



Product: [83803](#)

Electronic, 3 C #12 Str TC, FEP Ins, OS+TC Brd, Red FEP Jkt, CMP FPLP

 Request Sample

Product Description

High Temperature Electronic, 3 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      | Number of Element | Size   | Stranding | Material           |
|--------------|-------------------|--------|-----------|--------------------|
| Conductor(s) | 3                 | 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, 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 | 0.015 in (0.38 mm) | 0.323 in (8.20 mm) |

Cable Diameter (Nominal):

0.323 in (8.20 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)                             | 20 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   |
| Bend Radius     |                   |
| Stationary Min. | Installation Min. |

|                    |                            |
|--------------------|----------------------------|
| 3.2 in (81 mm)     | 3.2 in (81 mm)             |
| Max. Pull Tension: | 240 lbs (110 kg)           |
| Bulk Cable Weight: | 106 lbs/1000ft (158 kg/km) |

Standards and Compliance

|                                 |                                                                                                                           |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Environmental Suitability:      | Indoor, Outdoor, Oil Resistance, Burial                                                                                   |
| Sustainability:                 | CA Prop 65                                                                                                                |
| Flammability / Fire Resistance: | NFPA 262, FT6, IEC 60332-1-2                                                                                              |
| NEC / UL Compliance:            | Article 760, Article 800, CMP, FPLP                                                                                       |
| CEC / C(UL) Compliance:         | CMP                                                                                                                       |
| CPR Euroclass:                  | Eca                                                                                                                       |
| European Directive Compliance:  | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), 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: 0.360 Revision Date: 10-13-2021 |
|----------------------|--------------------------------------------------|

Variants

| Item #        | Color | Putup Type | Length   | UPC          |
|---------------|-------|------------|----------|--------------|
| 83803 002100  | Red   | Reel       | 100 ft   | 612825205753 |
| 83803 002500  | Red   | Reel       | 500 ft   | 612825205777 |
| 83803 0021000 | Red   | Reel       | 1,000 ft | 612825205760 |

© 2021 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.