# **Conductive Level Switch**

## General Information

#### <u>General</u>

The probe type level switch is ideal for use in monitoring and maintaining levels involving conductive liquids which may be contaminated with dirt or solids. Generally – a specific model will include both the relay and probe and can provide both a level monitoring function and pump-up pump-down situation. One to six probes can be supplied with one fitting in various materials and lengths. One electrode in the set can be used as a reference electrode, while the others maximum of five can be used for level control. If the tank being monitored is constructed of conductive material then the tank itself can act as a reference allowing 6 probes for level and control.

### **Operation**

- The remote relay sends a 24 VAC signal to the level probes
- When the liquid level reaches the tip of one of the set point probes an electrical path is completed between the reference and set point probe.
- The resulting electrical coupling is sensed by the relay and the SPDT contact is switched to provide multiple set points.

AC voltage is used to prevent electrolysis. The probes are available in many materials both rigid and flexible. The electrodes are fully clad in a non electrical material except for the tips. This material protects the instrument from false alarms resulting from debris which may become lodged between the probes.

#### <u>Relay</u>

Number of Channels Options	One or two channel
Power Supply	24, 110 or 140 VAC
Minimum Sensitivity	50K Ohms
Electrode Excitation Voltage	24 VAC Max.
Electrode Current	4 mA Max.
Response Time	0.5 seconds
Ambient Operating Temperature	32 to 158 deg. F
Output	SPDT, Max. 250 VAC @5A
Enclosure	PRO – Polyvinyloxide, NEMA 1, Din Rail