marine & offshore instrumentation cable

RFE-FRHF & RFA-FRHF(I) 250 V

RFE-FRHF & RFA-FRHF(i) 150/250 V IEC 60092-376 / IEC 60331 Fire-Resist

IEC 60092-376 / IEC 60331 · 150/250 V · Marine & offshore instrumentation cable



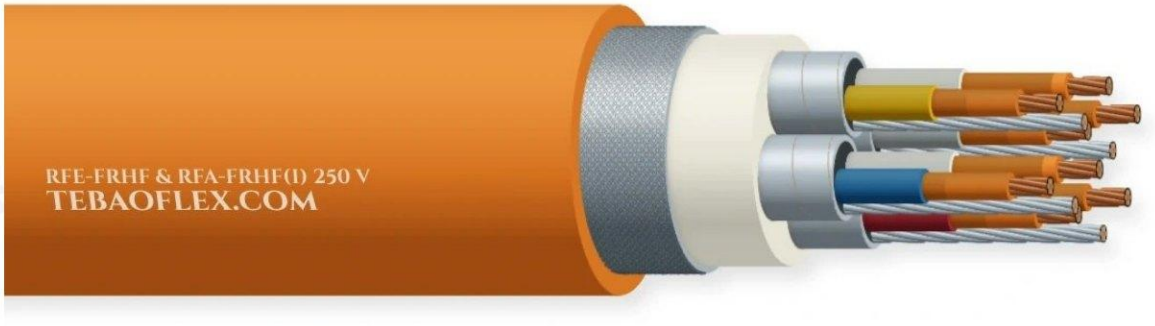
IEC 60092-376 / IEC 60331 | **150/250 V (-40 to +90 °C)** | **Orange SHF1 / SHF2 Fire-Safe Sheath**

Application

RFE-FRHF & RFA-FRHF(i) 150/250 V IEC 60092-376 / IEC 60331 Fire-Resistant Shipboard Instrumentation Cable (IEC 60092-376 / IEC 60331) engineered for 150/250 V service across -40 to +90 °C (min. bend radius 6 × OD).

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. Mica + XLPE Twisted Pairs (4×2×0.75 mm²)
2. Individual Pair Foil Screen (RFA-FRHF(i)
3. Tinned Copper Braid Armour (RFE-FRHF)
4. Orange SHF1 / SHF2 Fire-Safe Sheath

Technical data

Typical values

Rated voltage / transmission duty	150/250 V (IEC 60092-376 & IEC 60331-21 / IEC 60332-3-22 Cat. A)	**Core / conductor construction**	Mica + XLPE Twisted Pairs (4×2×0.75 mm²) — Stranded copper conductors with mica fire barrier and XLPE insulation
Primary dielectric / buffering	Individual Pair Foil Screen (RFA-FRHF(i)) — Each pair wrapped with Al/PET tape and tinned copper drain wire	**Continuous operating temperature**	−40…+90 °C (shipboard & offshore duty)
Short-circuit / peak thermal rating	Verified thermal stability per IEC 60092-376 & IEC 60331-21 / IEC 60332-3-22 Cat. A	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Orange SHF1 / SHF2 Fire-Safe Sheath — Halogen-free flame-retardant jacket maintaining signal integrity in fire	**Minimum bending radius**	6 × OD
Armour, screen & mechanical duty	Tinned Copper Braid Armour (RFE-FRHF) — Overall tinned copper wire braid screen and mechanical armour	**Flame, fire & smoke performance**	Qualified for marine flame-retardance and low-smoke zero-halogen / fire safety per IEC 60092-376 & IEC 60331-21 / IEC 60332-3-22 Cat. A
Oil, drilling mud & seawater resistance	Resistant to marine fuel/lube oils, salt mist and offshore fluids per IEC 60092-376 & IEC 60331-21 / IEC 60332-3-22 Cat. A	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEC 60092-376 & IEC 60331-21 / IEC 60332-3-22 Cat. A		

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-FRHF & RFA-FRHF(I) 250 V Construction Schedule (−40…+90 °C) 3 sizes						
☐ **RFE-FRHF 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-FRHF 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-FRHF 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 60331-21 / 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 / IEC 60331 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-frhf-rfa-frhf-i-250-v

Typical values for this cable type, based on IEC 60092-376 & IEC 60331-21 / 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.