



instrumentation cable series

Vented Level-Sensor Cable

Submersible PUR hydrostatic level sensor cable with atmospheric reference vent tube



Central Barometric Vent Tube

Para-Aramid Suspension

300 m Submersible PUR

Application

Vented Level-Sensor Cable engineered with a central crush-resistant PA12/PE atmospheric pressure reference capillary tube, 2 to 6 tinned copper power/4–20 mA/RS-485 conductors, para-aramid tensile strength yarns (≥ 500 –1,000 N),.

Typical uses: Deep Borehole & Groundwater Aquifer Monitoring, Municipal Wastewater Lift Stations & Digesters, Potable Water Reservoirs & Dam Piezometers, Marine Ballast, Draft & Bilge Tank Gauging, Leachate Wells, Tailings Dams & Chemical Tanks

Construction



Cross-section, not to scale

- 1 Tinned copper conductors + central PA12/PE vent tube
- 2 Hydrolysis-proof TPE-E / FEP primary core insulation
- 3 Para-aramid tensile yarns & non-hygroscopic bedding
- 4 Tinned copper EMC braid screen + drain wire
- 5 Submersible Polyether-PUR (or FEP /potable-water PE) jacket

Technical data

Typical values

Rated voltage	300 V rms (4–20 mA / HART / RS-485 / SDI-12)	Max. DC resistance @ 20 °C	79.0 Ω/km (0.25) · 57.0 Ω/km (0.34) · 39.0 Ω/km (0.50 mm ²)
Insulation resistance	≥ 1,000 MΩ·km @ 500 V DC	Test voltage	1,500 V AC rms (core-to-core & core-to-screen)
Operating temp. (PUR / PE)	-30 °C to +85 °C (fixed submerged)	Operating temp. (FEP chemical)	-40 °C to +105 °C
Ice-formation resistance	Thick-wall PA12 tube resists surface frost pinch	Vent capillary dimensions	1.2 mm ID × 2.4 mm OD (or 1.5 × 2.6 mm) PA12/PE tube
Max. tensile suspension load	500 N working / 1,200 N breaking (para-aramid core)	Min. bend radius	10 × OD without restricting airflow through vent tube
Hydrostatic water depth	Up to 300 m water column (3.0 MPa / 30 bar) without tube collapse	Microbial & sewage resist.	Polyether-PUR immune to bacterial hydrolysis, H ₂ S & grease
Drinking water option	Available with KTW-BWGL / WRAS / ACS / NSF-61 PE jacket	Standards	EN 50288-7 & IEC 60228 Class 5 tinned copper

Sizes

4 standard constructions

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

Order designation	Cores, vent tube & jacket	Outer Ø mm	Vent ID mm	Weight ≈ kg/km	Tensile max N
Submersible Vented Capillary Hydrostatic Level Transmitter Cables 4 sizes					
☐ VLC-PUR 2×0.50 + Vent	2×0.50 mm ² + 1.2 mm PA12 Vent · PUR	7.2	1.2	64	1,000
☐ VLC-PUR 4×0.34 + Vent	4×0.34 mm ² + 1.2 mm PA12 Vent · PUR	7.5	1.2	72	1,000
☐ VLC-PUR 6×0.25 + Vent	6×0.25 mm ² + 1.2 mm PA12 Vent · PUR	7.8	1.2	78	1,200
☐ VLC-FEP 4×0.34 + Vent	4×0.34 mm ² + 1.2 mm PTFE Vent · FEP	7.4	1.2	92	1,000

– Outer diameter tolerance is held to ±0.15 mm for leak-tight compression in submersible transmitter Viton/EPDM seals.

Standards and approvals

- ✓ EN 50288-7 Compliant
- ✓ KTW / WRAS / NSF-61 Option
- ✓ 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/pur-sheathed-vented-capillary-tube-submersible-hydrostatic-level-transmitter-cable



Typical values for this cable type, based on EN 50288-7 / IEC 60794 / KTW-BWGL / ACS. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.