halogen-free shipboard cable

# M2XH & (L)M2XH-J 0.6/1 KV

## M2XH & (L)M2XH-J 0.6/1 kV IEC 60092-353 / DIN 89160 Unarmoured Halogen




IEC 60092-353 / DIN 89160 · 0.6/1 kV · Halogen-free shipboard cable

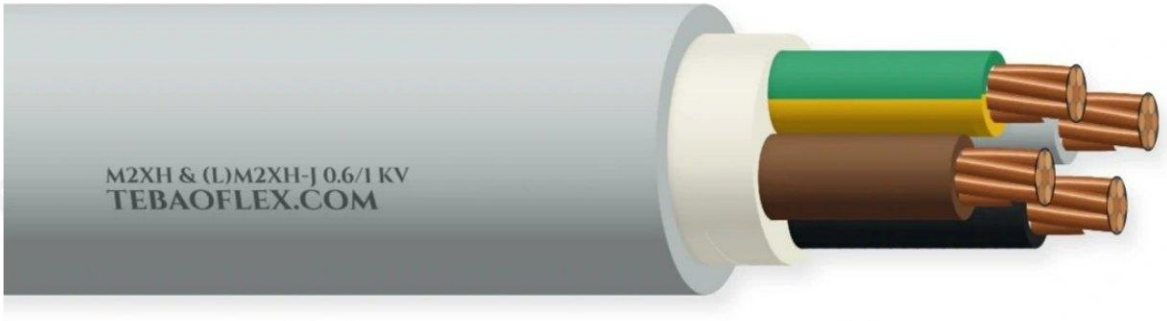
IEC 60092-353 / DIN 89160 | 0.6/1 kV (-40 to +90 °C) | SHF1 Lightweight Outer Sheath

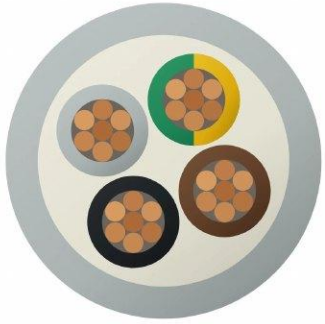
## Application

M2XH & (L)M2XH / (L)M2XH-J 0.6/1 kV XLPE-Insulated Unarmoured Lightweight SHF1 Halogen-Free Shipboard Power & Lighting Cable (IEC 60092-353 / DIN 89160, 0.6/1 kV, -40 to +90 °C, min. bend radius 6 × OD).

**Typical uses:** Passenger Vessels, Ferries & Yachts, Merchant Marine Engine & Cargo Spaces, Offshore Living Quarters & Utility Modules, Shipyard Newbuild & Retrofit Electrical Outfitting

## Construction



Cross-section, not to scale

1. Stranded Copper Conductors (4G16 mm²)
2. XLPE Core Insulation (HD 308 S2)
3. Halogen-Free Binder & Filler
4. SHF1 Lightweight Outer Sheath

## Technical data

Typical values

| | | | |
|---|---|---|---|
| **Rated voltage / transmission duty** | 0.6/1 kV (IEC 60092-353 & DIN 89160 / IEC 60092-360 SHF1) | **Core / conductor construction** | Stranded Copper Conductors (4G16 mm²) — IEC 60228 Class 2 plain annealed stranded copper conductors |
| **Primary dielectric / buffering** | XLPE Core Insulation (HD 308 S2) — Cross-linked polyethylene coded Brown, Black, Grey and Green/Yellow | **Continuous operating temperature** | −40…+90 °C (shipboard & offshore duty) |
| **Short-circuit / peak thermal rating** | Verified thermal stability per IEC 60092-353 & DIN 89160 / IEC 60092-360 SHF1 | **Storage & transport temperature** | −40…+80 °C on export wooden/steel drum |
| **Outer protection / armouring** | SHF1 Lightweight Outer Sheath — Grey low-smoke zero-halogen polyolefin outer jacket (DIN 89160) | **Minimum bending radius** | 6 × OD |
| **Armour, screen & mechanical duty** | Halogen-Free Binder & Filler — Flame-retardant non-hygroscopic core filler and wrapping tape | **Flame, fire & smoke performance** | Qualified for marine flame-retardance and low-smoke zero-halogen / fire safety per IEC 60092-353 & DIN 89160 / IEC 60092-360 SHF1 |
| **Oil, drilling mud & seawater resistance** | Resistant to marine fuel/lube oils, salt mist and offshore fluids per IEC 60092-353 & DIN 89160 / IEC 60092-360 SHF1 | **RoHS & REACH compliance** | RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant |
| **Standards** | IEC 60092-353 & DIN 89160 / IEC 60092-360 SHF1 | | |

## 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 |
|---|---|---|---|---|---|---|
| **M2XH & (L)M2XH-J 0.6/1 KV Construction Schedule (−40…+90 °C)** 3 sizes | | | | | | |
| ☐ **M2XH 3×16+1G16 mm²** | **3 × 16 + 1G16 mm² (4G16)** | **IEC 60228 Class 2/5 Cu/SnCu** | **22.4** | **920** | **3.8** | **135** |
| ☐ **M2XH 3×35+1G16 mm²** | **3 × 35 + 1G16 mm² (4G35)** | **IEC 60228 Class 2/5 Cu/SnCu** | **28.8** | **1,690** | **7.4** | **175** |
| ☐ **M2XH 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 60092-353 & DIN 89160 / IEC 60092-360 SHF1.

## 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 60092-353 / DIN 89160 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/m2xh-l-m2xh-j-0-6-1-kv**

Typical values for this cable type, based on IEC 60092-353 & DIN 89160 / IEC 60092-360 SHF1. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.