



Product: [83609](#)

Electronic, 9 C #20 Str TC, FEP Ins, OS+TC Brd, FEP Jkt, CMP

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Product Description

High Temperature Electronic, 9 Conductor 20AWG (7x28) Tinned Copper, FEP Insulation, Overall Beldfoil®+Tinned Copper Braid(85%) Shield, FEP Outer Jacket, CMP

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Suitable Applications: | extreme high/low temperature environments; chemical resistant; outdoor and burial applications; low voltage analog signals (4-20ma, 0-10v, ...); low voltage control (24v, ...); line level audio; voice communications; panel wiring |
|------------------------|---|

Construction Details

Conductor

| Element | No. of Elements | Size | Stranding | Material |
|--------------|-----------------|--------|-----------|--------------------|
| Conductor(s) | 9 | 20 AWG | 7x28 | TC - Tinned Copper |

Insulation

| Element | Material | Nom. Thickness | Nom. Insulation Diameter | Color Code |
|--------------|--------------------------------------|--------------------|--------------------------|--|
| Conductor(s) | FEP - Fluorinated Ethylene Propylene | 0.006 in (0.15 mm) | 0.050 in (1.3 mm) | Black, White, Red, Green, Orange, Blue, White/Black Stripe, Red/Black Stripe, Green/Black Stripe |

Outer Shield

| Shield Type | Material | Coverage |
|-------------|-------------------------|----------|
| Tape | Bi-Laminate (Alum+Poly) | 100% |
| Braid | Tinned Copper (TC) | 85% |

Outer Jacket

| Material | Nom. Thickness | Nom. Diameter |
|--------------------------------------|--------------------|--------------------|
| FEP - Fluorinated Ethylene Propylene | 0.014 in (0.36 mm) | 0.238 in (6.05 mm) |

| | |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.238 in (6.05 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

| Electricals | | | | |
|-------------------|--------------------|-------------------------------|---|--------------------------------|
| Element | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Max. Current |
| Conductor(s) | 11.2 Ohm/1000ft | 26 pF/ft (85 pF/m) | 51 pF/ft (170 pF/m) | 2.7 Amps per Conductor at 25°C |
| Voltage | | | | |
| UL Voltage Rating | | | | |
| 300 V (CMP) | | | | |

Mechanical Characteristics

| Temperature | |
|----------------|-----------------|
| UL Temperature | Operating |
| 150°C | -70°C to +200°C |
| Bend Radius | |

| Stationary Min. | Installation Min. |
|-------------------|-------------------|
| 2.38 in (60.5 mm) | 2.38 in (60.5 mm) |

| | |
|--------------------|----------------------|
| Max. Pull Tension: | 113.4 lbs (51.44 kg) |
| Bulk Cable Weight: | 60 lbs/1000ft |

Standards and Compliance

| | |
|----------------------------------|--|
| Environmental Suitability: | Indoor - Plenum, Indoor, Outdoor, Sunlight Resistance, Oil Resistance |
| Sustainability: | CA Prop 65 |
| Flammability / Reaction to Fire: | NFPA 262, UL 910 (Plenum), FT6 |
| CPR Compliance: | CPR Euroclass: Eca |
| NEC / UL Compliance: | Article 800, CMP |
| CEC / C(UL) Compliance: | CMP |
| European Directive Compliance: | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| UK Regulation Compliance: | UKCA Mark |
| APAC Compliance: | China RoHS II (GB/T 26572-2011) |

Product Notes

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|--------|---------------|
| Notes: | Gas Resistant |
|--------|---------------|

History

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| Update and Revision: | Revision Number: 0.511 Revision Date: 11-27-2023 |
|----------------------|--|

Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC | Footnote |
|---------------|-------|------------|----------|--------------|----------|
| 83609 002100 | Red | Reel | 100 ft | 612825205173 | C |
| 83609 002500 | Red | Reel | 500 ft | 612825205197 | C |
| 83609 0021000 | Red | Reel | 1,000 ft | 612825205180 | C |

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