

TT3000

TraceTek Sensing Cable for Conductive Liquids

TraceTek TT3000 sensing cable detects the presence of conductive liquids at any point along its length. Most acids and bases and even deionized water can be sensed and located. Installed with a TraceTek alarm and locating module, the cable senses the presence of fluid, triggers an alarm, and pinpoints the location.

Distributed sensing

TT3000 sensing cable provides distributed leak detection and location over a wide range of areas. The cable is available in a variety of lengths to provide as much coverage as needed.

Design flexibility

TT3000 sensing cable is available with factory-installed metal connectors that plug together. The measurement circuit is not dependent upon the conductivity of the leaking fluid. Therefore, the same

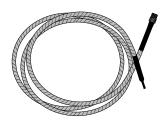
cable will detect a wide range of fluids without special design considerations or calibration.

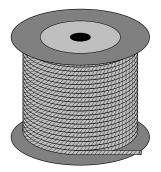
The cable is designed for a variety of applications, including floor surfaces, subfloors, equipment locations, pipes, storage tanks, and trenches. The cable is small, lightweight, and flexible, allowing easy installation. The smooth design allows quick drying.

Advanced technology

Raychem's conductive-polymer technology and fluoropolymer construction make TT3000 sensing cable mechanically strong and chemically resistant. The cable is constructed of two sensing wires, an alarm signal wire, and a continuity wire embedded in a fluoropolymer carrier rod. This rugged construction exposes no metal, and enables the cable to be reusable even in corrosive environments.

Ordering information





TT3000 zone sensing cable with factory-installed connector and end termination

Catalog number TT3000-Zone-MC

Description

5-ft (1.5 m) sensing cable with preinstalled heat-shrink end termination

TT3000 modular sensing cables with factory-installed connectors

Catalog number TT3000-0.3M/1FT-MC TT3000-1M/3FT-MC TT3000-1.5M/5FT-MC TT3000-3M/10FT-MC

TT3000-1.5M/5FT-MC TT3000-3M/10FT-MC TT3000-4.5M/15FT-MC TT3000-7.5M/25FT-MC TT3000-15M/50FT-MC TT3000-30M/100FT-MC

Description

1-ft (0.3 m) sensing cable
3-ft (1 m) sensing cable
5-ft (1.5 m) sensing cable
10-ft (3 m) sensing cable
15-ft (4.5 m) sensing cable
25-ft (7.5 m) sensing cable
50-ft (15 m) sensing cable
100-ft (30 m) sensing cable

TT3000 bulk sensing cable (connector kits required) for installation in double-containment piping

Catalog number TT3000-SC

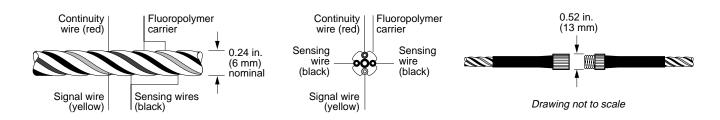
Connector kits (not shown) TT3000-CK-MC-M/F

TT3000-CK-MC-M TT3000-CK-MC-F

Description

Bulk sensing cable on reel, Minimum length: 250 ft (75 m) Maximum length: 1000 ft (300 m)

Components for five mated pairs of connectors (includes test tools) One pin-type connector One socket-type connector



Product characteristics

Cable diameter	0.24 in. (6.0 mm) nominal
Cable diameter with connecter	0.52 in. (13 mm) nominal
Continuity and signal wires	2 x 26 AWG with insulation of fluoropolymer
Sensing wires	2 x 30 AWG with jacket of conductive fluoropolymer
Carrier	Fluoropolymer
Cable weight (50-ft length)	2.3 lb

Technical Information

Breaking strength	160 lb
Cut-through force	>50 lb with 0.005 in. blade;
	crosshead speed 0.2 inch/minute
Abrasion resistance	>65 cycles per UL 719
Maximum continuous	
operating temperature	Sensing cable: 194°F (90°C)
	Cable connectors: 185°F (85°C)

Chemical resistance

Cable functions normally after exposure in accordance with ASTM D 543 at 77°F (25°C) for seven days:

Trichloroethylene (100%) Sulphuric acid (98%) Hydrochloric acid (37%) Hexane (100%) Methanol (100%) Sodium hydroxide (10%)

Xylene (100%) Aqua regia

Note: Prolonged exposure to concentrated ketones may cause temporary reduction of sensitivity; consult factory.

Radiation resistance

Cumulative radiation exposure of 10 megarad gamma radiation over design life of 30 years.

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, D Hazardous Locations (Zone 0 or Zone 1 in Europe).



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

Raychem Corporation
TraceTek Products Group
300 Constitution Drive
Menlo Park, CA 94025
Tel (800) 553-1737
(415) 361-4900
Fax (415) 361-3215

All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application. Raychem makes no warranties as to the accuracy or completeness of the information, and disclaims any liability regarding its use. Raychem's only obligations are those in the Raychem Standard Terms and Conditions of Sale for this product, and in no case will Raychem be liable for any incidental, indirect, or consequential damages arising from the sale, resale, use, or misuse of the product. Specifications are subject to change without notice. In addition, Raychem reserves the right to make changes—without notification to Buyer—to materials or processing that do not affect compliance with any applicable specification.