



instrumentation cable series

TraceTek TT3000

Acid, Base and Corrosive Chemical Leak Detection

4-wire conductive-fluoropolymer acid, base & corrosive chemical leak sensing cable



Acids, Bases & Etchants

All-Fluoropolymer Wetted

SEMI S2 Sub-Fab Standard

Application

TraceTek TT3000 Acid, Base and Corrosive Chemical Leak Detection Sensing Cable engineered with an all-fluoropolymer core, two chemical-resistant conductive-fluoropolymer sensing electrodes (~20 Ω /m), two fluoropolymer reference wires.

Typical uses: Semiconductor Wafer Fab Sub-Fabs & Wet Benches, Lithium-Ion Gigafactory Electrolyte & Acid Piping, Double-Containment Chemical Transfer Lines, Water Treatment Dosing Skids (NaOCl, H₂SO₄, NaOH), Pharmaceutical & Specialty Chemical Laboratories

Construction



Cross-section, not to scale

- 1 2 × fluoropolymer-insulated copper reference wires
- 2 Fluted green fluoropolymer central support core
- 3 2 × carbon-fluoropolymer chemical sensing electrodes
- 4 Capillary-wicking fluoropolymer outer overbraid

Technical data

Typical values

Sensing wire linear R	≈ 20.0 Ω/m (±2 % linearity for ±0.5 % distance accuracy)	Dry insulation resistance	≥ 100 MΩ per 30 m sensing loop
Alarm response time	< 5 s (10 % HCl / NaOH) · < 15 s (98 % concentrated H ₂ SO ₄)	Controller compatibility	All 4-wire 20 Ω/m locating modules (TTSIM, TTDM-128, PLC)
Continuous operating temp.	-20 °C to +85 °C	Short-term washdown peak	+100 °C
Plenum fire rating	NFPA 262 / UL 910 low-smoke plenum qualified	Nominal outer diameter	7.0 mm (0.28 in)
Min. bend radius	30 mm (4.5 × OD)	Pulling tension (pipe)	Up to 130 N (30 lbf) for pulling through interstitial containment pipes
Acid resistance	98 % H ₂ SO ₄ , 37 % HCl, 49 % HF, 70 % HNO ₃ , 85 % H ₃ PO ₄ , Aqua Regia	Alkali & oxidizer resist.	50 % NaOH, 45 % KOH, 29 % NH ₄ OH, 30 % H ₂ O ₂ , 15 % NaOCl bleach
Reusability after spill	Flush with DI water and dry to restore full baseline IR	Standards	SEMI S2 & SEMI S6 liquid chemical leak containment

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 & connectors	Outer Ø mm	Weight ≈ kg/km	Sense R Ω/m	H ₂ SO ₄ Resp. sec
4-Wire All-Fluoropolymer Acid & Chemical Leak Sensing Cables 3 sizes					
☐ TraceTek TT3000 (Bulk)	Bulk Reel (50 m / 100 m / 250 m) for Pipe Pull-In	7.0	44.0	20.0	12
☐ TraceTek TT3000-PC	Modular Plastic-Connector Lengths (1.5 m to 30 m)	7.0	44.0	20.0	12
☐ TraceTek TT3000-MC	Modular Metal-Collar Lengths for Mild Indoor Zones	7.0	44.0	20.0	12

– For outdoor sunlit pipe racks carrying 98 % H₂SO₄ or fuming HNO₃/HF, see UV-stabilized TraceTek TT7000-HUV.

Standards and approvals

- ✓ SEMI S2 Sub-Fab Compliant
- ✓ NFPA 262 / UL 910 Plenum
- ✓ Ex ia Intrinsically Safe Simple Apparatus

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-tt3000-acid-base-and-corrosive-chemical-leak-detection-sensing-cable



Typical values for this cable type, based on SEMI S2 / NFPA 262 / UL 910. Values for your order are confirmed in the quotation, Subject to change without notice.
Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.