



Product: [89842](#)

RS485, 2 Pr #24 Str TC, FEP Ins, OS+TC Brd, FEP Jkt, CMP

### Product Description

RS-485, 2 Pair 24AWG (7x32) Tinned Copper, FEP Insulation, Overall Beldfoil®+Tinned Copper Braid(90%) Shield, FEP Outer Jacket, CMP

### Technical Specifications

#### Product Overview

Suitable Applications:	RS-485, POS; Computer communications; Low Voltage Analog Signals (4-20ma, 0-10v, ...); Low Voltage Digital Control (24v, ...); Line Level Audio; Panel Wiring; serial communication (RS-485 standard) comprising of PLCs, VFDs, HMIs, motors, RTU, SCADA, etc. within noisy environments over long distance, etc.
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#### Construction Details

##### Conductor

Element	No. of Elements	Size	Stranding	Material
Pair(s)	2	24 AWG	7x32	TC - Tinned Copper

##### Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Pair(s)	FEP - Fluorinated Ethylene Propylene (Foam)	0.023 in (0.58 mm)	0.070 in (1.8 mm)	White/Blue Stripe & Blue/White Stripe, White/Orange Stripe & Orange/White Stripe

##### Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	24 AWG (7x32) TC
Braid	Tinned Copper (TC)	90%	

##### Outer Jacket

Material	Nom. Thickness	Nom. Diameter
FEP - Fluorinated Ethylene Propylene	0.020 in (0.51 mm)	0.345 in (8.76 mm)

Overall Cable Diameter (Nominal): 0.345 in (8.76 mm)

#### Electrical Characteristics

##### Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Pair(s)	24 Ohm/1000ft	12 pF/ft (39 pF/m)	22 pF/ft	120 Ohm	76%	4 Amps per Conductor at 25°C

Nom. Outer Shield DCR: 3.1 Ohm/1000ft (10 Ohm/km)

##### High Frequency (Nominal/Typical)

Element	Frequency [MHz]	Nom. Insertion Loss (Attenuation)
Pair(s)	1	0.6 dB/100ft

##### Voltage

UL Voltage Rating
300 V (CMP)

#### Mechanical Characteristics

## Temperature

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

## Bend Radius

Stationary Min.	Installation Min.
3.25 in (82.6 mm)	3.25 in (82.6 mm)

Max. Pull Tension:	68 lbs (31 kg)
Bulk Cable Weight:	44 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Indoor, Oil Resistance
Flammability / Reaction to Fire:	NFPA 262, UL 910 (Plenum), 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)
Non-Plenum Number:	9842

## Product Notes

Notes:	Oil and Gas Resistant
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## History

Update and Revision:	Revision Number: 0.535 Revision Date: 11-27-2023
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## Part Numbers

### Variants

Item #	Color	UPC	Footnote
89842 0021000	Red	612825221333	C
89842 002500	Red	612825221340	C

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