marine & offshore instrumentation cable

BFOU(i) / BFCU(i) 250V

BFOU(i) (TCWB) & BFCU(i) (GSWB) 150/250 V NEK TS 606 Fire- & Mud-Resis

NEK TS 606 / IEC 60092-376 BFOU(i) · 150/250 V (300 V) · Marine & offshore



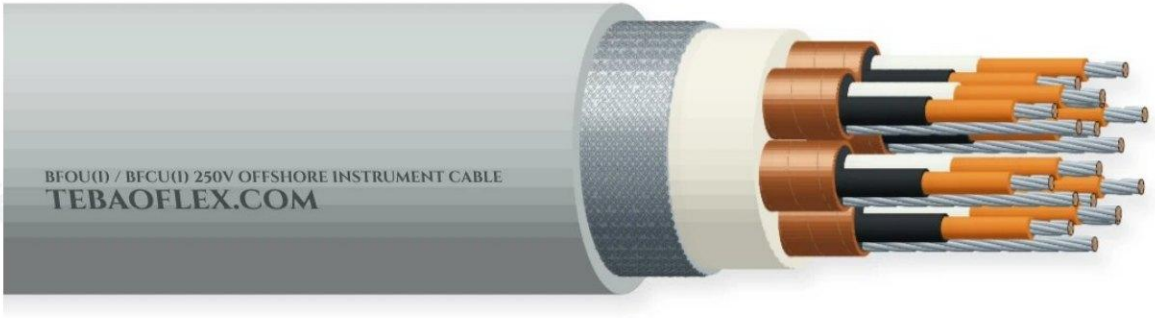
NEK TS 606 / IEC 60092-376 BFOU(i) | **150/250 V (300 V) (-40 to +90 °C)** | **SHF2-MUD Fire & Mud-Resistant Outer**

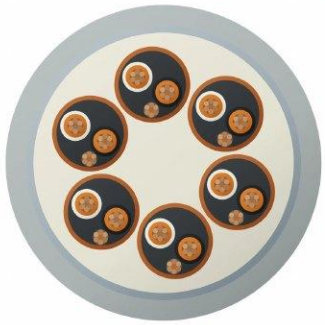
Application

BFOU(i) (TCWB) & BFCU(i) (GSWB) 150/250 V NEK TS 606 Fire- & Mud-Resistant Offshore Instrument Cable (NEK TS 606 / IEC 60092-376 BFOU(i)) engineered for 150/250 V (300 V) service across -40 to +90 °C (min. bend radius 8 × OD).

Typical uses: Offshore DCS, ESD & Fire-Gas Systems, Drilling Rig Instrumentation & Mud Logging, Naval Sonar, Radar & Combat Switchboards, Shipboard Bridge & Engine Room Automation

Construction





Cross-section, not to scale

1. Mica + EPR/XLPE Twisted Pairs (0.75-2.5
2. Cu/PET or Al/PET Individual & Collective
3. TCWB (BFOU) / GSWB (BFCU) Braid Armour
4. SHF2-MUD Fire & Mud-Resistant Outer Jack

Technical data

Typical values

Rated voltage / transmission duty	150/250 V (300 V) (NEK TS 606 Code S3/S7 BFOU(i) & BFCU(i) 150/250 V IEC 60331 Fire-Resistant SHF2-MUD Specification)	**Core / conductor construction**	Mica + EPR/XLPE Twisted Pairs (0.75-2.5 mm^2) — Tinned copper conductors with mica fire barrier and EPR/XLPE insulation
Primary dielectric / buffering	Cu/PET or Al/PET Individual & Collective Screen — Metallic foil tape + tinned copper drain wire on each pair/triad	**Continuous operating temperature**	−40…+90 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per NEK TS 606 Code S3/S7 BFOU(i) & BFCU(i) 150/250 V IEC 60331 Fire-Resistant SHF2-MUD Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	SHF2-MUD Fire & Mud-Resistant Outer Jacket — Cross-linked low-smoke zero-halogen mud-resistant thermoset sheath	**Minimum bending radius**	8 × OD
Armour, strength member & mechanical duty	TCWB (BFOU) / GSWB (BFCU) Braid Armour — Tinned copper wire braid (O) or galvanized steel wire braid (C)	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per NEK TS 606 Code S3/S7 BFOU(i) & BFCU(i) 150/250 V IEC 60331 Fire-Resistant SHF2-MUD Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per NEK TS 606 Code S3/S7 BFOU(i) & BFCU(i) 150/250 V IEC 60331 Fire-Resistant SHF2-MUD Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	NEK TS 606 Code S3/S7 BFOU(i) & BFCU(i) 150/250 V IEC 60331 Fire-Resistant SHF2-MUD Specification		

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
BFOU(i) / BFCU(i) 250V Construction Schedule (−40…+90 °C) 3 sizes						
☐ **BFOU 4Pr / 8Ch**	**4×2×24–20 AWG (or 8-Ch Array)**	**Stranded SnCu + Foil/Braid + Aramid**	**11.2**	**175**	**12.5**	**90**
☐ **BFOU 8Pr / 16Ch**	**8×2×22–18 AWG (or 16-Ch Array)**	**Stranded SnCu + Foil/Braid + Aramid**	**16.4**	**340**	**24.0**	**130**
☐ **BFOU 16Pr / 24Ch**	**16×2×18–16 AWG (or 24-Ch Array)**	**Stranded SnCu + Foil/Braid + Aramid**	**24.8**	**690**	**35.0**	**195**

– Custom core cross-sections, pair/fibre counts, armour breaking loads and continuous winch/seabed lengths available per NEK TS 606 Code S3/S7 BFOU(i) & BFCU(i) 150/250 V IEC 60331 Fire-Resistant SHF2-MUD Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
4×2×24–20 AWG (or 8-Ch Array)	**42.00**	**150/250 V (300 V) (≤55 nF/km)**	**−40…+90 °C**
8×2×22–18 AWG (or 16-Ch Array)	**26.00**	**150/250 V (300 V) (≤60 nF/km)**	**−40…+90 °C**
16×2×18–16 AWG (or 24-Ch Array)	**15.20**	**150/250 V (300 V) (≤65 nF/km)**	**−40…+90 °C**

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

Standards and approvals

- NEK TS 606 / IEC 60092-376 BFOU(i) 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/bfou-i-bfcu-i-250v-offshore-instrument-cable

Typical values for this cable type, based on NEK TS 606 Code S3/S7 BFOU(i) & BFCU(i) 150/250 V IEC 60331 Fire-Resistant SHF2-MUD Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.