Belden



Product: 83706

Electronic, 6 C #16 Str TC, FEP Ins, OS+TC Brd, FEP Jkt, CMP

Request Sample

Product Description

High Temperature Electronic, 6 Conductor 16AWG (19x29) 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	16 AWG	19x29	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)	0.069 in (1.8 mm)	Black, White, Red, Green, Orange, Blue

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	0.014 in (0.36 mm)	0.265 in (6.73 mm)

Overall Cable Diameter (Nominal):	0.265 in (6.73 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Max. Current
Conductor(s)	4.43 Ohm/1000ft	35 pF/ft (110 pF/m)	63 pF/ft (210 pF/m)	4.5 Amps per Conductor at 25ºC

Nom Outer Shield DCR@Cond DCR1-cnv:	3.7 Ohm/1000ft (12 Ohm/km)

Voltage

UL Voltage Rating
300 V

Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.	Installation Min.
2.7 in (69 mm)	2.7 in (69 mm)

Max. Pull Tension:	292 lbs (132 kg)
Bulk Cable Weight:	82 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
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: 0.516 Revision Date: 09-07-2025

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
83706 002100	Red	Reel	100 ft	612825205555	
83706 002500	Red	Reel	500 ft	612825205579	C
83706 0021000	Red	Reel	1,000 ft	612825205562	C

Footnote:	C - CRATE REEL PUT-UP.

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