armoured marine & offshore optical cable

QFCI & QFCU (NEK 606 F101)

QFCI & QFCU NEK TS 606 F101 Fire-Resistant GSWB-Armoured Offshore Back

NEK TS 606 F101 / IEC 60331-25 · Optical · Armoured marine & offshore optical cable



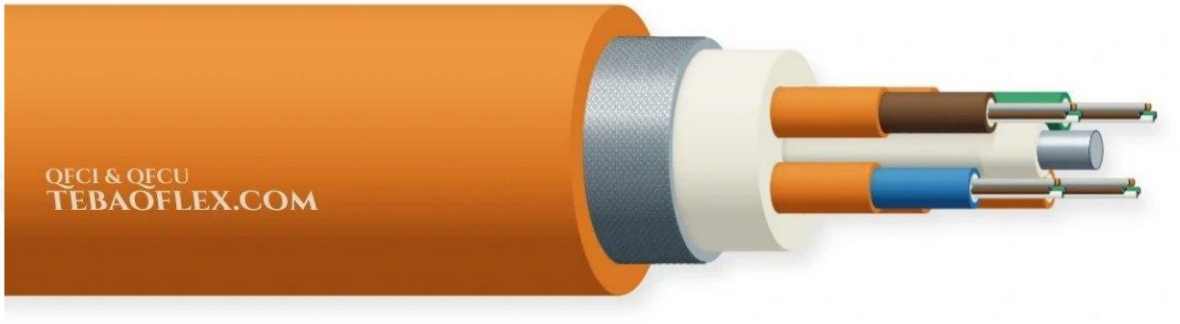
NEK TS 606 F101 / IEC 60331-25 | Optical (-40 to +85 °C) | SHF2-MUD Offshore Outer Jacket (Code

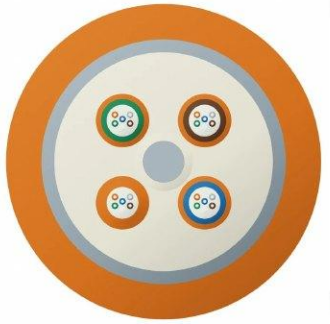
Application

QFCI & QFCU NEK TS 606 F101 Fire-Resistant GSWB-Armoured Offshore Backbone Fiber Optic Cable (NEK TS 606 F101 / IEC 60331-25) engineered for Optical service across -40 to +85 °C (min. bend radius 12 × OD).

Typical uses: Offshore Platform & FPSO Optical Backbones, Shipboard Integrated Bridge & IT Networks, Fire-Safe ESD, CCTV & Telecom Links, LNG Carrier & Drillship Process Control

Construction





Cross-section, not to scale

1. Central FRP Dielectric Strength Member
2. Mica-Protected Gel-Filled Loose Tubes (4
3. Aramid Yarn & SHF1/SHF2 Inner Sheath
4. Galvanized Steel Wire Braid Armour (QFCI
5. SHF2-MUD Offshore Outer Jacket (Code F10

Technical data

Typical values

Rated voltage / transmission duty	Optical (NEK TS 606 Code F101 & IEC 60331-25 (750–850 °C Fire Integrity) / IEC 60794)	**Core / conductor construction**	Central FRP Dielectric Strength Member — Non-metallic glass-fibre reinforced plastic central rod
Primary dielectric / buffering	Mica-Protected Gel-Filled Loose Tubes (4×6F) — PBT loose tubes wrapped with mica fire tape (IEC 60331-25)	**Continuous operating temperature**	−40…+85 °C (shipboard & offshore duty)
Short-circuit / peak thermal rating	Verified thermal stability per NEK TS 606 Code F101 & IEC 60331-25 (750–850 °C Fire Integrity) / IEC 60794	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	SHF2-MUD Offshore Outer Jacket (Code F101) — Mud-, oil- and fire-resistant thermoset outer sheath (NEK TS 606)	**Minimum bending radius**	12 × OD
Armour, screen & mechanical duty	Galvanized Steel Wire Braid Armour (QFCI) — High-coverage galvanized steel wire braid armour	**Flame, fire & smoke performance**	Qualified for marine flame-retardance and low-smoke zero-halogen / fire safety per NEK TS 606 Code F101 & IEC 60331-25 (750–850 °C Fire Integrity) / IEC 60794
Oil, drilling mud & seawater resistance	Resistant to marine fuel/lube oils, salt mist and offshore fluids per NEK TS 606 Code F101 & IEC 60331-25 (750–850 °C Fire Integrity) / IEC 60794	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	NEK TS 606 Code F101 & IEC 60331-25 (750–850 °C Fire Integrity) / IEC 60794		

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
QFCI & QFCU (NEK 606 F101) Construction Schedule (−40…+85 °C) 3 sizes						
☐ **QFCI & QFCU 4F OS2 / OM3**	4 × 9/125 µm OS2 or 50/125 µm OM3	Armoured marine optical core	10.6	155	2.2	110
☐ **QFCI & QFCU 12F OS2 / OM4**	12 × 9/125 µm OS2 or 50/125 µm OM4	Armoured marine optical core	12.8	235	3.0	130
☐ **QFCI & QFCU 24F OS2 / OM4**	24 × 9/125 µm OS2 or 50/125 µm OM4	Armoured marine optical core	15.4	345	4.2	155

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per NEK TS 606 Code F101 & IEC 60331-25 (750–850 °C Fire Integrity) / IEC 60794.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
4 × 9/125 µm OS2 or 50/125 µm OM3	0.35	≤0.35 dB/km @ 1310 nm	−40…+85 °C
12 × 9/125 µm OS2 or 50/125 µm OM4	0.22	≤0.22 dB/km @ 1550 nm	−40…+85 °C
24 × 9/125 µm OS2 or 50/125 µm OM4	0.20	≤0.20 dB/km @ 1550 nm	−40…+85 °C

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

Standards and approvals

- NEK TS 606 F101 / IEC 60331-25 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/qfci-qfcu-nek-606-f101

Typical values for this cable type, based on NEK TS 606 Code F101 & IEC 60331-25 (750–850 °C Fire Integrity) / IEC 60794. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.