subsea umbilical, ROV tether & oceanographic tow cable

Reelable Thinline Array

Reelable Thinline Cascaded Digital Bus & Optical Core USV/UUV Towed Li

Thinline EO Towed Array · 48 V DC / 300 V · Subsea umbilical, rov tether &



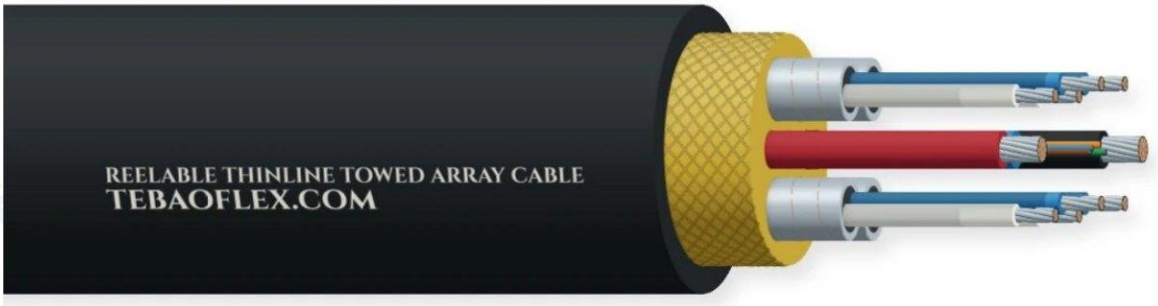
Thinline EO Towed Array | **48 V DC / 300 V (-30 to +75 °C)** | **Small-OD High-Elasticity PUR Acousti**

Application

Reelable Thinline Cascaded Digital Bus & Optical Core USV/UUV Towed Line Array Sonar Cable (Thinline EO Towed Array) engineered for 48 V DC / 300 V service across -30 to +75 °C (min. bend radius 8 × 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. Cascaded Digital Bus & Optical Core
2. Power Supply Copper Conductors
3. Synthetic Fiber Tensile Strength Member
4. Small-OD High-Elasticity PUR Acoustic Ho

Technical data

Typical values

Rated voltage / transmission duty	48 V DC / 300 V (Reelable Thinline Digital Bus & Optical Core High-Elasticity PUR Towed Array Specification)	**Core / conductor construction**	Cascaded Digital Bus & Optical Core — Optical fiber unit + screened digital telemetry pairs for thinline modules
Primary dielectric / buffering	Power Supply Copper Conductors — Oil- and water-resistant polymer insulated power cores	**Continuous operating temperature**	−30…+75 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per Reelable Thinline Digital Bus & Optical Core High-Elasticity PUR Towed Array Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	Small-OD High-Elasticity PUR Acoustic Hose — Low-noise acoustically transparent polyurethane outer tube	**Minimum bending radius**	8 × OD
Armour, strength member & mechanical duty	Synthetic Fiber Tensile Strength Member — Flexible high-modulus synthetic braid for small-drum winch reeling	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per Reelable Thinline Digital Bus & Optical Core High-Elasticity PUR Towed Array Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per Reelable Thinline Digital Bus & Optical Core High-Elasticity PUR Towed Array Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	Reelable Thinline Digital Bus & Optical Core High-Elasticity PUR Towed Array 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
Reelable Thinline Array Construction Schedule (−30…+75 °C) 3 sizes						
☐ Reelable Thinline Array 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
☐ Reelable Thinline Array 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
☐ Reelable Thinline Array 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 Reelable Thinline Digital Bus & Optical Core High-Elasticity PUR Towed Array 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…+75 °C
24–48 × ITU-T G.652D / G.654E SM (+ Power)	0.21	≤0.21 dB/km @ 1550 nm	−30…+75 °C
96–192 × ITU-T G.654E / G.652D Submarine	0.18	≤0.18 dB/km @ 1550 nm	−30…+75 °C

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

Standards and approvals

- Thinline EO Towed 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/reelable-thinline-towed-array-cable

Typical values for this cable type, based on Reelable Thinline Digital Bus & Optical Core High-Elasticity PUR Towed Array Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.