

# 2852-HCF Floating Oil Spill Alarm



## Reliable monitoring of sumps and containments for oil spills

Over 40 years of capacitance experience stands behind the 2852-HCF Oil Monitor. The unique floating sensor continuously monitors for the accumulation of oil at the water surface.

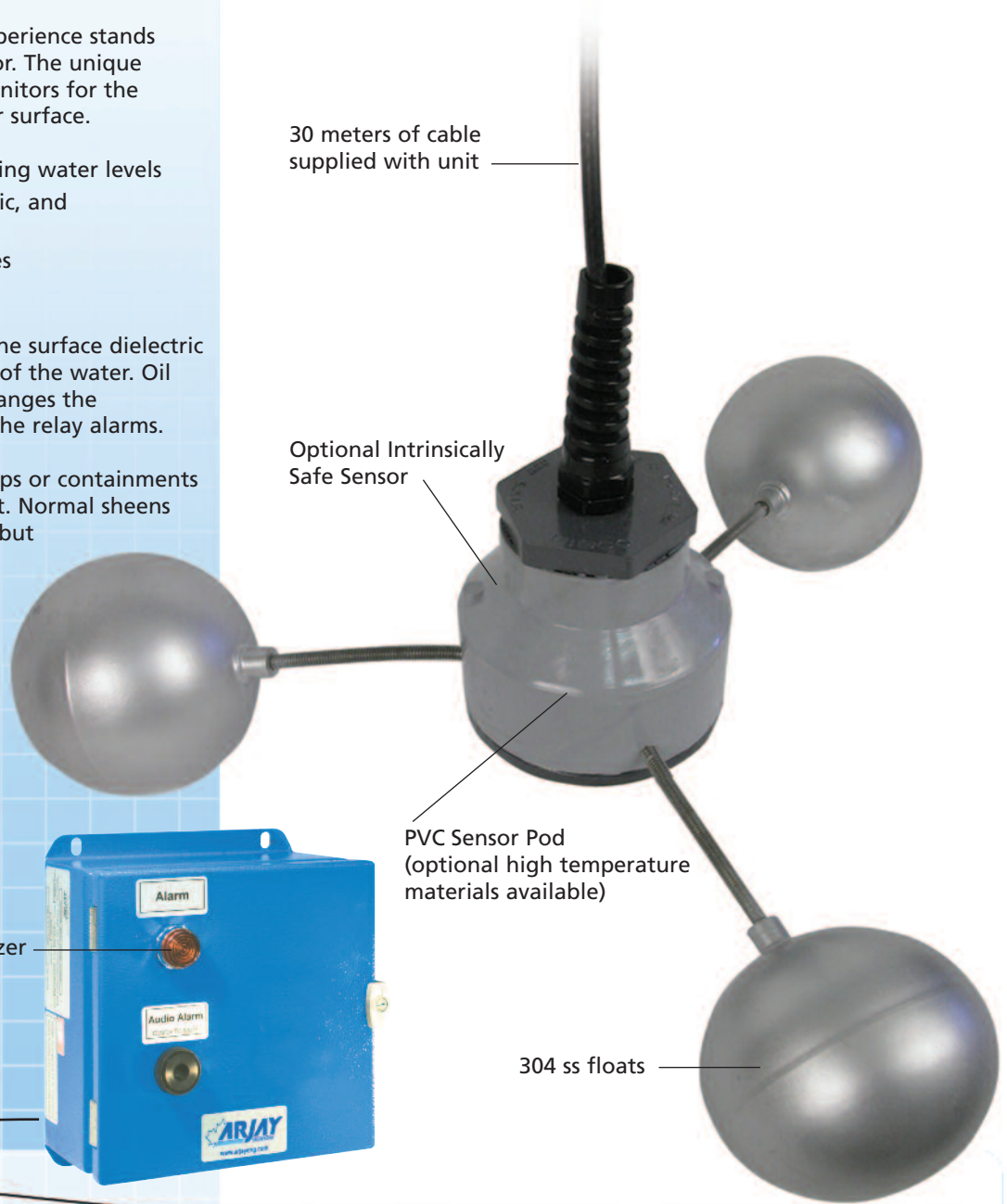
- Floating sensor follows changing water levels
- Alarms on petroleum, synthetic, and vegetable oils
- Potted stable sensor eliminates nuisance alarms

The 2852-HCF sensor monitors the surface dielectric and locks in on the capacitance of the water. Oil that separates to the surface changes the capacitance field and activates the relay alarms.

This unit is typically used in sumps or containments where oil is not typically present. Normal sheens will not cause a nuisance alarm but an upstream leak or spill that accumulates in the sump will alarm the monitor. The floating design allows the unit to track the changing water level in the sump and immediately alert operators, pumps or valves if there is an accumulation of oils.

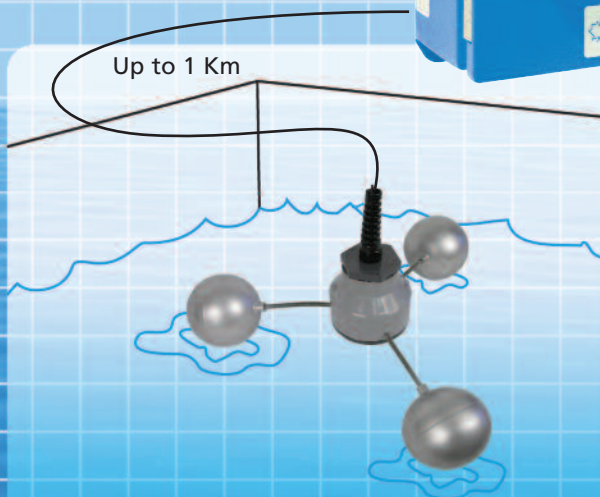
optional alarm light and/or buzzer

Remote Electronics available in painted steel, SS or polycarbonate enclosure



Up to 1 Km

The 2852-HCF protects facilities from accidental pumping of oils to municipal storm drains or streams. Ideal in utilities, factories, treatment plants & commercial applications. Anywhere oil on water should be acknowledged.



# 2852-HCF

## Features and Benefits

- stable tri-float design follows level changes
- adjustable time delay and sensitivity to eliminate nuisance alarms
- remote electronics via standard twisted pair
- sensor available Intrinsically Safe for Hazardous Locations
- waterproof PVC and SS wetted parts allow for use in harsh environments
- unit also alarms on dry sump conditions to shut down pumps
- capacitance technology responds to all types of oils and separated liquids of similar dielectrics
- alarms at a minimum of 2 mm surface oil, can be desensitized to 25mm oil

Need to know the oil thickness?  
Look to the **Arjay 4100-HCF** Oil Thickness Monitor

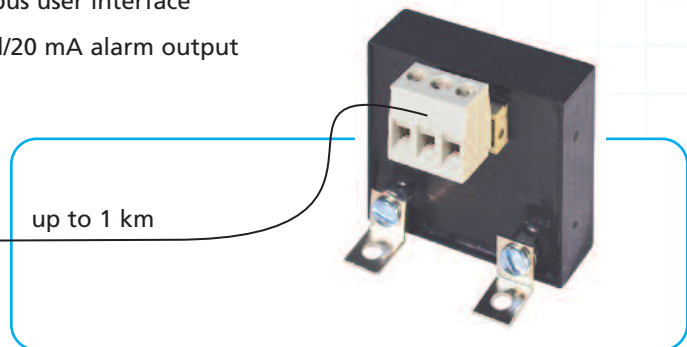
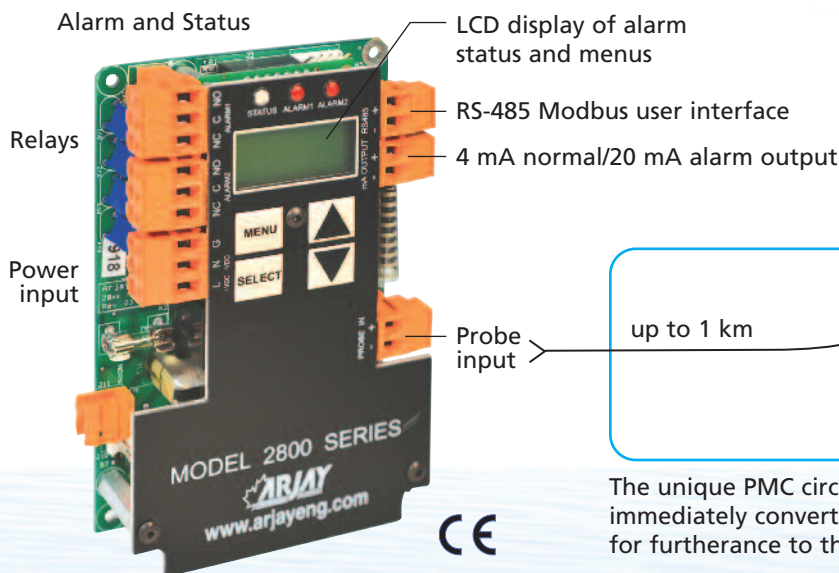
## Technical Specifications - Control Unit

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 Analog Output	4 mA normal/20 mA alarm
Communication	Modbus RS-485
Certified	UL 61010-1, 2 <sup>nd</sup> Edition CAN/CSA-22.2 61010-1-4 IEC/EN 61010-1, 2 <sup>nd</sup> Edition IEC 61326-1 CE Declared
Enclosure	Type 4/IP 66 painted steel or Type 4X/IP 66 polycarbonate or SS
Optional	Light, buzzer, beacon

## Technical Specifications - Float Sensor

Operating Temp.	0° to +55°C (optional to 141°C)
Intrinsic Safety	CSA Intrinsically Safe when ordered with Approved Barrier in Control Unit Div 1, Class I, Groups A,B,C,D; Class II, Groups E,F,G; Class III, Encl.Type 4
Wetted Parts	PVC and 304SS
Vertical Water Travel	Up to 2 meters
Minimum Oil Detection	2mm
Maximum Oil Detection	25mm

Optional sensor materials are eligible for NACE MR-0175 Compliance



The unique PMC circuit design, potted into the sensor, immediately converts the sensor signal to a frequency pulse for furtherance to the controller.