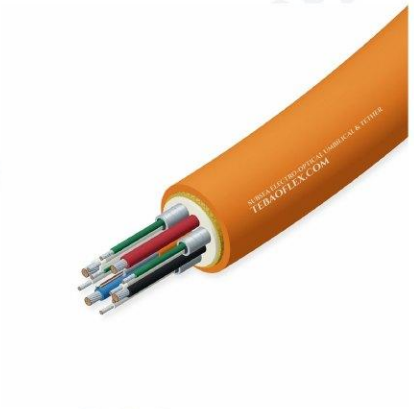
subsea umbilical, ROV tether & oceanographic tow cable

Subsea EO Umbilical

600–3,300 V Subsea Electro-Optical ROV, Diving Bell & Seabed Node Umbi

ISO 13628-5 / Subsea EO Umbilical · 600 V – 3,300 V · Subsea umbilical, rov tether &



ISO 13628-5 / Subsea EO Umbilical | **600 V – 3,300 V (-30 to +80 °C)** | **Polyurethane (PUR / TPE-E) Outer Jac**

Application

600–3,300 V Subsea Electro-Optical ROV, Diving Bell & Seabed Node Umbilical Tether featuring sm/mm optical fiber unit and polyurethane (pur / tpe-e) outer jacket (ISO 13628-5 / Subsea EO Umbilical, 600 V – 3,300 V, -30 to +80 °C).

Typical uses: Oceanographic CTD, ADCP & Deep-Tow Surveys, Work-Class & Observation ROV / AUV Systems, Side-Scan Sonar, SAS & Towed Hydrophone Arrays, Marine 2D/3D/UHR Seismic Streamers & OBC

Construction





Cross-section, not to scale

1. SM/MM Optical Fiber Unit
2. Power Cores & Shielded Signal Pairs
3. Aramid / Steel Braid Reinforcement
4. Polyurethane (PUR / TPE-E) Outer Jacket

Technical data

Typical values

Rated voltage / transmission duty	600 V – 3,300 V (Subsea Electro-Optical ROV, Diving Bell & Node Interconnect Umbilical Specification)	**Core / conductor construction**	SM/MM Optical Fiber Unit — Central pressure-resistant tube with single-mode and multi-mode fibers
Primary dielectric / buffering	Power Cores & Shielded Signal Pairs — Tinned/silver-plated copper cores with XLPE/PE/FEP insulation	**Continuous operating temperature**	−30...+80 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per Subsea Electro-Optical ROV, Diving Bell & Node Interconnect Umbilical Specification	**Storage & transport temperature**	−40...+80 °C on export wooden/steel winch reel
Outer protection / armouring	Polyurethane (PUR / TPE-E) Outer Jacket — High-visibility orange hydrolysis- and abrasion-resistant sheath	**Minimum bending radius**	10 × OD
Armour, strength member & mechanical duty	Aramid / Steel Braid Reinforcement — High-tensile braided strength member over TPE inner sheath	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per Subsea Electro-Optical ROV, Diving Bell & Node Interconnect Umbilical Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per Subsea Electro-Optical ROV, Diving Bell & Node Interconnect Umbilical Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	Subsea Electro-Optical ROV, Diving Bell & Node Interconnect Umbilical Specification		

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	Breaking / tensile kN ≈	Min. bend R mm
Subsea EO Umbilical Construction Schedule (−30...+80 °C) 3 sizes						
☐ **Subsea EO Umbilical Config A**	**3×25–50 mm² (or 3P+FO Composite)**	**Compacted / Class 5 Cu/SnCu + FO**	**32.0**	**1,850**	**85.0**	**380**
☐ **Subsea EO Umbilical Config B**	**3×95–150 mm² (or Heavy EOM)**	**Compacted / Class 5 Cu/SnCu + FO**	**48.5**	**4,280**	**130.0**	**580**
☐ **Subsea EO Umbilical Config C**	**3×240–400 mm² (or Trunk HV/MV)**	**Compacted Cu + Lead/Armour + FO**	**78.0**	**9,650**	**210.0**	**950**

– Custom core cross-sections, pair/fibre counts, armour breaking loads and continuous winch/seabed lengths available per Subsea Electro-Optical ROV, Diving Bell & Node Interconnect Umbilical Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
3×25–50 mm² (or 3P+FO Composite)	**0.49**	**600 V – 3,300 V (Subsea/MV)**	**−30...+80 °C**
3×95–150 mm² (or Heavy EOM)	**0.19**	**600 V – 3,300 V (Subsea/MV)**	**−30...+80 °C**
3×240–400 mm² (or Trunk HV/MV)	**0.07**	**600 V – 3,300 V (Trunk/HV)**	**−30...+80 °C**

– Every production length undergoes routine conductor DC resistance, high-voltage dielectric or OTDR continuity and dimensional verification.

Standards and approvals

- ISO 13628-5 / Subsea EO Umbilical 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/subsea-electro-optical-umbilical-tether

Typical values for this cable type, based on Subsea Electro-Optical ROV, Diving Bell & Node Interconnect Umbilical Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.