



Product: 9841NH ☑

RS485, 1 Pr #24 Str TC, PO Ins, OS+TC Brd, LSZH Jkt, CMG AWM 21088

Product Description

RS-485, 1 Pair 24AWG (7x32) Tinned Copper, PO Insulation, Overall Beldfoil®+Tinned Copper Braid(90%) Shield, LSZH Outer Jacket, CMG AWM 21088

Technical Specifications

Product Overview

| Suitable Applications: | harsh environment, IIoT, factory or process automation, video, audio, data communication, etc. |
|------------------------|--|
| | |

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | No. of Pairs |
|---------|--------------|--------------------|--------------|
| 24 | 7x32 | TC - Tinned Copper | 1 |
| Condu | uctor Count: | | |
| Total I | Number of Pa | airs: | |

Insulation

| Material | Nominal Diameter | Diameter +/- Tolerance |
|-------------------|------------------|------------------------|
| PE - Polyethylene | 1.73 mm | 0.05 mm |

Color Chart

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

Outer Shield Material

| Type | Layer | Material | Material Trade Name | Coverage [%] | Thickness of Foil | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|-------|-------|--------------------|---------------------|--------------|-------------------|--------------------|---------------|------------------------------|
| Tape | 1 | Alum / Poly | Beldfoil® | 100% | 9 / 23 µm | TC - Tinned Copper | AWG24/7 | 7x32 |
| Braid | 2 | Tinned Copper (TC) | | 90% | | | | |

Outer Jacket Material

| Material | Color | Nominal Diameter | Nominal Wall Thickness |
|---|-------------------|------------------|------------------------|
| LSZH - Low Smoke Zero Halogen flame retardant | Chrome (RAL 7037) | 6.10 mm | 0.9 mm |

Construction and Dimensions

Stranding

| Lay Direction | Twists |
|---------------|----------------|
| Left Hand | 5.333 twist/ft |

Cabling

| Description | Filler |
|--|-------------------------------------|
| 1 pair and 2 fillers twisted to cable core | Polypropylene (2x) (White, 1.90 mm) |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Nominal Inner Shield DCR | Nominal Outer Shield DCR |
|-----------------------|--------------------------|--------------------------|
| 78.7 Ohm/km | 11.0 Ohm/km | 3.4 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |
|---|---|
| 42 pF/m | 75.5 pF/m |

Impedance

| Frequency [MHz] | Nominal Characteristic Impedance |
|-----------------|----------------------------------|
| 1 | 120 Ohm |

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 1 MHz | 1.97 dB/100m |

Delay

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

Current

| Element | Max. Recommended Current [A] |
|-----------|------------------------------|
| Conductor | 2.1 Amps per Conductor |

Voltage

Voltage Rating [V]

Temperature Range

| Installation Temp Range: | -15°C To +80°C |
|--|----------------|
| UL Temp Rating: | 75°C |
| Storage Temp Range: | -45°C To +80°C |
| Operating Temp Range: | -20°C To +75°C |
| Operating Temp Range (Flexible Install): | -15°C To +80°C |
| Operating Temp Range (Fixed Install): | -45°C To +80°C |

Mechanical Characteristics

| Oil Resistance: | IEC 60811-404 |
|--------------------------------------|---------------|
| Bulk Cable Weight: | 33 lbs/1000ft |
| Max. Pull Tension: | 328 N |
| Min Bend Radius During Installation: | 61 mm |
| Min Bend Radius/Minor Axis: | 2.5 in |

Standards

| UL AWM Style Compliance: | UL AWM 21088 |
|--------------------------|---------------|
| CPR Euroclass: | Dca-s2,d1,a1 |
| CENELEC Compliance: | EN 50290-2-27 |

Applicable Environmental and Other Programs

| Environmental Space: | Indoor - Euroclass Dca | |
|---------------------------------------|-------------------------------|--|
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) | |
| EU CE Mark: | Yes | |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-01-01 | |

Suitability

| Suitability - Indoor: | Yes |
|------------------------------------|-----|
| Suitability - Non-Halogenated: | Yes |
| Suitability - Sunlight Resistance: | Yes |

Flammability, LS0H, Toxicity Testing

| IEC Flammability: | IEC 60332-3-24 and IEC 60332-3-22 |
|--|-----------------------------------|
| IEC 60754-1 (EN50267-1)- Halogen Amount: | Zero |

Plenum/Non-Plenum

| D. 0.000 | |
|---------------|----|
| Plenum (Y/N): | No |

Part Number

Variants

| Item # | Color | Putup Type | Length | UPC/EAN |
|----------------|--------|------------|----------|---------------|
| 9841NH.00152 | Chrome | Reel | 152 m | 8719605022929 |
| 9841NH.00305 | Chrome | Reel | 305 m | 8719605022936 |
| 9841NH.00500 | Chrome | Reel | 500 m | 8719605022943 |
| 9841NH 0601000 | Chrome | Reel | 1,000 ft | 612825259497 |
| 9841NH 0601000 | Chrome | Reel | 1,000 ft | 612825259497 |
| 9841NH.001000 | Chrome | Reel | 1,000 m | 8719605022912 |

Footnote: C - CRATE REEL PUT-UP.

History

| Update and Revision: | Revision Number: 0.406 Revision Date: 06-08-2020 |
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