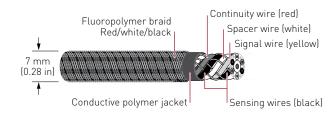
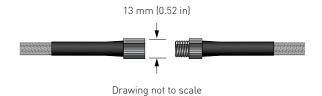


## TRACETEK TT5000

## FUEL SENSING CABLE

### Cable construction





### **PRODUCT OVERVIEW**

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 within one meter.

### 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 can be purchased in bulk form, cut to length in the field and joined using connector kits, or it can be obtained in standard lengths with connectors attached in the factory. 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. TT5000 zone sensing cable—which comes with a factory-installed, heat-shrink end termination—is also available for small area coverage.

### Advanced technology

TraceTek uses radiation-crosslinking and conductive-polymer technology 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

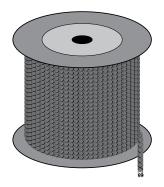
Catalog number	Part number	Description
TT5000-1.5M/5FT-HSE-MC	673739-000	1.5 m (5 ft) sensing cable with preinstalled heat-shrink end termination, prepared for zone system

### TT5000 modular sensing cable with factory-installed connectors



Catalog number	Part number	Description
TT5000-0.3M/1FT-MC	343347-000	0.3 m (1 ft) sensing cable
TT5000-1.5M/5FT-MC	743599-000	1.5 m (5 ft) sensing cable
TT5000-3M/10FT-MC	690609-000	3 m (10 ft) sensing cable
TT5000-4.5M/15FT-MC	251851-000	4.5 m (15 ft) sensing cable
TT5000-7.5M/25FT-MC	753845-000	7.5 m (25 ft) sensing cable
TT5000-15M/50FT-MC	770285-000	15 m (50 ft) sensing cable
TT5000-30M/100FT-MC	260635-000	30 m (100 ft) sensing cable

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



Catalog number	Part number	Description
TT5000-SC	869309-000	Bulk sensing cable on reel
		Minimum length: 30 m (100 ft)
		Maximum length: 240 m (800 ft)

### Connector kits (not shown)

Catalog number	Part number	Description
TT5000-CK-MC-M/F (includes test tools)	122499-000	Components for five mated pairs of connectors
TT5000-CK-MC-M	961207-000	One pin-type connector
TT5000-CK-MC-F	880841-000	One socket-type connector

**Note:** Refer to the Product Selection Guide (H55869) for other components of the TraceTek system.

### PRODUCT CHARACTERISTICS

connector

Cable diameter 7 mm (0.28 in) nominal Cable diameter with 13 mm (0.52 in) nominal

Cable weight 7.3 kg/100 m nominal (4.81 lb/100 ft nominal)

Fluoropolymer braid Color—red, white and black Operating temperature -20°C to 60°C (-4°F to 140°F) range

Pull force limit Not to exceed 22.7 kg (50 lb)
Bend radius 50 mm (2 in) minimum

Pressure Loads greater than 9 kg (20 lb) per linear inch at 20°C (68°F) may immediately trigger

an alarm

Nonresettable Must be replaced after exposure to hydrocarbon liquids

### **CHEMICAL RESISTANCE**

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

### **WATER RESISTANCE**

Sensing cable Connector system Less than 10  $\mu A$  leakage when immersed in salt water for 90 days Less than 10  $\mu A$  leakage when immersed in water at 10 psig for 24 hours

### **RESPONSE TIME**

Represented materials detected	Typical response time at 20°C (68°F)	
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	

#### 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.

### **APPROVALS AND CERTIFICATIONS**

TraceTek TT5000 sensing cables are approved for installation in ordinary and hazardous areas when used in conjunction with approved TraceTek monitoring equipment and zener safety barriers when appropriate.

All TraceTek sensing cables are designated as "simple apparatus" and included in the approval certification for TraceTek monitoring instruments.

Consult the specific data sheets and approval certificates for the TraceTek TTSIM-128, TTSIM-1, TTSIM-1A, TTSIM-2, TTC-1 and TT-FLASHER-BE for application limitations and specific area approvals and certifications.















### WWW.PENTAIRTHERMAL.COM

**NORTH AMERICA** 

Tel: +1.800.545.6258 Fax: +1.800.527.5703 Tel: +1.650.216.1526 Fax: +1.650.474.7215 thermal.info@pentair.com EUROPE, MIDDLE EAST, AFRICA

Tel: +32.16.213.511 Fax: +32.16.213.603 thermal.info@pentair.com **ASIA PACIFIC** 

Tel: +86.21.2412.1688 Fax: +86.21.5426.2937 cn.thermal.info@pentair.com **LATIN AMERICA** 

Tel: +1.713.868.4800 Fax: +1.713.868.2333 thermal.info@pentair.com

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