



**Product:** [83662](#) 

Electronic, 12 C #18 Str TC, FEP Ins, OS+TC Brd, FEP Jkt, CMP

 [Request Sample](#)

## Product Description

High Temperature Electronic, 12 Conductor 18AWG (19x30) 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) | 12              | 18 AWG | 19x30     | 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) | 0.057 in (1.4 mm)        | Black, White, Red, Green, Orange, Blue, White/Black Stripe, Red/Black Stripe, Green/Black Stripe, Orange/Black Stripe, Blue/Black Stripe, Black/White 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 | 0.015 in (0.38 mm) | 0.296 in (7.52 mm) |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.296 in (7.52 mm) |
|-----------------------------------|--------------------|

### Electrical Characteristics

#### Electricals

| Element      | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Nom. Inductance        | Max. Current                   |
|--------------|--------------------|-------------------------------|---|------------------------|--------------------------------|
| Conductor(s) | 7.06 Ohm/1000ft    | 33 pF/ft (110 pF/m)           | 60 pF/ft (200 pF/m)                             | 0.14 μH/ft (0.46 μH/m) | 3.8 Amps per Conductor at 25°C |

|                       |                            |
|-----------------------|----------------------------|
| Nom Outer Shield DCR: | 3.3 Ohm/1000ft (11 Ohm/km) |
|-----------------------|----------------------------|

#### 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. |
|-----------------|-------------------|
| 3.0 in (76 mm)  | 3.0 in (76 mm)    |

|                    |                  |
|--------------------|------------------|
| Max. Pull Tension: | 355 lbs (161 kg) |
| Bulk Cable Weight: | 102 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: 0.516 Revision Date: 09-07-2025 |
|----------------------|--|

## Part Numbers

### Variants

| Item #        | Color | Putup Type | Length   | UPC          | Footnote |
|---------------|-------|------------|----------|--------------|----------|
| 83662 002100  | Red   | Reel       | 100 ft   | 612825205432 | C        |
| 83662 002500  | Red   | Reel       | 500 ft   | 612825205456 | C        |
| 83662 0021000 | Red   | Reel       | 1,000 ft | 612825205449 | C        |

|           |                        |
|-----------|------------------------|
| Footnote: | C - CRATE REEL PUT-UP. |
|-----------|------------------------|

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