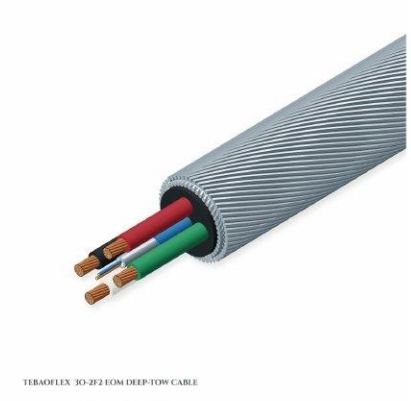
subsea umbilical, ROV tether & oceanographic tow cable

3O-2F2 EOM

3O-2F2 6,000 m Double-Armoured Electro-Optical-Mechanical (EOM) Deep-T

IEEE 1138 / Deep-Tow EOM · 600 V – 1,500 V · Subsea umbilical, rov tether &

IEEE 1138 / Deep-Tow EOM | **600 V – 1,500 V (-40 to +80 °C)** | **Contra-Helical Steel Wire Armour**

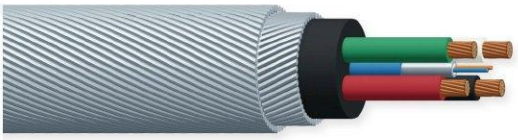


Application

3O-2F2 6,000 m Double-Armoured Electro-Optical-Mechanical (EOM) Deep-Tow Cable featuring single-mode optical unit (2×smf) and contra-helical steel wire armour (IEEE 1138 / Deep-Tow EOM, 600 V – 1,500 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 3O-2F2 EOM DEEP-TOW CABLE



Cross-section, not to scale

1. Single-Mode Optical Unit (2×SMF)
2. Copper Power Conductors (4×16 AWG)
3. Polymeric Inner Bedding Sheath
4. Contra-Helical Steel Wire Armour

Technical data

Typical values

Rated voltage / transmission duty	600 V – 1,500 V (Deep-Ocean 6,000 m Electro-Optical-Mechanical Towed Winch Specification)	**Core / conductor construction**	Single-Mode Optical Unit (2×SMF) — Central pressure-resistant tube housing 2 single-mode optical fibers
Primary dielectric / buffering	Copper Power Conductors (4×16 AWG) — Four stranded copper power conductors with high-voltage polymer insulation	**Continuous operating temperature**	−40…+80 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per Deep-Ocean 6,000 m Electro-Optical-Mechanical Towed Winch Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	Contra-Helical Steel Wire Armour — Torque-balanced double galvanized steel wire armour for 6,000 m deep tow	**Minimum bending radius**	12 × OD
Armour, strength member & mechanical duty	Polymeric Inner Bedding Sheath — Extruded void-filling polymeric bedding layer	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per Deep-Ocean 6,000 m Electro-Optical-Mechanical Towed Winch Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per Deep-Ocean 6,000 m Electro-Optical-Mechanical Towed Winch Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	Deep-Ocean 6,000 m Electro-Optical-Mechanical Towed Winch 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
3O-2F2 EOM Construction Schedule (−40…+80 °C) 3 sizes						
☐ 3O-2F2 EOM 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
☐ 3O-2F2 EOM 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
☐ 3O-2F2 EOM 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 Deep-Ocean 6,000 m Electro-Optical-Mechanical Towed Winch 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	−40…+80 °C
24–48 × ITU-T G.652D / G.654E SM (+ Power)	0.21	≤0.21 dB/km @ 1550 nm	−40…+80 °C
96–192 × ITU-T G.654E / G.652D Submarine	0.18	≤0.18 dB/km @ 1550 nm	−40…+80 °C

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

Standards and approvals

- IEEE 1138 / Deep-Tow EOM 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/3o-2f2-eom-deep-tow-cable

Typical values for this cable type, based on Deep-Ocean 6,000 m Electro-Optical-Mechanical Towed Winch Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.