

Uses

# AC1/P Level Control for Conducting Liquids



Pumping out between two levels use controller in FSL

Aqueous solutions such as Water, Sewage, most Acids,

Fail safe switch, Fail safe high for pumping IN

Single probe operation for alarms.

Easily set up and very stable.

Fail safe low for pumping OUT.

Double probe operation for control between two levels.

Very accurate - Relay switches at the exact tip of the probe.



P2 G

## levels use controller in FSH





use controller in FSL

# use controller in FSH

Controls between two levels, High Level Alarm, Low Level Alarm, Borehole Level Control.

- Adjustable sensitivity and close switching differential to ignore electrode fouling and save electric power.
- ATEX models available (See Data Sheet No 304)
- A.C. current at the probes to prevent possible electrolytic action between them.
- Full range of hardware available for easy site operation.

### **Operating Principle**

The conducting properties of the liquid enable an electrical circuit to be completed between electrodes fixed at the levels to be controlled. Low voltage alternating current is used to avoid electrolysis.

#### Sensitivity

Applications

Milk, Beer, etc

In dirty applications such as sewage, which may contain debris such as rags, paper, etc, spurious operation of the controller may occur. It can cause the pump to stop not at the tip of the lower electrode, but at the end of the rag clinging to it. The controller may operate at the top of the foam and not at the liquid below it. Both these occurrences can cause the pump to run dry, with the consequent damage and excess use of electricity. To overcome this, the AC1/P

range of controllers operate with close switching differential between switching on and switching off of better than 5%, to obtain optimum results, therefore, it is necessary to adjust the sensitivity of the controller to suit the ohmic resistance of the liquid. This is easily carried out by means of a graduated knob and L.E.D. indicating the relay state. Full information is given in the operating manual.

#### Specification

Sensitivity:

Adjustable from 100 to approx 18,000 ohms

Switching Differential:	Better than 5% of sensitivity setting e.g. better than 5 ohms @ 100 ohms	
Ambient Temperature:	-10 <sup>°</sup> C to 50 <sup>°</sup> C	
Relay Contact Rating:	AC1/P @ 250V, 50Hz 80% PF	5 Amps
Supply Voltage:	AC1/P	110V or 240V, 50Hz
Supply Variation:	AC1/P	+10% to -12%
Fail Safe:	Selectable by internal switch e.g. FSL for pumping OUT, FSH for pumping IN	
Relay Energised Indication:	L.E.D.	



This product has been designed and complies to the relevant standards as listed in its certificate of conformity. The installer/user must ensure compliance The crossed out bin symbol, placed on the product, reminds you of the need to dispose of the product correctly at the end of its life Because of continuing development we reserve the right to change the specifications without notice

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