subsea umbilical, ROV tether & oceanographic tow cable

2GAX160 / 8GAX163

300 V Observation ROV & AUV Aramid Neutrally Buoyant

2GAX160 / 8GAX163 ROV Tether · 300 V · Subsea umbilical, rov tether & oceanographic



2GAX160 / 8GAX163 ROV Tether | **300 V (-30 to +75 °C)** | **Neutrally Buoyant Foamed PUR Jacket**

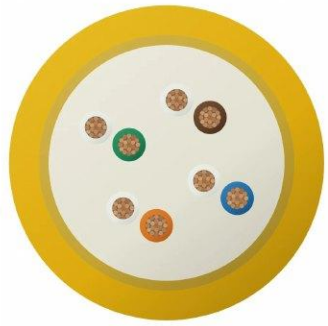
Application

2GAX160 / 8GAX163 300 V Observation ROV & AUV Aramid Neutrally Buoyant Foamed-PUR Tether (2GAX160 / 8GAX163 ROV Tether) engineered for 300 V service across -30 to +75 °C (min. bend radius 6 × 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. 26 AWG Tinned Copper Twisted Pairs (1-4
2. TPR Elastomeric Inner Sheath
3. LCP High-Modulus Fiber Braid (320 kg)
4. Neutrally Buoyant Foamed PUR Jacket

Technical data

Typical values

Rated voltage / transmission duty	300 V (Observation-Class ROV Neutrally Buoyant Aramid Foamed-PUR Tether Specification)	**Core / conductor construction**	26 AWG Tinned Copper Twisted Pairs (1-4 Pr) — Finely stranded tinned copper conductors with PE insulation
Primary dielectric / buffering	TPR Elastomeric Inner Sheath — Flexible thermoplastic rubber inner bedding layer	**Continuous operating temperature**	−30…+75 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per Observation-Class ROV Neutrally Buoyant Aramid Foamed-PUR Tether Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	Neutrally Buoyant Foamed PUR Jacket — Yellow syntactic/foamed polyurethane outer sheath for zero water weight	**Minimum bending radius**	6 × OD
Armour, strength member & mechanical duty	LCP High-Modulus Fiber Braid (320 kg) — Liquid-crystal polymer high-strength fiber braid reinforcement	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per Observation-Class ROV Neutrally Buoyant Aramid Foamed-PUR Tether Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per Observation-Class ROV Neutrally Buoyant Aramid Foamed-PUR Tether Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	Observation-Class ROV Neutrally Buoyant Aramid Foamed-PUR Tether 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
2GAX160 / 8GAX163 Construction Schedule (−30…+75 °C) 3 sizes						
☐ 2GAX160 4Pr / 8Ch	4×2×24–20 AWG (or 8-Ch Array)	Stranded SnCu + Foil/Braid + Aramid	11.2	175	12.5	90
☐ 2GAX160 8Pr / 16Ch	8×2×22–18 AWG (or 16-Ch Array)	Stranded SnCu + Foil/Braid + Aramid	16.4	340	24.0	130
☐ 2GAX160 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 Observation-Class ROV Neutrally Buoyant Aramid Foamed-PUR Tether 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…+75 °C
8×2×22–18 AWG (or 16-Ch Array)	26.00	300 V (≤60 nF/km)	−30…+75 °C
16×2×18–16 AWG (or 24-Ch Array)	15.20	300 V (≤65 nF/km)	−30…+75 °C

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

Standards and approvals

- ✓ 2GAX160 / 8GAX163 ROV Tether 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/2gax160-8gax163-buoyant-rov-tether

Typical values for this cable type, based on Observation-Class ROV Neutrally Buoyant Aramid Foamed-PUR Tether Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.