fire-resistant shipboard & offshore cable

M2XCH-FE180 & M2XH-FE180 0.6/1 KV

M2XCH-FE180 & M2XH-FE180 0.6/1 kV IEC 60331-21 Fire-Resistant Shipboar

IEC 60331-21 / IEC 60092-353 · 0.6/1 kV · Fire-resistant shipboard & offshore cable



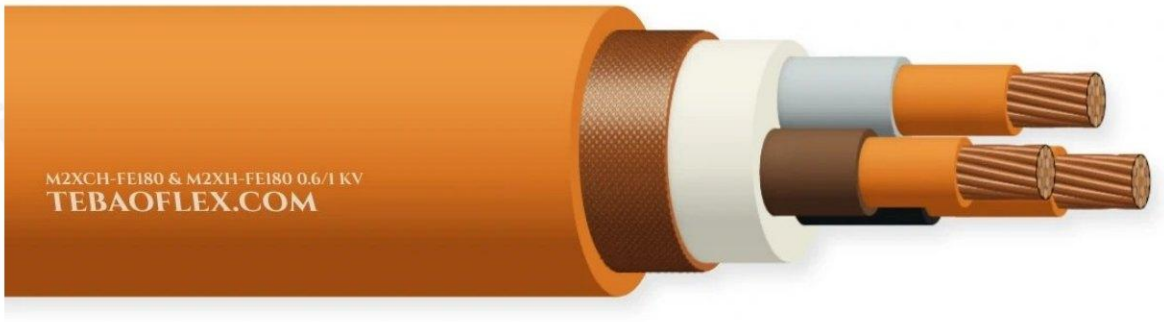
IEC 60331-21 / IEC 60092-353 | 0.6/1 kV (-40 to +90 °C) | Orange SHF1 Fire-Resistant Jacket

Application

M2XCH-FE180 (M2XCH-FFR) & M2XH-FE180 0.6/1 kV Mica-Tape + XLPE Insulated Copper-Braided & Unscreened SHF1 Fire-Resistant (FE180) Shipboard Emergency Power Cable (IEC 60331-21 / IEC 60092-353, 0.6/1 kV, -40 to +90 °C).

Typical uses: Offshore Emergency Shutdown (ESD) & Deluge, Passenger Cruise & Ferry Safe-Return-to-Port, Shipboard Fire Alarm, PA/GA & Emergency Lighting, FPSO & Petrochemical Hydrocarbon Fire Zones

Construction





Cross-section, not to scale

1. Stranded Copper Conductors (3×25 mm²)
2. Mica Glass-Fibre Fire Barrier (FE180)
3. XLPE Core Insulation (HF90)
4. Copper Wire Braid Screen & Armour
5. Orange SHF1 Fire-Resistant Jacket

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (IEC 60331-21 (FE180) & IEC 60092-353 / IEC 60332-3-22 Cat. A)
Primary dielectric / buffering	Mica Glass-Fibre Fire Barrier (FE180) — Helically lapped phlogopite mica tape for 180 min circuit integrity
Short-circuit / peak thermal rating	Verified thermal stability per IEC 60331-21 (FE180) & IEC 60092-353 / IEC 60332-3-22 Cat. A
Outer protection / armouring	Orange SHF1 Fire-Resistant Jacket — Orange low-smoke zero-halogen polyolefin outer sheath (IEC 60331-21)
Armour, screen & mechanical duty	Copper Wire Braid Screen & Armour — High-coverage annealed bare copper wire braid over halogen-free bedding
Oil, drilling mud & seawater resistance	Resistant to marine fuel/lube oils, salt mist and offshore fluids per IEC 60331-21 (FE180) & IEC 60092-353 / IEC 60332-3-22 Cat. A
Standards	IEC 60331-21 (FE180) & IEC 60092-353 / IEC 60332-3-22 Cat. A
Core / conductor construction	Stranded Copper Conductors (3×25 mm²) — IEC 60228 Class 2 / Class 5 plain annealed copper conductors
Continuous operating temperature	−40…+90 °C (shipboard & offshore duty)
Storage & transport temperature	−40…+80 °C on export wooden/steel drum
Minimum bending radius	6 × OD
Flame, fire & smoke performance	Qualified for marine flame-retardance and low-smoke zero-halogen / fire safety per IEC 60331-21 (FE180) & IEC 60092-353 / IEC 60332-3-22 Cat. A
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	Tensile rating kN ≈	Min. bend R mm
M2XCH-FE180 & M2XH-FE180 0.6/1 KV Construction Schedule (−40…+90 °C) 3 sizes						
☐ M2XCH-FE180 3×16+1G16 mm²	3 × 16 + 1G16 mm² (4G16)	IEC 60228 Class 2/5 Cu/SnCu	22.4	920	3.8	135
☐ M2XCH-FE180 3×35+1G16 mm²	3 × 35 + 1G16 mm² (4G35)	IEC 60228 Class 2/5 Cu/SnCu	28.8	1,690	7.4	175
☐ M2XCH-FE180 3×70+1G35 mm²	3 × 70 + 1G35 mm² (4G70)	IEC 60228 Class 2/5 Cu/SnCu	38.2	3,260	14.8	230

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per IEC 60331-21 (FE180) & IEC 60092-353 / IEC 60332-3-22 Cat. A.

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 (4G16)	1.15	0.6/1 kV (98 A)	−40…+90 °C
3 × 35 + 1G16 mm² (4G35)	0.52	0.6/1 kV (158 A)	−40…+90 °C
3 × 70 + 1G35 mm² (4G70)	0.27	0.6/1 kV (245 A)	−40…+90 °C

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

Standards and approvals

- IEC 60331-21 / IEC 60092-353 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/m2xch-fe180-m2xh-fe180-0-6-1-kv

Typical values for this cable type, based on IEC 60331-21 (FE180) & IEC 60092-353 / IEC 60332-3-22 Cat. A. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.