


Ultravolt NEXTGEN+

125° HEAT RESISTANT

e-Beam PRO TECHNOLOGY

## ADVANCED PROTECTION FOR THE HOMES OF TOMORROW

As homes become more connected and power-intensive, their wiring must be ready for heavier, continuous electrical loads. NextGen combines E-Beam cross-linked insulation with advanced heat and fire protection to deliver the highest level of safety and performance in the UltraVolt House Wires range.

## WHY CHOOSE ULTRAVOLT NEXTGEN?

### Future Heavy-Load Ready

125°C continuous operating temperature enables growing electrical loads safely and reliably.

### Short-Circuit Safe

Cross-linked insulation retains its shape under extreme fault temperatures, helping contain faults.

### Low Smoke, Safer Exit

Halogen-free insulation emits zero toxic halogen gases and negligible smoke, supporting safer evacuation.

### Higher Current - Carrying Capacity

Supports up to 90% higher current carrying capacity than normal PVC insulated wires.

## KEY PRODUCT FEATURES

| 125°C | Toxic Halogen Free | LF | 80+Yrs* | Anti-Pest | 99.97% Cu | HFFR |
|---|---|---|---|---|---|---|
| Heat Resistant | Halogen-Free Safer Escape | Lead-Free Insulation | Long Service Life | Termite & Rodent Free | TruePure Copper | Cross-Linked XLPO |

- Future heavy-load ready - Performance subject to rated current capacity of the circuit including the switches, sockets and switchgears and following correct installation as per NEC 2023
- Short circuit safety - * short-circuit protection subject to rated conditions as per IEC 60949 and correct installation with protection devices.
- 90% higher current carrying capacity - vs. normal PVC cables and basis independent test conducted under controlled conditions. Actual performance may vary.
- 125 deg heat resistant - Based on independent testing under controlled conditions. Actual performance may vary. Details at www.UltraVoltwirescables.com

**Available Sizes:** 0.75, 1.0, 1.5, 2.5, 4.0, 6.0 sq.mm

**Available Colours:**

| | | |
|---|---|---|
| **CONDUCTOR**<br>**Bare Annealed Copper**<br>99.97% purity | **CONDUCTOR CLASS**<br>**Class 5**<br>Fine flexible | **INSULATION**<br>**HFFR HFI XL90**<br>• Electron beam cross-linked<br>• Halogen-Free Flame-Retardant |
| **RATED VOLTAGE**<br>**1100 V**<br>Suitable for all domestic circuits | **TEMP. RATING**<br>**125°C Heat Resistant**<br>250°C short-circuit | **PACK LENGTHS**<br>**90 m**<br>Retail coil |

**Applicable Certifications:**

Quality Management System Certification

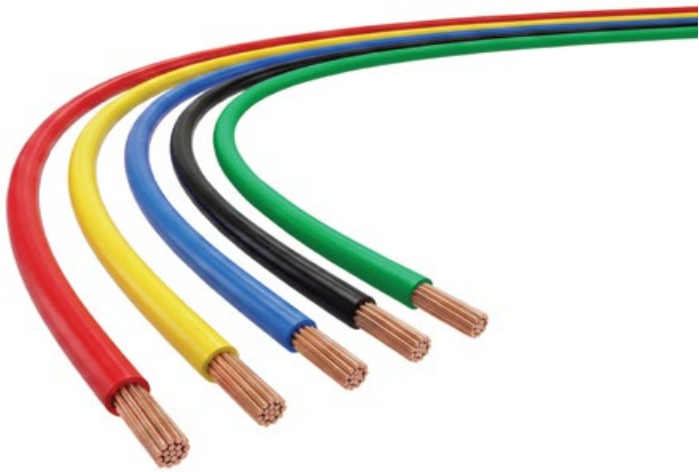
European Conformity

IS : 17048
CM/L: 7100158405

Product Certifications

REACH compliant RoHS compliant

Human Safety / Environment Safety



## FIRE PERFORMANCE — TESTED VALUES

| Test Parameter | Standard | Requirement |
|---|---|---|
| Halogen Content (HCL and HBr) | IS 17048 CL 5.7 Annex. D | < 0.5% |
| Smoke Density (min. transmittance of light) | IS 10810 P-63 / ASTM D2843 | ≥ 70% |

## TECHNICAL SPECIFICATION

| Item Code | Nominal Conductor Area | Number and Nominal Diameter of Strands# | Class of Conductor | Nominal Thickness of Insulation | Maximum DC Conductor Resistance at 20°C per kilometer | Current Carrying Capacity / 2 Cables Single Phase** | |
|---|---|---|---|---|---|---|---|
| | | | | | | In Conduit Trunking | Unenclosed |
| UWFCAI5HXX7501--090E | 0.75 sq.mm | 24 N/0.20 mm | Class-5 | 0.6 mm | 26.0 Ω/km | 13 A | 14 A |
| UWFCAI5HX1X001--090E | 1.0 sq.mm | 32 N/0.20 mm | Class-5 | 0.6 mm | 19.50 Ω/km | 21 A | 22 A |
| UWFCAI5HX1X501--090E | 1.5 sq.mm | 30 N/0.25 mm | Class-5 | 0.6 mm | 13.30 Ω/km | 24 A | 27 A |
| UWFCAI5HX2X501--090E | 2.5 sq.mm | 50 N/0.25 mm | Class-5 | 0.7 mm | 7.98 Ω/km | 32 A | 36 A |
| UWFCAI5HX4X001--090E | 4.0 sq.mm | 56 N/0.30 mm | Class-5 | 0.8 mm | 4.95 Ω/km | 41 A | 47 A |
| UWFCAI5HX6X001 --090E | 6.0 sq.mm | 84 N/0.30 mm | Class-5 | 0.8 mm | 3.30 Ω/km | 53 A | 60 A |

** Current carrying capacity values are calculated for 90°C from IEC 60287-1-1

# The numbers of strands and strand diameter are for reference only. Governing criteria shall be max. DC resistance requirement as per IS 8130.