



REPRESENTATIVE IMAGE

**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. |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Construction Details

#### Conductor

| Element | Number of Element | Size   | Stranding | Material           |
|---------|-------------------|--------|-----------|--------------------|
| Pair(s) | 2                 | 24 AWG | 7x32      | TC - Tinned Copper |

#### Insulation

| Element | Material                                    | Nom. Thickness     | Color Code                                                                       |
|---------|---------------------------------------------|--------------------|----------------------------------------------------------------------------------|
| Pair(s) | FEP - Fluorinated Ethylene Propylene (Foam) | 0.023 in (0.58 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 | 0.014 in (0.36 mm) | 0.305 in (7.75 mm) |

|                           |          |
|---------------------------|----------|
| Cable Diameter (Nominal): | 0.305 in |
|---------------------------|----------|

### Electrical Characteristics

#### Electricals

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

|                        |                |
|------------------------|----------------|
| Nom. Outer Shield DCR: | 3.1 Ohm/1000ft |
|------------------------|----------------|

#### High Frequency (Nominal/Typical)

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

#### 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. |
|-------------------|-------------------|
| 3.25 in (82.6 mm) | 3.25 in           |

|                    |               |
|--------------------|---------------|
| Max. Pull Tension: | 68 lbs        |
| Bulk Cable Weight: | 44 lbs/1000ft |

Standards and Compliance

|                                 |                                                                                                                           |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Environmental Suitability:      | Indoor, Oil Resistance                                                                                                    |
| Flammability / Fire Resistance: | NFPA 262 Plenum Flame Test (UL910), FT6, IEC 60332-1-2                                                                    |
| 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), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance:                | China RoHS II (GB/T 26572-2011)                                                                                           |
| Non-Plenum Number:              | 9842                                                                                                                      |

Product Notes

|        |                       |
|--------|-----------------------|
| Notes: | Oil and Gas Resistant |
|--------|-----------------------|

History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.372 Revision Date: 10-13-2021 |
|----------------------|--------------------------------------------------|

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