



**Product:** [83504](#)

Electronic, 4 C #24 Str TC, FEP Ins, OS+TC Brd, FEP Jkt, CMP

[Request Sample](#)

Product Description

High Temperature Electronic, 4 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) | 4               | 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, Green |

Outer Shield

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

Outer Jacket

| Separator      | Material                             | Nom. Thickness     | Nom. Diameter      |
|----------------|--------------------------------------|--------------------|--------------------|
| Polyester Tape | FEP - Fluorinated Ethylene Propylene | 0.015 in (0.38 mm) | 0.146 in (3.71 mm) |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.146 in (3.71 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)                             | 1.6 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. |
|-------------------|-------------------|
| 1.46 in (37.1 mm) | 1.46 in (37.1 mm) |

|                    |                  |
|--------------------|------------------|
| Max. Pull Tension: | 22 lbs (10.0 kg) |
| Bulk Cable Weight: | 20 lbs/1000ft    |

Standards and Compliance

|                                  |                                                                                                                                  |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Environmental Suitability:       | Indoor - Plenum, Indoor, Outdoor, Sunlight Resistance, Oil Resistance                                                            |
| 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

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

History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.509 Revision Date: 11-27-2023 |
|----------------------|--------------------------------------------------|

Part Numbers

Variants

| Item #        | Color | Putup Type | Length   | UPC          | Footnote |
|---------------|-------|------------|----------|--------------|----------|
| 83504 002100  | Red   | Reel       | 100 ft   | 612825204770 | C        |
| 83504 002500  | Red   | Reel       | 500 ft   | 612825204794 | C        |
| 83504 0021000 | Red   | Reel       | 1,000 ft | 612825204787 | C        |

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