



**Product:** [83503](#)

Electronic, 3 C #24 Str TC, FEP Ins, OS+TC Brd, FEP Jkt, CMP

[Request Sample](#)

Product Description

High Temperature Electronic, 3 Conductor 24AWG (7x32) 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) | 3               | 24 AWG | 7x32      | 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) | 0.036 in (0.91 mm)       | Black, White, Red |

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) | 0.137 in (3.48 mm) |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.137 in (3.48 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

| Electricals       |                    |                               |                                                 |                              |
|-------------------|--------------------|-------------------------------|-------------------------------------------------|------------------------------|
| Element           | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Max. Current                 |
| Conductor(s)      | 24 Ohm/1000ft      | 20 pF/ft (66 pF/m)            | 36 pF/ft (120 pF/m)                             | 2 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. |
|-------------------|-------------------|
| 1.37 in (34.8 mm) | 1.37 in (34.8 mm) |

|                    |                 |
|--------------------|-----------------|
| Max. Pull Tension: | 16 lbs (7.3 kg) |
| Bulk Cable Weight: | 16 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                                                                                                   |
| 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) |
| APAC Compliance:                 | China RoHS II (GB/T 26572-2011)                                                                                                  |

Product Notes

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

History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.515 Revision Date: 02-03-2025 |
|----------------------|--------------------------------------------------|

Part Numbers

Variants

| Item #        | Color | Putup Type | Length   | UPC          | Footnote |
|---------------|-------|------------|----------|--------------|----------|
| 83503 002500  | Red   | Reel       | 500 ft   | 612825204763 | C        |
| 83503 0021000 | Red   | Reel       | 1,000 ft | 612825204756 | C        |

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