fire-resistant shipboard & offshore cable

MHXCH FE120 & FMHXCH FE120

0.6/1 kV / 250 V S95 Ceramifying Silicone F

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



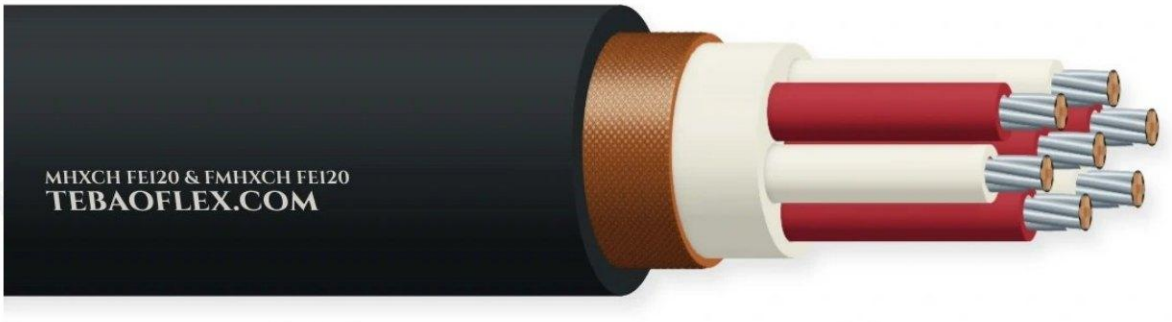
IEC 60331 / IEC 60092-353 | **0.6/1 kV (-40 to +90 °C)** | **SHF1 Halogen-Free Outer Sheath**

Application

MHXCH FE120 & MHXH FE120 0.6/1 kV & FMHXCH FE120 250 V S95 Ceramized-Elastomer Insulated Copper-Braided SHF1 Fire-Resistant Shipboard Cable (IEC 60331 / IEC 60092-353, 0.6/1 kV, -40 to +90 °C, min. bend radius 6 × OD).

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. Tinned Copper Conductors (7×1.5 mm²)
2. S95 Ceramifying Silicone Insulation (HX)
3. Halogen-Free Inner Covering
4. Copper Wire Braid Screen (C)
5. SHF1 Halogen-Free Outer Sheath

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (IEC 60331 (FE120) / IEC 60092-353 & 60092-376 S95 Ceramifying Elastomer)	**Core / conductor construction**	Tinned Copper Conductors (7×1.5 mm²) — Stranded tinned annealed copper conductors
Primary dielectric / buffering	S95 Ceramifying Silicone Insulation (HX) — Cross-linked silicone elastomer forming protective ceramic shell in fire (FE120)	**Continuous operating temperature**	−40…+90 °C (shipboard & offshore duty)
Short-circuit / peak thermal rating	Verified thermal stability per IEC 60331 (FE120) / IEC 60092-353 & 60092-376 S95 Ceramifying Elastomer	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	SHF1 Halogen-Free Outer Sheath — Low-smoke zero-halogen polyolefin jacket	**Minimum bending radius**	6 × OD
Armour, screen & mechanical duty	Copper Wire Braid Screen (C) — High-coverage copper wire braid for EMC and mechanical protection	**Flame, fire & smoke performance**	Qualified for marine flame-retardance and low-smoke zero-halogen / fire safety per IEC 60331 (FE120) / IEC 60092-353 & 60092-376 S95 Ceramifying Elastomer
Oil, drilling mud & seawater resistance	Resistant to marine fuel/lube oils, salt mist and offshore fluids per IEC 60331 (FE120) / IEC 60092-353 & 60092-376 S95 Ceramifying Elastomer	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEC 60331 (FE120) / IEC 60092-353 & 60092-376 S95 Ceramifying Elastomer		

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
MHXCH FE120 & FMHXCH FE120 Construction Schedule (−40…+90 °C) 3 sizes						
☐ **MHXCH FE120 4G2.5 mm²**	**4 × 2.5 mm² (or 4C × 14 AWG)**	**IEC 60228 Class 2/5 Cu/SnCu**	**13.2**	**275**	**1.5**	**80**
☐ **MHXCH FE120 7G2.5 mm²**	**7 × 2.5 mm² (or 7C × 14 AWG)**	**IEC 60228 Class 2/5 Cu/SnCu**	**15.8**	**415**	**2.6**	**95**
☐ **MHXCH FE120 12G1.5 mm²**	**12 × 1.5 mm² (or 12C × 16 AWG)**	**IEC 60228 Class 2/5 Cu/SnCu**	**17.4**	**495**	**2.7**	**105**

- Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per IEC 60331 (FE120) / IEC 60092-353 & 60092-376 S95 Ceramifying Elastomer.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
4 × 2.5 mm² (or 4C × 14 AWG)	**7.98**	**0.6/1 kV (26 A)**	**−40…+90 °C**
7 × 2.5 mm² (or 7C × 14 AWG)	**7.98**	**0.6/1 kV (21 A)**	**−40…+90 °C**
12 × 1.5 mm² (or 12C × 16 AWG)	**13.30**	**0.6/1 kV (14 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 / 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/mhxch-fe120-fmhxch-fe120

Typical values for this cable type, based on IEC 60331 (FE120) / IEC 60092-353 & 60092-376 S95 Ceramifying Elastomer. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.