LIQUID LEAK DETECTION PROBE

PRODUCT OVERVIEW

The nVent RAYCHEM TT-MINI-PROBE is a cost effective solution for low point leak detection. It is a special purpose probe designed to detect electrically conductive fluid leaks in space limited locations. The TT-MINI-PROBE is built using chemically resistant plastic and stainless steel materials to withstand exposure to a wide range of harsh chemicals.

Installations of the TT-MINI-PROBE at specially constructed low points in double contained pipe take advantage of the compact size and chemically resistant features of the device. In the event of a chemical leak from the carrier pipe, fluid will drain to the low point in the containment pipe, and the TT-MINI-PROBE will detect the leak.

The TT-MINI-PROBE can also be used to detect leaks in drip trays or sumps, or low spots where TraceTek sensing cables are inappropriate. The TT-MINI-PROBE will detect leaks with as little as 3 mm (1/8 inch) of the probe electrodes exposed to liquid, but the probe can be installed in virtually any position to provide optimized leak sensitivity.

The TT-MINI-PROBE can be interconnected with jumper cable and branching connectors to other TT-MINI-PROBE or TraceTek sensing cable segments, and be monitored by a TTDM-128 or TTSIM alarm module. System reliability and integrity are ensured because the TT-MINI-PROBE is designed to be an integral part of the leak detection sensor circuit. Any damage to the TT-MINI-PROBE will be immediately detected by the alarm module.

The TT-MINI-PROBE comes with a hold down clip that is useful for mounting against a sump sidewall. An optional L shaped stainless steel (SS) mounting bracket can be ordered to secure the probe vertically on flat open areas. An optional pressure-feedthrough (PFT) fitting can be ordered to secure the probe in double contained pipe applications.

Simple and easy to use

The TT-MINI-PROBE is provided with the TraceTek standard metal connector so that it can be directly connected to any nVent RAYCHEM TT3000, TT5000 or TT5001 modular sensing cable and accessory.

The TT-MINI-PROBE can be used at any point in a TraceTek leak detection circuit where an end termination would be used. A single TT-MINI-PROBE can be connected directly to a nVent RAYCHEM TT-MLC-MC-BLK leader cable to create a simple single point detection circuit. Multi-point leak detection circuits can be constructed using TT-MBC-MC-TW branch connectors and multiple TT-MINI-PROBES. Leak detection system design is very flexible with the TT-MINI-PROBE and TraceTek leak detection cable.
The illustration below shows several possible leak detection circuits constructed with the TT-MINI-PROBE and TraceTek sensing cable monitored by a nVent RAYCHEM TTDM-128 and TTSIM alarm modules.

**POTENTIAL CONFIGURATION EXAMPLES**

**TTDM-128**
- Master Module

**TTSIM**
- Sensor Interface

**TraceTek Sensing Cable**
- Leader Cable
- Jumper Cable
- Modular branching connector (TT-MBC-MC-TW)

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>Catalog number</th>
<th>P/N</th>
<th>Description</th>
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<tbody>
<tr>
<td>TT-MINI-PROBE</td>
<td>P000000149</td>
<td>Fluid leak detection probe</td>
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<tr>
<td>Optional Mounting Parts (Not Shown)</td>
<td></td>
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<tr>
<td>TT-PFT-3/4-MC</td>
<td>544029-000</td>
<td>Pressure rated feed through fitting, ¾ inch NPT, BRASS</td>
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<tr>
<td>TT-PFT-3/4-SS/MC</td>
<td>487179-000</td>
<td>Pressure rated feed through fitting, ¾ inch NPT, made of 316 SS</td>
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<tr>
<td>TT-FFS-MOUNTING-BRACKET</td>
<td>P0000001040</td>
<td>L shaped 306 SS bracket with cable ties for vertical mount</td>
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**PRODUCT CHARACTERISTICS**

- **Dimensions**: 0.6 inch diameter x 1.3 inch L (16 mm diameter x 34 mm L)
- **Weight**: 0.1 lb (0.05 kg) nominal
- **Materials**: Electrodes - 302 Stainless steel; Housing - black NORYL® plastic
- **Mounting part provided**: Comes with Hold Down Clip (alternate mounting parts available separately)
- **Ambient temperature range**: Min 0°F (-18°C); Max 194°F (90°C)
- **Connections**: TraceTek male (pin) metal connector can be attached to any TraceTek female (socket) metal connector
- **Minimum water depth to trigger leak**: 0.12 inch (3 mm)