



Product: [9841](#)

RS485, 1 Pr #24 Str TC, PE Ins, OS+TC Brd, PVC Jkt, CM

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Product Description

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

Technical Specifications

| | |
|------------------------|---|
| 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. |
|------------------------|---|

Conductor

| Element | Number of Element | AWG | Stranding | Material |
|---------|-------------------|-----|-----------|--------------------|
| Pair(s) | 1 | 24 | 7x32 | TC - Tinned Copper |

Insulation

| Element | Material | Thickness | Color Code |
|---------|-------------------|-----------|---------------------------------------|
| Pair(s) | PE - Polyethylene | 0.023 in | White/Blue Stripe & Blue/White Stripe |

Outer Shield Material

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

Outer Jacket Material

| Material | Thickness | Nom. Diameter |
|--------------------------|-----------|---------------|
| PVC - Polyvinyl Chloride | 0.035 in | 0.232 in |

| | |
|---------------------------|----------|
| Cable Diameter (Nominal): | 0.232 in |
|---------------------------|----------|

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 pF/ft | 120 Ohm | 66% | 2.1 Amps per Conductor at 25°C (10°C Temperature Rise) |

| | |
|-----------------------|----------------|
| Nom Outer Shield DCR: | 3.4 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 (CM), 30 V (UL AWM 2919) |

Temperature

| UL Rating | Operating |
|--------------------|----------------|
| 80°C (UL AWM 2919) | -30°C to +80°C |

Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 2.5 in | 2.5 in |

| | |
|--------------------|----------|
| Max. Pull Tension: | 72.3 lbs |
|--------------------|----------|

| | |
|---------------------------------|---|
| Bulk Cable Weight: | 36 lbs/1000ft |
| Environmental Suitability: | Indoor |
| Flammability / Fire Resistance: | 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, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance: | China RoHS II (GB/T 26572-2011) |
| Plenum Number: | 82841, 89841 |
| Non-Plenum Number: | 9841ZH |
| Update and Revision: | Revision Number: 0.381 Revision Date: 09-30-2020 |

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