instrumentation cable series

TT7000-HUV

UV-Stabilized Outdoor Aggressive Acid Leak Sensing Cable



UV-stabilized porous-fluoropolymer outdoor aggressive & fuming acid leak sensing cable

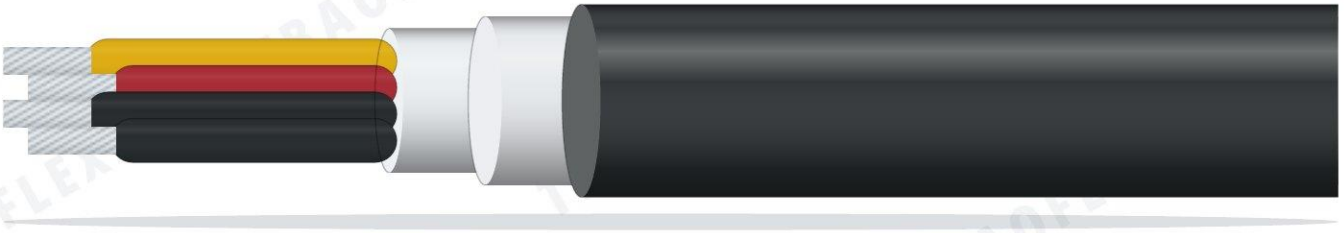
98 % H_2SO_4 · Fuming HNO_3 · HF | **UV-Stabilized Outdoor Braid** | **+120 °C Perfluorinated Core**

Application

TT7000-HUV UV-Stabilized Outdoor Aggressive Acid Leak Detection Sensing Cable engineered with a perfluorinated core, two carbon-perfluoroalkoxy sensing electrodes (~20 Ω/m), two fluoropolymer reference wires and a.

Typical uses: Refinery HF & H_2SO_4 Alkylation Units, Copper / Uranium SX-EW Sulfuric Acid Leach Piping, Outdoor Bulk Semiconductor Chemical Tank Farms, Fuming Nitric, Hydrofluoric & Chlor-Alkali Plants, High-Temperature (+120 °C) Acid Transfer Trenches

Construction





Cross-section, not to scale

1	2 × PFA-insulated nickel/tinned copper reference wires	Prevents acid vapor permeation up to +120 °C
2	Perfluorinated high-temperature fluted central spline	
3	Outer sheath	Prevents acid vapor permeation up to +120 °C

Technical data

Typical values

Sensing wire linear R	≈ 20.0 Ω/m (±2 % linearity — works with all modules)	**Dry insulation resistance**	≥ 100 MΩ per 30 m sensing loop
Response time (98 % H_2SO_4)	< 10 seconds upon contact with microporous braid	**Hazardous area rating**	Ex ia IIC T4 Ga Simple Apparatus (with zener barrier)
Continuous operating temp.	-40 °C to +120 °C (+248 °F)	**Short-term steam/acid peak**	+140 °C
Cold impact temperature	-40 °C outdoor arctic tank-farm service	**Nominal outer diameter**	7.5 mm (0.30 in)
Min. bend radius	35 mm (4.5 × OD)	**Max. pulling tension**	180 N (40 lbf)
Extreme acid resistance	98 % H_2SO_4, Oleum, 70–90 % Fuming HNO_3, 49 % HF, Aqua Regia	**Solar UV weathering**	Carbon-black UV fluoropolymer braid per ISO 4892 / ASTM G154
Decontamination & reuse	Neutralize, flush with clean water and dry to reset	**Standards**	IEC 60079-11 / UL 913 Intrinsically Safe Simple Apparatus

Sizes

2 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	Max. temp. °C	98% H_2SO_4 sec
UV-Stabilized Perfluorinated Aggressive Acid Leak Sensing Cables 2 sizes					
☐ **TT7000-HUV (Bulk)**	**Bulk Reel (50 m / 100 m / 250 m) · Outdoor Acid Racks**	**7.5**	**56**	**120**	**10**
☐ **TT7000-HUV-PC**	**Modular UV-Black Acid-Proof Connector Lengths**	**7.5**	**56**	**120**	**10**

– Uses the same 20.0 Ω/m 4-wire resistance gradient as TT1000 and TT3000 for seamless integration with TTSIM and TTDM-128 panels.

Standards and approvals

- ✓ Ex ia IIC Simple Apparatus
- ✓ ISO 4892 Outdoor UV
- ✓ SEMI S2 & RoHS 2

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-tt7000-huv-uv-stabilized-outdoor-aggressive-acid-leak-sensing-cable

Typical values for this cable type, based on SEMI S2 / IEC 60079-11 / ISO 4892. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.