

# INSTALLATION INSTRUCTIONS

Figures for speed (rpm) and pressure apply to interval operation with cold water. For continual operation, the speed of all pump models must be limited to 700 rpm and the maximum operating pressure reduced by 10%.

Required NPSH refers to water: Specific weight  $1\text{kg/dm}^3$ , viscosity  $1^\circ\text{E}$  at maximum permissible revolutions.

## Operation and Maintenance

Check oil level prior to starting and ensure trouble-free water supply. **Oil:** Use only 1.3 gallons (5.0 liters) of Industrial Gear Lube Oil (Giant 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.

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

### Keep NPSH under control.

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



## 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%.

Before any maintenance to the pump takes place, pressure in discharge line and in pump must be at zero. Close up suction line. Disconnect fuses to ensure that the driving motor does not get switched on accidentally.

Before starting the pump, make sure that all parts on the pressure side of the unit are vented and refilled and the 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-aggressive 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 manufacturer and/or operator to ensure that all pertinent safety regulations are adhered to.**