submarine & offshore armoured optical cable

S670T IEEE 1580 FO

S670T 2–48F IEEE 1580 & UL 1309 Bronze-Braid Armoured LSZH Shipboard F

IEEE 1580 / UL 1309 S670T · Optical · Submarine & offshore armoured optical cable



IEEE 1580 / UL 1309 S670T | Optical (-40 to +90 °C)

Halogen-Free Flame-Retardant LSZH Ja

Application

S670T 2–48F IEEE 1580 & UL 1309 Bronze-Braid Armoured LSZH Shipboard Fiber Optic Cable featuring central epoxy-glass frp strength rod and halogen-free flame-retardant lszh jacket (IEEE 1580 / UL 1309 S670T, Optical, -40 to +90 °C).

Typical uses: Submarine Telecom & Cabled Ocean Observatories, Island, Coastal & Inter-Platform Subsea Optical Links, Offshore Platform & FPSO Fire-Safe Optical Backbones, Tactical Marine & Harsh-Environment Optical Deployment

Construction





Cross-section, not to scale

1. Central Epoxy-Glass FRP Strength Rod
2. Aramid-Reinforced 900 pm Sub-Units (2—48
3. IEEE 1580 Bronze Wire Braid Armour
4. Halogen-Free Flame-Retardant LSZH Jacket

Technical data

Typical values

Rated voltage / transmission duty	Optical (IEEE 1580 & UL 1309 S670T Bronze-Braid Armoured LSZH Shipboard Optical Specification)
Primary dielectric / buffering	Aramid-Reinforced 900 pm Sub-Units (2—48F) — Tight-buffered optical sub-units with individual LSZH jackets
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per IEEE 1580 & UL 1309 S670T Bronze-Braid Armoured LSZH Shipboard Optical Specification
Outer protection / armouring	Halogen-Free Flame-Retardant LSZH Jacket — Low-smoke zero-halogen shipboard & offshore outer sheath
Armour, strength member & mechanical duty	IEEE 1580 Bronze Wire Braid Armour — Corrosion-resistant braided bronze wire armour over LSZH inner jacket
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per IEEE 1580 & UL 1309 S670T Bronze-Braid Armoured LSZH Shipboard Optical Specification
Standards	IEEE 1580 & UL 1309 S670T Bronze-Braid Armoured LSZH Shipboard Optical Specification
Core / conductor construction	Central Epoxy-Glass FRP Strength Rod — Dielectric central anti-buckling strength member
Continuous operating temperature	−40…+90 °C (subsea & offshore duty)
Storage & transport temperature	−40…+80 °C on export wooden/steel winch reel
Minimum bending radius	10 × OD
Seawater, hydrostatic & hydrolysis resistance	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per IEEE 1580 & UL 1309 S670T Bronze-Braid Armoured LSZH Shipboard Optical Specification
RoHS & REACH compliance	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant

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
S670T IEEE 1580 FO Construction Schedule (−40…+90 °C) 3 sizes						
☐ **S670T IEEE 1580 FO 4–12F EOM/Sub**	4–12 × ITU-T G.652D / G.654E SM (+ Power)	Laser-welded SS FIMT + Steel/Aramid Armour	8.2	260	48.0	125
☐ **S670T IEEE 1580 FO 24–48F EOM/Sub**	24–48 × ITU-T G.652D / G.654E SM (+ Power)	Laser-welded SS FIMT + Contra-Helical Steel	17.5	680	120.0	260
☐ **S670T IEEE 1580 FO 96–192F Trunk**	96–192 × ITU-T G.654E / G.652D Submarine	SS Tube + Steel Vault + Cu Tube + DA Armour	28.0	1,650	300.0	420

– Custom core cross-sections, pair/fibre counts, armour breaking loads and continuous winch/seabed lengths available per IEEE 1580 & UL 1309 S670T Bronze-Braid Armoured LSZH Shipboard Optical Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
4–12 × ITU-T G.652D / G.654E SM (+ Power)	0.35	≤0.35 dB/km @ 1310 nm	−40…+90 °C
24–48 × ITU-T G.652D / G.654E SM (+ Power)	0.21	≤0.21 dB/km @ 1550 nm	−40…+90 °C
96–192 × ITU-T G.654E / G.652D Submarine	0.18	≤0.18 dB/km @ 1550 nm	−40…+90 °C

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

Standards and approvals

- IEEE 1580 / UL 1309 S670T 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/s670t-bronze-armoured-shipboard-fo-cable

Typical values for this cable type, based on IEEE 1580 & UL 1309 S670T Bronze-Braid Armoured LSZH Shipboard Optical Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.