Double-copper-braid shielded submarine & ship inboard cable

REF 57517 & REF 57525

0.6/1 kV Double-Braided Submarine Inboard Cable

IEC 60332-3 / 60092 · 0.6/1 kV · Double-copper-braid shielded submarine & ship inboard



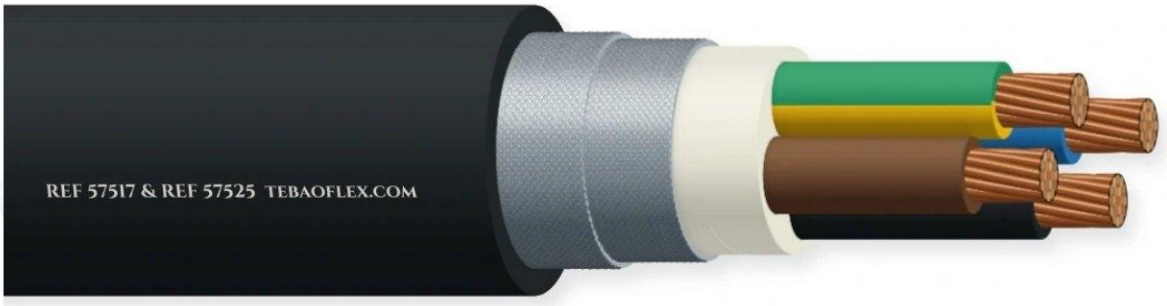
IEC 60332-3 Flame Retardant | **0.6/1 kV Double Cu Braid** | **Submarine Inboard EMC**

Application

REF 57517 (0.6/1 kV 4×25 mm² Double-Tinned-Copper-Braid Shielded XLPE Submarine Power Cable) & REF 57525 (Pair-Braided & Overall-Braided LSZH Submarine Instrumentation Cable) (IEC 60332-3 / 60092, 0.6/1 kV, -30 to +90 °C).

Typical uses: Naval Shipboard & Submarine Outboard, Offshore Cathodic Protection (ICCP), Underwater Welding & Nuclear Pools, Deep-Well & Seabed Pump Feeders

Construction





Cross-section, not to scale

1. Flexible Conductors (4×25 / 2×2×0.75 mm²)
2. 600/1,000 V XLPE Core Insulation
3. Double Tinned Copper Braid (0.56 mΩ/m)
4. IEC 60332-3 Fire-Retardant Outer Sheath

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (IEC 60092-350 / IEC 60332-3 Bunched Flame-Retardant Naval)	**Core / conductor construction**	Flexible Conductors (4×25 / 2×2×0.75 mm²) — 4×25 mm² flexible plain Cu (REF 57517) or 2×2×0.75 mm² tinned Cu pairs (REF 57525)
Primary dielectric / buffering	600/1,000 V XLPE Core Insulation — Cross-linked polyethylene insulation (–25 °C to +90 °C operating temperature)	**Continuous operating temperature**	−30…+90 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per IEC 60092-350 / IEC 60332-3 Bunched Flame-Retardant Naval	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	IEC 60332-3 Fire-Retardant Outer Sheath — Black fire-retardant XLPE (REF 57517, Ø 27.8 mm) or LSZH polyolefin (REF 57525, Ø 17.1 mm)	**Minimum bending radius**	8 × OD
Hydrostatic, tensile & crush duty	Double Tinned Copper Braid (0.56 mΩ/m) — Two overall tinned Cu braids on REF 57517 (individual pair braid+sheath + overall braid on 57525)	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per IEC 60092-350 / IEC 60332-3 Bunched Flame-Retardant Naval
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per IEC 60092-350 / IEC 60332-3 Bunched Flame-Retardant Naval	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEC 60092-350 / IEC 60332-3 Bunched Flame-Retardant Naval		

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 57517 & REF 57525 Construction Schedule (−30…+90 °C) 3 sizes						
☐ **REF 57517 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 57517 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 57517 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 60092-350 / IEC 60332-3 Bunched Flame-Retardant Naval.

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)	−30…+90 °C
4×2×20 AWG + 4×16 AWG (or 8C)	10.70	0.6/1 kV (45–100 Ω data)	−30…+90 °C
8×2×20 AWG + 4×12 AWG (or 12C)	5.40	0.6/1 kV (High-Power Hybrid)	−30…+90 °C

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

Standards and approvals

- IEC 60332-3 / 60092 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-57517-ref-57525

Typical values for this cable type, based on IEC 60092-350 / IEC 60332-3 Bunched Flame-Retardant Naval. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.