

**ProductSKU:** 287650  
**ProductDescription:** FREP®Instrumentation,OverallShielded,EPR,CPE,Volts:600V,ULTypeTC,No.ofPairs/Triads:1,ConductorSize(AWG):18,ConductorStrands:7/.0152,Ratedat90°Cwetordry  
**ProductCategory:** Instrumentation,Power,Control&Specialty-Instrumentation&ThermocoupleCables-300V&600V-FREPInstrumentation,Shielded,EPR/CPEOverallShieldedPairs/Triads-OVERALLShielded Pairs/TRIADS18AWGConductors

**ProductConstruction:**

- CableType:** • FREP®Instrumentation
- ShieldType:** • Shielded
- InsulationType:** • EPR
- JacketType:** • CPE
- Volts:** • 600V
- Conductors:** • Bare,annealedcopperperASTMB3  
• ClassBstrandingperASTMB8  
• Tinned,annealedcopperperASTMB33
- Insulation:** • ColorCode:perICEAMethod1;Pairs-blackandwhite.Triads-black,whiteandred.  
Oneconductorineachpairortriadisprintedalpha-numericallyforeasyidentification  
• Flame-retardantEthylenePropyleneRubber(EPR)TypeII
- Shield:** • OverallshieldisFlexFoil@aluminum/polyesterincontactwithstrandedtinnedcopper  
drainwire
- Jacket:** • Flame-retardantthermoplasticChlorinatedPolyethylene(CPE)
- Print:** • GENERALCABLE®BICC®BRAND(WC)FREPXX/PS/TSXXAWGEPR/CPE  
SHIELDED(UL)TYPETC90°CETORDRY600VDIRBURSUNRES  
MONTH/YEAROFMFGSEQUENTIALFOOTAGEMARK

- Options:
- Barecopperconductor
  - ClassCstranding
  - Cross-LinkedPolyethylene(XLPE)insulation
  - FREP300V-ULTypePLTC
  - FREPII-flame-retardant,thermoplasticLow-Smoke,Zero-Halogen(LSZH)polyolefin jacket
  - FREPII-XL-flame-retardant,thermosetLow-Smoke,Zero-Halogen(XL-LSZH)polyolefin jacket
  - FREP-XLflame-retardant,thermosetChlorinatedPolyethylene(XL-CPE)jacket
  - Otherconstructionsavailableuponrequest

**ProductSpecification:**

- OverallShieldedPairs/Triads: • OverallshieldisFlexfoil®aluminum/polyesterincontactwithstrandedtinnedcopper drainwire
- No.ofPairs: • 1
- ConductorSize(AWG/kcmil): • 18
- ConductorStrand: • 7/.0152
- MinimumAverageInsulation Thickness(in): • 0.025
- MinimumAverageInsulation Thickness(mm): • 0.64
- MinimumAverageJacket Thickness(in): • 0.045
- MinimumAverageJacket Thickness(mm): • 1.14
- NominalCableOutsideDiameter (in): • 0.300
- NominalCableOutsideDiameter (mm): • 7.62
- ApproximateCopperWeight(lbs per1,000ft): • 12.5
- ApproximateNetWeight(lbsper 1,000ft): • 42
- ApproximateNetWeight(kgper 1,000km): • 63
- StandardPackaging: • Perorderlength(pol)
- Footnote: • Dimensionsandweightsarenominal;subjecttoindustrytolerance.
- UPC#: • 079407009596
- SCC-14: • 00079407009599
- WeightPerUnitofMeasure: • .0414
- ConductorSize(AWG): • 18

**ProductInformation:**

- Applications:**
- In free air, raceways, or direct burial in accordance with NEC
  - In wet or dry locations
  - Permitted for use in Class I Division 2 industrial hazardous locations per NEC Article 501-4(b) for UL Type PLTC cables
- Compliances:**
- IEEE 383 (70,000 BTU/hr)
  - OSHA acceptable
  - ICEAT-29-520 (210,000 BTU/hr)
  - IEEE 1202 (70,000 BTU/hr) / CSA FT4
  - ICEAS-82-552-600V
  - IEEE 1202 (70,000 BTU/hr) CSA FT4
  - UL Subject 1277 (70,000 BTU/hr)
  - UL Type TC-600V
- Features:**
- Excellent moisture resistance
  - Excellent electrical, thermal and physical properties
  - Excellent flame resistance - burn to ash; does not exhibit thermoplastic drip
  - Excellent low temperature cold bend characteristics
  - Excellent resistance to compression cuts
  - Low coefficient of friction for easy pulling
  - Meets cold bend test at -35°C
  - Rated at 90°C wet or dry
  - Sunlight and weather-resistant
- Packaging:**
- Material cut to length and shipped out on non-returnable wood reels

## **Technical Specifications**

### Reference Standards

2002 NEC Chapter 3 Article Conversion Chart

### Recommended Handling & Storage Practices

### Voltage Drop

### AC Resistance & Inductive Reactance

### Cable Installation

### Common Color Sequence

### Cable Pre-Installation

### Short Circuit Current

### Metric Conversion

### Glossary

### Emergency Overload Current

### Conductors for General Wiring

### Jacket & Insulation Materials

### Conductor Reference Table

### Formula - Copper Shield & Bonding (Grounding) Conductors

### ICEA Ampacities

### Cable Testing

### NEC & CSA Designations

### CSA Technical Section

### Checklist for Specifications

**BICC**<sup>®</sup>  
**BRAND**

