



TT5000

TraceTek® fuel-sensing cable

TraceTek® TT5000 sensing cable detects the presence of liquid hydrocarbon fuels at any point along its length, yet 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

TT5000 sensing cable provides distributed leak detection and location for a wide range of applications. The cable is available in a variety of lengths to provide as much coverage as needed.

Design flexibility

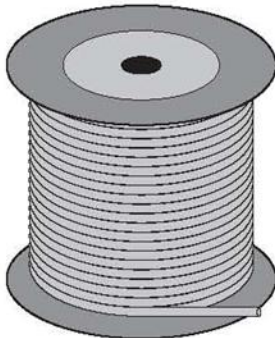
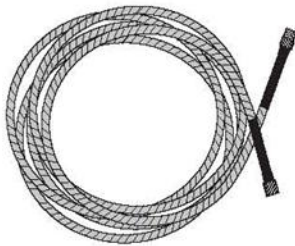
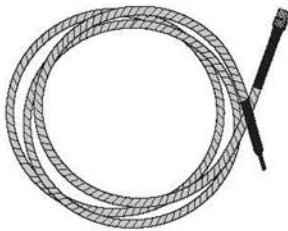
TT5000 sensing cable is available in bulk reels, with connector kits or with factory-installed connectors that plug together. The cable is

designed for a variety of double-containment applications, including tanks, trenches, and piping. (See the "TraceTek Double-Containment Design Guide" for specific design alternatives.)

Advanced technology

The Raychem® radiation-crosslinking and conductive-polymer technologies are used to make TT5000 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 reliably in the most demanding environments.

Ordering Information



TT5000 zone sensing cable with factory-installed connector and end termination

Catalog number	Description
TT5000-Zone-MC	5 ft (1.5 m) sensing cable with heat-shrink end termination

TT5000 modular sensing cable with factory-installed connectors

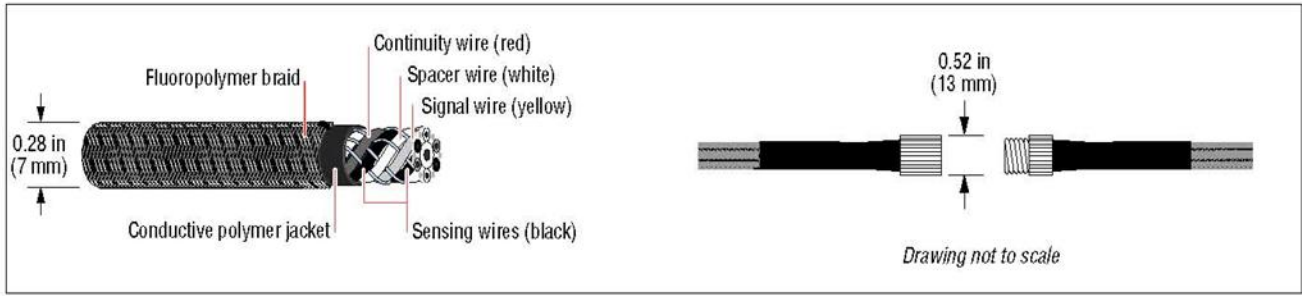
Catalog number	Description
TT5000-0.3M/1FT-MC	1 ft (0.3 m) sensing cable
TT5000-1.5M/5FT-MC	5 ft (1.5 m) sensing cable
TT5000-3M/10FT-MC	10 ft (3 m) sensing cable
TT5000-4.5M/15FT-MC	15 ft (4.5 m) sensing cable
TT5000-7.5M/25FT-MC	25 ft (7.5 m) sensing cable
TT5000-15M/50FT-MC	50 ft (15 m) sensing cable
TT5000-30M/100FT-MC	100 ft (30 m) sensing cable

TT5000 bulk sensing cable for installation in double-containment piping (connector kits required)

Catalog number	Description
TT5000-SC	Bulk sensing cable on reel Minimum length: 100 ft (30 m) Maximum length: 800 ft (240 m)

Connector kits (not shown)

TT5000-CK-MC-M/F (includes test tools)	Components for five mated pairs of connectors
TT5000-CK-MC-M	One pin-type connector
TT5000-CK-MC-F	One socket-type connector



Product Characteristics

Cable diameter	0.28 in (7 mm) nominal
Cable diameter with connector	0.52 in (13 mm) nominal
Cable weight (50 ft/15 m length)	2.4 lb (1.1 kg)
Operating temperature range	-4°F to 140°F (-20°C to 60°C)
Pull force limit	Not to exceed 50 lb (22.7 kg)
Bend radius	2 in (50 mm) minimum
Pressure	Loads greater than 20 lb (9 kg) per linear inch at 68°F (20°C) may immediately trigger an alarm
Nonresettable	Must be replaced after exposure to hydrocarbon liquids

Chemical Resistance

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

Notes:

- Response Time Test Method: "Test Procedures for Third Party Evaluation of Leak Detection Methods; Cable Sensor Liquid Contact Leak Detection Systems."
- Response times are affected by operating temperature. Consult factory for specific response times at other temperatures and in other liquids.

Represented materials detected	Typical response time at 68°F (20°C)
Gasoline	12 minutes
#1 diesel fuel	60 minutes
#2 diesel fuel	120 minutes
JP5 jet fuel	70 minutes
JP8 jet fuel	50 minutes
Jet-A jet fuel	50 minutes
Xylene	20 minutes

Approvals



Sensing cable may be used in Class I, Division 2, Groups A, B, C, D Hazardous Locations. If wiring from module meets requirements for intrinsic safety, sensing cable may be used in Class I, Division 1, Groups A, B, C, and D Hazardous Locations (Zone 0 or Zone 1 in Europe).



The TraceTek products group is a part of Tyco Thermal Controls. Tyco Thermal Controls is ISO 9001 certified.

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