subsea umbilical, ROV tether & oceanographic tow cable

EOM Tow Cable

EOM 600–3,000 V Oceanographic Power, Coaxial & Fiber-Optic Hybrid Tow

IEC 60092 / EOM Hybrid Tow · 600 V – 3,000 V · Subsea umbilical, rov tether &



IEC 60092 / EOM Hybrid Tow | **600 V – 3,000 V (-30 to +80 °C)** | **Polyurethane (PUR) Outer Jacket**

Application

EOM 600–3,000 V Oceanographic Power, Coaxial & Fiber-Optic Hybrid Tow Cable featuring optical fiber unit (sm/mm) and polyurethane (pur) outer jacket (IEC 60092 / EOM Hybrid Tow, 600 V – 3,000 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. Optical Fiber Unit (SM/MM)
2. Coaxial & Power Conductors
3. Water-Blocked Inner Bedding
4. Steel Wire / Aramid Strength Armour
5. Polyurethane (PUR) Outer Jacket

Technical data

Typical values

Rated voltage / transmission duty	600 V – 3,000 V (Oceanographic Electro-Optical-Mechanical (EOM) Hybrid Tow Cable Specification)	**Core / conductor construction**	Optical Fiber Unit (SM/MM) — Central stainless-steel tube housing single-mode and multi-mode fibers
Primary dielectric / buffering	Coaxial & Power Conductors — Shielded coaxial unit + tinned copper power cores with XLPE/FEP insulation	**Continuous operating temperature**	−30…+80 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per Oceanographic Electro-Optical-Mechanical (EOM) Hybrid Tow Cable Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	Polyurethane (PUR) Outer Jacket — Hydrolysis- and abrasion-resistant black PUR outer sheath	**Minimum bending radius**	10 × OD
Armour, strength member & mechanical duty	Steel Wire / Aramid Strength Armour — High-tensile load-bearing armour layer	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per Oceanographic Electro-Optical-Mechanical (EOM) Hybrid Tow Cable Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per Oceanographic Electro-Optical-Mechanical (EOM) Hybrid Tow Cable Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	Oceanographic Electro-Optical-Mechanical (EOM) Hybrid Tow Cable 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
EOM Tow Cable Construction Schedule (−30…+80 °C) 3 sizes						
☐ **EOM Tow Cable 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**
☐ **EOM Tow Cable 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**
☐ **EOM Tow Cable 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 Oceanographic Electro-Optical-Mechanical (EOM) Hybrid Tow Cable 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

- IEC 60092 / EOM Hybrid Tow 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/eom-oceanographic-tow-cable

Typical values for this cable type, based on Oceanographic Electro-Optical-Mechanical (EOM) Hybrid Tow Cable Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.