

# TT5001

## TraceTek Solvent-Sensing Cable

TraceTek TT5001 sensing cable detects liquid organic solvents anywhere along its length, but does not react to the presence of water. Installed with a TraceTek alarm and locating module, the cable senses the liquid, triggers an alarm, and pinpoints the location of the leak.

### Distributed sensing

TraceTek TT5001 sensing cable provides distributed leak detection and location for a wide range of applications. Cable lengths can be arranged to provide as much coverage as necessary.

### Design flexibility

The TT5001 sensing cable is available in a variety of lengths with factory-installed connectors. These modular sensing cables may be connected in series to provide distributed monitoring for trenches,

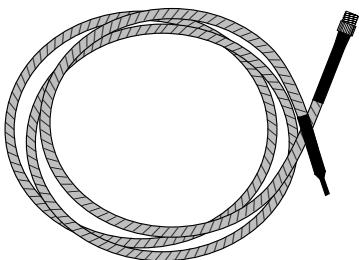
subfloors, and double-containment piping, or used individually for double-containment tanks, sumps, and small areas. TT5001 zone sensing cable—which comes with a factory-installed heat-shrink end termination—is also available for small area coverage.

### Advanced technology

Raychem's radiation-crosslinking and conductive-polymer technologies are used to make TraceTek TT5001 sensing cable mechanically strong and chemically resistant. The core of the cable is constructed of two sensing wires, an alarm signal wire, and a continuity wire. The core is encased in a conductive-polymer jacket and surrounded with a fluoropolymer braid. This rugged construction allows the cable to perform well, even in demanding environments.

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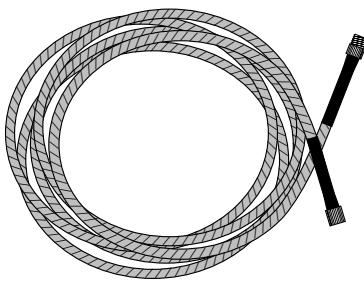
### Ordering information



#### TT5001 zone sensing cable with factory-installed connector and end termination

**Catalog number**  
TT5001-Zone-MC

**Description**  
5-ft (1.5 m) sensing cable with heat-shrink end termination.



#### TT5001 modular sensing cable with factory-installed connectors

**Catalog number**  
TT5001-0.3M/1FT-MC  
TT5001-1.5M/5FT-MC  
TT5001-3M/10FT-MC  
TT5001-7.5M/25FT-MC  
TT5001-15M/50FT-MC

**Description**  
1-ft (0.3 m) sensing cable  
5-ft (1.5 m) sensing cable  
10-ft (3 m) sensing cable  
25-ft (7.5 m) sensing cable  
50-ft (15 m) sensing cable

# TT5001 Solvent-Sensing Cable



## Product characteristics

Cable diameter	0.27 in. (6.9 mm) nominal
Cable connector diameter	0.52 in. (13 mm) nominal
Cable weight (50-ft length)	2.4 lb
Operating temperature range	-20°C to 60°C (-4°F to 140°F)
Pull force limit	Not to exceed 50 lb (23 kg)
Bend radius	2 in. (50 mm) minimum
Pressure	Loads greater than 20 lb (9 kg) per linear inch at 20°C (68°F) may immediately trigger an alarm.
Nonresettable	Must be replaced after exposure to solvents.

## Chemical resistance

Cable functions normally after exposure in accordance with ASTM D 543 at 23°C (73°F) for seven days:	Sulfuric acid (10%) Nitric acid (10%) Hydrochloric acid (10%) Sodium hydroxide (10%)
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## Water resistance

Sensing cable	Less than 10-µA leakage when immersed in salt water for 90 days.
Connector system	Less than 10-µA leakage when immersed in water at 10 psig for 24 hours.

## Response time

Representative materials detected:	Typical response time at 20°C (68°F):
Toluene	10 min.
Dichloromethane (methylene chloride)	5 min.
1, 1, 1-trichloroethylene (TCE)	8 min.
Trichloroethane (TCA)	20 min.
Methyl ethyl ketone (MEK) <sup>†</sup>	10 min. <sup>†</sup>
Acetone <sup>†</sup>	10 min. <sup>†</sup>
n-methyl pyrrolidone (NMP) <sup>†</sup>	60 min. <sup>†</sup>
Isopropyl alcohol (anhydrous)	90 min.

Notes:

- Response times are based on 2 inches of cable immersed in liquid.
- Response times are affected by operating temperature. Consult factory for specific response times at other temperatures and in other liquids.

<sup>†</sup> Prolonged immersion in ketones will inhibit sensing-cable performance.

## Approvals pending

Underwriters Laboratories
C-UL (certified to Canadian standards)
Factory Mutual



The TraceTek products group is a part of Raychem Chemelex Division. Chemelex Division is ISO 9001 certified.

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