Belden



Product: 88770

Electronic, 3 C #18 Str TC, FEP Ins, OS, FEP Jkt, CMP

Request Sample

Product Description

High Temperature Electronic, 3 Conductor 18AWG (19x30) Tinned Copper, FEP Insulation, Overall Beldfoil® 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)	3	18 AWG	19x30	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)	0.057 in (1.4 mm)	Black, White, Red

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	20 AWG (19x32) TC

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
FEP - Fluorinated Ethylene Propylene	0.014 in (0.36 mm)	0.155 in (3.94 mm)

Overall Cable Diameter (Nominal):	0.155 in (3.94 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Max. Current
Conductor(s)	7.06 Ohm/1000ft	54 pF/ft (180 pF/m)	96 pF/ft (310 pF/m)	17 Amps per Conductor at 30ºC

Nom Outer Shield DCR@Cond DCR1-cnv:	8 Ohm/1000ft (26 Ohm/km)

Voltage

UL Voltage Rating
300 V (CMP)

Mechanical Characteristics

Temperature

UL Temperature	Operating
150°C	-20°C to +150°C

Bend Radius

Stationary Min.	Installation Min.

1.6 in (41 mm)	1.6 in (41 mm)

Max. Pull Tension:	89.1 lbs (40.4 kg)
Bulk Cable Weight:	28 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	NFPA 262, UL 910 (Plenum), 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)
Non-Plenum Number:	8770

Product Notes

Notes:	Gas Resistant

History

Update and Revision:	Revision Number: 0.541 Revision Date: 09-07-2025

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
88770 002500	Red	Reel	500 ft	612825217404	C Z
88770 0021000	Red	Reel	1,000 ft	612825217398	C Z
88770 0025000	Red	Reel	5,000 ft	612825217411	C Z

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

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