



instrumentation cable series

TraceTek TT5000

Hydrocarbon Fuel and Solvent Leak Detection

Water-immune swelling-polymer hydrocarbon fuel, diesel & jet-fuel leak sensing cable



Detects Fuel · Ignores Water

Gasoline, Jet A-1 & Diesel

4-Wire ± 1 m Pinpoint

Application

TraceTek TT5000 Hydrocarbon Fuel and Solvent Leak Detection Sensing Cable engineered with a hydrocarbon-absorbent swelling silicone-elastomer actuator layer that physically presses two internal conductive-polymer sensing wires (~20.

Typical uses: Data-Centre Standby Diesel Generator Rooms, Airport Jet A-1 Hydrant Pipelines & Valve Pits, Underground Storage Tank (UST) Double-Containment, Refinery, Tank Farm & Pipeline Trench Monitoring, Marine Bunker & Turbine Lube-Oil Skids

Construction



Cross-section, not to scale

- 1 2 × insulated copper reference & continuity wires
- 2 Inner conductive-polymer sensing electrode + spacer
- 3 Hydrocarbon-absorbent swelling elastomer actuator
- 4 Protective high-tenacity polymer outer braid

Technical data

Typical values

Sensing wire linear R	≈ 20.0 Ω/m (±2 % linearity — uses standard TTDm/TTSIM modules)	Dry / water-immersed IR	≥ 100 MΩ in dry air or clean tap/rainwater
Location accuracy	± 0.5 % of total sensing circuit length	Intrinsic safety rating	Ex ia IIC T4 Ga (Simple Apparatus per IEC 60079-11 Cl. 5.7)
Continuous operating temp.	-20 °C to +60 °C	Storage temperature	-30 °C to +70 °C
Response time @ 20 °C	≈ 3–8 min (Gasoline / Jet A-1) · ≈ 15–45 min (#2 Diesel)	Nominal outer diameter	9.5 mm (cable body) · 14–19 mm (at modular connector)
Min. bend radius	50 mm (5 × OD)	Max. pulling tension	220 N (50 lbf)
Detected hydrocarbons	Gasoline, Jet A / JP-8, #1/#2 Diesel, Kerosene, Toluene, Xylene	Water & methane immunity	Does not alarm in liquid water or gaseous methane/natural gas
Volatile fuel recovery	Can reset after light gasoline/solvent evaporation (replace after heavy diesel saturation)	Standards	US EPA 40 CFR Part 280 & NWGLDE Third-Party Listed

Sizes

3 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Supply format & duty	Body Ø mm	Weight ≈ kg/km	Jet/Petrol min	#2 Diesel min
4-Wire Swelling-Polymer Hydrocarbon Fuel Sensing Cables 3 sizes					
☐ TraceTek TT5000 (Bulk)	Bulk Reel for Slotted Conduit & Pipe Pull-In	9.5	88	5	30
☐ TraceTek TT5000-PC	Modular Plastic Connectors (1.5 m to 15 m) · Wet Sumps	9.5	88	5	30
☐ TraceTek TT5000-MC	Modular Metal Connectors · Indoor Generator Rooms	9.5	88	5	30

– For ultra-fast response (< 1–3 min) to light organic solvents (MEK, acetone, benzene, toluene), see TraceTek TT5001 / TT5001-HUV.

Standards and approvals

- ✓ EPA 40 CFR 280 / NWGLDE
- ✓ Ex ia IIC Simple Apparatus
- ✓ CE, RoHS 2 & REACH

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/tracetek-tt5000-hydrocarbon-fuel-and-solvent-leak-detection-sensing-cable



Typical values for this cable type, based on UL 913 / IEC 60079-11 / EPA 40 CFR 280. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.