



# TT7000 / TT7000-HUV

## TraceTek Sensing Cable for Sulfuric Acid and Nitric Acid

### Description

TraceTek TT7000 sensing cable detects and locates concentrated sulfuric acid or nitric acid 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 acid, triggers an alarm, and pinpoints the location of the leak. TT7000 can be installed indoors or outdoors to monitor for acid leaks from tanks, pipes, valves, or pumps. The cable can also be pulled into double wall pipe to monitor interstitial containment space.

### Design Flexibility

TT7000 sensing cable is available in standard lengths with pre-installed connectors or on bulk reels with connector kits. The cable is designed for a variety of applications, including direct burial in the same trench with buried pipeline or in double containment tanks and piping. The cable may also be installed in pipe trenches or on above ground piping. The outdoor version, TT7000-HUV, is supplied with a UV resistant polyester woven fabric sun shield to provide extra UV protection.

### Advanced Technology

TT7000 sensing cable is mechanically strong and chemically resistant to all but a few strong mineral acids. The patented design uses two electrode wires coated with a unique polymer that provides insulation under normal circumstances but is quick to dissolve when strong acids contact the cable. TT7000 reacts to strong acids in less than 1 minute and when used with standard TraceTek can report the spill location accurately to +/- 1 meter.

### Ordering Information

#### TT7000 modular sensing cables with factory installed connectors

Catalog Number	Description
TT7000-1M/3FT-MC	3 ft (1 m) sensing cable
TT7000-3M/10FT-MC	10 FT (3M) sensing cable
TT7000-7.5M/25FT-MC	25 FT (7.5 M) sensing cable
TT7000-15M/50FT-MC	50 FT (15 M) sensing cable

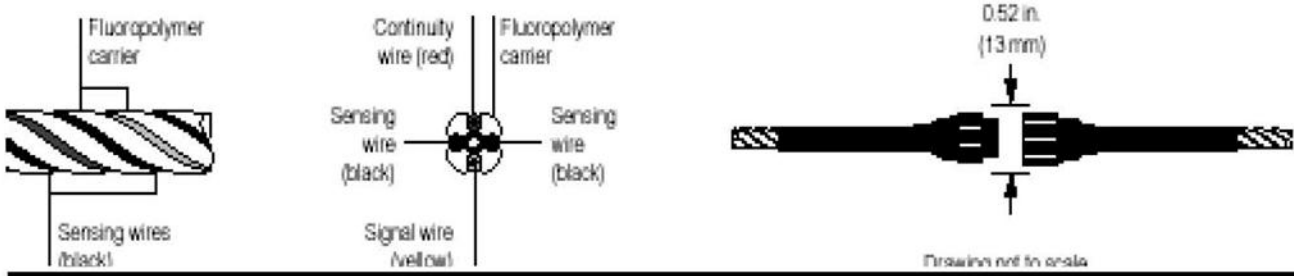


#### TT7000 bulk sensing cable (connector kits required)

Catalog Number	Description
TT7000-SC	Bulk sensing cable on reel, flame retarded core, indoor use Minimum length: 250 ft (75 m) Maximum length: 1000 ft (300 m)
TT7000-HUV	Bulk sensing cable with UV resistant polyester overbraid, outdoor use (not shown) Minimum length: 250 ft (75 m) Maximum length: 1000 ft (300 m)
<i>Connector kits (not shown)</i>	
TT7000-CK-MC-M/F	Components for five mated pairs of connectors (includes test tools)
TT7000-CK-MC-M	One pin type connector
TT7000-CK-MC-F	One socket type connector

Note: TT7000- HUV cable with factory installed connectors is also available by special order.

# TT7000 / TT7000-HUV Sensing Cable for Strong Acids and Bases



## Product Characteristics

Cable diameter	SC version: 0.20 in. (5.0 mm) nominal HUV version: 0.35 in. (9.0 mm) nominal
Cable diameter with connector	0.52 in. (13 mm) nominal
Continuity and signal wires	2 x 26 AWG with fluoropolymer insulation
Sensing wires	2 x 30 AWG with jacket of acid soluble dielectric coating
Carrier	Polyolefin
Cable weight (50 ft length)	SC version: 1.6 lb (.73 kg) HUV version: 1.9 lbs (.87 kg)

## Technical Information

Breaking strength	SC version: HUV version:
Cut-through force	>TBD with 0.005 in. (0.13 mm) blade; crosshead speed 0.2 inch/minute (5 mm/minute)
Abrasion resistance	> TBD
Maximum continuous operating temperature	Sensing cable: 175F (80C)

## Response Time

Representative materials detected:	Typical response time at room temperature:
Sulfuric Acid 98%	40 second
Sulfuric Acid 88%	1 minute
Sulfuric Acid 73%	6.5 hours
Sulfuric Acid 50%	No response
Nitric Acid 70%	25 seconds
Nitric Acid 63%	1.3 minutes
Nitric Acid 52%	1 hour
Nitric Acid 35%	No response

## Approvals

Class 1, Division 2, Groups A, B, C, D hazardous locations. If wiring from module meets requirements for intrinsic safety, sensing cables may be used in Class I, Division 1, Groups A, B, C, D hazardous locations (IEC Zone 0 or Zone 1)

**Resikom Limited**

**3 Kent Road, Dagenham, Essex, RM10 8HA,  
United Kingdom**

**Tel: +44 (0) 845 686 6066**

**Fax: +44 (0) 845 686 6067**

**Email: [info@resikom.com](mailto:info@resikom.com)**

**Web: [www.resikom.com](http://www.resikom.com)**