



Product: [9843](#)

RS485, 3 Pr #24 Str TC, PO Ins, OS+TC Brd, PVC Jkt, CM

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Product Description

RS-485, 3 Pair 24AWG (7x32) Tinned Copper, PO Insulation, Overall Beldfoil®+Tinned Copper Braid(90%) Shield, PVC Outer Jacket, CM

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Suitable Applications: | rs-485 applications; computer communications; low voltage analog signals (4-20ma, 0-10v, ...); low voltage digital control (24v, ...); line level audio; panel wiring |
|------------------------|---|

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | No. of Pairs |
|-----|-----------|--------------------|--------------|
| 24 | 7x32 | TC - Tinned Copper | 3 |

| | |
|------------------------|---|
| Conductor Count: | 6 |
| Total Number of Pairs: | 3 |

Insulation

| Material | Nominal Wall Thickness |
|-------------------|------------------------|
| PE - Polyethylene | 0.022 in |

Color Chart

| Number | Color |
|--------|-----------------------------|
| 1 | White/Blue & Blue/White |
| 2 | White/Orange & Orange/White |
| 3 | White/Green & Green/White |

Outer Shield Material

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

Outer Jacket Material

| Material | Nominal Diameter | Nominal Wall Thickness |
|--------------------------|------------------|------------------------|
| PVC - Polyvinyl Chloride | 0.36 in | 0.035 in |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Nominal Outer Shield DCR |
|-----------------------|--------------------------|
| 24 Ohm/1000ft | 2.3 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |
|---|---|
| 12.8 pF/ft | 23 pF/ft |

Impedance

| Nominal Characteristic Impedance |
|----------------------------------|
|----------------------------------|

120 Ohm

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 1 MHz | 0.6 dB/100m |

Delay

| Max. Delay Skew | Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|-----------------|---------------|--|
| 66 ns/100m | 1.6 ns/ft | 66% |

Current

| Max. Recommended Current [A] |
|---------------------------------|
| 1.54 Amps per Conductor at 25°C |

Voltage

| UL Description | UL Voltage Rating |
|-------------------|-------------------|
| UL AWM Style 2919 | 300 V RMS |

Temperature Range

| | |
|-----------------------|--------------------------|
| UL Temp Rating: | 80°C (UL AWM Style 2919) |
| Operating Temp Range: | -30°C To +80°C |

Mechanical Characteristics

| | |
|-----------------------------|---------------|
| Bulk Cable Weight: | 62 lbs/1000ft |
| Max. Pull Tension: | 105.5 lbs |
| Min Bend Radius/Minor Axis: | 3.75 in |

Standards

| | |
|--------------------------|-------------------|
| NEC Articles: | Article 800 |
| NEC/(UL) Compliance: | CM |
| CEC/C(UL) Compliance: | CM |
| UL AWM Style Compliance: | 2919 (300 V 80°C) |
| 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): | 2004-01-01 |
| MII Order #39 (China RoHS): | Yes |

Flammability, LSOH, Toxicity Testing

| | |
|--------------------|-------------------|
| UL Flammability: | UL1685 UL Loading |
| IEC Flammability: | IEC 60332-1-2 |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Part Number

Variants

| Item # | Color | Putup Type | Length | UPC/EAN |
|--------------|--------|------------|----------|---------------|
| 9843 060100 | Chrome | Reel | 100 ft | 612825259589 |
| 9843.00305 | Chrome | Reel | 305 m | 8719605023339 |
| 9843 060500 | Chrome | Reel | 500 ft | 612825259602 |
| 9843 0601000 | Chrome | Reel | 1,000 ft | 612825259596 |

| | | | | |
|--------------|--------|------|----------|--------------|
| 9843 0605000 | Chrome | Reel | 5,000 ft | 612825259619 |
|--------------|--------|------|----------|--------------|

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

History

| | |
|----------------------|--|
| Update and Revision: | Revision Number: 0.338 Revision Date: 06-08-2020 |
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