



Diamond Controls

Leak Detection & Trace Heating Systems

DATASHEET



Detects the presence of water at any point along its length



Small but rugged, TT1000 cable is extremely resistant to abrasion & corrosion



Smooth design that dries quickly



Can be monitored by both the TraceTek digital pinpoint location system & AquiTron zonal panels



WATER LEAK DETECTION

TT1000

Water Sensing Cable

nVent RAYCHEM TraceTek TT1000 sensing cables detect the presence of water at any point along their length. Installed with an nVent RAYCHEM TraceTek alarm and locating module, the cable senses water intrusion, triggers an alarm, and pinpoints the location.





DISTRIBUTED SENSING

TT1000 sensing cables provide 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.

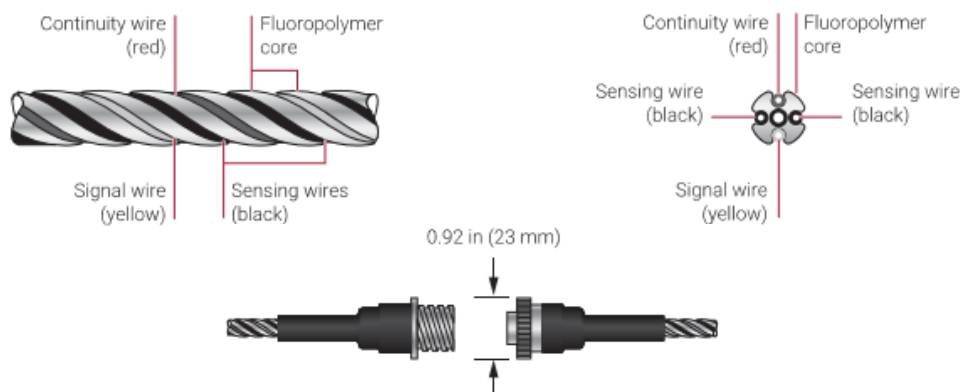
DESIGN FLEXIBILITY

TT1000 sensing cable is supplied with factory-installed plastic connectors that plug together. The cable is designed for a range of applications, including data center subfloors, telecommunication rooms, HVAC equipment locations, pipes, electrical vaults, storage areas, tanks, and roofs. The cable is small, lightweight, and flexible, allowing easy installation. The smooth design allows for quick drying.

ADVANCED TECHNOLOGY

The nVent RAYCHEM conductive-polymer technology and fluoropolymer construction make TT1000 sensing cable mechanically strong and resistant to corrosion and abrasion. The cable is constructed of two sensing wires, an alarm signal wire, and a continuity wire embedded in a fluoropolymer carrier rod. The alarm module constantly monitors the sensing cable for continuity. The rugged cable construction exposes no metal, and enables the cable to be reused even in corrosive environments.

CABLE CONSTRUCTION



Drawing not to scale

Diamond Controls Ltd.
Unit 5, Baines Way,
Norwich, Norfolk,
NR5 9JR

VAT number: 797 771 750
Registered company: 4113848

Contact
01603 745000
sales@diamondcontrols.co.uk
www.diamondcontrols.co.uk



Procedure:	OPS08	Document ref:	TT1000	Publish date:	01/05/24	Approved by:	Lee Blackett	Review date:	As Required
------------	-------	---------------	--------	---------------	----------	--------------	--------------	--------------	-------------



ORDERING INFORMATION

TT1000 modular sensing cable with factory-installed connectors

Catalogue No.	Part No.	Product Description
TT1000-1M/3FT-PC	409271-000	3 ft (1 m) sensing cable
TT1000-3M/10FT-PC	391887-000	10 ft (3 m) sensing cable
TT1000-5M/17FT-PC	072827-000	17 ft (5 m) sensing cable
TT1000-7M/25FT-PC	017859-000	25 ft (7 m) sensing cable
TT1000-15M/50FT-PC	805147-000	50 ft (15 m) sensing cable
TT1000-30M/100FT-PC	396807-000	100 ft (30 m) sensing cable
TT1000-50M/165FT-PC	P000000873	165 ft (50 m) sensing cable

TT1000 bulk sensing cable (connector kits required)

Catalogue No.	Part No.	Product Description
TT1000-SC	683901-000	Bulk sensing cable on reel Minimum length: 350 ft (75 m) Maximum length: 1000 ft (300 m)

Connector kits (not shown)

Catalogue No.	Part No.	Product Description
TT-1000 / JC-CK-PC-M/F	P000000080	Components for ten mated pairs of connectors

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



Diamond Controls Ltd.

Unit 5, Baines Way,
Norwich, Norfolk,
NR5 9JR

VAT number: 797 771 750
Registered company: 4113848

Contact

01603 745000
sales@diamondcontrols.co.uk
www.diamondcontrols.co.uk



Procedure:	OPS08	Document ref:	TT1000	Publish date:	01/05/24	Approved by:	Lee Blackett	Review date:	As Required
------------	-------	---------------	--------	---------------	----------	--------------	--------------	--------------	-------------



PRODUCT CHARACTERISTICS

Cable diameter	0.24 in (6.0 mm) nominal
Continuity and signal wires	2 x 26 AWG with fluoropolymer insulation
Sensing wires	2 x 30 AWG with conductive fluoropolymer jacket
Core	Fluoropolymer
Cable weight (50 ft/15 m length)	2.3 lb (1 kg)
Cable color	High-visibility yellow

TECHNICAL INFORMATION

Breaking strength	Cable only: 160 lb (72 kg)
Cut-through force	Including connectors: 70 lb (32 kg)
Abrasion resistance	>50 lb with 0.005 (>22 kg with 0.13 mm) in blade; crosshead speed 0.2 in/min >65 c ycles per UL 719
Maximum continuous operating temperature	167°F (75°C)
Fire resistance	Meets the requirements of NFPA 262 "Standard Method of Test for Flame Travel and Smoke of Wires and Cables for use in Air-Handling Spaces"

PERFORMANCE DATA

Leak size to alarm (tap water)	2 in (50 mm) maximum at any point along sensing cable; up to 5000 ft maximum system length
Drying time	Cable dries and resets within 15 seconds of removal from standing water
Standard cleaning method	Wipe with clean damp cloth

Diamond Controls Ltd.
Unit 5, Baines Way,
Norwich, Norfolk,
NR5 9JR

VAT number: 797 771 750
Registered company: 4113848

Contact
01603 745000
sales@diamondcontrols.co.uk
www.diamondcontrols.co.uk



Procedure:	OPS08	Document ref:	TT1000	Publish date:	01/05/24	Approved by:	Lee Blackett	Review date:	As Required
-------------------	-------	----------------------	--------	----------------------	----------	---------------------	--------------	---------------------	-------------

APPROVALS AND CERTIFICATIONS

TT1000 sensing cables are approved for installation in ordinary and hazardous areas when used in conjunction with approved nVent RAYCHEM TraceTek monitoring equipment and zener safety barriers when appropriate.

All nVent RAYCHEM TraceTek sensing cables are designated as “simple apparatus” and included in the approval certification for nVent RAYCHEM TraceTek monitoring instruments.

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



Important: All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application.

Diamond Controls Ltd.
Unit 5, Baines Way,
Norwich, Norfolk,
NR5 9JR

VAT number: 797 771 750
Registered company: 4113848

Contact
01603 745000
sales@diamondcontrols.co.uk
www.diamondcontrols.co.uk



Procedure:	OPS08	Document ref:	TT1000	Publish date:	01/05/24	Approved by:	Lee Blackett	Review date:	As Required
-------------------	-------	----------------------	--------	----------------------	----------	---------------------	--------------	---------------------	-------------