submarine & offshore power composite cable

TXXI / TXOI / RFOU 0.6/1kV

TXXI / TXOI / RFOU 0.6/1 kV IEC 60092-353 & NEK TS 606 Nordic Halogen-

NEK TS 606 / IEC 60092-353 RFOU · 0.6/1 kV · Submarine & offshore power composite cable



NEK TS 606 / IEC 60092-353 RFOU | **0.6/1 kV (-40 to +90 °C)** | **SHF1 / SHF2-MUD Halogen-Free Outer S**

Application

TXXI / TXOI / RFOU 0.6/1 kV IEC 60092-353 & NEK TS 606 Nordic Halogen-Free Marine & Offshore Cable (NEK TS 606 / IEC 60092-353 RFOU) engineered for 0.6/1 kV service across -40 to +90 °C (min. bend radius 6 × OD).

Typical uses: Offshore Wind Inter-Array & Export Submarine Links, Subsea Island & Platform HV/MV Power Interconnects, Offshore Oil & Gas Drilling Rigs & FPSOs, Commercial Vessels, Polar Ships & Marine Propulsion

Construction





Cross-section, not to scale

1. Class 2 / Class 5 Tinned Copper Conducto
2. Halogen-Free XLPE / EPR Core Insulation
3. Tinned Copper Wire Braid (TXOI / RFOU)
4. SHF1 / SHF2-MUD Halogen-Free Outer Sheat

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (NEK TS 606 Code P1/P8 (RFOU) & Nordic TXXI/TXOI 0.6/1 kV SHF1/SHF2-MUD Marine Specification)	**Core / conductor construction**	Class 2 / Class 5 Tinned Copper Conductors — Stranded tinned annealed copper power and control cores
Primary dielectric / buffering	Halogen-Free XLPE / EPR Core Insulation — 90 °C cross-linked polyethylene or EPR insulation	**Continuous operating temperature**	−40...+90 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per NEK TS 606 Code P1/P8 (RFOU) & Nordic TXXI/TXOI 0.6/1 kV SHF1/SHF2-MUD Marine Specification	**Storage & transport temperature**	−40...+80 °C on export wooden/steel winch reel
Outer protection / armouring	SHF1 / SHF2-MUD Halogen-Free Outer Sheath — Flame-retardant oil- and mud-resistant offshore jacket	**Minimum bending radius**	6 × OD
Armour, strength member & mechanical duty	Tinned Copper Wire Braid (TXOI / RFOU) — High-coverage tinned copper wire braid screen and armour	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per NEK TS 606 Code P1/P8 (RFOU) & Nordic TXXI/TXOI 0.6/1 kV SHF1/SHF2-MUD Marine Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per NEK TS 606 Code P1/P8 (RFOU) & Nordic TXXI/TXOI 0.6/1 kV SHF1/SHF2-MUD Marine Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	NEK TS 606 Code P1/P8 (RFOU) & Nordic TXXI/TXOI 0.6/1 kV SHF1/SHF2-MUD Marine 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
TXXI / TXOI / RFOU 0.6/1kV Construction Schedule (−40...+90 °C) 3 sizes						
☐ **TXXI 3×16+1G16 mm²**	**3 × 16 + 1G16 mm² (or 1C×50 mm²)**	**IEC 60228 Class 2/5 Cu/SnCu**	**22.4**	**920**	**18.5**	**135**
☐ **TXXI 3×35+1G16 mm²**	**3 × 35 + 1G16 mm² (or 1C×150 mm²)**	**IEC 60228 Class 2/5 Cu/SnCu**	**28.8**	**1,690**	**32.0**	**175**
☐ **TXXI 3×95+1G50 mm²**	**3 × 95 + 1G50 mm² (or 1C×300 mm²)**	**IEC 60228 Class 2/5 Cu/SnCu**	**41.2**	**3,680**	**58.0**	**250**

– Custom core cross-sections, pair/fibre counts, armour breaking loads and continuous winch/seabed lengths available per NEK TS 606 Code P1/P8 (RFOU) & Nordic TXXI/TXOI 0.6/1 kV SHF1/SHF2-MUD Marine Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
3 × 16 + 1G16 mm² (or 1C×50 mm²)	**1.15**	**0.6/1 kV (98 A)**	**−40...+90 °C**
3 × 35 + 1G16 mm² (or 1C×150 mm²)	**0.52**	**0.6/1 kV (158 A)**	**−40...+90 °C**
3 × 95 + 1G50 mm² (or 1C×300 mm²)	**0.19**	**0.6/1 kV (285 A)**	**−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 60092-353 RFOU 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/txxi-txoi-rfou-0-6-1kv-marine-cable

Typical values for this cable type, based on NEK TS 606 Code P1/P8 (RFOU) & Nordic TXXI/TXOI 0.6/1 kV SHF1/SHF2-MUD Marine Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.