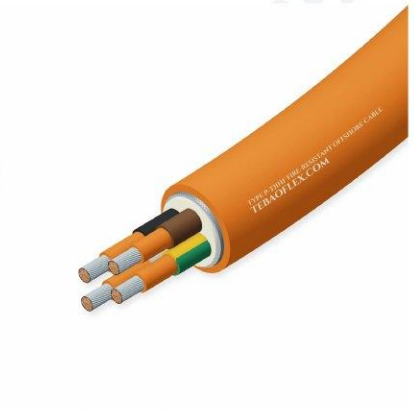
fire-resistant shipboard & offshore cable

Type P-331HF Fire-Resistant

IEEE 1580 Type P-331HF & IEC 60331 0.6/1–15 kV Mica-Taped Fire-Resista

IEEE 1580 / IEC 60331-21 Type P-331HF · 0.6/1 kV – 15 kV · Fire-resistant shipboard &



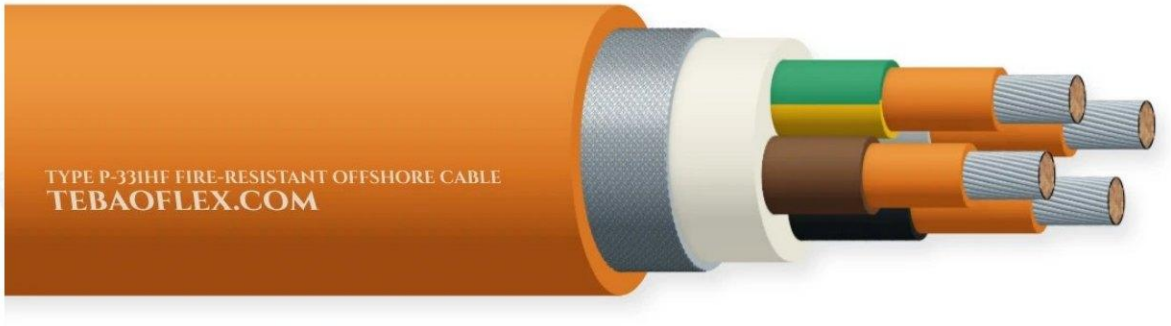
IEEE 1580 / IEC 60331-21 Type P-331H | 0.6/1 kV – 15 kV (-40 to +125 °C) | SHF2 Low-Smoke Zero-Halogen Outer Ja

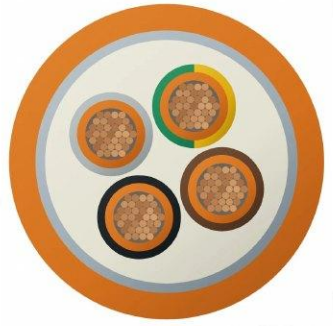
Application

IEEE 1580 Type P-331HF & IEC 60331 0.6/1–15 kV Mica-Taped Fire-Resistant SHF2 Offshore Power Cable (IEEE 1580 / IEC 60331-21 Type P-331HF) engineered for 0.6/1 kV – 15 kV service across -40 to +125 °C (min. bend radius 8 × OD).

Typical uses: Offshore Emergency Shutdown (ESD) & Fire Pumps, FPSO & Drilling Rig Essential Power Circuits, Passenger Vessel Safe-Return-to-Port Systems, Shipboard Fire Alarm, PA/GA & Emergency Lighting

Construction





Cross-section, not to scale

1. High-Flex Tinned Copper Conductors
2. Mica Fire-Barrier Tape + XLPO Insulation
3. Bronze / Tinned Copper Wire Braid Armour
4. SHF2 Low-Smoke Zero-Halogen Outer Jacket

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV – 15 kV (IEEE 1580 Type P-331HF & IEC 60331-21 Fire-Resistant SHF2 Bronze-Armoured Offshore Specification)	**Core / conductor construction**	High-Flex Tinned Copper Conductors — Stranded tinned copper conductors for power, control & VFD circuits
Primary dielectric / buffering	Mica Fire-Barrier Tape + XLPO Insulation — Mica tape + cross-linked polyolefin certified to IEC 60331 fire integrity	**Continuous operating temperature**	−40…+125 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per IEEE 1580 Type P-331HF & IEC 60331-21 Fire-Resistant SHF2 Bronze-Armoured Offshore Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	SHF2 Low-Smoke Zero-Halogen Outer Jacket — Thermoset halogen-free oil- and mud-resistant safety sheath	**Minimum bending radius**	8 × OD
Armour, strength member & mechanical duty	Bronze / Tinned Copper Wire Braid Armour — High-coverage metallic braid over halogen-free inner bedding	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per IEEE 1580 Type P-331HF & IEC 60331-21 Fire-Resistant SHF2 Bronze-Armoured Offshore Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per IEEE 1580 Type P-331HF & IEC 60331-21 Fire-Resistant SHF2 Bronze-Armoured Offshore Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEEE 1580 Type P-331HF & IEC 60331-21 Fire-Resistant SHF2 Bronze-Armoured Offshore Specification		

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	Breaking / tensile kN ≈	Min. bend R mm
Type P-331HF Fire-Resistant Construction Schedule (−40…+125 °C) 3 sizes						
☐ **Type P-331HF Fire-Resistant 3×16+1G16 mm²**	3 × 16 + 1G16 mm² (or 1C×50 mm²)	IEC 60228 Class 2/5 Cu/SnCu	22.4	920	18.5	135
☐ **Type P-331HF Fire-Resistant 3×35+1G16 mm²**	3 × 35 + 1G16 mm² (or 1C×150 mm²)	IEC 60228 Class 2/5 Cu/SnCu	28.8	1,690	32.0	175
☐ **Type P-331HF Fire-Resistant 3×95+1G50 mm²**	3 × 95 + 1G50 mm² (or 1C×300 mm²)	IEC 60228 Class 2/5 Cu/SnCu	41.2	3,680	58.0	250

– Custom core cross-sections, pair/fibre counts, armour breaking loads and continuous winch/seabed lengths available per IEEE 1580 Type P-331HF & IEC 60331-21 Fire-Resistant SHF2 Bronze-Armoured Offshore Specification.

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 (or 1C×50 mm²)	1.15	0.6/1 kV – 15 kV (98 A)	−40…+125 °C
3 × 35 + 1G16 mm² (or 1C×150 mm²)	0.52	0.6/1 kV – 15 kV (158 A)	−40…+125 °C
3 × 95 + 1G50 mm² (or 1C×300 mm²)	0.19	0.6/1 kV – 15 kV (285 A)	−40…+125 °C

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

Standards and approvals

- IEEE 1580 / IEC 60331-21 Type P-331HF 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/type-p-331hf-fire-resistant-offshore-cable

Typical values for this cable type, based on IEEE 1580 Type P-331HF & IEC 60331-21 Fire-Resistant SHF2 Bronze-Armoured Offshore Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.