

## FILLING CRANE PUMP TYPE PZ 31

### APPLICATION:

The pump is designed to force plastic grease from drums (barrels) of 200 dm<sup>3</sup> capacity (acc. to BN-76/5046-03) to tanks of central lubrication pumps, e.g. type PA, PD and others. It may be used to fill other containers with plastic grease as well.

### CONSTRUCTION:

The filling pump consists of a gear pump being the forcing unit, an electrical motor, a clutch connecting the motor shaft with the gear pump shaft, a mantle with a rubber flange which makes the barrel cover, a feeding screw, double-speed gear transmission built in the pump body and a flexible hose with a screwed end. There are two aeration valves on the pump mantle while in the body, at the grease-forcing way, there is an overflow (safety) valve. The crane consist of a job with pulleys, a rope, a clamping ring with clips and a cargo whip. The cargo whip consists of a barrel, crank, ratchet coupling, clamp rope guide and a rope with a hook. The pump is suspended under the crane rope with a clamp.



### PRINCIPLE OF OPERATION:

The pump is powered by an electric motor. The engine shaft rotation is transmitted by a clutch to the gear wheels of the forcing assembly and through a system of transmission gears to the feeding screw. The feeding screw cuts into the grease present in the barrel, kneads it initially and passes through the reduction gear housing to the pump sucking area. The gear pump sucks the grease fed by the screw and forces it through the body holes and flexible hose to the filled tank. The pump falls as the amount of grease in the barrel decreases, until the barrel is empty. If the pressure in the forcing way increases above the maximum allowable value, the safety valve opens and the grease flows out of the pump. After the grease is forced out of the barrel, the pump is taken out together with the crane and they are moved together to another barrel full of grease.

### TECHNICAL SPECIFICATION:

delivery:	9 dm <sup>3</sup> /min
nominal pressure:	2,5 MPa
lubricants forced	plastic grease of the consistence class $\leq 2$ acc. to PN-72/C-04095 (NLGI)
engine rated voltage:	230/400 V or 500 V with 50 Hz
rated power:	1,1 kW
Ambient temperature:	-10...60°C
length of flexible hose:	~3 running meters
pump weight:	48 kg
crane weight:	16 kg

**EXECUTIONS:**

The pump is manufactured in two executions of different engine rated voltage and is marked as follows:

- PZ 31-1 with an engine of 230/400 V
- PZ 31-2 with an engine of 500 V

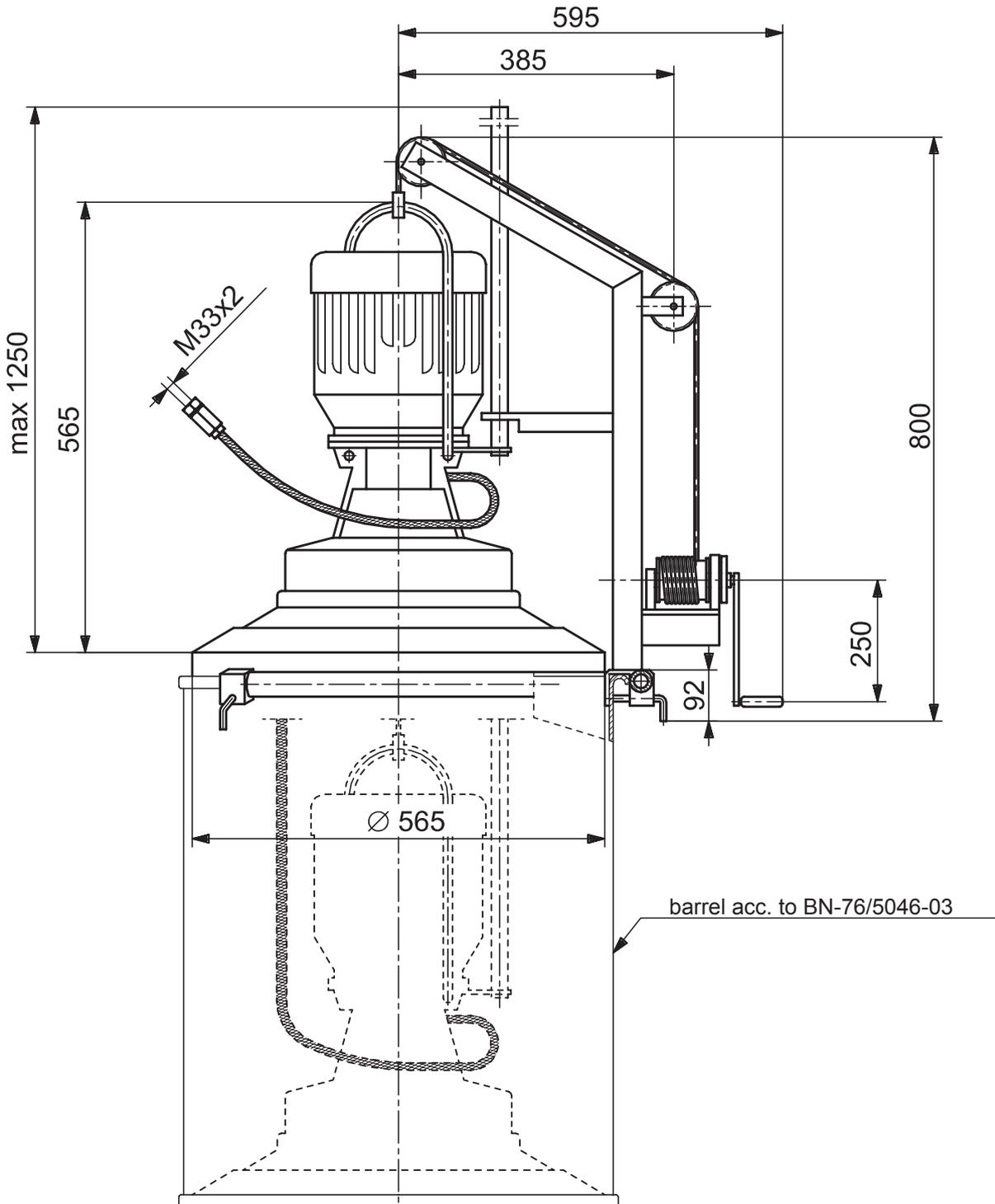


Fig. 1 Dimensions of the pump