



Product: [83702](#)

Electronic, 2 C #16 Str TC, FEP Ins, OS+TC Brd, FEP Jkt, CMP

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Product Description

High Temperature Electronic, 2 Conductor 16AWG (19x29) 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) | 2               | 16 AWG | 19x29     | TC - Tinned Copper |

| Insulation   |                                      |                    |                          |              |
|--------------|--------------------------------------|--------------------|--------------------------|--------------|
| Element      | Material                             | Nom. Thickness     | Nom. Insulation Diameter | Color Code   |
| Conductor(s) | FEP - Fluorinated Ethylene Propylene | 0.007 in (0.18 mm) | 0.069 in (1.8 mm)        | Black, White |

| 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 | 0.015 in (0.38 mm) | 0.198 in (5.03 mm) |  |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.198 in (5.03 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

| Electricals  |                    |                               |                                                 |                                |
|--------------|--------------------|-------------------------------|-------------------------------------------------|--------------------------------|
| Element      | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Max. Current                   |
| Conductor(s) | 4.43 Ohm/1000ft    | 35 pF/ft (110 pF/m)           | 63 pF/ft (210 pF/m)                             | 6.4 Amps per Conductor at 25°C |

| Voltage           |  |
|-------------------|--|
| UL Voltage Rating |  |
| 300 V             |  |

Mechanical Characteristics

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

Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 2.0 in (51 mm)  | 2.0 in (51 mm)    |

|                    |                   |
|--------------------|-------------------|
| Max. Pull Tension: | 105 lbs (47.6 kg) |
| Bulk Cable Weight: | 37 lbs/1000ft     |

Standards and Compliance

|                                  |                                                                                                                                  |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Environmental Suitability:       | Indoor, Outdoor, Oil Resistance, Burial                                                                                          |
| Sustainability:                  | CA Prop 65                                                                                                                       |
| Flammability / Reaction to Fire: | NFPA 262 (UL 910), FT6, IEC 60332-1-2                                                                                            |
| 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

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

History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.518 Revision Date: 02-03-2025 |
|----------------------|--------------------------------------------------|

Part Numbers

Variants

| Item #        | Color | Putup Type | Length   | UPC          | Footnote |
|---------------|-------|------------|----------|--------------|----------|
| 83702 002100  | Red   | Reel       | 100 ft   | 612825205463 | C        |
| 83702 002500  | Red   | Reel       | 500 ft   | 612825205494 | C        |
| 83702 0021000 | Red   | Reel       | 1,000 ft | 612825205470 | C        |
| 83702 0023000 | Red   | Reel       | 3,000 ft | 612825205487 | C Z      |

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