



Product: [9841ZH](#)

RS485, 1 Pr #24 Str TC, PE Ins, OS+TC Brd, LSZH 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, LSZH Outer Jacket, CM

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Suitable Applications: | exposure to rodent, crush, or cut through force, burial, POS, serial communication (RS-485 standard) comprising of PLCs, VFDs, HMIs, motors, RTU, SCADA, etc. within noisy environments over long distance, outdoor such as solar, lighting, etc. |
|------------------------|---|

Construction Details

| Element | No. of Elements | Size | Stranding | Material |
|---------|-----------------|--------|-----------|--------------------|
| Pair(s) | 1 | 24 AWG | 7x32 | TC - Tinned Copper |

| Element | Material | Nom. Thickness | Color Code |
|---------|-------------------|--------------------|--|
| Pair(s) | PE - Polyethylene | 0.028 in (0.71 mm) | White/Blue Stripe & Blue/White Stripe, White |

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

| Material | Nom. Thickness | Nom. Diameter |
|---|--------------------|--------------------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 0.035 in (0.89 mm) | 0.258 in (6.55 mm) |

| | |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.258 in (6.55 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

| Element | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Nom. Characteristic Impedence | Nom. Velocity of Prop. | Max. Current |
|---------|-------------------------------|-------------------------------|---|-------------------------------|------------------------|--------------------------------|
| Pair(s) | 24.0 Ohm/1000ft (78.7 Ohm/km) | 14.5 pF/ft (47.6 pF/m) | 26 pF/ft | 120 Ohm | 66% | 2.1 Amps per Conductor at 25°C |

High Frequency (Nominal/Typical)

| Element |
|---------|
| Pair(s) |

| UL Voltage Rating |
|-------------------|
| 300 V (CMG) |

Mechanical Characteristics

Temperature

| UL Temperature | Operating |
|----------------|---------------|
| 75°C | -20°C to 75°C |

| | |
|--------------------|--------------------------|
| Max. Pull Tension: | 72.3 lbs (32.8 kg) |
| Bulk Cable Weight: | 33 lbs/1000ft (49 kg/km) |

Standards and Compliance

| | |
|----------------------------------|---|
| Environmental Suitability: | Indoor |
| Flammability / Reaction to Fire: | UL 1685 FT4 Loading |
| NEC / UL Compliance: | Article 800, CMG |
| AWM Compliance: | AWM 21088 |
| CEC / C(UL) Compliance: | CMG |
| 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

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|----------------------|--|
| Update and Revision: | Revision Number: 0.276 Revision Date: 02-15-2024 |
|----------------------|--|

Part Numbers

Variants

| Item # | Color | UPC |
|---------------|--------|--------------|
| 9841ZH 060500 | Chrome | 612825382591 |

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