2880-OWI / 2881-OWI / 2882-OWI Oil/Water Interface Transmitter



Reliable monitoring of oil/water interface and emulsions

Over 40 years of capacitance experience stands behind the 2880-OWI transmitter. The sensing probe continuously monitors the capacitance of the inserted probe. As the interface or emulsion layer (rag layer) crosses over the probe, a proportional 4-20 mA output is provided. Typical applications include oil water separators, oil/water knock-out tanks, treater trains and decanting tanks.

 capacitance technology does not foul or require cleaning

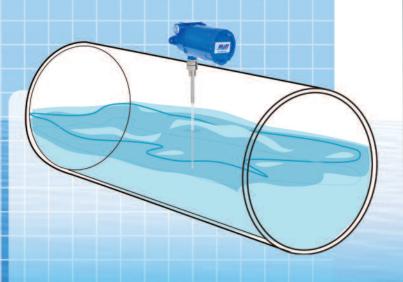
no moving parts

 remote monitor mounts safely away from the process

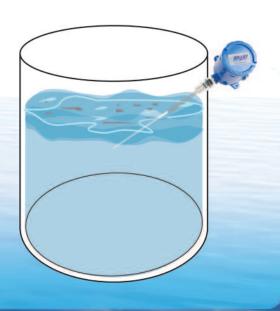
The 2880-OWI sensing probe monitors the capacitance field around the probe. A calibration is performed against the an oil condition and a water condition. The active portion of the probe is fully submerged into the liquid and sized to your targeted range of interest. As the oil/water interface or emulsion crosses or envelopes the probe, the capacitance change is tracked and an output of 4-20 mA is provided.



Inactive probe Sheath (length to order)



Teflon coated probe (length to order)



2880-**OWI**

Features and Benefits

- no moving parts
- electronics is integral to the probe
- high corrosion resistant Teflon and stainless steel wetted parts
- capacitance technology responds to all oil types
- HF capacitance technology does not require routine cleaning
- easy calibration and control set-up

Technical Specifications - Electronics

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, 0.1 amp max.

100-240 vac +/- 10%

Communication RS-485 Modbus

Control Interface

2880-OWI 0/4-20 mA non-isolated output 2881-OWI 0/4-20 mA isolated output 2882-OWI 0/4-20 mA non-isolated output

OWI 0/4-20 mA non-isolated output and 2 x 10amp@240 vac, SPDT,

dry relays

Optional Viewing window of % Level LCD

Technical Specifications - Probe

Process Temp. -60°C to +260°C (Teflon probe)
Pressure 103 bar/10342 kPA/1500psi

at stable temperature

CRN ABSA-CRN #OF07450.2 Wetted Parts 316SS and Teflon

Probe materials are eligible for NACE MR-0175 Compliance

Hazardous Location Use

Available Component Certifications may be suitable to your application. Consult Arjay for assistance.

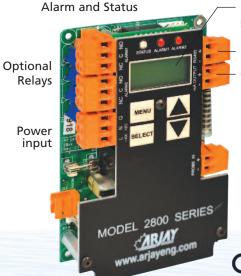
2880 Electrical Safety UL, CSA, or IEC 61010

Housing UL/FM/CSA

Class 1, Group B,C,D; Class II, Group E,F,G

Probe CSA Class 1, Group C,D

The electronics for this model can also be mounted remote from the probe. Refer to the Model 2852-OWI. The probe becomes Intrinsically Safe when ordered with an IS Barrier installed in 2852-OWI control panel: CSA Div 1, Class 1, Groups A,B,C,D



LCD display of alarm status and menus

RS-485 Modbus user interface

0/4-20 mA output



All calibration and power wiring is done at the main control unit. This is mounted directly onto the probe.





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