

January 1995

SENSOR DATA SHEET

EPG 3-Point Level Sensor

SENSOR LOGIC AND FUNCTION

EPG's 3-point level sensor has three "F" series level displacement sensors (floats) that move up and down on guide rods actuating magnetic reed switches. Each float is suspended on 5' (standard) of adjustable color coded wire from a weathertight junction box with two inch male pipe threads (2" MNPT) and 25' of five conductor CP cord as standard. The sensor is installed into the top of a transfer tank or sump. The sensors have a small diameter PVC outer protective shell and are designed to be vertically suspended. They will float when submerged in water or petroleum products. The tank full sensor is normally closed (N.C.) with red color coded wire and is set near the top of the tank or sump. The middle sensor with a blue color coded wire and the low sensor with yellow color coded wire are normally open (N.O.) and are commonly used to start and stop a pump. The middle sensor is set at the point where the pump is to start. The low sensor is set near the bottom of the tank just above the pump intake. When the fluid in the tank rises to the point where both sensors are submerged the pump will start. The pump will continue to run until the fluid level in the tank or sump drops below the lower sensor. In a high level condition, the tank full sensor with red wire commonly sends a signal to shut off the influent pump. Typically the sensors send signals to intrinsically safe relays which start/stop a pump and stop flow into the tank. These control circuits have an energy potential so low that they are incapable of causing ignition of flammable or combustible materials. Non-intrinsically safe relays can also be used. Maximum load of sensor is 50 VA resistive load.

