EMC-screened marine & offshore VFD cable

M2XCH-EMC & LKSM-EMC 0.6/1-1.8/3 KV

M2XCH-EMC & LKSM-EMC 0.6/1–1.8/3 kV Dual-Screened Shipboard Propulsion

IEC 60092-353 · 0.6/1 kV – 1.8/3 kV · Emc-screened marine & offshore vfd cable



IEC 60092-353 | **0.6/1 kV – 1.8/3 kV (-40 to +90 °C)**

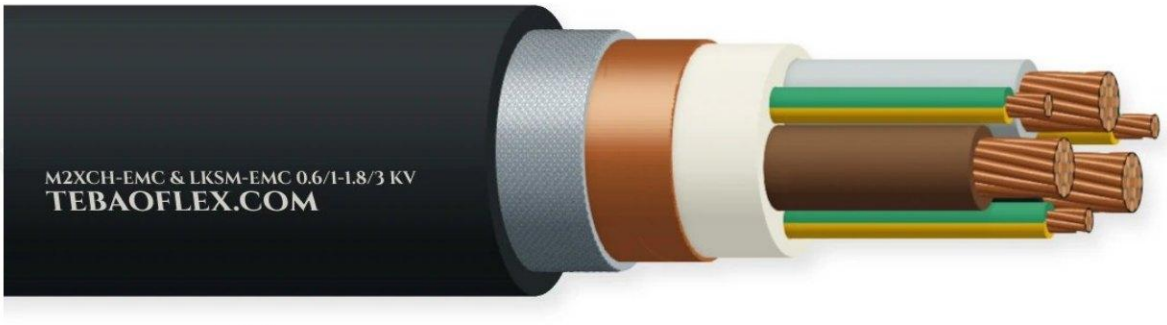
SHF1 / SHF2 Halogen-Free Outer Sheat

Application

M2XCH-EMC & LKSM-EMC 0.6/1–1.8/3 kV Dual-Screened Shipboard Propulsion & VFD Cable (IEC 60092-353) engineered for 0.6/1 kV – 1.8/3 kV service across -40 to +90 °C (min. bend radius 8 × OD).

Typical uses: Marine Azimuth & Tunnel Thruster Drives, Offshore Drilling Drawworks & Mud Pumps, Diesel-Electric & Hybrid Vessel Propulsion, Offshore Deck Winch & Crane Inverter Feeds

Construction





Cross-section, not to scale

1. Main Phase Conductors (3×70 mm² XLPE)
2. Symmetrical Split Earth Cores (3G10 mm²)
3. 100% Copper / Foil Tape Screen (1st EMC)
4. High-Density Copper Wire Braid (2nd EMC)
5. SHF1 / SHF2 Halogen-Free Outer Sheath

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV – 1.8/3 kV (IEC 60092-353 / IEC 60092-360 SHF1 & SHF2 EMC Class)	**Core / conductor construction**	Main Phase Conductors (3×70 mm² XLPE) — Low-capacitance HF90 XLPE insulated phase cores (Brown, Black, Grey)
Primary dielectric / buffering	Symmetrical Split Earth Cores (3G10 mm²) — Three symmetrically placed Green/Yellow earth cores in outer interstices	**Continuous operating temperature**	−40...+90 °C (shipboard & offshore duty)
Short-circuit / peak thermal rating	Verified thermal stability per IEC 60092-353 / IEC 60092-360 SHF1 & SHF2 EMC Class	**Storage & transport temperature**	−40...+80 °C on export wooden/steel drum
Outer protection / armouring	SHF1 / SHF2 Halogen-Free Outer Sheath — Flame-retardant zero-halogen marine jacket (IEC 60092-360)	**Minimum bending radius**	8 × OD
Armour, screen & mechanical duty	High-Density Copper Wire Braid (2nd EMC) — Low transfer-impedance copper wire braid screen and armour	**Flame, fire & smoke performance**	Qualified for marine flame-retardance and low-smoke zero-halogen / fire safety per IEC 60092-353 / IEC 60092-360 SHF1 & SHF2 EMC Class
Oil, drilling mud & seawater resistance	Resistant to marine fuel/lube oils, salt mist and offshore fluids per IEC 60092-353 / IEC 60092-360 SHF1 & SHF2 EMC Class	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEC 60092-353 / IEC 60092-360 SHF1 & SHF2 EMC Class		

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-EMC & LKSM-EMC 0.6/1-1.8/3 KV Construction Schedule (−40...+90 °C) 3 sizes						
☐ M2XCH-EMC 3×35+3G6 VFD	3 × 35 + 3G6 mm² (3+3E EMC)	IEC 60228 Class 2/5 Cu/SnCu	29.4	1,760	15.8	235
☐ M2XCH-EMC 3×70+3G10 VFD	3 × 70 + 3G10 mm² (3+3E EMC)	IEC 60228 Class 2/5 Cu/SnCu	37.8	3,190	31.5	305
☐ M2XCH-EMC 3×120+3G16 VFD	3 × 120 + 3G16 mm² (3+3E EMC)	IEC 60228 Class 2/5 Cu/SnCu	46.5	5,120	54.0	375

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per IEC 60092-353 / IEC 60092-360 SHF1 & SHF2 EMC Class.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
3 × 35 + 3G6 mm² (3+3E EMC)	0.52	0.6/1 kV – 1.8/3 kV (138 A VFD)	−40...+90 °C
3 × 70 + 3G10 mm² (3+3E EMC)	0.27	0.6/1 kV – 1.8/3 kV (215 A VFD)	−40...+90 °C
3 × 120 + 3G16 mm² (3+3E EMC)	0.15	0.6/1 kV – 1.8/3 kV (305 A VFD)	−40...+90 °C

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

Standards and approvals

- 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-emc-lksm-emc-0-6-1-1-8-3-kv

Typical values for this cable type, based on IEC 60092-353 / IEC 60092-360 SHF1 & SHF2 EMC Class. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.