# 2852-IFA Liquid Interface Alarm



## Reliable interface monitoring for alarm between two liquids

Over 40 years of capacitance experience stands behind the 2852-IFA Liquid Interface Alarm. The sensing probe continuously monitors the liquid in a vessel and will alarm when the interface of a different dielectric liquid crosses the active probe. Typical applications include oil/water interface in pipes and separators, water accumulation in fuel tank bottoms, and product phase changes in process piping streams.

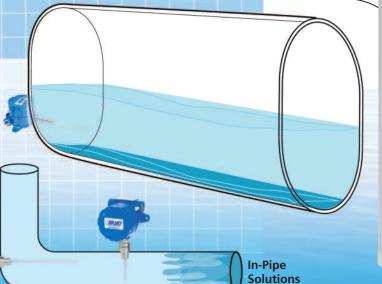
- capacitance technology does not foul or require cleaning
- no moving parts
- remote alarm unit mounts away from the process for safety and ease of control wiring

The 2852-IFA sensing probe monitors the capacitance field around the probe. The probe is calibrated to one of the liquids. As the interface of the second product crosses over the probe, the probe capacitance changes. This change is used to activate the relays for alarm and control.



optional alarm light and/or buzzer

Remote Electronics available in painted steel, SS or polycarbonate enclosure



# 2852-IFA

#### **Features and Benefits**

- no moving parts
- remote electronics via standard twisted pair
- explosion proof probe is standard
- probe is available with Intrinsically Safe option for alternative HazLoc protection
- high corrosion resistant Teflon and stainless steel wetted parts
- capacitance technology responds to all liquid types
- HF capacitance technology does not require routine cleaning
- easy calibration and control set-up

### **Technical Specifications - Control Unit**

-20°C to +55°C Operating Temp. .04 pF at 1,000 pF Resolution 0.2% of full scale pF Accuracy **Power Input** 12 vdc or 24 vdc or 100-240 vac +/- 10% Alarm Relay Two common 3 amp SPDT dry contacts

Communication Modbus RS-485 Enclosure

**Analog Output** 

Optional

Type 4/IP 66 painted steel or Type 4X/IP 66 polycarbonate or SS

4 mA normal/20 mA alarm

Light, buzzer, beacon

### **Technical Specifications - Probe**

Probe -60°C to +200°C -40 C to + 55 C **PMC** 

#### Certifications (certificates available on website)

Included Standard on Control Unit and Probe - Ordinary Location Use UL/CSA/IEC 61010-1 CAN/CSA 22.2

Included Standard on Probe - Hazardous Location Use - Explosion Proof USA/Canada CSA Zone 1,2; AEx db IIC T5 Gb IECEx/ATEX Zone 1,2; Ex db IIC T5 Gb

Optional on Probe - Hazardous Location Use - Intrinsically Safe

ANSI/UL 913-2013 Class II; Division 1,2; Groups A,B,C,D; T4 Class II; Division 1,2; Groups E,F,G Class III; Division 1,2 Class 1, Zone 0,1,2; Ex ia IIC T4 Ga

Included Standard on Probe CRN # 0F07450.2 (all provinces) NACE MR-0175 Compliant where applicable

Alarm and Status

Relays

Power input



LCD display of alarm status and menus

RS-485 Modbus user interface

4 mA normal/20 mA alarm output

Probe input

up to 1 km



The unique PMC circuit design, installed at the probe and exclusive to Arjay, immediately converts the sensor signal to a frequency pulse for furtherance to the controller.



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