subsea umbilical, ROV tether & oceanographic tow cable

Deep-Tow Coax EO

Oceanographic Deep-Tow Low-Loss Coaxial & Electro-Optical Double-Armou

UNOLS Deep-Tow Coax/EO · 600 V – 2,000 V · Subsea umbilical, rov tether &

UNOLS Deep-Tow Coax/EO | **600 V – 2,000 V (-40 to +80 °C)** | **Torque-Balanced Double Steel Armour**



Application

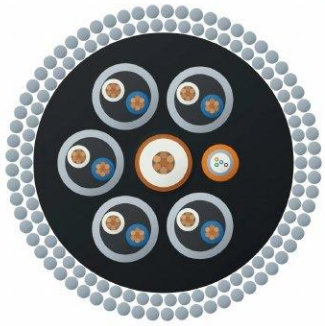
Oceanographic Deep-Tow Low-Loss Coaxial & Electro-Optical Double-Armoured Winch Cable featuring central coaxial telemetry core and torque-balanced double steel armour (UNOLS Deep-Tow Coax/EO, 600 V – 2,000 V, -40 to +80 °C).

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



TEBAOFLEX OCEANOGRAPHIC DEEP-TOW COAX & EO CABLE



Cross-section, not to scale

1. Central Coaxial Telemetry Core
2. Symmetrical Pairs & Optical Unit
3. PE Inner Bedding Jacket
4. Torque-Balanced Double Steel Armour

Technical data

Typical values

Rated voltage / transmission duty	600 V – 2,000 V (Oceanographic 6,000 m Torque-Balanced Double-Armoured Coaxial & EO Tow Specification)	**Core / conductor construction**	Central Coaxial Telemetry Core — Electrolytic copper center conductor + low-loss PE dielectric + copper shield
Primary dielectric / buffering	Symmetrical Pairs & Optical Unit — Five balanced PE/PP twisted pairs plus 1 stainless-steel optical tube	**Continuous operating temperature**	−40…+80 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per Oceanographic 6,000 m Torque-Balanced Double-Armoured Coaxial & EO Tow Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	Torque-Balanced Double Steel Armour — Contra-helical high-tensile galvanized steel wire armour	**Minimum bending radius**	15 × OD
Armour, strength member & mechanical duty	PE Inner Bedding Jacket — Void-free extruded polyethylene inner bedding	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per Oceanographic 6,000 m Torque-Balanced Double-Armoured Coaxial & EO Tow Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per Oceanographic 6,000 m Torque-Balanced Double-Armoured Coaxial & EO Tow Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	Oceanographic 6,000 m Torque-Balanced Double-Armoured Coaxial & EO Tow 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
Deep-Tow Coax EO Construction Schedule (−40…+80 °C) 3 sizes						
☐ Deep-Tow Coax EO Coax / Cat5e	Coax (39/40/50/75 Ω) or 4Pr Cat5e + Power	Stranded SnCu + Foam PE/FEP + Armour/Aramid	8.2	245	42.7	120
☐ Deep-Tow Coax EO Composite B	Heavy Coax / 64-Ch Digital Bus + Power	Stranded SnCu + Low-Loss Dielectric + Strength	11.5	485	71.2	170
☐ Deep-Tow Coax EO Array / Trunk C	Multi-Ch Digital Streamer / 255-Ch Bus	Redundant Telemetry + Aramid + PUR Jacket	44.5	1,620	95.0	445

– Custom core cross-sections, pair/fibre counts, armour breaking loads and continuous winch/seabed lengths available per Oceanographic 6,000 m Torque-Balanced Double-Armoured Coaxial & EO Tow Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
Coax (39/40/50/75 Ω) or 4Pr Cat5e + Power	18.50	600 V – 2,000 V (High-Speed)	−40…+80 °C
Heavy Coax / 64-Ch Digital Bus + Power	11.20	600 V – 2,000 V (Deep-Tow/Array)	−40…+80 °C
Multi-Ch Digital Streamer / 255-Ch Bus	6.80	600 V – 2,000 V (Full Array)	−40…+80 °C

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

Standards and approvals

- UNOLS Deep-Tow Coax/EO 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/oceanographic-deep-tow-coax-eo-cable

Typical values for this cable type, based on Oceanographic 6,000 m Torque-Balanced Double-Armoured Coaxial & EO Tow Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.