

In-Line Dry Pump and Product Phase Detector

Pipe monitoring for dry run conditions or liquid phase changes

Over 30 years of Arjay's field proven HF capacitance technology has been applied to the 9820/9830-DPM pipe monitor. The unique in-line sensor continuously monitors for the change from a wet to dry condition or a liquid change from one dielectric to another.

- capacitance technology responds to any liquid type
- no moving parts
- remote alarm unit mounts safely away from pipe
- no intrusion into stream flow



9820 | 9830-DPM

The 9830-DPM sensor monitors a cross sectional area of the pipe and locks in on the capacitance field of the fluid passing through. A change toward a dry condition or a liquid of a different dielectric will upset the capacitive field and initiate an alarm.

The sensing plates are embedded into a wafer flange which provides monitoring without any intrusion into the stream flow

■ Features and Benefits

- wafer flange sensor for easy installation
- adjustable time delay and sensitivity to eliminate nuisance alarms from bubbles
- remote electronics via standard twisted pair
- available with Intrinsic Safety Barrier for Hazardous Locations
- PVC wetted parts for corrosive environments
- capacitance technology responds to all types of liquids
- non-intrusive sensor design does not restrict flow

■ Technical Specifications - Control Unit

Operating Temperature	-20°C to 50°C
Power Input	24 vdc or 110 vac or 220 vac
Alarm Relay	5 amp, DPDT, dry
Standards	UL, CSA
Enclosure	Type 4X, IP65
Optional	Lights and Buzzer

■ Technical Specifications - Sensing Probe

Operating Temperature	-60°C to 50°C
Approval	CSA Class 1, Zone 2, Div 2, Groups A,B,C,D (also available with an Intrinsic Barrier Option on the 9830 version)



All calibration, control relays and power wiring is available at the main control unit. This can be safely mounted up to 1 km away from the sump (9830 version).



The Model 9820-DPM version provides the electronics mounted directly to the probe for compact installations.



On the 9830 version the unique PMC circuit design, exclusive to Arjay, immediately converts the sensor signal to a frequency pulse for furtherance to the controller.



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