subsea umbilical, ROV tether & oceanographic tow cable

1SSA4 40-Ohm

Heavy Double-Armoured Deep-Water Side-Scan & SAS Sonar Co

1SSA4 / 40-Ohm Sonar Tow · 1,500 V DC · Subsea umbilical, rov tether & oceanographic

1SSA4 / 40-Ohm Sonar Tow | **1,500 V DC (-40 to +80 °C)** | **71.2 kN Double Preformed Steel Armou**



Application

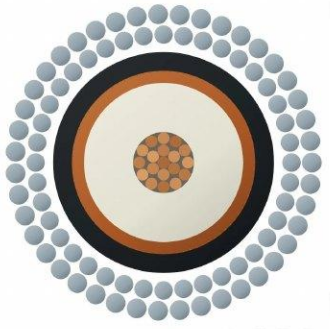
1SSA4 40-Ohm Heavy Double-Armoured Deep-Water Side-Scan & SAS Sonar Coaxial Tow Cable (71.2 kN) (1SSA4 / 40-Ohm Sonar Tow) engineered for 1,500 V DC service across -40 to +80 °C (min. bend radius 15 × OD).

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



TEBAOFLEX ISSA4 40-OHM COAXIAL TOW CABLE



Cross-section, not to scale

1. High-Conductivity Copper Center Conducto
2. 40-Ohm XLPE Coaxial Dielectric
3. Copper Outer Coaxial Shield & XLPE Beddi
4. 71.2 kN Double Preformed Steel Armour

Technical data

Typical values

Rated voltage / transmission duty	1,500 V DC (1SSA4 (Ø 11.5 mm, 71.2 kN MBL) 40-Ohm Heavy Armoured Coaxial Tow Specification)	**Core / conductor construction**	High-Conductivity Copper Center Conductor — Stranded plain copper coaxial inner conductor
Primary dielectric / buffering	40-Ohm XLPE Coaxial Dielectric — Cross-linked polyethylene insulation engineered for 40 Ω impedance	**Continuous operating temperature**	−40…+80 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per 1SSA4 (Ø 11.5 mm, 71.2 kN MBL) 40-Ohm Heavy Armoured Coaxial Tow Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	71.2 kN Double Preformed Steel Armour — Two contra-helical layers of high-tensile galvanized steel wire (2 11.5 mm)	**Minimum bending radius**	15 × OD
Armour, strength member & mechanical duty	Copper Outer Coaxial Shield & XLPE Bedding — Helically served copper outer conductor + extruded XLPE inner sheath	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per 1SSA4 (Ø 11.5 mm, 71.2 kN MBL) 40-Ohm Heavy Armoured Coaxial Tow Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per 1SSA4 (Ø 11.5 mm, 71.2 kN MBL) 40-Ohm Heavy Armoured Coaxial Tow Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	1SSA4 (Ø 11.5 mm, 71.2 kN MBL) 40-Ohm Heavy Armoured Coaxial Tow 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
1SSA4 40-Ohm Construction Schedule (−40…+80 °C) 3 sizes						
☐ 1SSA4 40-Ohm Coax / Cat5e	Coax (39/40/50/75 Ω) or 4Pr Cat5e + Power	Stranded SnCu + Foam PE/FEP + Armour/Aramid	8.2	245	42.7	120
☐ 1SSA4 40-Ohm Composite B	Heavy Coax / 64-Ch Digital Bus + Power	Stranded SnCu + Low-Loss Dielectric + Strength	11.5	485	71.2	170
☐ 1SSA4 40-Ohm Array / Trunk C	Multi-Ch Digital Streamer / 255-Ch Bus	Redundant Telemetry + Aramid + PUR Jacket	44.5	1,620	95.0	445

– Custom core cross-sections, pair/fibre counts, armour breaking loads and continuous winch/seabed lengths available per 1SSA4 (Ø 11.5 mm, 71.2 kN MBL) 40-Ohm Heavy Armoured Coaxial Tow Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
Coax (39/40/50/75 Ω) or 4Pr Cat5e + Power	18.50	1,500 V DC (High-Speed)	−40…+80 °C
Heavy Coax / 64-Ch Digital Bus + Power	11.20	1,500 V DC (Deep-Tow/Array)	−40…+80 °C
Multi-Ch Digital Streamer / 255-Ch Bus	6.80	1,500 V DC (Full Array)	−40…+80 °C

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

Standards and approvals

- ✓ 1SSA4 / 40-Ohm Sonar Tow 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/1ssa4-40-ohm-coaxial-tow-cable

Typical values for this cable type, based on 1SSA4 (Ø 11.5 mm, 71.2 kN MBL) 40-Ohm Heavy Armoured Coaxial Tow Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.