

TRM-CC Series

Fuel / Oil Sensors

Product Description

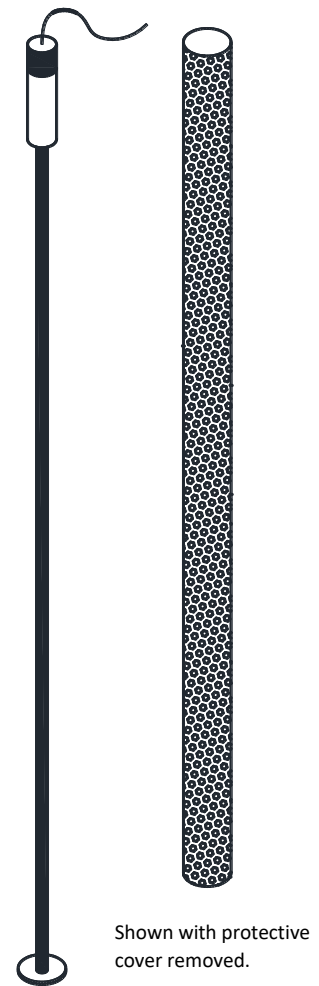
TRM-CC Series sensors are designed to detect the presence of crude oil, refined fuels and gas condensates in a containment area or in the vicinity of a buried flange. A typical application would be to monitor for leaks or tank overflows within a contained space or to monitor backfill surrounding a buried flange or valve body. The sensor does not detect or react to ground water or storm water. Only a thin layer of fuel or oil is required for detection. As long as the perforated portion of the sensor probe penetrates the surface of any collected water, leaking or spilled hydrocarbon floating on the water surface will be detected.

TRM-CC Series sensors will also detect crude oil, refined fuels or gas condensates collecting on a dry sump floor at the lower end of the probe.

TRM-CC Series sensors have no moving parts. The entire length of the screen protected area is sensitive to liquid hydrocarbons. The TRM-CC made for use with TRM Relay Unit Type-DA. TRM-CC is considered to be "Simple Apparatus" per CSA/EN/IEC/UL 60079-11 and can be installed in hazardous areas with the recommended zener safety barrier.

Key Features

- Fast detection of crude oil, refined fuels or gas condensates
- Suitable for Hazardous Areas when installed with appropriate zener barriers
- Solid state, no moving parts
- Wide range operating temperature range
- Corrosion resistance stainless steel components used throughout
- Can be cleaned, reset and reused in most cases.
- Factory restoration service available



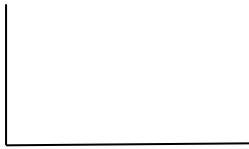
Product Specifications

- Dimensions:
 - Stainless steel screen diameter: 2.125"
 - Upper Body: 1" x 4" 316 stainless steel
 - Interior Probe : 3/8" dia. 316 stainless steel with fuel sensitive coating
- Perforated screen length: 9", 35" and 59"
 - Probes are provided with perforated stainless steel outer sleeve for use in open sumps and containments
- Standard leader cable length: 5m
- Operating Temperature: -40C to +85C
- Representative response times to crude oil:
 - API 38: less than 3 seconds @ 70F
 - API 28: less than 3 seconds @ 70F
 - Refined fuels and gas condensates: less than 3 seconds @ 70F
- Reset after crude oil detection requires rinsing electrode area in naphtha – see care and cleaning instructions
- Factory restoration service available
- "Simple Apparatus" per CSA/EN/IEC/UL 60079-11 Clause 5.7 a) & b)

TRM-CC Hydrocarbon Sensors for sumps

Ordering Information:

TRM-CC-□□



Probe length in inches – standard sizes are 9”, 35” and 59”

Examples: TRM-CC-35 is a 35” probe with 5 meter leader cable configured for TRM Relay Unit Type-DA

Installation:

1. For sump monitoring, TRM-CC sensor probes should be installed in a vertical orientation with the cable at the top. Use uni-strut or similar sturdy structure to fix the sensor in position. A U-bolt can be used to clamp the sensor body to the uni-strut frame.
2. The sensor should be installed at the low point of the contained area or near the storm water drain (if installed). It is important that the sensor be positioned such that it penetrates the surface of any storm water pooling in the contained area. Place the sensor in the lowest corner of the contained area.

CAUTION: It is the installer’s responsibility to select the installation location such that any oil spill accumulating in the contained area or floating on the surface of storm water in the contained area will come into contact with the sensor probe before it exits the containment via a storm drain or by overtopping the containment berm

3. Connect the leader cable from the sensor probe to the monitoring device terminal block matching the marked color code.
4. For below ground flange monitoring applications the sensor should be inserted into 3” slotted PVC well-screen that has been positioned next to the buried fitting and surrounded with a containing material. Placement of the well screen will typically be determined on a site specific basis.

Care and Reset:

The sensor must be removed for cleaning, reset and performance testing.

CAUTION: The thin black film of material on the outer surface of the interior probe is sensitive to abrasion and easily damaged. We recommend leaving the stainless steel protective outer screen in place for storage, handling and once installed.

Follow these general guidelines for sensor cleaning and reset:

1. Use a shallow trough or drip pan and lay the sensor on the bottom in a horizontal position.
2. Leave the protective screen in place. Use extreme care to avoid abrasion or mechanical damage to the surface coating of the probe.
3. Gently add sufficient naphtha (Coleman Camp Stove Fuel is a good source) to completely cover the length of the probe. Soak the probe for at least 1 minutes but not more than 3 minutes.
4. Remove the probe, lay it on its side on paper towels, and allow to dry in the air for at least 60 minutes. Do not use heat or forced air to speed the process. Natural air drying only.
5. If necessary, repeat Step 3 and 4 several times using fresh naphtha until the residual naphtha is clear. Allow the sensor to air dry for a final time a minimum 2 hours. Do not touch the interior core or the probe with any foreign object and do not attempt to hasten the drying time with forced air or heat
6. Reconnect the sensor to the Relay Unit to check for reset. If a TRM relay Unit Type DA is in use,

WARNING: Naphtha is extremely flammable. Use extreme care. Remove all sources of ignition. Clean the sensors in an outdoor location away from buildings or flammable structures