subsea umbilical, ROV tether & oceanographic tow cable

OBC Armoured Seismic

300–600 V Ocean Bottom Seismic (OBC) Hermetic SS Optical Tube & Double



Armoured OBC Seabed Array · 300 V – 600 V · Subsea umbilical, rov tether &

Armoured OBC Seabed Array | **300 V – 600 V (-30 to +80 °C)** | **Heavy-Duty Polyurethane (PUR) Outer**

Application

300–600 V Ocean Bottom Seismic (OBC) Hermetic SS Optical Tube & Double-Armoured Seabed Array Cable (Armoured OBC Seabed Array) engineered for 300 V – 600 V service across -30 to +80 °C (min. bend radius 12 × OD).

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. Hermetic Stainless-Steel Optical Unit
2. Tinned Copper Power & Signal Pairs
3. Contra-Helical Galvanized Steel Armour
4. Heavy-Duty Polyurethane (PUR) Outer Shea

Technical data

Typical values

Rated voltage / transmission duty	300 V – 600 V (300–600 V Ocean Bottom Seismic (OBC) SS Optical + Power + Double Steel Armour PUR Specification)	**Core / conductor construction**	Hermetic Stainless-Steel Optical Unit — Laser-welded stainless-steel tube housing single-mode optical fibers
Primary dielectric / buffering	Tinned Copper Power & Signal Pairs — HDPE/PP insulated power cores and foil-screened twisted pairs	**Continuous operating temperature**	−30…+80 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per 300–600 V Ocean Bottom Seismic (OBC) SS Optical + Power + Double Steel Armour PUR Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	Heavy-Duty Polyurethane (PUR) Outer Sheath — Black abrasion- and cut-resistant polyurethane seabed jacket	**Minimum bending radius**	12 × OD
Armour, strength member & mechanical duty	Contra-Helical Galvanized Steel Armour — High-tensile steel wire armour for repeated seabed deployment	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per 300–600 V Ocean Bottom Seismic (OBC) SS Optical + Power + Double Steel Armour PUR Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per 300–600 V Ocean Bottom Seismic (OBC) SS Optical + Power + Double Steel Armour PUR Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	300–600 V Ocean Bottom Seismic (OBC) SS Optical + Power + Double Steel Armour PUR 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
OBC Armoured Seismic Construction Schedule (−30…+80 °C) 3 sizes						
☐ **OBC Armoured Seismic 4–12F EOM/Sub**	**4–12 × ITU-T G.652D / G.654E SM (+ Power)**	**Laser-welded SS FIMT + Steel/Aramid Armour**	**8.2**	**260**	**48.0**	**125**
☐ **OBC Armoured Seismic 24–48F EOM/Sub**	**24–48 × ITU-T G.652D / G.654E SM (+ Power)**	**Laser-welded SS FIMT + Contra-Helical Steel**	**17.5**	**680**	**120.0**	**260**
☐ **OBC Armoured Seismic 96–192F Trunk**	**96–192 × ITU-T G.654E / G.652D Submarine**	**SS Tube + Steel Vault + Cu Tube + DA Armour**	**28.0**	**1,650**	**300.0**	**420**

– Custom core cross-sections, pair/fibre counts, armour breaking loads and continuous winch/seabed lengths available per 300–600 V Ocean Bottom Seismic (OBC) SS Optical + Power + Double Steel Armour PUR Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
4–12 × ITU-T G.652D / G.654E SM (+ Power)	**0.35**	**≤0.35 dB/km @ 1310 nm**	**−30…+80 °C**
24–48 × ITU-T G.652D / G.654E SM (+ Power)	**0.21**	**≤0.21 dB/km @ 1550 nm**	**−30…+80 °C**
96–192 × ITU-T G.654E / G.652D Submarine	**0.18**	**≤0.18 dB/km @ 1550 nm**	**−30…+80 °C**

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

Standards and approvals

- ✓ Armoured OBC Seabed Array 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/ocean-bottom-seismic-obc-armoured-cable

Typical values for this cable type, based on 300–600 V Ocean Bottom Seismic (OBC) SS Optical + Power + Double Steel Armour PUR Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.