## INSTALLATION INSTRUCTIONS

Maximum pressures of 6525 PSI (450 bar) for P57 and only apply for very intermittent operation such as when testing tanks and pipelines whereby the maximum operating pressure is only attained for a very short period of time (a few minutes).

Required NPSH refers to water: Specific weight 1kg/dm3, viscosity 1°E at maximum permissible revolutions.

## **Operation and Maintenance**

Check oil level prior to starting and ensure trouble-free water supply.

Oil: Use only 0.45 litres of Giant oil (p/n 01154) or ISO VG 220 (e.g. Aral Degol BG220) or SAE 90 gear oil.

Initial change after 50 operating hours and then every 500 operating hours, after 6 months operation in any case.

**Caution:** When operating in damp places or with high temperature fluctuations, oil must be changed immediately (should condensate or frothy oil occur in the gear box).

Maximum input pressure: 145 PSI (10 bar). Maximum suction head: -4.35 PSI (-0.3 bar).

Keep NPSH under control.

## $\triangle$

## Safety Rules

Pump operation without safety valve as well as any excess in temperature or speed limits automatically voids the warranty. The safety valve must be regulated in accordance with the guidelines for liquid spraying units so that the admissible operating pressure can not be exceeded by more than 10%.

When the pump is in operation, the open shaft end must be covered up by shaft protector (17) and the driven shaft side and coupling by a belt guard or coupling bell. Before any maintenance to the pump takes place, pressure in discharge line and in pump must be at zero. Close up suction line. To ensure that the driving motor does not get switched on accidently, disconnect fuses.

Before starting the pump, make sure that all parts on the pressure side of the unit are vented and refilled, while pressure is at zero. In order to prevent air, or an air/water-mixture being absorbed and to prevent cavitation occurring, the pump-npshr, positive suction head and water temperature must be kept under control.

Cavitation and/or compression of gases lead to uncontrollable pressure-kicks which can ruin pump and unit parts and also be dangerous to the operator or anyone standing nearby.

Giant plunger pumps are suitable for pumping clean water and other non-agressive or abrasive media with a specific weight similar to water.

Before pumping other liquids - especially inflammable, explosive and toxic media - the pump manufacturer must, under all circumstances, be consulted with regard to the resistance of the pump material. It is the responsibility of the equipment manufacture and/or operator to ensure that all pertinent safety regulations are adhered to.