# INSTALLATION AND INITIAL START-UP INSTRUCTIONS FOR 'MJ'TYPE VERTICAL GLANDLESS PUMPS

## PLEASE READ CAREFULLY BEFORE START-UP

## GENERAL

1.1 ORIENTATION OF THE PUMP CONNECTTIONS.

The positions of the delivery and overflow branches in relation to the mounting bracket may be altered by removing the clamp bolts and turning the Lower Rotor Casing round. Care must be taken to ensure that the joints between the Upper and Lower Casings are not damaged and after the required branch position has been obtained, all of the clamp bolts must be tightened evenly and in accordance with the recommended torque settings on the attached sheet.

1.2 CONNECTING THE PIPEWORK AND FLANGES

In the case of pumps having wetted parts made in plastic materials, eg 'KEEPLUS' or 'KEEBUSH' and also high silicon iron ' TANTIRON', special care must be taken when coupling the pipework to prevent damage to the pump branches. The branches of these pumps are tapered externally and fitted with Cast Iron split flanges. In the case of plastic pumps 3mm soft rubber joints shore hardness 50-70 should be used and all pipework be adequately and properly aligned. When rubber expansion bellows or similar flexible connections are used it is important to ensure that these are designed for the pressure or vacuum conditions and the material is compatible with the pumped fluid. The metal pumps should have a CAF jointing gasket material 1-2mm thick between the pump branches and the connecting pipework.

1.3 METHOD OF INSTALLATION

The 'MJ' pump should be mounted in the vertical position with the bottom of the overflow branch level or slightly above the maximum liquid level in the tank. (see fig 1). This will ensure that the impeller is flooded and the unit is therefore in a primed state. The pump may now be started (see paragraph 1.4 – 'Electrical connections'), and the discharge throttled for desired flow. The unit will continue to deliver until the suction pipe becomes uncovered. It should be borne in mind that because the glandless pump does not have any internal bearings or frictional surfaces, it may be allowed to run dry completely for indefinite periods without ill-effect. Also because of the internal by-pass the pump may be run against a closed valve for indefinite periods without any detrimental effect.

1.4 ELECTRICAL CONNECTIONS

Check that the supply voltage conforms with the information on the electric motor nameplate. Check that the phasing of the supply is in accordance with the information on the electric motor nameplate. The motor starter should be wired up to the mains supply. Starters should incorporate full no-volt and overload release protection.