Subsea aquaculture feeding & halieutic observation hybrid cable

REF 15689 & REF 59436 (AQUACULTURE & HALIEUTIC)

REF 15689 & REF 59436 1,000 V Subsea Aquaculture & Halieutic Cable

IEC 60228 / Subsea · 0.6/1 kV · Subsea aquaculture feeding & halieutic observation



1,000 V Power / 250 V Data | 4×2.5 + 20×0.6 / 2×SMF | Aquaculture & Halieutic

Application

REF 15689 (1,000V/250V 4×2.5mm² Shielded Power + 20×0.6mm² XLPE/PUR Aquaculture Cable) & REF 59436 (2×SMF + 2×RS-422 + Power Aramid-Braided Halieutic Observation Cable) (IEC 60228 / Subsea, 0.6/1 kV, -15 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. Screened 1,000 V Power Unit (4×2.5 mm²)
2. 250 V Control & Sensor Ring (20×0.6 mm²)
3. Halieutic Electro-Optic Option (REF 59436)
4. Subsea Polyurethane Outer Sheath (Ø15.7 mm)

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (IEC 60228 / Subsea Aquaculture & Halieutic Observation)	**Core / conductor construction**	Screened 1,000 V Power Unit (4×2.5 mm²) — Central 4×2.5 mm² flexible tinned Cu XLPE cores enclosed in a tinned copper wire braid
Primary dielectric / buffering	250 V Control & Sensor Ring (20×0.6 mm²) — 20 concentric 0.6 mm² flexible tinned Cu XLPE cores (≤36 Ω/km) around power core	**Continuous operating temperature**	−15…+70 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per IEC 60228 / Subsea Aquaculture & Halieutic Observation	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Subsea Polyurethane Outer Sheath (Ø15.7 mm) — Black abrasion- and hydrolysis-resistant PUR jacket (–15 °C to +70 °C, 0.39 kg/m)	**Minimum bending radius**	10 × OD
Hydrostatic, tensile & crush duty	Halieutic Electro-Optic Option (REF 59436) — 2×SMF + 2×(2×0.25 mm² 100 Ω RS-422) + 1×(2×0.75)S + 5×0.25 + 140 daN aramid braid	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per IEC 60228 / Subsea Aquaculture & Halieutic Observation
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per IEC 60228 / Subsea Aquaculture & Halieutic Observation	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEC 60228 / Subsea Aquaculture & Halieutic Observation		

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 15689 & REF 59436 (AQUACULTURE & HALIEUTIC) Construction Schedule (−15…+70 °C) 3 sizes						
☐ **REF 15689 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 15689 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 15689 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 / Subsea Aquaculture & Halieutic Observation.

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)	−15…+70 °C
4×2×20 AWG + 4×16 AWG (or 8C)	10.70	0.6/1 kV (45–100 Ω data)	−15…+70 °C
8×2×20 AWG + 4×12 AWG (or 12C)	5.40	0.6/1 kV (High-Power Hybrid)	−15…+70 °C

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

Standards and approvals

- IEC 60228 / Subsea 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-15689-ref-59436-aquaculture-halieutic

Typical values for this cable type, based on IEC 60228 / Subsea Aquaculture & Halieutic Observation. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.