



Product: <u>85168</u> ☑

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

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 Pair
20	7x28	TC - Tinned Copper	8
Condu	ctor Count:		16
Total I	Number of Pa	airs:	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



Inductance

Nominal Inductance
0.186 µH/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, LS0H, 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 36	81000	Clear, Transparent	Reel	1,000 ft	612825210641
Footnote:	:			C - CRATI	E REEL PUT-UP

Product Notes

Notes:	Tefzel and Kapton are DuPont trademarks.

History

Update and Revision:	Revision Number: 0.377 Revision Date: 04-08-2022

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