SENDING ALL THE RIGHT SIGNALS


Product: 9843 [
RS485, 3 Pr \#24 Str TC, PE Ins, OS+TC Brd, PVC Jkt, CM
if Request Sample

## Product Description

RS-485, 3 Pair 24AWG ( $7 \times 32$ ) Tinned Copper, PE Insulation, Overall Beldfoil@+Tinned Copper Braid( $90 \%$ ) Shield, PVC Outer Jacket, CM

## Technical Specifications

Product Overview

| Suitable Applications: | RS-485, POS; Computer communications; Low Voltage Analog Signals (4-20ma, 0-10v, ...); Low Voltage Digital Control ( $24 \mathrm{v}, \ldots$, ..) Line Level Audio; Panel Wiring; serial communication <br> (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) | 3 | 24 AWG | $7 \times 32$ | TC - Tinned Copper |

Insulation

| Element | Material | Nom. Thickness |  | Color Code |
| :--- | :---: | :---: | :---: | :---: |
| Pair(s) | PE - Polyethylene | 0.022 in $(0.56 \mathrm{~mm})$ | White/Blue Stripe \& Blue/White Stripe, White/Orange Stripe \& Orange/White Stripe, White/Green Stripe \& Green/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 |
| :---: | :---: | :---: |
| PVC - Polyvinyl Chloride | 0.035 in ( 0.89 mm ) | 0.360 in (9.14 mm) |
| Overall Cable Diameter (Nominal): | 0.360 in |  |

Electrical Characteristics

| Electricals |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Element | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Characteristic Impedence | Nom. Velocity of Prop. | Max. Current |
| Pair(s) | 24 Ohm/1000ft | 12.8 pF/ft | $23 \mathrm{pF} / \mathrm{ft}$ | 120 Ohm | 66\% | 1.54 Amps per Conductor at $25^{\circ} \mathrm{C}$ |
| Nom. Outer Shield DCR: 2.3 Ohm/1000ft |  |  |  |  |  |  |

High Frequency (Nominal/Typical)

| Element | Frequency [MHz] | Nom. Insertion Loss |
| :--- | :--- | :--- |
| Pair(s) | 1 MHz | $0.6 \mathrm{~dB} / 100 \mathrm{ft}$ |

## Voltage

UL Voltage Rating
300 V (CM), 30 V (UL AWM 2919)

## Mechanical Characteristics

| UL Temperature | Operating |
| :---: | :---: |
| $80^{\circ} \mathrm{C}$ (UL AWM 2919) | $-30^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |

Bend Radius

## Stationary Min. Installation Min.

3.75 in ( 95.3 mm ) 3.75 in

Standards and Compliance

| Environmental Suitability: | Indoor |
| :---: | :---: |
| Flammability / Reaction to Fire: | UL1685 UL Loading, IEC 60332-1-2 |
| NEC / UL Compliance: | Article 800, CM |
| AWM Compliance: | 2919 |
| CEC / C(UL) Compliance: | CM |
| CPR Euroclass: | Eca |
| 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) |

History
Update and Revision: Revision Number: 0.434 Revision Date: 12-15-2021

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