



Product: [83659](#)

Electronic, 9 C #18 Str TC, FEP Ins, OS+TC Brd, FEP Jkt, CMP

[Request Sample](#)

Product Description

High Temperature Electronic, 9 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
------------------------	---

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
Conductor(s)	18	19x30	TC - Tinned Copper	9

Conductor Count:	9
------------------	---

Insulation

Element	Material	Nominal Wall Thickness
Conductor(s)	FEP - Fluorinated Ethylene Propylene	0.0065 in

Color Chart

Number	Color
1	Black
2	White
3	Red
4	Green
5	Orange
6	Blue
7	White/Black
8	Red/Black
9	Green/Black

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Alum / Poly	Beldfoil®	100 %
Braid	2	TC - Tinned Copper		85 %

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
FEP - Fluorinated Ethylene Propylene	0.265 in	0.015 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
5.8 Ohm/1000ft	2.7 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
33 pF/ft	60 pF/ft

Inductance

Nominal Inductance
0.14 µH/ft

Current

Element	Max. Recommended Current [A]
10C Temperature Rise	3.8 Amps per conductor @ 25°C ambient

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Operating Temp Range:	-70°C To +200°C
-----------------------	-----------------

Mechanical Characteristics

Bulk Cable Weight:	81 lbs/1000ft
Max Recommended Pulling Tension:	216 lbs
Min Bend Radius/Minor Axis:	2.75 in

Standards

NEC Articles:	800
NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
CPR Euroclass:	Eca

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU RoHS Compliance Date (yyyy-mm-dd):	2005-04-01
CA Prop 65:	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

Flammability, LSOH, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes
---------------	-----

Part Number

Variants

Item #	Color	Putup Type	Length	UPC
--------	-------	------------	--------	-----

83659 002100	Red	Reel	100 ft	612825205395
83659 002500	Red	Reel	500 ft	612825205418
83659 0021000	Red	Reel	1,000 ft	612825205401
83659 0025000	Red	Reel	5,000 ft	612825205425

Footnote:	C - CRATE REEL PUT-UP.
Footnote:	Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

History

Update and Revision:	Revision Number: 0.291 Revision Date: 05-11-2020
----------------------	--

© 2020 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.