subsea umbilical, ROV tether & oceanographic tow cable

Type 300 / 302

300–600 V CTD, ADCP & Tide Gauge Subsea Power & Screene

Type 300 / 302 Subsea Sensor · 300 V – 600 V · Subsea umbilical, rov tether &



Type 300 / 302 Subsea Sensor | **300 V – 600 V (-30 to +80 °C)** | **Black Marine Polyurethane (PUR) Jack**

Application

Type 300 / 302 300–600 V CTD, ADCP & Tide Gauge Subsea Power & Screened Sensor Cable (Type 300 / 302 Subsea Sensor) engineered for 300 V – 600 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. Tinned Copper Power Cores (0.5–2.5 mm²)
2. Foil-Screened Signal Pairs (0.22-0.5 mm²
3. Aramid Braided Strength Member
4. Black Marine Polyurethane (PUR) Jacket

Technical data

Typical values

Rated voltage / transmission duty	300 V – 600 V (Type 300 / 302 Subsea Power (4×1.5 mm²) + Screened Pairs (4×2×0.34 mm²) PUR Specification)	**Core / conductor construction**	Tinned Copper Power Cores (0.5–2.5 mm²) — 300V-—600V PE/XLPE insulated tinned copper power conductors
Primary dielectric / buffering	Foil-Screened Signal Pairs (0.22-0.5 mm²) — Twisted pairs with individual & collective AVPET foil shields	**Continuous operating temperature**	−30…+80 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per Type 300 / 302 Subsea Power (4×1.5 mm²) + Screened Pairs (4×2×0.34 mm²) PUR Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	Black Marine Polyurethane (PUR) Jacket — Seawater- and abrasion-resistant black PUR outer sheath	**Minimum bending radius**	8 × OD
Armour, strength member & mechanical duty	Aramid Braided Strength Member — Optional braided aramid reinforcement for instrument suspension	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per Type 300 / 302 Subsea Power (4×1.5 mm²) + Screened Pairs (4×2×0.34 mm²) PUR Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per Type 300 / 302 Subsea Power (4×1.5 mm²) + Screened Pairs (4×2×0.34 mm²) PUR Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	Type 300 / 302 Subsea Power (4×1.5 mm²) + Screened Pairs (4×2×0.34 mm²) PUR 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
Type 300 / 302 Construction Schedule (−30…+80 °C) 3 sizes						
☐ **Type 300 4Pr / 8Ch**	**4×2×24–20 AWG (or 8-Ch Array)**	**Stranded SnCu + Foil/Braid + Aramid**	**11.2**	**175**	**12.5**	**90**
☐ **Type 300 8Pr / 16Ch**	**8×2×22–18 AWG (or 16-Ch Array)**	**Stranded SnCu + Foil/Braid + Aramid**	**16.4**	**340**	**24.0**	**130**
☐ **Type 300 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 Type 300 / 302 Subsea Power (4×1.5 mm²) + Screened Pairs (4×2×0.34 mm²) PUR 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 – 600 V (≤55 nF/km)**	**−30…+80 °C**
8×2×22–18 AWG (or 16-Ch Array)	**26.00**	**300 V – 600 V (≤60 nF/km)**	**−30…+80 °C**
16×2×18–16 AWG (or 24-Ch Array)	**15.20**	**300 V – 600 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

- ✓ Type 300 / 302 Subsea Sensor 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/type-300-302-subsea-sensor-cable

Typical values for this cable type, based on Type 300 / 302 Subsea Power (4×1.5 mm²) + Screened Pairs (4×2×0.34 mm²) PUR Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.