Liquid Sample Recovery System

Description

The Hobre Instruments Liquid Sample Recovery System (LSRS) is designed specifically to collect liquid effluent or spent sample from analyzers and return this to the process line, or any other suitable location. This system is ideal for use in applications where it is undesirable to discharge chemicals or hydrocarbons into sewage drains.

Liquid sample recovery system to be installed horizontally at a level that allows natural draining from the analyzer drain and sample conditioning system header into the recovery tank. The system is provided without sun protection. If necessary, additional sun protection can be provided to protect the exd control box from the sun.

Design basis

The system consists of:

1) Stainless steel recovery tank  
2) Recovery pump  
3) Level gauge with high/high and low/low alarm  
4) Control box (Exd)

The pump yields a flow at a differential pressure of 2 bars typical. The level gauge provides starting and stopping of the pump at high respectively low level.

The system control of the LSRS activates at high level the valve to the release outlet of the system. When the tank level reaches the low level, the valve will be deactivated. At low/low alarm the pump is stopped and the common alarm set. At high/high the common alarm is set. Reset alarm by manual pump/reset. Push button. At high/high the common alarm is set. Reset alarm by manual.
Features

- Equipment certified for use in Zone 1 or Zone 2 Hazardous areas
- Discharge pressure up to 30 bar
- Alarm level switches
- Heating (steam or electrical)
- Flame arrestor

Technical Data

- Tank volume: 50 L (other volumes optional)
- Operational volume: 35 L
- Pump capacity: 800 l/h @ 8.5 bar
- Weatherproofing: IP55
- Ambient temperature limits: -35 to +40°
- Power supply: 220 VAC 50/60 Hz 1 ph, 380 VAC 50/60 Hz 1 ph
- Power consumption: 0.60 kW (at pump in operation)