



Product: [3107ENH](#)

RS-485, 2 Pr #22 Str TC, PO ins, F/B, LSNH Jkt

Product Description

RS-485, 2 Pair 22 AWG Tinned Copper - Stranded, Polyolefin (PO, PE, PP) insulation, Foil + Braid(s) shielding, LSZH / FRNC jacket ,

Technical Specifications

Product Overview

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

Construction Details

Conductor

| Size | Stranding | Material |
|------|-----------|--------------------|
| 22 | 7x30 | TC - Tinned Copper |

Insulation

| Material | Nom. Insulation Diameter | Color Code |
|--------------------------|--------------------------|--|
| PE - Polyethylene (Foam) | 2.04 mm (0.0803 in) | White/Blue & Blue/White, White/Orange & Orange/White |

Outer Shield

| Shield Type | Material | Coverage |
|-------------|-------------------------|----------|
| Tape | Bi-Laminate (Alum+Poly) | 100% |
| Braid | Tinned Copper (TC) | 65% |

Outer Jacket

| Material | Nom. Thickness | Nom. Diameter |
|---|---------------------|------------------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 1.35 mm (0.0531 in) | 8.9 mm (0.35 in) |

| | |
|-----------------------------------|------------------|
| Table Notes: | UV Stabilised |
| Overall Cable Diameter (Nominal): | 8.9 mm (0.35 in) |

Electrical Characteristics

Electricals

| Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Nom. Characteristic Impedance | Nom. Velocity of Prop. | Max. Current |
|-------------------------------|-------------------------------|---|-------------------------------|------------------------|------------------------|
| 48.2 Ohm/km (14.7 Ohm/1000ft) | 36.1 pF/m (11.0 pF/ft) | 68.6 pF/m | 120 Ohm | 78% | 2.7 Amps per Conductor |

Nom. Outer Shield DCR: 5.9 Ohm/km (1.8 Ohm/1000ft)

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss (Attenuation) |
|-----------------|-----------------------------------|
| 1 | 1.64 dB/100m |

Mechanical Characteristics

Temperature

| Operating | Installation | Storage |
|----------------|----------------|----------------|
| -45°C To +80°C | -15°C To +80°C | -45°C To +80°C |

Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 45 mm (1.8 in) | 89 mm (3.5 in) |

Max. Pull Tension: 290 N (65 lbf)

Standards and Compliance

| | |
|----------------------------------|--|
| Environmental Suitability: | Indoor/Outdoor - Euroclass Eca, Non-Halogenated, Sunlight Resistance, Oil Resistance |
| Flammability / Reaction to Fire: | IEC 60332-1-2 |
| CPR Compliance: | CPR Euroclass: Eca |
| ISO/IEC Compliance: | IEC 61034-2 - Smoke Density Min Transmittance = 60% |
| CENELEC Compliance: | EN 50290-2-27 |
| European Halogen Free Standards: | IEC 62821-1 Halogen Free Compliance = Yes, IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 2.5 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3 |
| European Directive Compliance: | EU CE Mark |

History

Update and Revision: Revision Number: 0.280 Revision Date: 05-06-2022

Part Numbers

Variants

| Item # | Color | Putup Type | Length | EAN |
|----------------|--------|------------|---------|---------------|
| 3107ENH.00305 | Black | Reel | 305 m | 8719605005977 |
| 3107ENH.K0305 | Black | Reel | 305 m | 8719605188755 |
| 3107ENH.001000 | Black | Reel | 1,000 m | 8719605174185 |
| 3107ENH.01500 | Orange | Reel | 500 m | 8719605192486 |

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