UNOLS 0.680" 3,000 VDC 45 Ω double-armored deep-sea tow cable

A301241

(UNOLS 0.680") 3,000 V 45 Ω Double-Armored Deep-Sea Tow Cable

UNOLS 0.680" Coax · 1.8/3 kV · Unols 0.680" 3,000 vdc 45 ω double-armored deep-sea tow

UNOLS 0.680" Standard | **3,000 VDC / 45 Ω Coax** | **177.9 kN SXGIPS Armor**



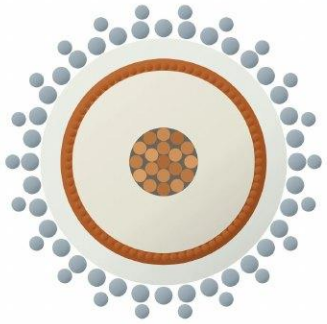
Application

A301241 (UNOLS 0.680" 3000 V 45-Ohm) Torque-Balanced Double-Armored Deep-Sea Coaxial & Multi-Coax Tow Cable (UNOLS 0.680" Coax, 1.8/3 kV, -40 to +80 °C, min. bend radius 15 × OD).

Typical uses: Work-Class & Observation ROV Systems, Offshore Wind & Subsea Power Grids, Oceanographic, Sonar & Seismic Survey, Commercial Diving & Subsea Intervention

Construction





Cross-section, not to scale

1. 0-6-12 Center Conductor
2. 3,000 V 45 Ω HDPE Dielectric
3. Served Copper Return & Cu/PET Tape
4. Polyallomer / HDPE Inner Belt
5. 22 + 36 SXGIPS Torque-Balanced Armor

Technical data

Typical values

Rated voltage / transmission duty	1.8/3 kV (UNOLS Standard 0.680" (17.27 mm) 3,000 VDC Deep-Sea Coax)	**Core / conductor construction**	0-6-12 Center Conductor — Work-hardened half-hard copper wires stranded around central monofilament
Primary dielectric / buffering	3,000 V 45 Ω HDPE Dielectric — Solid high-density polyethylene coaxial insulation rated for 3,000 VDC	**Continuous operating temperature**	−40…+80 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per UNOLS Standard 0.680" (17.27 mm) 3,000 VDC Deep-Sea Coax	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	22 + 36 SXGIPS Torque-Balanced Armor — Inner 22×1.65 mm + outer 36×1.27 mm 315 ksi galvanized steel wires (177.9 kN)	**Minimum bending radius**	15 × OD
Hydrostatic, tensile & crush duty	Polyallomer / HDPE Inner Belt — Tough extruded thermoplastic barrier isolating return conductor from armor	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per UNOLS Standard 0.680" (17.27 mm) 3,000 VDC Deep-Sea Coax
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per UNOLS Standard 0.680" (17.27 mm) 3,000 VDC Deep-Sea Coax	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	UNOLS Standard 0.680" (17.27 mm) 3,000 VDC Deep-Sea Coax		

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	Tensile rating kN ≈	Min. bend R mm
A301241 Construction Schedule (−40…+80 °C) 3 sizes						
☐ **A301241 Type A (Standard Lift)**	**3 × 10 mm² HV + 6×2×1.0 + 12F FIMT**	**Class 5 tinned Cu + 316L FIMT**	**25.4**	**1,680**	**320.0**	**380**
☐ **A301241 Type B (Heavy Work-Class)**	**3 × 16 mm² HV + 8×2×1.0 + 12F FIMT**	**Class 5 tinned Cu + 316L FIMT**	**32.2**	**2,650**	**480.0**	**485**
☐ **A301241 Type C (Ultra-Deep Trencher)**	**3 × 25 mm² HV + 12×2×1.0 + 24F FIMT**	**Class 5 tinned Cu + 316L FIMT**	**38.1**	**3,890**	**680.0**	**570**

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per UNOLS Standard 0.680" (17.27 mm) 3,000 VDC Deep-Sea Coax.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
3 × 10 mm² HV + 6×2×1.0 + 12F FIMT	**1.91**	**1.8/3 kV (≤0.35 dB/km SM)**	**−40…+80 °C**
3 × 16 mm² HV + 8×2×1.0 + 12F FIMT	**1.21**	**1.8/3 kV (≤0.35 dB/km SM)**	**−40…+80 °C**
3 × 25 mm² HV + 12×2×1.0 + 24F FIMT	**0.78**	**1.8/3 kV (≤0.35 dB/km SM)**	**−40…+80 °C**

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

Standards and approvals

- UNOLS 0.680" Coax 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/a301241

Typical values for this cable type, based on UNOLS Standard 0.680" (17.27 mm) 3,000 VDC Deep-Sea Coax. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.