



Product: [83506](#) 

Electronic, 6 C #24 Str TC, FEP Ins, OS+TC Brd, FEP Jkt, CMP

 [Request Sample](#)

Product Description

High Temperature Electronic, 6 Conductor 24AWG (7x32) 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
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	6	24 AWG	7x32	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	FEP - Fluorinated Ethylene Propylene	0.006 in (0.15 mm)	0.036 in (0.91 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)	0.167 in (4.24 mm)

Overall Cable Diameter (Nominal): 0.167 in (4.24 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Max. Current
Conductor(s)	24 Ohm/1000ft	20 pF/ft (66 pF/m)	36 pF/ft (120 pF/m)	1.4 Amps per Conductor at 25°C

Nom Outer Shield DCR@Cond
DCR1-cnvt: 28.5 Ohm/1000ft (93.5 Ohm/km)

Voltage

UL Voltage Rating
300 V (CMP)

Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.	Installation Min.
1.67 in (42.4 mm)	1.67 in (42.4 mm)

Max. Pull Tension:	33 lbs (15 kg)
Bulk Cable Weight:	26 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor - Plenum, Indoor, Outdoor, Sunlight Resistance, Oil Resistance
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	NFPA 262, UL 910 (Plenum), FT6
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)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Product Notes

Notes:	Gas Resistant
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History

Update and Revision:	Revision Number: 0.514 Revision Date: 09-07-2025
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
83506 002500	Red	Reel	500 ft	612825204817	C
83506 0021000	Red	Reel	1,000 ft	612825204800	C

Footnote:	C - CRATE REEL PUT-UP.
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