marine & offshore instrumentation cable

# RFE-HF & RFE-SHF2 / RFE-HF(I) 250 V

## RFE-HF, RFE-SHF2 & RFE-HF(i) 150/250 V IEC 60092-376 Copper-Braided Ma



IEC 60092-376 · 150/250 V · Marine & offshore instrumentation cable

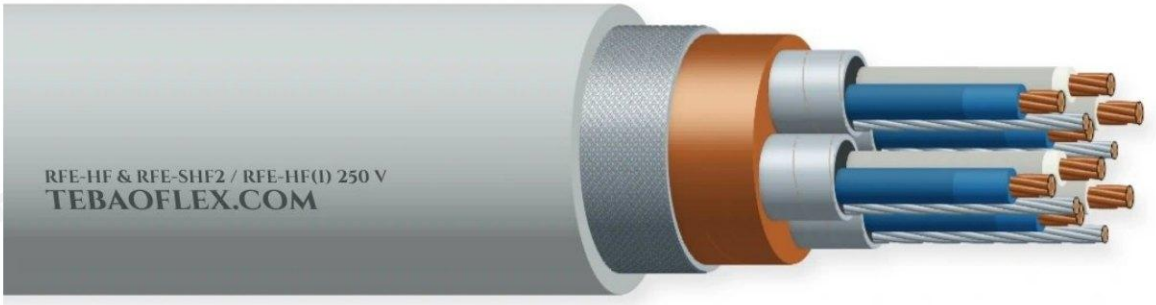
**IEC 60092-376** | **150/250 V (-40 to +90 °C)** | **SHF1 / Oil-Resistant SHF2 Outer Jack**

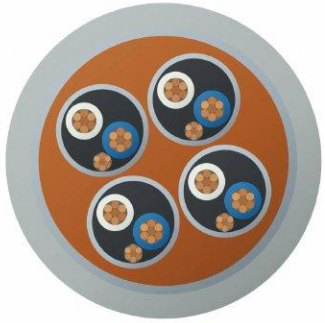
## Application

RFE-HF, RFE-SHF2 & RFE-HF(i) 150/250 V (300 V) IEC 60092-376 XLPE-Insulated Copper-Wire-Braid Armoured & Screened SHF1/SHF2 Shipboard & Offshore Pair Instrumentation Cable (IEC 60092-376, 150/250 V, -40 to +90 °C).

**Typical uses:** Offshore DCS, ESD & Fire-Gas Systems, Shipboard Bridge & Engine Room Automation, Drilling Rig Instrumentation & Mud Logging, Naval Radar, Sonar & Combat Switchboards

## Construction



Cross-section, not to scale

1. XLPE Twisted Pairs (4×2×0.75 mm²)
2. Individual & Collective Foil Screen
3. Copper Wire Braid Armour (RFE)
4. SHF1 / Oil-Resistant SHF2 Outer Jacket

## Technical data

Typical values

| | |
|---|---|
| **Rated voltage / transmission duty** | 150/250 V (IEC 60092-376 / IEC 60092-360 SHF1 & SHF2 / IEC 60332-3-22 Cat. A) |
| **Primary dielectric / buffering** | Individual & Collective Foil Screen — Pair Al/PET foil + drain (RFE-HF(i)) and collective copper/PET tape |
| **Short-circuit / peak thermal rating** | Verified thermal stability per IEC 60092-376 / IEC 60092-360 SHF1 & SHF2 / IEC 60332-3-22 Cat. A |
| **Outer protection / armouring** | SHF1 / Oil-Resistant SHF2 Outer Jacket — Halogen-free polyolefin (RFE-HF) or cross-linked elastomer (RFE-SHF2) |
| **Armour, screen & mechanical duty** | Copper Wire Braid Armour (RFE) — Tinned or bare copper wire braid mechanical armour and EMC screen |
| **Oil, drilling mud & seawater resistance** | Resistant to marine fuel/lube oils, salt mist and offshore fluids per IEC 60092-376 / IEC 60092-360 SHF1 & SHF2 / IEC 60332-3-22 Cat. A |
| **Standards** | IEC 60092-376 / IEC 60092-360 SHF1 & SHF2 / IEC 60332-3-22 Cat. A |
| **Core / conductor construction** | XLPE Twisted Pairs (4×2×0.75 mm²) — Stranded copper conductors with numbered Blue/White XLPE insulation |
| **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 60092-376 / IEC 60092-360 SHF1 & SHF2 / 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 |
|---|---|---|---|---|---|---|
| **RFE-HF & RFE-SHF2 / RFE-HF(I) 250 V Construction Schedule (−40…+90 °C)** 3 sizes | | | | | | |
| ☐ **RFE-HF 2×2×0.75 mm²** | 2 × 2 × 0.75 mm² (2Pr) | Stranded Cu/SnCu (IEC 60228 Class 2/5) | 11.4 | 195 | 1.2 | 70 |
| ☐ **RFE-HF 4×2×1.0 mm²** | 4 × 2 × 1.0 mm² (4Pr) | Stranded Cu/SnCu (IEC 60228 Class 2/5) | 15.6 | 365 | 2.4 | 95 |
| ☐ **RFE-HF 8×2×1.5 mm²** | 8 × 2 × 1.5 mm² (8Pr) | Stranded Cu/SnCu (IEC 60228 Class 2/5) | 22.8 | 760 | 4.8 | 140 |

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per IEC 60092-376 / IEC 60092-360 SHF1 & SHF2 / 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. |
|---|---|---|---|
| 2 × 2 × 0.75 mm² (2Pr) | 26.00 | 150/250 V (≤60 nF/km) | −40…+90 °C |
| 4 × 2 × 1.0 mm² (4Pr) | 19.50 | 150/250 V (≤65 nF/km) | −40…+90 °C |
| 8 × 2 × 1.5 mm² (8Pr) | 13.30 | 150/250 V (≤75 nF/km) | −40…+90 °C |

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

## Standards and approvals

- IEC 60092-376 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/rfe-hf-rfe-shf2-rfe-hf-i-250-v**

Typical values for this cable type, based on IEC 60092-376 / IEC 60092-360 SHF1 & SHF2 / 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.