 bar .....	0.5 l/min
Admissible operating temperature.....	0°C to 40°C

#### Suitable Oils

Mineral oils ..... SAE 0W-40



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#### ATTENTION!

*The following oils must not be used in the ESILUB Oil System EOS: used oils, gear oils, glycol oils and vegetable oils.*

*Biological diester oils may be used.*

#### EMC

Acc. to DIN VDE 879/2: 1999-03 and

acc. to EN ISO 14982: 1998

Limiting value class 3 (agricultural and forestry machines)

#### Metering elements

Colour ring.....	output/ pulse
white.....	0.1 cm <sup>3</sup>
red.....	0.3 cm <sup>3</sup>
green.....	0.4 cm <sup>3</sup>
blue.....	0.5 cm <sup>3</sup>

### Operating Time and Pause Time

An increased number of lube points or longer lubrication lines make a prolongation of operating time and pause time of the electrically driven gear pump necessary.

#### Factory Settings

<b>Maximum</b> operating time.....	<b>4 sec.</b>
in combination with	
<b>minimum</b> pause time.....	<b>30 sec.</b>



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#### ATTENTION!

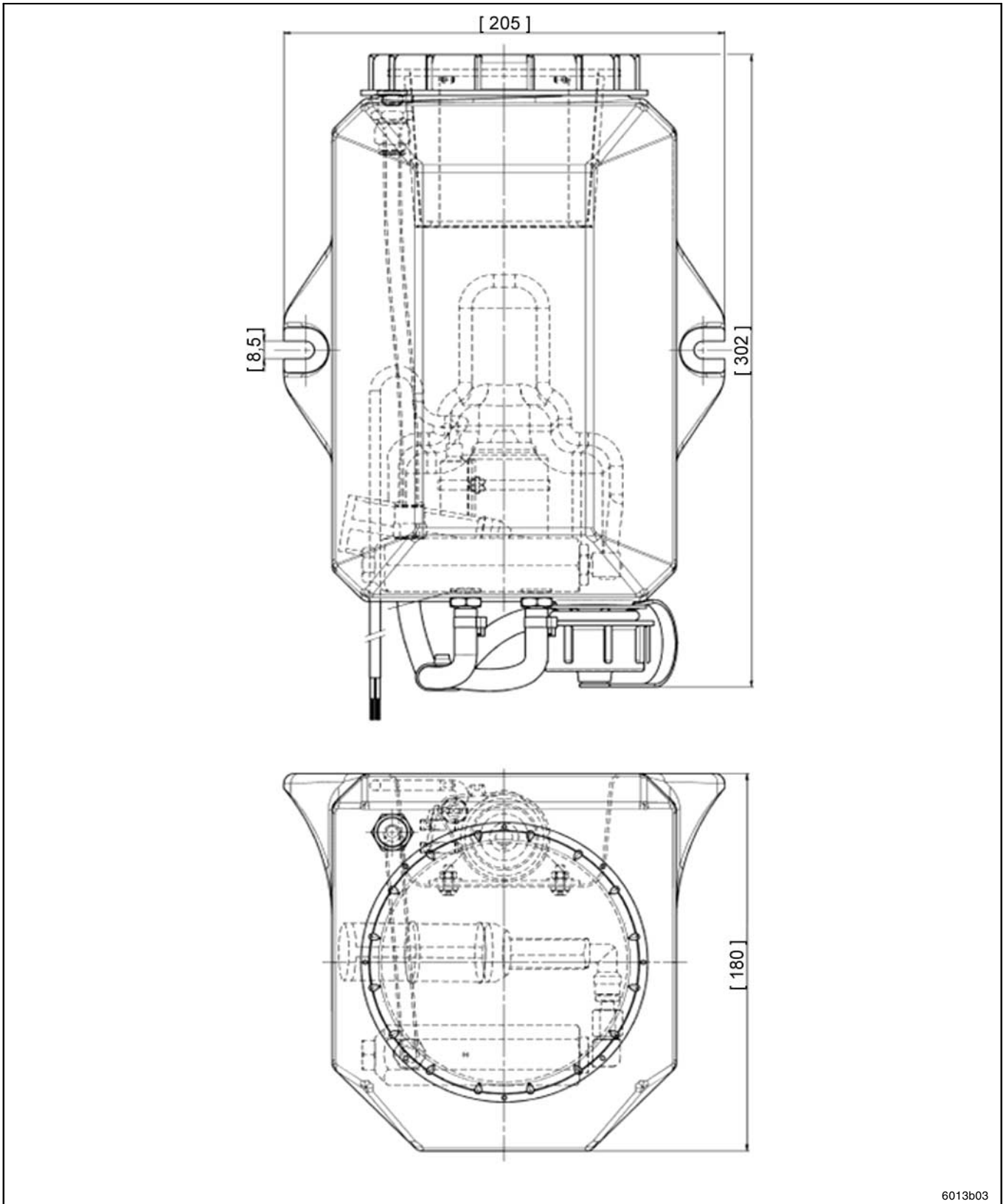
*Exceeding the maximum operating time or undergoing the minimum operating time can result in an overheating and damage of the electrically driven gear pump.*

- Application conditions different from the standard must be clarified with Lincoln GmbH & Co. KG before the first start-up. (See back page of the User Manual!)

Technical Data, continuation

4.1B-10001-A03

Dimensions of the ESILUB Oil Pump EOP



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Fig. 19 EOP Dimensions

Technical Data, continuation

4.1B-10001-A03

Dimensions of the ESILUB metering element EOE

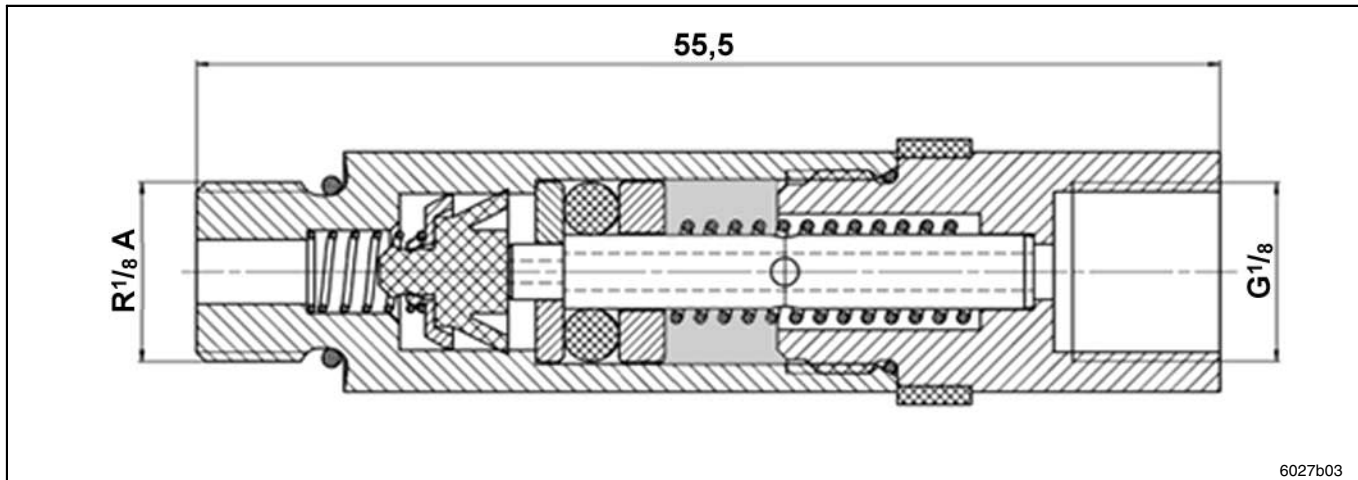


Fig. 20 EOE-Dimensions

Connection diagram of the ESILUB Oil Pump EOP

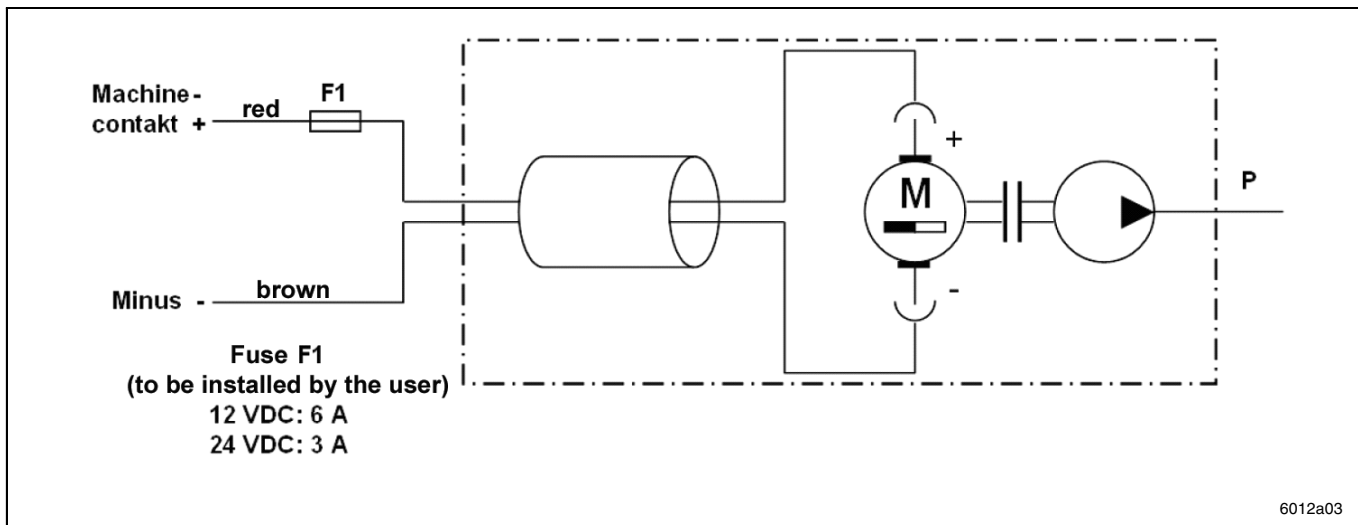


Fig. 21 EOP-Connection diagram



## Spare Parts List and Accessories

4.1B-10001-A03

### QUICKLINC connecting elements – plug-in type

for metering elements, brushes and filling connections on the divider bar



Fig. 22 Connecting elements for lube lines

	Line-Ø	Thread	Part No.
<b>Male connector GEZ (Pos. 16)</b>	4 mm	R 1/8	226-10205-2
<b>90° Adaptor WEK</b>	4 mm	M8 x 1	226-13753-1

Tab. 2 QUICKLINC- connecting elements for line-Ø 4 mm  
(see fig. 22: from left to right)

for ESILUB Oil Pump EOP- reservoir and divider bars



Fig. 23 Connecting elements for supply lines

	Line-Ø	Thread	Part No.
<b>Male connector GEZ (pos. 19)</b>	8 mm	R 1/8	226-13746-5
<b>Bulkhead fitting (pos. 18)</b>	8 mm	G 1/8	226-10214-1
<b>90° Adaptor WEK, rotatable</b>	8 mm	R 1/8	226-13776-3

Tab. 3 QUICKLINC connecting elements for line-Ø 8 mm  
(see fig. 23: from left to right)

### Closure plug and closure screw for dividerbars



Fig. 24 Closure plug and closure screw

	Line-Ø	Thread	Part No.
<b>Closure plug for QUICKLINC</b>	4 mm		226-10238-1
<b>Closure screw</b>		R 1/8	226-14160-3

Tab. 4 Closure plug and closure screw for divider bars  
(see fig. 24: from left to right)

**Spare Parts List and Accessories, continuation**

4.1B-10001-A03

Pos	Description	Part No.
1	Brush	452-70233-1
3	Pump EOP-12	552-32404-1
3	Pump EOP-24	552-32405-1
4	Pressure relief valve assy	552-32401-1
5	Metering element EOE, white, 0.1 cm <sup>3</sup>	552-32397-1
5	Metering element EOE, red, 0.3 cm <sup>3</sup>	552-32398-1
5	Metering element EOE, green, 0.4 cm <sup>3</sup>	552-32399-1
5	Metering element EOE, blue, 0.5 cm <sup>3</sup>	552-32400-1
6	Divider bar, double	452-70235-1
6	Divider bar, triple	452-70236-1
6	Divider bar, quadruple	452-70237-1
	Bracket for divider bars	307-19543-1
8	Suction filter	235-10002-5
10	Cover, blue	221-12488-5
11	Filter insert	235-13189-1
13	Cable, 2-core with suppression	664-34135-1
14	Fuel hose	111-35089-6
	Hose clamp, left-hand side	226-10054-6
	Hose clamp, right-hand side	226-10054-5
	Tube, PA12HL 8.0 x 1.0, black (supply line)	112-35255-4
	Tube, PA12HL 4.0 x 0.65, black (lube line)	112-35255-3

Tab. 5 Spare Parts and Accessories

**Manufacturer's declaration**

4.1B-10001-A03

D	GB	F	I
<b>Herstellererklärung im Sinne der EG-Richtlinie Maschinen 98/37/EG, Anhang II B</b>	<b>Declaration by the manufacturer as defined by machinery directive 98/37/EEC Annex II B</b>	<b>Déclaration du fabricant conformément à la directive 98/37/CEE, annexe II B</b>	<b>Dichiarazione del costruttore ai sensi della direttiva 98/37/CEE in materia di macchinari, Appendice II B</b>
<i>Hiermit erklären wir, dass die Bauart von</i>	<i>Herewith we declare that the supplied model of</i>	<i>Par la présente, nous déclarons que le produit ci- dessous</i>	<i>Si dichiara che il prodotto da noi fornito</i>

**Product: EOS ESILUB Oil System**

<i>in der von uns gelieferten Ausführung zum Einbau in eine Maschine bestimmt ist und dass ihre Inbetriebnahme solange untersagt ist, bis festgestellt wurde, dass die Maschine, die in das o.g. Produkt eingebaut werden soll, den Bestimmungen der oben genannten Richtlinie – einschließlich deren zum Zeit- punkt der Erklärung geltenden Änderungen – entspricht.</i>	<i>is intended to be incorporated into machinery covered by this directive and must not be put into service until the machinery into which it is to be incorporated has been declared in conformity with the provisions of the above mentioned directive – including all modifications of this directive valid at the time of the declaration.</i>	<i>dans l'exécution dans laquelle nous le livrons, est destiné à être installé sur une machine, et que sa mise en service est interdite tant qu'il n'aura pas été constaté que la machine sur laquelle il sera installé est conforme aux dispositions de la directive ci-dessus, y compris les modifications qui y auront été apportées et qui seront valides à la date de la déclaration.</i>	<i>è destinato all' installazione su di un macchinario e che la sua messa in funzione non sarà autorizzata fino a quando non sarà stata accertata la conformità del macchinario, sul quale esso dovrà essere installato, in relazione alle disposizioni della direttiva 98/37/CEE – comprese tutte la rettifiche di questa direttiva al momento della dichiarazione.</i>
<i>Angewendete harmonisierte Normen, insbesondere</i>	<i>Applied harmonized standards in particular</i>	<i>Normes harmonisées, notamment</i>	<i>Norme armonizzate applicate in particolare</i>

**Standards:** EN 292-1; EN 292-2; EN 809

16.04.2003 ppa. Z. Paluncic			
<i>(Datum / Unterschrift)</i>	<i>(date / signature)</i>	<i>(date / signature)</i>	<i>(data/firma)</i>

GR	E	P	NL	DK
<i>Δήλωση του κατασκευασ του συμφ. με τις προδιαγρ αφες: 98/37/ΕΟΚ, παρ. II Β</i>	<b>Declaración del fabricante conforme con la Directiva CE sobre máquinas 98/37/CEE, Anexo II B</b>	<b>Declaração do Fabricante segundo diretiva CE 98/37/CEE, Anexo II B</b>	<b>Verklaring van de fabrikant inzake de richtlijn betreffende machines, (98/37/EEG, bijlage II B)</b>	<b>Fabrikantens erklaring i henold til EF-lovgivning om maskiner 98/37/EØF bilag II b</b>
<i>Δια του παροντος σας γνω- στοποιουμε, οτι το προιον</i>	<i>Por la presente, declaramos que el modelo suministrado</i>	<i>Em anexo declaramos que o modelo fornecido</i>	<i>hiermede verklaren wij, dat de</i>	<i>Hermed erklæres, at</i>

**Product: EOS ESILUB Oil System**

<i>προοριζεται για τοποθετηση εντος μηχανηματος, και οτι δεν επιτρεπεται να τεθει σε λειτουργια μεχρις οτου διαπιστωθει, οτι το μηχανημα εντος του οποιου προκειται να τοποθετηθει ανταποκρινετ αι στις προαναφερομενες ισχυουσες προ- διαγραφες (συμπεριλαμβανο- μενων των αλλαγων που ισχυ -ουν και που εγιναν στο χρον ι-κο αυτο διαστημα).</i>	<i>es destinado a ser incorporado en una máquina y que su puesta en servicio está prohibida antes de que la máquina en la que vaya a ser incorporado haya sido declarada conforme a las disposiciones de la Directiva en su redacción 98/37/CEE – incluso las modificaciones de la misma vigentes a la hora de la declaración.</i>	<i>deverá ser incorporado na maquinaria coberta por esta directiva e não poderá ser colocado em serviço até a maquinaria na qual é para ser incorporado for declarada em conformidade com as provisões da directiva acima mencionada / incluindo todas as modificações desta diretiva válida desde a emissão desta declaração.</i>	<i>ertoe bestemd is, ingebouwd te worden in een machine en dat een inwerkstelling verboden is, voordat vastgesteld is, dat de machine, waarin deze machine wordt ingebouwd, in overeenstemming met de bepalingen van de richtlijn 98/37/EEG – ingesloten de tot dit tijdstip geldende veranderingen van deze richtlijn - verklaard is.</i>	<i>er bestemt til inkorporering i en maskine og at igangsætningen forbydes indtil der er konstateret, at maskinen, som skal inkorporeres i denne maskine, er bragt i overensstemmelse med alle relevante bestemmelser, samt ændringer gældende på deklarationstidspunktet.</i>
<i>Προσθετα προς εφαρμογην χρησιμοποιηθησες εναρμον ισμενες προδιαγραφες</i>	<i>Normas armonizadas utilizadas, particularmente</i>	<i>Normas harmonizadas utilizadas, em particular</i>	<i>Gebruikte geharmoniseerde normen, namelijk</i>	<i>Harmoniserede standarder, der blev anvendt, i særdeleshed</i>

**Standards:** EN 292-1; EN 292-2; EN 809

16.04.2003 ppa. Z. Paluncic			
<i>(ημερομηνια / υπογραφη)</i>	<i>(fecha / firma)</i>	<i>(Data / assinatura)</i>	<i>(Datum/ handtekening)</i>

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