MOBILE LUBRICATION PUMP

Z1P

APPLICATION

Mobile lubrication pumps Z1P are used for fast and reliable lubrication of bearings, pins and other lubricated points of stationary machinery and equipment, especially in heavy industry, metallurgy and mining industry which are not equipped with their own lubrication system, and further for lubrication of mobile machines, machinery and transportation vehicles, e.g. excavators, cranes, trucks, buses, agricultural and forestry devices, in rail transport, etc. Mobile lubrication pump Z1P is available with a 40 and 63 litres lubricant reservoir and nominal outputs of 200 cm³/min. and 400 cm³/min. Standard electromotors are 230/400V and 500V, for other voltages, consult with the supplier.

DESCRIPTION

The main part of the lubrication pump Z1P is a piston pump. The pump is driven through a one-speed worm-gear unit with electromotor attached over the flange. By-pass valve with a pressure gauge damper and a pressure gauge is connected to the pump body. Steel lubricant reservoir is attached to the upper part of the pump body. A scraper blade and inclined pressure surfaces which feed the plastic lubricant to the suction chamber are located in the lubricant reservoir to improve the pumping of the plastic lubricant and good suction efficiency. The pump is fixed to the wheelframe. A high pressure hose (standard length 5 m) with a lubrication gun is connected to the pump outlet. Mobile lubrication pump is equipped with a starting circuit-breaker and a cable with plug for the power supply connection.

OPERATION

Electromotor connected to the power supply drives through the gear-box an eccentric shaft located in the lubrication pump body. Then linear reciprocating motion of the guide pistons connected to working pistons comes into effect by means of connecting rods. Low pressure and lubricant suction occur when the piston slides out from the cylinder of the pumping unit and, when it slides in, lubricant is discharged through the piston and a ball check valve to the connecting flange, the by-pass valve and the high-pressure hose with the lubricating gun. Adjustment of the operating pressure is performed with an adjusting screw on the by-pass valve.

SERVICE AND MAINTENANCE

Lubricant reservoir needs to be checked for any impurities. Also check for resistance caused by contaminating particles by manually turning the scraping blade in the reservoir is necessary. Lubricant reservoir is filled with specified lubricant. Electromotor is connected by the means of a cable with plug to the power supply. Electromotor of the lubrication pump is turned on and off with the starting circuit-breaker. Lubrication pump needs to be checked for its smooth and regular run after being set into an operation. The lubricant left in the lubrication pump for preservation reasons is pumped out after the pressure test. When the lubricant supplied from the lubricating gun flows out regularly without bubbles, the lubrication pump can be used. The adjustment of required pressure is carried out on the by-pass valve as required by tightening or loosening the adjusting screw. Turning it clockwise increases the by-pass pressure, counter-clockwise reduces it. The by-pass pressure is verified on the reduced part of the reservoir. If the reservoir is fully emptied, the pump must be bled.

⊘TriboTec

Lubricant is refilled directly to the reservoir after lifting the cover. Lubricant purity must be strictly ensured during the refilling operation. Except for lubricant refilling no other maintenance of the pump is required. For an operation safety it is necessary to regularly check condition of the power supply cable.

TECHNICAL DATA

Maximum working pressure		300 bar
Working pressure		200 bar
Regulating range of working pressure		50 to 300 bar
Nominal supplied quantity		200 cm ³ /min., 400 cm ³ /min.
Lubricant reservoir capacity		40, 63 dm ³
Number of outlets		1 (into lubricating gun)
Electric motor		230/400V, 1.86A , 500V, 1.49A, 50Hz, 0.75kW
Lubricant	grease	max. NLGI-2
	oil	min. 50 mm ² /sec.
Temperature of working environment		-25 to 40°C
Weight		125 kg

