8,900 daN steel-wire armoured underwater acoustic sonar cable

REF 50108 (ACOUSTIQUE ARMÉ ACIER)

REF 50108 (Acoustique Armé Acier) 1,000 V Steel-Armoured Sonar Cable



Subsea Acoustic SWA · 0.6/1 kV · 8,900 dan steel-wire armoured underwater acoustic

1,000 V & 500 V Cores | 8,900 daN Steel Armour | Underwater Acoustic Sonar

Application

REF 50108 (Acoustique Armé Acier) 1,000 V / 500 V PE/PP-Insulated Copper-Braid Shielded Galvanized Steel-Wire Armoured (8,900 daN) PUR Underwater Acoustic Detection Cable (Subsea Acoustic SWA, 0.6/1 kV, -25 to +70 °C).

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. Composite Conductors (1×4.0 + 2×1.0 + 3×0.6)
2. Watertight Stranding & Copper Braid
3. HDPE Inner Sheath
4. Galvanized Steel Wire Armour (8,900 daN)
5. Polyurethane Outer Sheath (Ø28 ± 1 mm)

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (IEC 60228 / 8,900 daN Steel-Armoured Acoustic Detection)	**Core / conductor construction**	Composite Conductors (1×4.0 + 2×1.0 + 3×0.6) — 1×4.0 mm² PP (500 V) + 2×1.0 mm² PE (500 V) + 3×0.6 mm² PE (1,000 V) plain copper
Primary dielectric / buffering	Watertight Stranding & Copper Braid — Watertightness compound in voids + overall plain copper wire braid shield	**Continuous operating temperature**	−25…+70 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per IEC 60228 / 8,900 daN Steel-Armoured Acoustic Detection	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Polyurethane Outer Sheath (Ø28 ± 1 mm) — Black abrasion- and seawater-resistant polyurethane (PUR) outer jacket	**Minimum bending radius**	12 × OD
Hydrostatic, tensile & crush duty	Galvanized Steel Wire Armour (8,900 daN) — Helically served galvanized round steel wires (89 kN theoretical breaking strength)	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per IEC 60228 / 8,900 daN Steel-Armoured Acoustic Detection
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per IEC 60228 / 8,900 daN Steel-Armoured Acoustic Detection	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEC 60228 / 8,900 daN Steel-Armoured Acoustic Detection		

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
REF 50108 (ACOUSTIQUE ARMÉ ACIER) Construction Schedule (−25…+70 °C) 3 sizes						
☐ **REF 50108 Config A (Compact)**	4×2×24 AWG + 2×18 AWG (or 4C)	Stranded tinned Cu (IEC 60228 / ASTM)	10.4	155	4.5	85
☐ **REF 50108 Config B (Standard)**	4×2×20 AWG + 4×16 AWG (or 8C)	Stranded tinned Cu (IEC 60228 / ASTM)	13.3	265	9.6	110
☐ **REF 50108 Config C (Heavy Hybrid)**	8×2×20 AWG + 4×12 AWG (or 12C)	Stranded tinned Cu (IEC 60228 / ASTM)	16.6	420	18.5	140

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per IEC 60228 / 8,900 daN Steel-Armoured Acoustic Detection.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
4×2×24 AWG + 2×18 AWG (or 4C)	28.40	0.6/1 kV (45–100 Ω data)	−25…+70 °C
4×2×20 AWG + 4×16 AWG (or 8C)	10.70	0.6/1 kV (45–100 Ω data)	−25…+70 °C
8×2×20 AWG + 4×12 AWG (or 12C)	5.40	0.6/1 kV (High-Power Hybrid)	−25…+70 °C

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

Standards and approvals

- Subsea Acoustic SWA 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/ref-50108-acoustique-arme-acier

Typical values for this cable type, based on IEC 60228 / 8,900 daN Steel-Armoured Acoustic Detection. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.