

# 2852-LS Two Point Level Switch



## Reliable level alarm and control of liquids and solids

Over 40 years of capacitance experience stands behind the 2852-LS level controller. The sensing probe continuously monitors the level changes in a vessel to alarm at user defined setpoints. It is typically used to control pumps and valves, alarm of high or low product conditions, or alert to potential overflow and dry conditions.

- capacitance technology does not foul or require routine cleaning
- no moving parts
- remote monitor mounts away from the process for operator safety and ease of control wiring.
- two discrete relay setpoints, each with full differential control

The 2852-LS sensing probe monitors the capacitance field around the probe. As the level of product increases or decreases in the vessel, the probe capacitance changes. This change is used to activate the relays for alarm and control.



explosion proof head

3/4" npt 316SS  
process connection

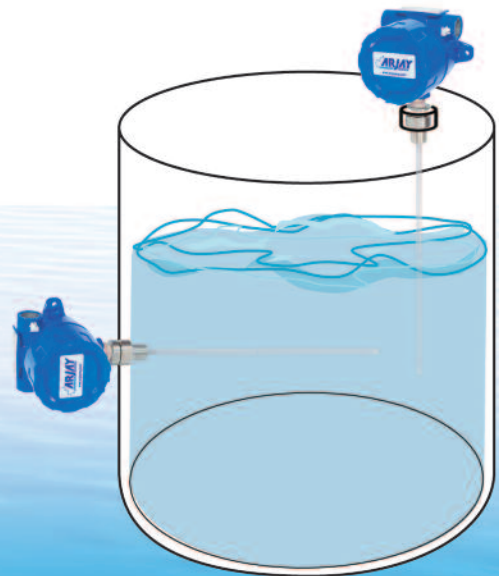
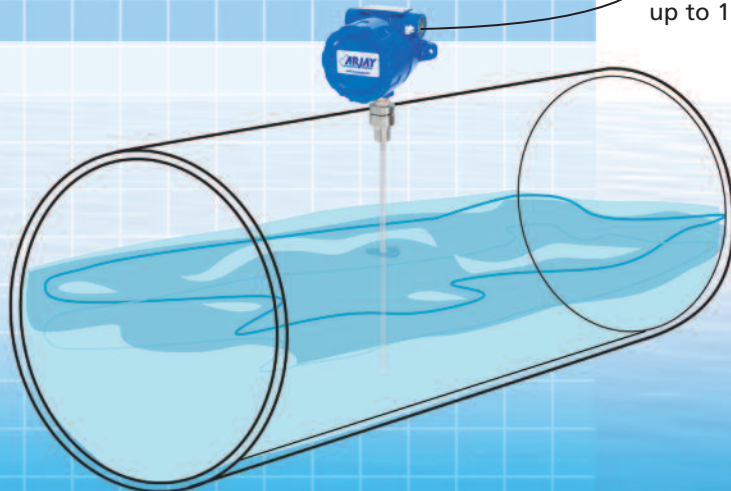


optional alarm light and/or buzzer

Remote Electronics available in painted steel, SS or polycarbonate enclosure

Teflon sensing probe

up to 1 km



# 2852-LS

## 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 and solid types
- HF capacitance technology does not require routine cleaning
- easy calibration and control set-up
- two discrete relay setpoints on one probe, each with 100% differential control

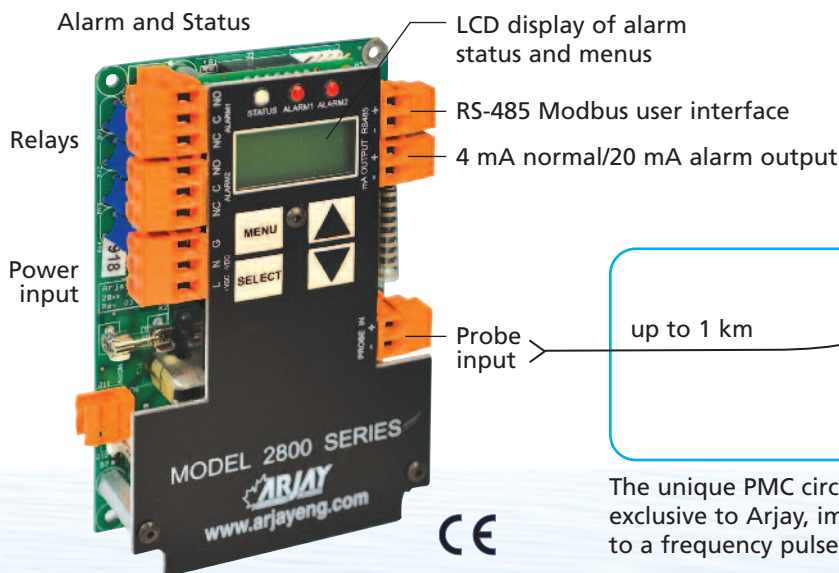
## Technical Specifications - Control Unit

|                         |  |
|-------------------------|--|
| Operating Temp.         | -20°C to +55°C   |
| Resolution              | .007% (.07 pF at 1,000 pF)   |
| Accuracy                | .04% of full scale pF  |
| Power Input             | 12 vdc or 24 vdc or 100-240 vac +/- 10%  |
| Alarm Relay             | 2 x 10 amp@240 vac, SPDT dry, discrete relays with differential control  |
| Analog Output           | 4 mA normal/20 mA alarm pegged to Relay 1 high differential setpoint   |
| Communication Certified | Modbus RS-485<br>UL 61010-1, 2 <sup>nd</sup> Edition<br>CAN/CSA-22.2 61010-1-4<br>IEC/EN 61010-1, 2 <sup>nd</sup> Edition<br>IEC 61326-1 + CE Declared |
| Enclosure               | Type 4/IP 66 painted steel<br>or Type 4X/IP 66 polycarbonate or SS   |
| Optional                | Light, buzzer, beacon  |

## Technical Specifications - Probe

|                  |  |
|------------------|--|
| Probe            | -60°C to +260°C  |
| PMC              | -60°C to +55°C   |
| Pressure         | 103 bar/10342 kPA/1500psi at stable temp   |
| Explosion Proof  | CSA Div 1, Class 1, Groups C,D   |
| Intrinsic Safety | Approved Intrinsically Safe when ordered with Approved Barrier in Control Unit<br>CAN/CSA E60079-11: Class I, Groups A,B,C,D;<br>Class II, Groups E,F,G; Class III, Encl.Type 4<br>ABSA-CRN #OF07450.2 |
| CRN              | 316SS and Teflon   |
| Wetted Parts     |  |

Probe materials are eligible for NACE MR-0175 Compliance



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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