LUBRICATION PUMP

ANC 20 P2

APPLICATION

Pneumatically driven lubrication pumps ANC 20 P2 are used as sources of pressurised lubricant for lubrication systems equipped with progressive distributors. Their use is recommended for lubricating circuits comprising up to 100 lubricated points. They can also be used as lubrication pumps for direct supply of lubricant to exposed lubricated points of machines, engineering technologies and devices. They are also used as sources of pressurised lubricant for the central lubrication system circuits of trucks and other mobile machines and equipment.
Lubrication pump ANC 20 P2 is normally supplied with a 1 litre transparent lubricant reservoir made of organic glass and provided with 2 outlets of independent lubricant pressure and lubricant supply.

DESCRIPTION

The basic part of the pneumatic lubrication pump is the body which includes two lubricating units. The unit consists of a pneumatic rectilinear motor whose piston moves the piston of the lubricating unit. Lubricant is fed to the lubricating unit working cylinder from the reservoir attached to the body wall. Lubricant in the reservoir is pushed with a piston fitted with a compression spring that fills the lubricating units during the suction stroke. The reservoir is a transparent cylinder that enables the visual check of the lubricant level. The reservoir piston may be furnished with a tie rod which enables the piston to be pulled to the limit position. The lubricant outlets, fitted with non-return valves, are attached to the body side walls. The side wall of the body also carries a filling valve. On the body bottom under a cover there are bleed screws for lubricating units. Lubrication pump is equipped with a bracket for its attachment to the machine or equipment wall.

OPERATION

The supplied pressurised air drives the pneumatic linear motor, whose piston is connected to the working pump piston, which pushes a dose of lubricant from the working pump cylinder, via the non-return valve, into the lubrication pump outlet. The operation of the pump is controlled by a pneumatic distributor (not included in the delivery), preferably fitted with an air vent from the piping to the pump pneumatic cylinder in the period of time when the air is not supplied. If a distributor without an air vent is used, the air escapes from the pneumatic cylinder through a labyrinth in the pneumatic piston when the air supply is interrupted. The return spring moves the piston to the starting position and allows the lubricating unit to be filled with a new dose of lubricant. Lubricant is pushed onto the pump working cylinder under the pressure generated by the push plate in the lubrication pump reservoir, with a piston placed under the spring pushing against the reservoir cover. The whole cycle repeats during the following air pressure pulse and another nominal dose of lubricant is supplied.

SERVICE AND MAINTENANCE

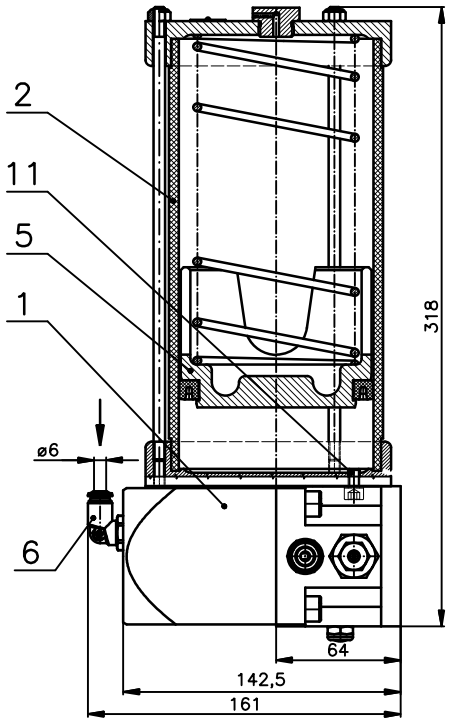
The lubrication pump can be mounted in any position by means of four M8 anchor bolts. Then connect the pump to the pressure air distribution system. Fill the lubrication pump with the prescribed lubricant through the filling valve and put it into operation. Then see whether the working cycles are smooth and regular. Pump out the lubricant that has remained in the lubrication pump after the pressure test as a preservative.

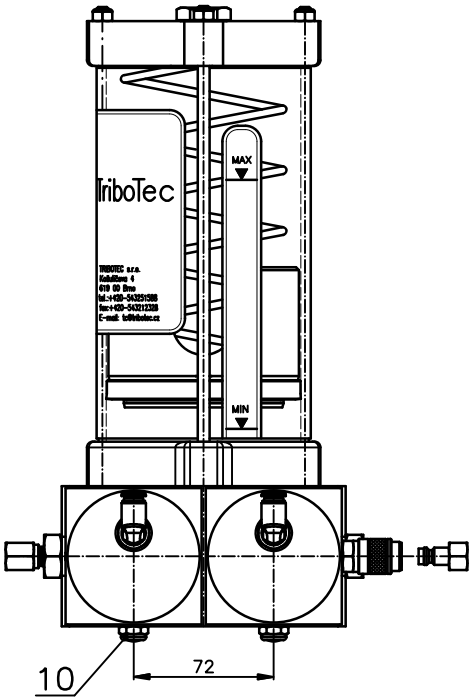
When the lubricant exits smoothly and free of air bubbles, close the outlet by connecting it to the lubricating circuit piping.
The pump does not need any maintenance except for the replenishment of the lubricant into the reservoir.

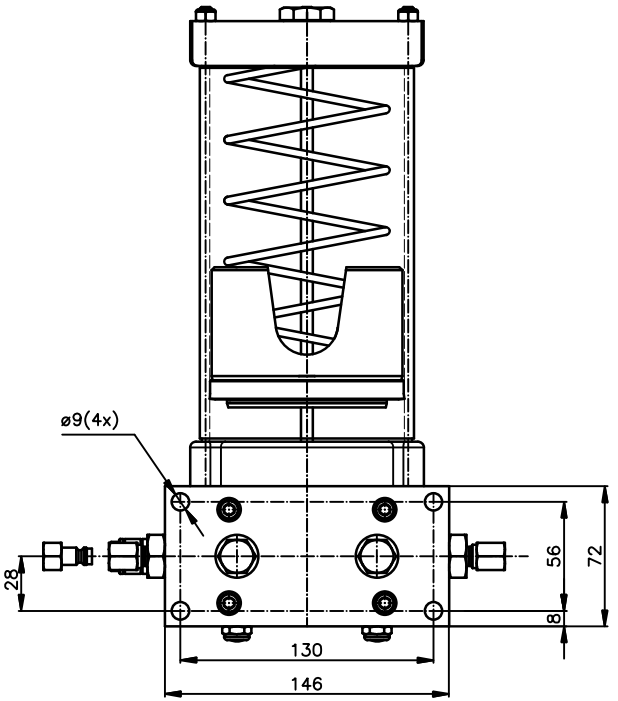
To ensure perfect performance of the pump it is necessary to fill the reservoir without any air bubbles. In the case where the piston of the lubricating unit sucks air, the discharge stroke compresses it, and when the next suction stroke takes place, the air expands preventing the lubricant from getting in the unit cylinder. To bleed the air out, use the bleed screws. After releasing the M6 screws at the body bottom, remove the metallic cover. Remove the two screws with inner hexagons (each unit having one of them). Supply pressurised air to the air intake. The air moves the piston to the discharge position. When the pressurized air is interrupted, close off the bleed holes (with plugs, hands etc.) so that the return motion of the piston cannot suck air again. Repeat this procedure until lubricant free of bubbles exits from the bleed holes. Then refit the screws and cover with the sheet. Bleeding can also be carried out through the outlet pipe union. To do this, disconnect the discharge piping from the non-return valve at the pump body outlet and, with the pump in operation, let the air bubbles out until bubble free lubricant is flowing. After bleeding, re-connect the piping.

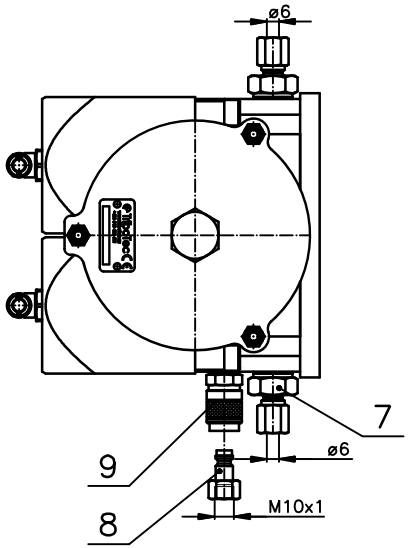
TECHNICAL DATA

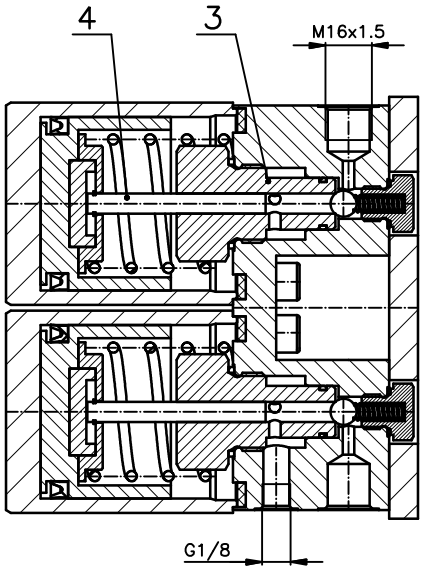
Maximum pressure		210 bar
Working pressure		160 bar
Nominal supplied quantity		0.5 cm^3/stroke/outlet
Lubricant reservoir capacity		1 dm^3
Number of outlets		2
Outlet pipe union		M16x1.5 mm, for tube outside dia. 6 mm
Air pressure		6 to 8 bar
Pressure air consumption		70 cm^3/stroke/lubricating unit
Pressure air supply		G1/4", push-in for tube dia. 6 mm
Lubricant	grease	max. NLGI-2
	oil	min. 50 mm^2/sec.
Temperature of working environment		-25 to 80°C
Weight		8.1 kg
Assembly position		vertical











Pos.	Name
1	Pump
2	Lubrication tank
3	Operating cylindr
4	Operating piston
5	Pressure plate
6	Pressure air supply
7	Outlet pipe union with check valve
8	Filling plug
9	Filling valve
10	Sintered filter
11	Bleed screw

Name	**LUBRICATION PUMP**	TriboTec s.r.o. Košuličova 4 Brno www.tribotec.cz +420 543 425 611
Type	**ANC 20 P2**	
Code		