2852-CAP
Capacitance Monitor

Reliable monitoring of process conditons and concentration

Over 40 years of capacitance experience stands behind the 2852-CAP monitor. The sensing probe continuously monitors the dielectric stability of the product. Changes in dielectric can be tagged to product quality changes, moisture content, emulsions, concentrations and product phase changes. Typical applications include liquid blending, moisture content of solids, upset product intrusion or separation, and general product quality.

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

The 2852-CAP sensing probe monitors the capacitance field around the probe. The active portion of the probe is fully submerged into the liquid or solid to the point of targeted interest. Changes in product dielectric due to blending of other products, moisture content of solids, or process cracking will cause a positive or negative capacitance change around the probe. This change is used to provide a 4-20 mA proportional output and two setpout alarm relays.

explosion proof probe

3/4" npt 316SS
process connection

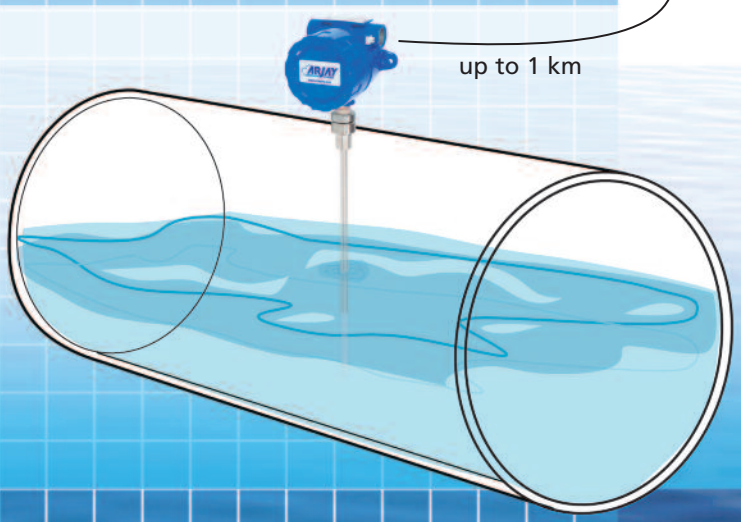
Inactive sheath

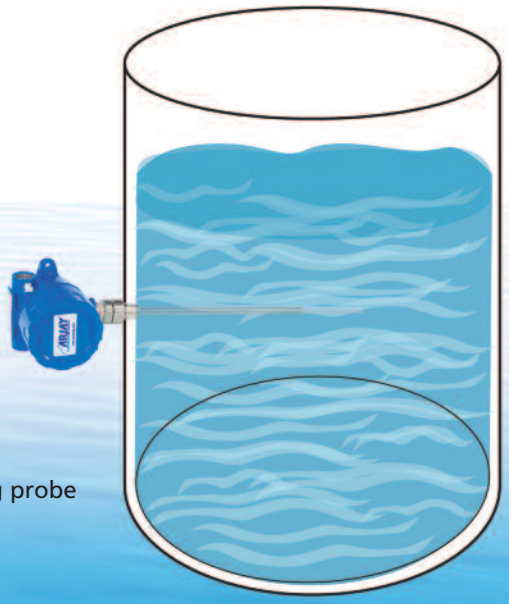
optional alarm light and/or buzzer

Remote Electronics available in painted steel, SS or polycarbonate enclosure

up to 1 km

Teflon sensing probe





2852-CAP

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 product types
- HF capacitance technology does not require routine cleaning
- easy calibration and control set-up

Need more than 2 relays or a visual display of your process activity? Look to the **Arjay 4100-CAP** series Level Monitor.

Technical Specifications - Control Unit

Operating Temp.	-20˚C to +55˚C
Resolution	.007% (.07 pF at 1,000 pF)
Accuracy	0.2% of full scale pF
Power Input	12 vdc or 24 vdc or 100-240 vac +/- 10%
Alarm Relays	Two independent 3 amp SPDT dry contacts with differential control
Analog output	4-20mA proportional output, non-isolated
Communication	Modbus RS-485
Enclosure	Type 4/IP 66 painted steel or Type 4X/IP 66 polycarbonate or SS
Optional	Light, buzzer, beacon

Technical Specifications - Sensing Probe

Probe	-60˚C to +200˚C
PMC	-40˚C to +55˚C
Wetted Parts	316SS and Teflon

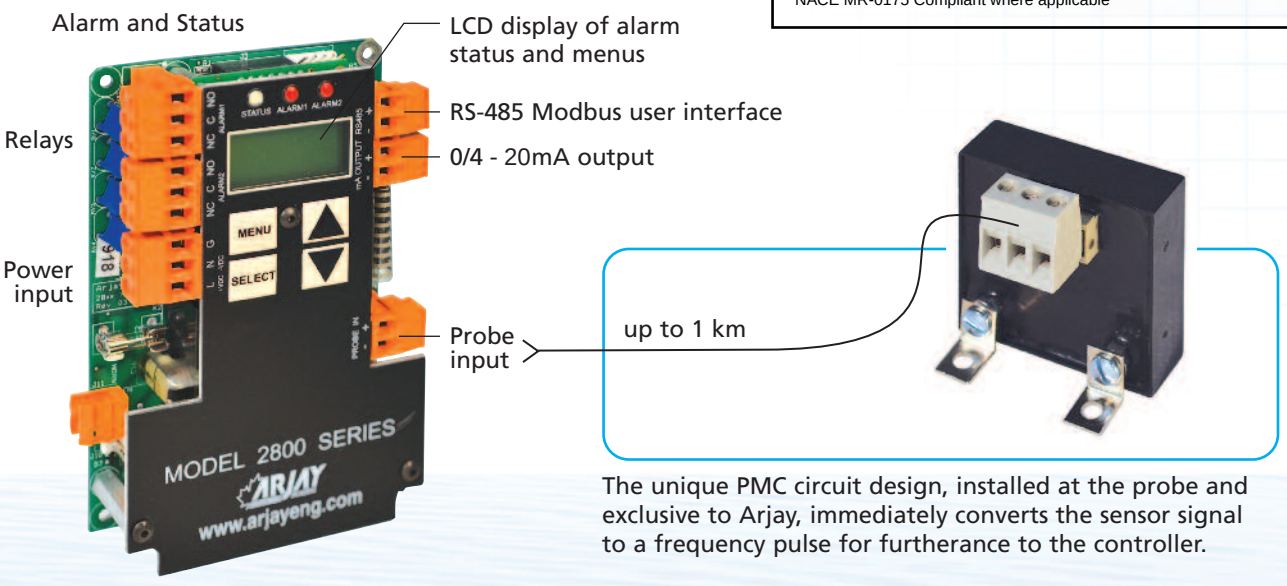
Certifications (certificates available on website)

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

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
UL/CSA/IEC 60079
ANSI/UL 913-2013
Class I; 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



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.

ARJAY ENGINEERING

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