LUBRICATION PUMP **SEO**

APPLICATION

SEO lubrication pumps are used as a source of pressure lubricant, oil, for lost and circulatory lubrication systems of central lubrication. The circuits of lost lubrication systems are designed with SKIE, SKIB and SKIC series single-line metering valves using SRK distribution manifolds or SMIE or SMIB series single-line metering valves assembled directly to the lubricated point. Circulatory lubrication circuits are usually furnished with PR progressive distributors.

Lubrication pumps are used for permanent, regular lubrication of a variety of machines and equipment, e.g. metal working, textile, food-making, wood-working, shoe-making, plastic-making, paper-making, packing etc.

SEO lubrication pumps are supplied with lubricant reservoirs of capacity 2, 3, 4, 6, 8, 12, 50 or 100 litres. These tanks are made out of plastic or metal. The nominal flow rate is set to 500 cm³/min. with adjustable working pressure in the range from 15 to 50 bar, upon request it is possible to supply pumps with a nominal flow rate of 200 cm³/min. and working pressure of 25 bar. Electric motors are 220/380 V and 280/440 V. For other voltages, including DC, consult supplier.

DESCRIPTION

The lubrication pump consists of a container with a cover. The container is attached to the cover by 6 screws and sealed by a paper gasket. All the lubrication unit parts are placed on the cover, namely an electric motor, coupling, gear pump, suction strainer, outlet with a pressure gauge, distributor, pressure regulator, level gauge with electric indicators and a filling hole with a strainer and cap.

OPERATION

After setting the lubrication pump into motion, the gear pump, driven by an electric motor, carries oil to a distributor the working piston of which is shifted into a working position at the same time as the electric motor starts. Thus the way for the pressurised oil into the lubricating circuit is open and all distributors complete their strokes and deliver the lubricant into the lubricated points by the pressure of the delivered oil. When the pressure reaches the switching pressure of a built-in pressure switch at the most distant place of the lubricating circuit, its electric signal switches off the electric motor and the distributor working piston is moved back to its zero position. Thus the way for pressurised oil into the lubricating circuit is closed and the pressure in the lubricating circuit is reduced through a pressure relief valve with an outlet. After lubricating circuit relief, the dosers' pistons will move into their initial positions and the lubricating cycle may be repeated.

Every lubrication circuit must be furnished with a pressure switch at the most distant point.

SERVICE AND MAINTENANCE

The SEO series lubrication units are mounted in a horizontal position and are fastened to the machine or equipment walls. For fixing the type SEO - 2, 3, 4 and 6, two 7 mm diameter anchor holes are prepared and for the units of type SEO – 8 and 12, four 11 mm diameter holes are prepared in the container side.

After mounting the unit in its chosen place and fastening the outlet to the lubrication circuit piping, the container is filled with the prescribed lubricant. The outlet is constructed for attaching to 6 mm outside diameter tube. Outlet for attaching to 8 mm or other outside diameter tube must be specified in the order.

SEO CENTRAL LUBRICATION



For correct functioning of the lubrication pump the lubricating circuit must be perfectly bled, it is further necessary to keep the piping clean, i.e. before pipework assembly, remove burrs and other mechanical impurities.

Except for regular lubricant filling and suction strainer cleaning, approximately twice a year, the pump does not require any other attention or maintenance.

TECHNICAL DATA

| Maximum pressure | | 70 bar | |
|--------------------------------------|-----|---|--|
| Working pressure | | 50 bar (25 bar) | |
| Relief pressure | | to 1 bar | |
| Regulating range of working pressure | | 15 to 50 bar (5 to 25 bar) | |
| Nominal supplied quantity | | 500 cm ³ /min (200 cm ³ /min) | |
| Lubricant reservoir volume | | 2, 3, 4, 6, 8, 12, 50 dm ³ | |
| Number of outlets | | 1 | |
| Outlet pipe union | | M 12x1, tube outside dia. 6, 8, mm | |
| Electric motor | | 220-240/380-420 V , 250-280/440-480 V | |
| | | 50/60 Hz , 0.6 – 0.35 A , 0.09 kW | |
| Alarm nominal voltage | | 250 V AC, 200 V DC, 1.5 A | |
| Lubricant | oil | min. 50 mm ² s ⁻¹ | |
| Lubricant temperature | | 0 to 80 °C | |
| Temperature of working environment | | 0 to 60 °C | |
| Weight | | depending on variant | |

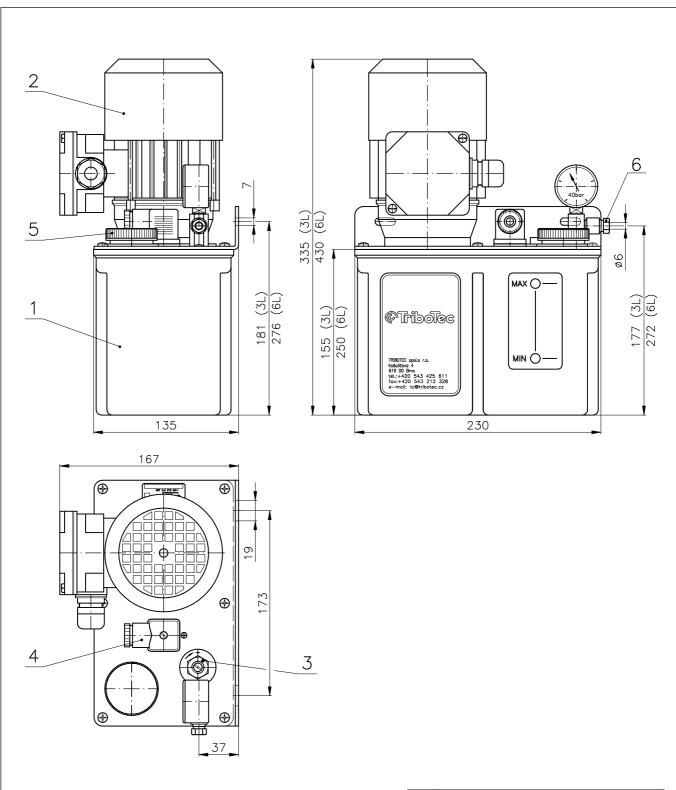
STANDARD VARIANT

| Nominal dose (cm ³ /min) | Working pressure (bar) | Tank volume (dm ³) | Tank variant | Type | Code |
|---|------------------------------|-----------------------------------|--------------|---------|---------|
| 200 | 25 | 2 | plastic | SEO-2P | 1608210 |
| 500 | 50 | 3 | plastic | SEO-3P | 1608222 |
| 500 | 50 | 4 | metal | SEO-4M | 1608227 |
| 500 | 50 | 6 | plastic | SEO-6P | 1608223 |
| 500 | 50 | 8 | metal | SEO-8M | 1608228 |
| 500 | 50 | 12 | metal | SEO-12M | 1608229 |
| 500 | 50 | 50 | metal | SEO-50M | 1608291 |

NOTE

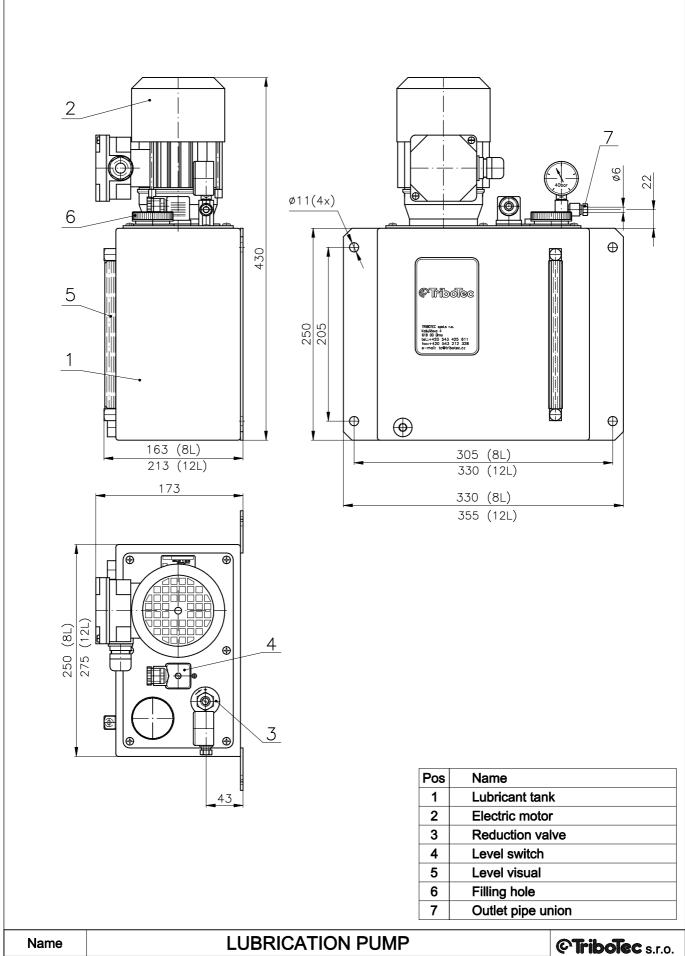
SEO Lubrication pumps for lost and circulatory lubrication can be supplied according to customer's request. Customer variants are furnished with filtration unit, several pumping units (outlets), specific lubricant tank volume, signalling of several lubricant levels, flow meters, built in control unit (automatic).

SEO CENTRAL LUBRICATION



| Pos | Name |
|-----|-------------------|
| 1 | Lubricant tank |
| 2 | Electric motor |
| 3 | Reduction valve |
| 4 | Level switch |
| 5 | Filling hole |
| 6 | Outlet pipe union |

| Name | LUBRICATION PUMP | Tribolec s.r.o. |
|------|-------------------|--------------------------------------|
| Туре | SEO, SEG - 31, 61 | Košuličova 4 Brno www.tribotec.cz |
| Code | | +420 543 425 611 |



| Name | LUBRICATION PUMP | Tribotec s.r.o. |
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