submersible water-quality, CTD & ocean sensor cable

Vented TPU Water Quality Cable

ISO 15839 / IEC 60770 · 300 V · Submersible water-quality, ctd & ocean sensor cable



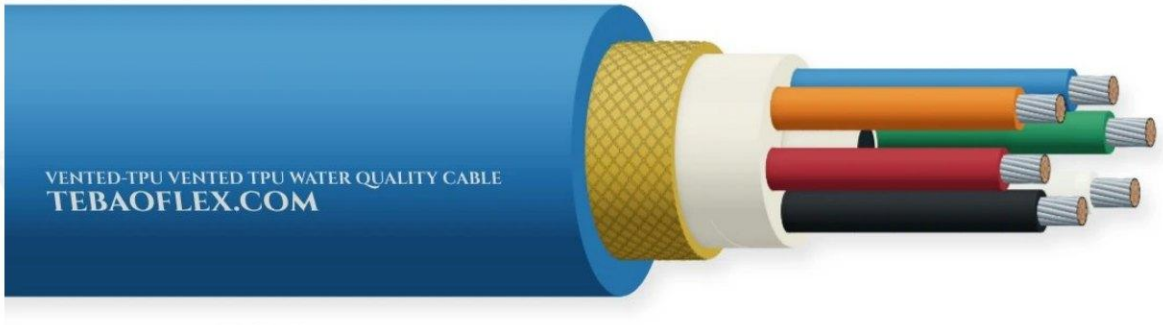
ISO 15839 / IEC 60770 | 300 V (-30 to +80 °C) | Subsea / Marine Outer Protective She

Application

Vented TPU Water Quality Cable featuring central atmospheric vent tube and subsea / marine outer protective sheath (ISO 15839 / IEC 60770, 300 V, -30 to +80 °C, min. bend radius 6 × OD).

Typical uses: Aquaculture Dissolved Oxygen (DO), pH & Salinity Monitoring, Vented Hydrostatic Water-Level & Borehole Pressure Probes, Oceanographic CTD Rosettes, Current Meters & Mooring Buoys, Recirculating Aquaculture (RAS) & Wastewater Sensor Networks

Construction





Cross-section, not to scale

1. Central Atmospheric Vent Tube
2. 22/24 AWG Tinned Copper Sensor Cores
3. Subsea / Marine Outer Protective Sheath

Technical data

Typical values

Rated voltage / operating system	300 V (ISO 15839 Vented TPU Submersible Water Quality & Level Sensor Specification)
Primary dielectric / optical buffer	22/24 AWG Tinned Copper Sensor Cores — Six color-coded conductors with Fluoropolymer (FEP/ETFE) high-dielectric insulation
Hydrostatic & thermal cycling endurance	Verified cold-bend and wet dielectric stability across −30…+80 °C per ISO 15839 Vented TPU Submersible Water Quality & Level Sensor Specification
Outer jacket / sheath protection	Subsea / Marine Outer Protective Sheath — Black hydrolysis- & abrasion-resistant marine Polyurethane (PUR) outer sheath
Reinforcement / screen / bedding layer	22/24 AWG Tinned Copper Sensor Cores — Six color-coded conductors with Fluoropolymer (FEP/ETFE) high-dielectric insulation
Hydrostatic pressure & water blocking	Radial and longitudinal water-blocking integrity verified per ISO 15839 Vented TPU Submersible Water Quality & Level Sensor Specification
Standards	ISO 15839 Vented TPU Submersible Water Quality & Level Sensor Specification
Core / conductor construction	Central Atmospheric Vent Tube — Breather capillary tube for hydrostatic depth/level compensation
Continuous operating temperature	−30…+80 °C (submerged seawater & topside deck service)
Storage & transport temperature	−40…+80 °C on export wooden/steel cable drum
Minimum bending radius	6 × OD
Seawater, hydrolysis & oil resistance	Resistant to permanent seawater immersion, hydrolysis, hydraulic oil and bio-fouling per ISO 15839 Vented TPU Submersible Water Quality & Level Sensor Specification
RoHS & REACH compliance	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant

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	Configuration	Core / stranding	Outer Ø ≈ mm	Net weight ≈ kg/km	Max. pulling kN ≈	Min. bend R mm
Vented TPU Water Quality Construction Schedule (−30…+80 °C) 3 sizes						
☐ **Vented TPU Water Quality 2×2×0.50 mm²**	**2 × 2 × 0.50 mm² (20 AWG) + Vent/Drain**	**Stranded SnCu + Foil/TCWB + Subsea PUR**	**8.4**	**98**	**2.5**	**50**
☐ **Vented TPU Water Quality 4×2×0.50 + 2×1.5**	**4 × 2 × 0.50 + 2 × 1.5 mm² Hybrid**	**Stranded SnCu + Individual/Overall Shield**	**11.8**	**195**	**5.2**	**70**
☐ **Vented TPU Water Quality 4×2×0.75 + 4×2.5**	**4 × 2 × 0.75 + 4 × 2.5 mm² Subsea**	**Stranded SnCu + Aramid/Armour + PUR**	**15.2**	**360**	**12.0**	**95**

– Custom core counts, optical fiber channels, wet-mate terminations and continuous winch lengths available per ISO 15839 Vented TPU Submersible Water Quality & Level Sensor Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} Ω/km	Rating / Impedance / Load	Operating temp.
2 × 2 × 0.50 mm² (20 AWG) + Vent/Drain	**39.00**	**300 V (4–20 mA / DO)**	**−30…+80 °C**
4 × 2 × 0.50 + 2 × 1.5 mm² Hybrid	**39.00**	**300 V (CTD / Multi-Sensor)**	**−30…+80 °C**
4 × 2 × 0.75 + 4 × 2.5 mm² Subsea	**26.00**	**300 V (ROV / Camera / LED)**	**−30…+80 °C**

– Every production length undergoes routine conductor DC resistance / OTDR optical attenuation, AC dielectric and dimensional verification.

Standards and approvals

- ISO 15839 / IEC 60770 Compliant
- EN 10204 3.1 Factory Test Certificate
- CE, RoHS 2 (2011/65/EU) & 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/vented-tpu-vented-tpu-water-quality-cable

Typical values for this cable type, based on ISO 15839 Vented TPU Submersible Water Quality & Level Sensor Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.