

# LUBRICATION PUMP **ZCA 13**

## APPLICATION

Hand-operated ZCA lubrication pumps are used as the simplest pressure sources in lubricating circuits fitted with progressive distributors. They may be used as portable lubrication pumps for occasional lubrication of the various lubricated points of machines and equipment. Built-in ZCA lubrication pumps are usually used for occasional lubrication of separate assemblies of different machines, engineering technology and equipment. They are also used as sources of pressurised lubricant for central lubrication system circuits on lorries, trucks and other mobile machines and equipment.

The basic ZCA lubrication pump is provided with a 1.3 litre aluminium reservoir. The capacity of lubricant reservoir, way of replenishment, use of pressure gauges and the distribution of the doses of lubricant supplied to more outlets by the connection of a progressive distributor can all be adapted according to customer's request. Volume of lubricant supplied per pump stroke is 2 cm<sup>3</sup>.

## DESCRIPTION

The lubrication pump consists of a cylindrical tank provided with a flange at the bottom, a screwed-on cover, and the pump body. In the cylinder of the tank, the lubricant is kept under pressure with a loading spring between the cover and a push plate provided with a rubber sleeve, which to wipe the lubricant from the tank walls. A tie rod is attached to the plate centre for retracting the push plate to the top position when filling the tank. This tie rod is automatically locked in the top position with a lock installed in the tank cover. The extension of the tie rod also indicates the amount of lubricant in the tank. A hand-operated lever moves the working piston inside the compartment of the lubrication pump. This lever can be locked against spontaneous movement with a rotary lock installed at the stepped end of the pump compartment. The lock has a locked position, and, when turned through 90° in either direction, two unlocked positions. The body also has a venting hole and a filling valve for replenishing the lubricant without unscrewing the cover. The lubrication pump is provided with a standard pipe union outlet for tube outside dia. 10 mm. Dia. 6 and 8 mm pipe unions can be specified in the order.

## OPERATION

The swinging motion of the hand-operated lever results in a rectilinear, reversible motion of the piston. The outwards motion of the piston generates vacuum in the working cylinder, pump compartment. This vacuum - when the piston is fully out - opens the suction channel, sucks lubricant from the tank cylinder to the pump compartment. The piston' inward movement pushes the lubricant, via the reverse valve, to the outlet and then, through the piping, to the lubrication circuit.

## SERVICE AND MAINTENANCE

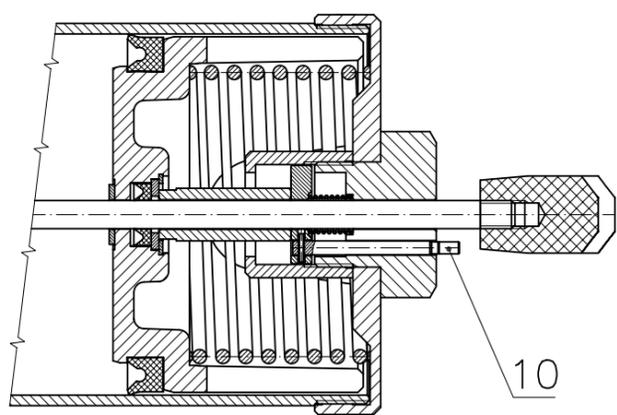
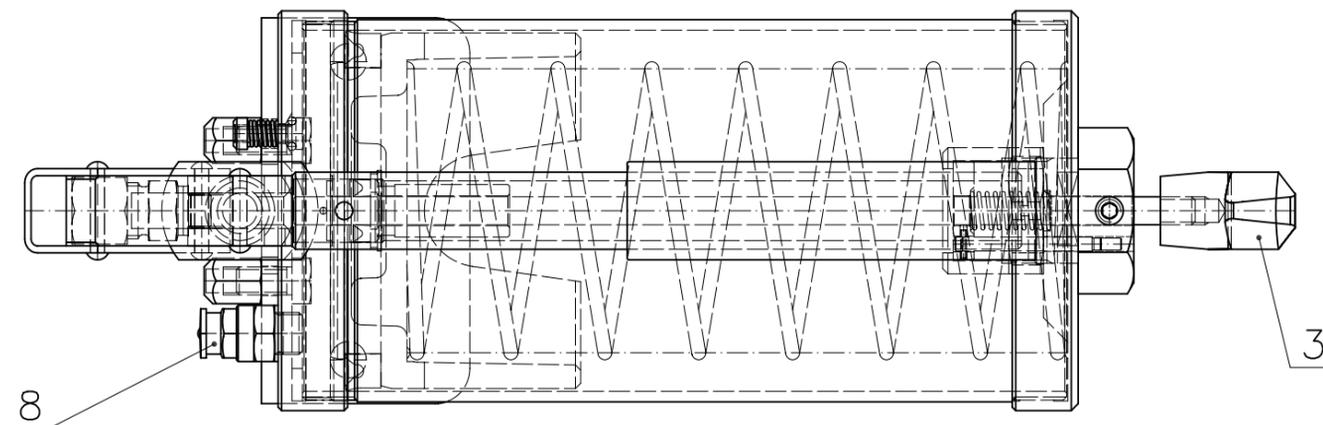
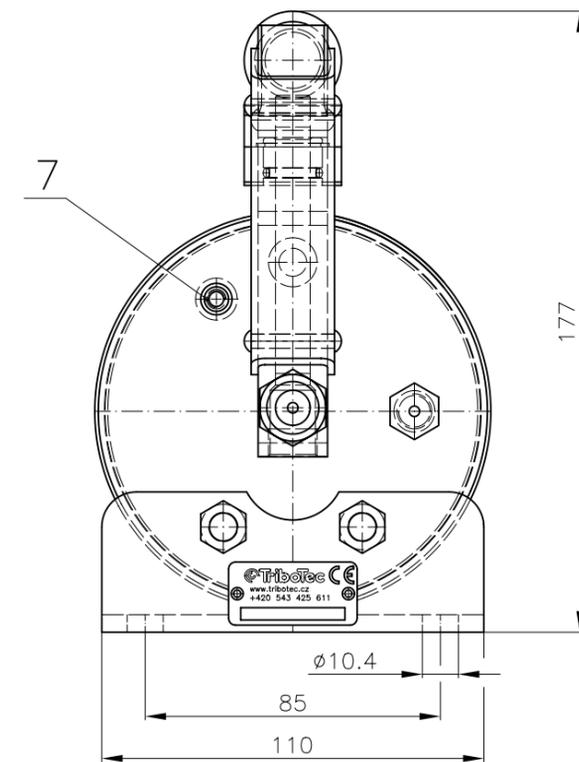
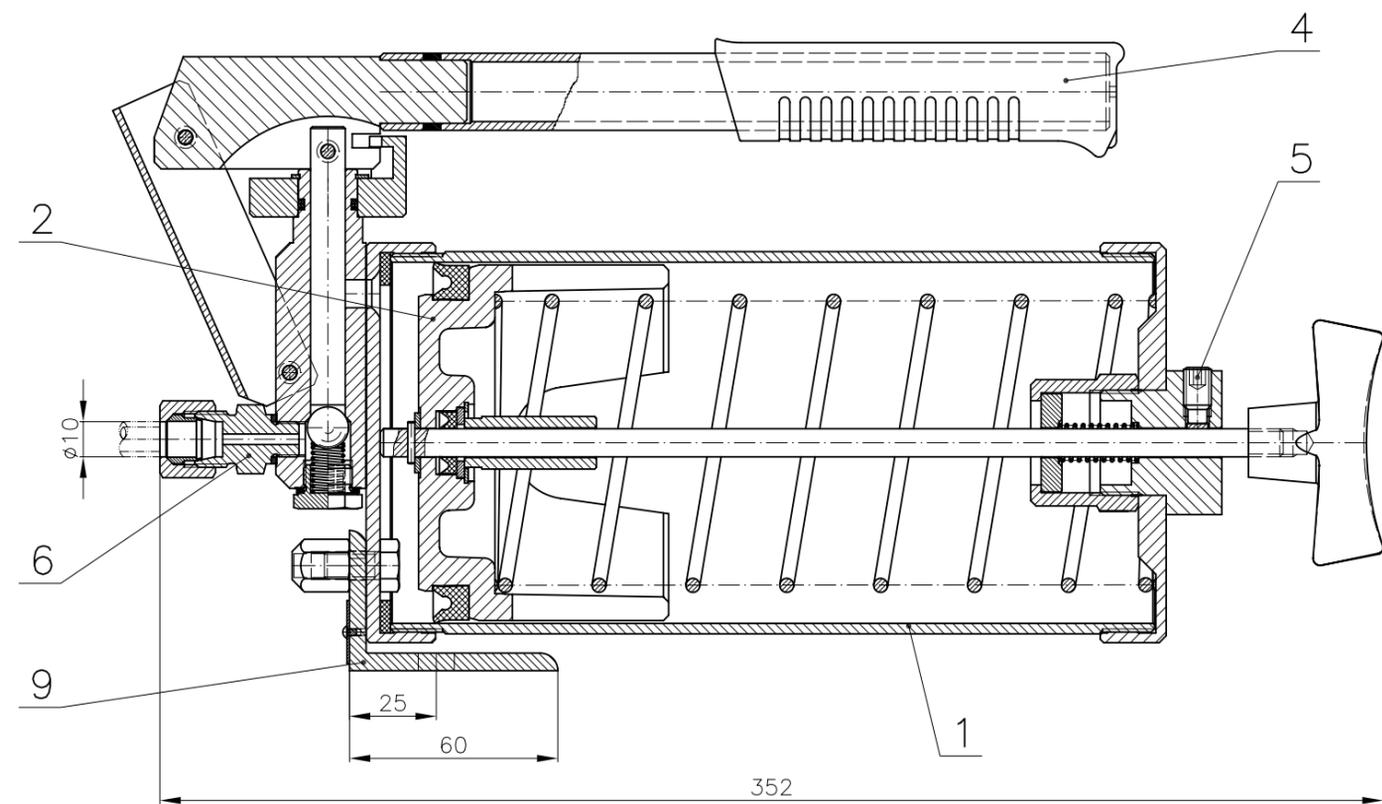
The lubrication pump may be mounted in any position (the vertical position being recommended) with two M10 anchor bolts to the wall of the machine or equipment. Then proceed as follows:

Fill the lubrication pump with the prescribed lubricant. Do this by unscrewing the cover and removing the push plate or by means of pumping through the filling valve on the lubrication pump body. The filling operation can be carried out with any mobile or hand-operated lubrication device or filler. When filling the lubrication pump, it is necessary to ensure the cleanliness of the lubricant.

When commissioning the pump, first pump out the plastic lubricant that has remained in the lubrication pump after the pressure test as a preserving means. When the lubricant exits smoothly and free of bubbles, close the outlet by connecting it to the piping of the lubricating circuit. Except for the replenishment of lubricant into the tank, the lubrication pump does not require any maintenance.

## TECHNICAL DATA

Maximum pressure	250 bar
Working pressure	200 bar
Nominal supplied quantity	2 cm <sup>3</sup> / stroke
Maximum number of cycles	30 min <sup>-1</sup>
Lubricant reservoir volume	1.3 dm <sup>3</sup>
Number of outlets	1
Outlet pipe union	M16x1.5 mm, tube outside dia. 10 mm
Lubricant	grease max. NLGI - 2
Temperature of working environment	- 25 to 60 °C
Weight	3.3 kg



Pos	Name
1	Lubricant tank
2	Follower plate
3	Rod
4	Hand lever
5	Detent screw
6	Outlet connection
7	Venting
8	Filling connection
9	Mouting bracket
10	Monitoring pin

Name	HAND-OPERATED PUMP	<b>©Tribotec</b> s.r.o. Košuličova 4 Brno www.tribotec.cz +420 543 425 611
Type	ZCA 13	
Code	9 45 0229	