BELDEN



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	No. of Elements	Size	Stranding	Material
Conductor(s)	3	12 AWG	7x20	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	FEP - Fluorinated Ethylene Propylene	0.016 in (0.41 mm)	0.123 in (3.12 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)	0.294 in (7.47 mm)

Overall Cable Diameter (Nominal):	0.294 in (7.47 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Max. Current
Conductor(s)	1.74 Ohm/1000ft	32 pF/ft (100 pF/m)	55 pF/ft (180 pF/m)	22 Amps per Conductor at 25ºC

Voltage

UL Voltage Rating
300 V

Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.	Installation Min.

3.0 in (76 mm)	3.0 in (76 mm)

Max. Pull Tension:	310 lbs (140 kg)
Bulk Cable Weight:	106 lbs/1000ft

Standards and Compliance

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; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 760, Article 800
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: 0.521 Revision Date: 11-27-2023

Part Numbers

Variants

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

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