subsea umbilical, ROV tether & oceanographic tow cable

Dynamic Subsea Reeling

0.6/1–3.6 kV Dynamic Subsea Winch, A-Frame & Knuckle-Boom Crane Reelin

IEC 60092 / Dynamic Reeling · 0.6/1 kV – 3.6 kV · Subsea umbilical, rov tether &



IEC 60092 / Dynamic Reeling | 0.6/1 kV – 3.6 kV (-40 to +85 °C) | PUR / SHF2 Heavy Reeling Outer Jacke

Application

0.6/1–3.6 kV Dynamic Subsea Winch, A-Frame & Knuckle-Boom Crane Reeling Umbilical (IEC 60092 / Dynamic Reeling) engineered for 0.6/1 kV – 3.6 kV service across -40 to +85 °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. Class 5/6 Flexible Tinned Copper Power C
2. Screened Control Pairs & Optical Unit
3. Anti-Torsion Reinforcement Braid
4. PUR / SHF2 Heavy Reeling Outer Jacket

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV – 3.6 kV (0.6/1–3.6 kV Dynamic Subsea Winch & A-Frame Reeling Umbilical Specification (PUR / SHF2))	**Core / conductor construction**	Class 5/6 Flexible Tinned Copper Power Cores — High-flexibility tinned copper conductors with EPR/XLPE insulation
Primary dielectric / buffering	Screened Control Pairs & Optical Unit — Braided-shield control twisted pairs + central fiber-optic unit	**Continuous operating temperature**	−40…+85 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per 0.6/1–3.6 kV Dynamic Subsea Winch & A-Frame Reeling Umbilical Specification (PUR / SHF2)	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	PUR / SHF2 Heavy Reeling Outer Jacket — High-abrasion hydrolysis-resistant outer sheath for dynamic winches	**Minimum bending radius**	8 × OD
Armour, strength member & mechanical duty	Anti-Torsion Reinforcement Braid — Aramid or steel wire anti-torsion braid between inner & outer sheaths	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per 0.6/1–3.6 kV Dynamic Subsea Winch & A-Frame Reeling Umbilical Specification (PUR / SHF2)
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per 0.6/1–3.6 kV Dynamic Subsea Winch & A-Frame Reeling Umbilical Specification (PUR / SHF2)	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	0.6/1–3.6 kV Dynamic Subsea Winch & A-Frame Reeling Umbilical Specification (PUR / SHF2)		

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
Dynamic Subsea Reeling Construction Schedule (−40…+85 °C) 3 sizes						
☐ **Dynamic Subsea Reeling Config A**	**3×25–50 mm² (or 3P+FO Composite)**	**Compacted / Class 5 Cu/SnCu + FO**	**32.0**	**1,850**	**85.0**	**380**
☐ **Dynamic Subsea Reeling Config B**	**3×95–150 mm² (or Heavy EOM)**	**Compacted / Class 5 Cu/SnCu + FO**	**48.5**	**4,280**	**130.0**	**580**
☐ **Dynamic Subsea Reeling Config C**	**3×240–400 mm² (or Trunk HV/MV)**	**Compacted Cu + Lead/Armour + FO**	**78.0**	**9,650**	**210.0**	**950**

– Custom core cross-sections, pair/fibre counts, armour breaking loads and continuous winch/seabed lengths available per 0.6/1–3.6 kV Dynamic Subsea Winch & A-Frame Reeling Umbilical Specification (PUR / SHF2).

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
3×25–50 mm² (or 3P+FO Composite)	**0.49**	**0.6/1 kV – 3.6 kV (Subsea/MV)**	**−40…+85 °C**
3×95–150 mm² (or Heavy EOM)	**0.19**	**0.6/1 kV – 3.6 kV (Subsea/MV)**	**−40…+85 °C**
3×240–400 mm² (or Trunk HV/MV)	**0.07**	**0.6/1 kV – 3.6 kV (Trunk/HV)**	**−40…+85 °C**

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

Standards and approvals

- IEC 60092 / Dynamic Reeling 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/dynamic-subsea-reeling-umbilical

Typical values for this cable type, based on 0.6/1–3.6 kV Dynamic Subsea Winch & A-Frame Reeling Umbilical Specification (PUR / SHF2). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.