



Product: <u>83656</u> ☑

Electronic, 6 C #18 Str TC, FEP Ins, OS+TC Brd, FEP Jkt, CMP

Request Sample

Product Description

High Temperature Electronic, 6 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) | 6 | 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 | |

Outer Shield

| Shield Type | Material | Coverage | |
|-------------|-------------------------|----------|--|
| Таре | Bi-Laminate (Alum+Poly) | 100% | |
| Braid | Tinned Copper (TC) | 87% | |

Outer Jacket

| Material | Nom. Thickness | Nom. Diameter |
|---------------------------------------|--------------------|--------------------|
| FEP - Fluorinated Ethylene Propylene | 0.015 in (0.38 mm) | 0.230 in (5.84 mm) |
| Overall Cable Diameter (Nominal): 0.: | 230 in (5.84 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 Sh DCR1-cnv: | nield DCR@Cond 4 | .2 Ohm/1000ft (14 Ohm/km) | | | |

Voltage



Mechanical Characteristics

Temperature

| UL Temperature | Operating |
|-----------------------|-----------------|
| 150°C | -70°C to +200°C |

Bend Radius

| 2.3 in (58 mm) 2 | 2.3 in (58 mm) | 1) |
|--------------------|----------------|---------------|
| Max. Pull Tension: | : | |
| Bulk Cable Weight | t: | 58 lbs/1000ft |

Standards and Compliance

Stationary Min. Installation Min.

| 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: 0.518 Revision Date: 09-07-2025 | |
|----------------------|--|--|

Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC | Footnote |
|---------------|-------|------------|----------|--------------|----------|
| 83656 002100 | Red | Reel | 100 ft | 612825205357 | |
| 83656 002500 | Red | Reel | 500 ft | 612825205388 | С |
| 83656 0021000 | Red | Reel | 1,000 ft | 612825205364 | С |
| 83656 0024000 | Red | Reel | 4,000 ft | 612825205371 | С |

Footnote: C - CRATE REEL PUT-UP.

© 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.