subsea umbilical, ROV tether & oceanographic tow cable

# 1SSA32 39-Ohm

## 1SSA32 1,200 V DC 39-Ohm Double-Armoured Side-Scan Sonar Coaxial Tow C

1SSA32 / 39-Ohm Sonar Tow · 1,200 V DC · Subsea umbilical, rov tether & oceanographic

1SSA32 / 39-Ohm Sonar Tow | 1,200 V DC (-40 to +80 °C) | XLPE Inner Sheath & Double Steel Arm




## Application

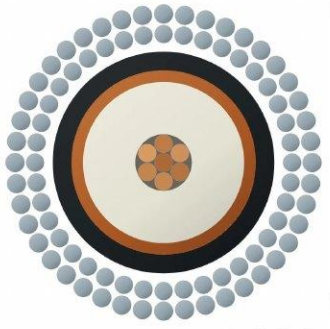
1SSA32 1,200 V DC 39-Ohm Double-Armoured Side-Scan Sonar Coaxial Tow Cable (42.7 kN) (1SSA32 / 39-Ohm Sonar Tow) engineered for 1,200 V DC service across -40 to +80 °C (min. bend radius 15 × OD).

**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 1SSA32 39-OHM COAXIAL TOW CABLE



Cross-section, not to scale

1. Tinned Copper Inner Conductor (7×0.40 mm
2. 39-Ohm XLPE Coaxial Dielectric
3. Served Bare Copper Outer Conductor (14 A
4. XLPE Inner Sheath & Double Steel Armour

## Technical data

Typical values

| | | | |
|---|---|---|---|
| **Rated voltage / transmission duty** | 1,200 V DC (1SSA32 (Ø 8.20 mm, 42.7 kN MBL) 39-Ohm 1,200 V DC Armoured Coaxial Tow Specification) | **Core / conductor construction** | Tinned Copper Inner Conductor (7×0.40 mm) — Stranded tinned copper coaxial center conductor (1,200 V DC) |
| **Primary dielectric / buffering** | 39-Ohm XLPE Coaxial Dielectric — Cross-linked polyethylene core insulation | **Continuous operating temperature** | −40…+80 °C (subsea & offshore duty) |
| **Hydrostatic & thermal stability** | Verified thermal and hydrostatic stability per 1SSA32 (Ø 8.20 mm, 42.7 kN MBL) 39-Ohm 1,200 V DC Armoured Coaxial Tow Specification | **Storage & transport temperature** | −40…+80 °C on export wooden/steel winch reel |
| **Outer protection / armouring** | XLPE Inner Sheath & Double Steel Armour — Extruded XLPE inner jacket + double preformed galvanized steel armour (42.7 kN) | **Minimum bending radius** | 15 × OD |
| **Armour, strength member & mechanical duty** | Served Bare Copper Outer Conductor (14 AWG) — Helically served bare copper return & coaxial shield layer | **Seawater, hydrostatic & hydrolysis resistance** | Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per 1SSA32 (Ø 8.20 mm, 42.7 kN MBL) 39-Ohm 1,200 V DC Armoured Coaxial Tow Specification |
| **Oil, drilling mud & abrasion resistance** | Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per 1SSA32 (Ø 8.20 mm, 42.7 kN MBL) 39-Ohm 1,200 V DC Armoured Coaxial Tow Specification | **RoHS & REACH compliance** | RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant |
| **Standards** | 1SSA32 (Ø 8.20 mm, 42.7 kN MBL) 39-Ohm 1,200 V DC 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 |
|---|---|---|---|---|---|---|
| **1SSA32 39-Ohm Construction Schedule (−40…+80 °C)** 3 sizes | | | | | | |
| ☐ 1SSA32 39-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 |
| ☐ 1SSA32 39-Ohm Composite B | Heavy Coax / 64-Ch Digital Bus + Power | Stranded SnCu + Low-Loss Dielectric + Strength | 11.5 | 485 | 71.2 | 170 |
| ☐ 1SSA32 39-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 1SSA32 (Ø 8.20 mm, 42.7 kN MBL) 39-Ohm 1,200 V DC 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 | 1,200 V DC (High-Speed) | −40…+80 °C |
| Heavy Coax / 64-Ch Digital Bus + Power | 11.20 | 1,200 V DC (Deep-Tow/Array) | −40…+80 °C |
| Multi-Ch Digital Streamer / 255-Ch Bus | 6.80 | 1,200 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

- ✓ 1SSA32 / 39-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/1ssa32-39-ohm-coaxial-tow-cable**

Typical values for this cable type, based on 1SSA32 (Ø 8.20 mm, 42.7 kN MBL) 39-Ohm 1,200 V DC 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.