



Product: [85168](#)

Electronic, 8 Pr #20 Str TC, ETFE Ins, OS, ETFE Jkt

[Request Sample](#)

Product Description

High Temperature Electronic, 8 Pair 20AWG (7x28) Tinned Copper, ETFE Insulation, Overall Beldfoil® Shield, ETFE Outer Jacket

Technical Specifications

Product Overview

Suitable Applications:	extreme high/low temperature environments; chemical resistant; low voltage analog signals (4-20ma, 0-10v, ...); low voltage control (24v, ...); instrumentation
------------------------	---

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
20	7x28	TC - Tinned Copper	8

Conductor Count:	16
Total Number of Pairs:	8

Insulation

Material	Material Trade Name	Nominal Wall Thickness
ETFE - Ethylene Tetrafluoroethylene	Tefzel®	0.015 in

Color Chart

Number	Color
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue
5	Black & Yellow
6	Black & Brown
7	Black & Orange
8	Red & White

Outer Shield

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Bi-Laminate (Alum+Kapton®)	Beldfoil®	100%	TC - Tinned Copper	22	7x30

Outer Jacket

Material	Material Trade Name	Nominal Diameter	Nominal Wall Thickness
ETFE - Ethylene Tetrafluoroethylene	Tefzel®	0.439 in	0.025 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
9.3 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
23 pF/ft	40 pF/ft

Inductance

Nominal Inductance
0.186 μ H/ft

Impedance

Nominal Characteristic Impedance
73 Ohm

Current

Max. Recommended Current [A]
4 Amps per Conductor at 25°C

Voltage

Non-UL Voltage Rating
300 V RMS

Temperature Range

UL Temp Rating:	150°C
Operating Temperature Range:	-60°C To +150°C

Mechanical Characteristics

Bulk Cable Weight:	115 lbs/1000ft
Max. Pull Tension:	224 lbs
Min. Bend Radius/Minor Axis:	4.5 in

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 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
MII Order #39 (China RoHS):	Yes

Flammability, LSOH, Toxicity Testing

UL voltage rating:	300 V RMS
--------------------	-----------

Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
85168 3681000	Clear, Transparent	Reel	1,000 ft	612825210641

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

Product Notes

Notes:	Tefzel and Kapton are DuPont trademarks.
--------	--

History

Update and Revision:	Revision Number: 0.385 Revision Date: 02-03-2025
----------------------	--

© 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.