subsea umbilical, ROV tether & oceanographic tow cable

FEP/PUR Hydrophone Array

300 V 6×2 Individually Foil-Screened FEP/ETFE Low-Noise Subsea Hydroph

Subsea Hydrophone Array FEP/PUR · 300 V · Subsea umbilical, rov tether & oceanographic



Subsea Hydrophone Array FEP/PUR | **300 V (-30 to +80 °C)** | **Low-Noise Acoustic Polyurethane (PUR**

Application

300 V 6×2 Individually Foil-Screened FEP/ETFE Low-Noise Subsea Hydrophone Array Cable (Subsea Hydrophone Array FEP/PUR) engineered for 300 V service across -30 to +80 °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. Silver/Tinned Copper Hydrophone Pairs (6
2. Individual Pair Foil Shields & Power Cor
3. Braided Aramid Tensile Strength Layer
4. Low-Noise Acoustic Polyurethane (PUR) Sh

Technical data

Typical values

Rated voltage / transmission duty	300 V (300 V 6×2 Individually Foil-Screened FEP/ETFE + Aramid + Acoustic PUR Array Specification)	**Core / conductor construction**	Silver/Tinned Copper Hydrophone Pairs (6×2) — Stranded silver-plated copper with low-capacitance FEP/ETFE insulation
Primary dielectric / buffering	Individual Pair Foil Shields & Power Cores — 100% Al/PET screen per pair + 2 power supply conductors	**Continuous operating temperature**	−30…+80 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per 300 V 6×2 Individually Foil-Screened FEP/ETFE + Aramid + Acoustic PUR Array Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	Low-Noise Acoustic Polyurethane (PUR) Sheath — Seawater-matched polyurethane jacket minimizing flow noise	**Minimum bending radius**	8 × OD
Armour, strength member & mechanical duty	Braided Aramid Tensile Strength Layer — High-modulus aramid braid preventing strain on acoustic pairs	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per 300 V 6×2 Individually Foil-Screened FEP/ETFE + Aramid + Acoustic PUR Array Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per 300 V 6×2 Individually Foil-Screened FEP/ETFE + Aramid + Acoustic PUR Array Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	300 V 6×2 Individually Foil-Screened FEP/ETFE + Aramid + Acoustic PUR 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
FEP/PUR Hydrophone Array Construction Schedule (−30…+80 °C) 3 sizes						
☐ **FEP 4Pr / 8Ch**	**4×2×24–20 AWG (or 8-Ch Array)**	**Stranded SnCu + Foil/Braid + Aramid**	**11.2**	**175**	**12.5**	**90**
☐ **FEP 8Pr / 16Ch**	**8×2×22–18 AWG (or 16-Ch Array)**	**Stranded SnCu + Foil/Braid + Aramid**	**16.4**	**340**	**24.0**	**130**
☐ **FEP 16Pr / 24Ch**	**16×2×18–16 AWG (or 24-Ch Array)**	**Stranded SnCu + Foil/Braid + Aramid**	**24.8**	**690**	**35.0**	**195**

– Custom core cross-sections, pair/fibre counts, armour breaking loads and continuous winch/seabed lengths available per 300 V 6×2 Individually Foil-Screened FEP/ETFE + Aramid + Acoustic PUR Array Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
4×2×24–20 AWG (or 8-Ch Array)	**42.00**	**300 V (≤55 nF/km)**	**−30…+80 °C**
8×2×22–18 AWG (or 16-Ch Array)	**26.00**	**300 V (≤60 nF/km)**	**−30…+80 °C**
16×2×18–16 AWG (or 24-Ch Array)	**15.20**	**300 V (≤65 nF/km)**	**−30…+80 °C**

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

Standards and approvals

- Subsea Hydrophone Array FEP/PUR 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/subsea-hydrophone-array-cable-fep-pur

Typical values for this cable type, based on 300 V 6×2 Individually Foil-Screened FEP/ETFE + Aramid + Acoustic PUR 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.