



Product: [83802](#)

Electronic, 2 C #12 Str TC, FEP Ins, OS+TC Brd, Red FEP Jkt, CMP FPLP

Request Sample

### Product Description

High Temperature Electronic, 2 Conductor 12AWG (7x20) Tinned Copper, FEP Insulation, Overall Beldfoil®+Tinned Copper Braid(85%) Shield, Red FEP Outer Jacket, CMP FPLP

### Technical Specifications

#### Product Overview

|                        |  |
|------------------------|--|
| Suitable Applications: | fire alarms; extreme high/low temperature environments; indoor/outdoor applications; low voltage analog signals (4-20ma, 0-10v, ...); low voltage control (24v, ...) |
|------------------------|--|

#### Construction Details

##### Conductor

| Element      | No. of Elements | Size   | Stranding | Material           |
|--------------|-----------------|--------|-----------|--------------------|
| Conductor(s) | 2               | 12 AWG | 7x20      | TC - Tinned Copper |

##### Insulation

| Element      | Material                             | Nom. Thickness     | Color Code   |
|--------------|--------------------------------------|--------------------|--------------|
| Conductor(s) | FEP - Fluorinated Ethylene Propylene | 0.016 in (0.41 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) | 0.303 in (7.70 mm) |

Overall Cable Diameter (Nominal): 0.303 in (7.70 mm)

#### Electrical Characteristics

##### Electricals

| Element      | Nom. Conductor DCR          | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Max. Current                  |
|--------------|-----------------------------|-------------------------------|---|-------------------------------|
| Conductor(s) | 1.7 Ohm/1000ft (5.6 Ohm/km) | 32 pF/ft (100 pF/m)           | 55 pF/ft (180 pF/m)                             | 25 Amps per Conductor at 25°C |

##### Voltage

| UL Voltage Rating |
|-------------------|
| 300 V (CMP)       |

#### Mechanical Characteristics

##### Temperature

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

|                    |                           |
|--------------------|---------------------------|
| Max. Pull Tension: | 218 lbs (98.9 kg)         |
| Bulk Cable Weight: | 75 lbs/1000ft (110 kg/km) |

## Standards and Compliance

|                                  |  |
|----------------------------------|--|
| Environmental Suitability:       | Outdoor, Oil Resistance, Burial  |
| Flammability / Reaction to Fire: | NFPA 262   |
| NEC / UL Compliance:             | Article 760, Article 800   |
| 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: 0.368 Revision Date: 02-03-2025 |
|----------------------|--|

## Part Numbers

### Variants

| Item #        | Color | Putup Type | Length   | UPC          | Footnote |
|---------------|-------|------------|----------|--------------|----------|
| 83802 002500  | Red   | Reel       | 500 ft   | 612825205746 | C        |
| 83802 0021000 | Red   | Reel       | 1,000 ft | 612825205739 | C        |

© 2025 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.