



**Part Number:** 89841

RS485, 1 Pr #24 Str TC, FEP Ins, OS+TC Brd, FEP Jkt, CMP

[Request Sample](#)

## Product Description

RS-485, 1 Pair 24AWG (7x32) Tinned Copper, FEP Insulation, Overall Beldfoil®+Tinned Copper Braid(90%) Shield, FEP Outer Jacket, CMP

## Technical Specifications

### Physical Characteristics (Overall)

#### Conductor

| AWG | Stranding | Material           | No. of Pairs |
|-----|-----------|--------------------|--------------|
| 24  | 7x32      | TC - Tinned Copper | 1            |

Conductor Count: 2

#### Insulation

| Material                                   | Material Trade Name | Nominal Wall Thickness |
|--|---------------------|------------------------|
| FFEP - Foam Fluorinated Ethylene Propylene | Teflon®             | 0.025 in               |

#### Color Chart

| Number | Color                   |
|--------|-------------------------|
| 1      | White/Blue & Blue/White |

#### Outer Shield Material

| Type  | Layer | Material           | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|-------|-------|--------------------|---------------------|--------------|--------------------|---------------|------------------------------|
| Tape  | 1     | Aluminum/Polyester | Beldfoil®           | 100 %        | TC - Tinned Copper | 24            | 7x32 mm                      |
| Braid | 2     | TC - Tinned Copper |                     | 90 %         |                    |               |                              |

#### Outer Jacket Material

| Material                             | Material Trade Name | Nominal Diameter | Nominal Wall Thickness |
|--------------------------------------|---------------------|------------------|------------------------|
| FEP - Fluorinated Ethylene Propylene | Teflon®             | 0.202 in         | 0.014 in               |

### Electrical Characteristics

#### Conductor DCR

| Nominal Conductor DCR | Nominal Outer Shield DCR |
|-----------------------|--------------------------|
| 24 Ohm/1000ft         | 3.1 Ohm/1000ft           |

#### Capacitance

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |
|---|---|
| 12 pF/ft                                | 22 pF/ft  |

#### Impedance

| Nominal Characteristic Impedance |
|----------------------------------|
| 120 Ohm                          |

#### Delay

| Max. Delay Skew | Nominal Velocity of Propagation (VP) [%] |
|-----------------|--|
| 76 ns/100m      | 76 %                                     |

#### Current

**Max. Recommended Current [A]**

4 Amps per conductor @ 25°C A

**Voltage****UL Voltage Rating**

300 V RMS

**Temperature Range**

|                       |                 |
|-----------------------|-----------------|
| Non-UL Temp Rating:   | 150°C           |
| UL Temp Rating:       | 150°C           |
| Operating Temp Range: | -70°C To +200°C |

**Mechanical Characteristics**

|                                  |               |
|----------------------------------|---------------|
| Bulk Cable Weight:               | 27 lbs/1000ft |
| Max Recommended Pulling Tension: | 45.7 lbs      |
| Min Bend Radius/Minor Axis:      | 2.25 in       |

**Standards**

|                          |     |
|--------------------------|-----|
| NEC Articles:            | 800 |
| NEC/(UL) Specification:  | CMP |
| CEC/C(UL) Specification: | CMP |
| CPR Euroclass:           | Eca |

**Applicable Environmental and Other Programs**

|                                       |                               |
|---------------------------------------|-------------------------------|
| EU Directive 2000/53/EC (ELV):        | Yes                           |
| EU Directive 2003/96/EC (BFR):        | Yes                           |
| EU Directive 2011/65/EU (ROHS II):    | Yes                           |
| EU Directive 2012/19/EU (WEEE):       | Yes                           |
| EU Directive 2015/863/EU:             | Yes                           |
| EU Directive Compliance:              | EU Directive 2003/11/EC (BFR) |
| EU CE Mark:                           | Yes                           |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-04-01                    |
| CA Prop 65 (CJ for Wire & Cable):     | Yes                           |
| MII Order #39 (China RoHS):           | Yes                           |

**Flammability, LSOH, Toxicity Testing**

|                       |                                    |
|-----------------------|------------------------------------|
| UL Flammability:      | NFPA 262 Plenum Flame Test (UL910) |
| CSA Flammability:     | FT6                                |
| ISO/IEC Flammability: | IEC 60332-1-2                      |
| UL voltage rating:    | 300 V RMS                          |

**Plenum/Non-Plenum**

|               |     |
|---------------|-----|
| Plenum (Y/N): | Yes |
|---------------|-----|

**Part Number**

|                    |      |
|--------------------|------|
| Non-Plenum Number: | 9841 |
|--------------------|------|

**Variants**

| Item #        | Color | UPC          | Footnote |
|---------------|-------|--------------|----------|
| 89841 0021000 | Red   | 612825221302 | C        |
| 89841 002500  | Red   | 612825221319 |          |
| 89841 0025000 | Red   | 612825221326 |          |

|           |                        |
|-----------|------------------------|
| Footnote: | C - CRATE REEL PUT-UP. |
|-----------|------------------------|

**Product Notes**

|        |   |
|--------|---|
| Notes: | Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc. |
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**History**

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|----------------------|--|
| Update and Revision: | Revision Number: 0.317 Revision Date: 08-22-2019 |
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