# AC1, AC1/12 Level Control for Conducting Liquids



Pumping out between two levels use controller in FSL



Pumping in between two levels use controller in FSH



Low level alarm use controller in FSL



High level alarm use controller in FSH

### **Applications**

Aqueous solutions such as Water, Sewage, most Acids, Milk, Beer, etc

- Double probe operation for control between two levels.
- Single probe operation for alarms.
- Very accurate relay switches at the exact tip of the probe.
- Fail safe switch, fail safe high for pumping IN, fail safe low for pumping OUT.

### Uses

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.
- A.C. current at the probes to prevent possible electrolytic action between them.
- Full range of hardware available for easy site operation.
- Easily set up and very stable.

### 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

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 A.C. and 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:

AC1 @ 250V. 50Hz 80% PF Relay Contact Rating: 5 Amps

Supply Voltage: AC1 110V or 240V. 50Hz

> Supply Variation: AC1 +10% to -12%

Selectable by internal switch e.g. FSL for pumping OUT, FSH for pumping IN Fail Safe:

Relay Energised Indication:

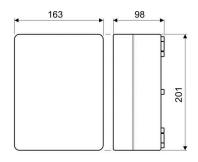
# **HHHHHH**

## Wall Mounting Level Controller

AC1 in plastic enclosure to IP66

AC1 control between levels or high or low alarm

AC1/12 for 12V DC operation



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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