



INSTALLATION INSTRUCTION FOR LSM – PUMPS TYPE

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Installation Instructions

Before mounting the pump, make sure that the access ways to the pump are in order.

Check that the foundation, where the pump is to be mounted can carry the load of the pump. Also have the appropriate SWL marked lifting gear / crane ready for the given situation.

No special tools are required, other than ordinary hand-tools and a hammer/drilling machine for the installation of the pump.

Don't forget the necessary safety equipment, such as safety helmet- and footwear, and working gloves.

Preparation

Before mounting and erecting the pump, make sure that the unit corresponds to the ordered, and has not been damaged during the transport. Also make sure that all parts for the installation is available, so that the installation can be finalised.

Plug for transport!

Plug is to be dismantled before start-up.

Check fluid level, fill up if needed, before putting into use. Glycerol is to be filled up until the lowest of the sight glasses on the front of the pump.

ATEX approved pumps

By ATEX approved pumps the following precautions are to be followed with precision:

- Check that the medias temperature does not exceed the t_{max} that is indicated on the name plate.
- Check that the indicated ATEX-data, both for motor, gear and pump corresponds to the specified category. If the ATEX-data are different, it is the lowest of the values that are in force.
- Checks that the rated power of the motor corresponds to the power P2, demanded by the pump, see the nameplate.
- Operating the pump against a shut valve, can cause overheating and hose fracture. Install a bypass line with a pressure reduced countervalve
- In order for the pump to have the ATEX approval, there needs to be a dry-run safety switch, installed on the pipe system just before the pumps suction side. This shall break the power to the motor, if the pump runs dry for more than 2 minutes.

Handling

Connecting to pipe system

It's recommended that the connection to a pipe system is made as a flexible joint. There are several flexible systems on the marked, which includes both metallic and rubber maid systems.

By making a flexible joint, the risk of introducing vibrations in the complete pipe system is reduced. Vibrations may cause wear and in some cases fatigue fractures of the pipe system.

The connection between the pipe system and the pump are not to transfer any other forces than that of the transported media. (The pipesystem is not allowed to hang by the connection studs of the pump).

Mounting the pump

The pump is fastened to the foundation via the holes in the frame or pumpchassis. If the pump is mounted on rubber pads, it's very important that the connecting pipeline is fitted with a flexible joint.

Electrical connection

Connecting the pump electrically is only to be done by a licensed electrician.

The motor is to be thermally protected against overload by a protective circuit switch and is to have a correct dimensioned fuse according to the local existing rules and regulations.

Important:

The motor has to be grounded with a sufficient size ground wire!

Details of how to connect the electrical wires, please see the datasheet of the motor supplier.

It is recommended to mount a pad-lockable repair switch on/ or in the emmidiate nearness of the pump.

The repair switch has to be suitable for starting electrial motors directly (AC3).

Static electricity

In order to insure that the pump remains free of static electricity, the pump needs to be grounded. This is done via. the grounding of the motor.