



Part Number: 3105A

RS485, 1 Pr #22 Str TC, PO Ins, OS+TC Brd, PVC Jkt, CM

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Product Description

RS-485, 1 Pair 22AWG (7x30) Tinned Copper, PO Insulation, Overall Beldfoil®+Tinned Copper Braid(65%) Shield, PVC Outer Jacket, CM

Technical Specifications

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | Nominal Diameter | No. of Pairs |
|-----|-----------|--------------------|------------------|--------------|
| 22 | 7x30 | TC - Tinned Copper | 0.03 in | 1 |

Conductor Count: 2

Insulation

| Material | Material Trade Name | Nominal Diameter |
|--|---------------------|------------------|
| FHDPE - Foamed High Density Polyethylene | Datalene® | 0.087 in |

Color Chart

| Number | Color |
|--------|---|
| 1 | White/Blue Ringband Stripe and Blue/White Ringband Stripe |

Outer Shield Material

| Type | Layer | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|-------|-------|--------------------|---------------------|--------------|--------------------|---------------|------------------------------|
| Tape | 1 | Aluminum/Polyester | Beldfoil® | 100 % | TC - Tinned Copper | 22 | 7x30 mm |
| Braid | 2 | TC - Tinned Copper | | 65 % | | | |

Outer Jacket Material

| Material | Nominal Diameter |
|--------------------------|------------------|
| PVC - Polyvinyl Chloride | 0.281 in |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Nominal Outer Shield DCR |
|-----------------------|--------------------------|
| 14.7 Ohm/1000ft | 2.8 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |
|---|---|
| 11 pF/ft | 20.9 pF/ft |

Impedance

| Nominal Characteristic Impedance |
|----------------------------------|
| 120 Ohm |

High Frequency (Nominal/Typical)

| Nom. Insertion Loss |
|---------------------|
| 0.5 dB/100ft |

Delay

Nominal Velocity of Propagation (VP) [%]

78 %

Current**Max. Recommended Current [A]**

2.7 Amps per conductor @ 25°C

Voltage**UL Voltage Rating**

300 V RMS (NEC Type PLTC)

300 V RMS (NEC Type CM)

Electrical Characteristics Notes: Input Impedance/Unfitted Impedance .5 - 10 MHZ, 120 +-12 Ohms

Temperature Range

| | |
|-----------------------|----------------|
| Non-UL Temp Rating: | 60°C |
| UL Temp Rating: | 60°C |
| Operating Temp Range: | -20°C To +60°C |

Mechanical Characteristics

| | |
|----------------------------------|---------------|
| Bulk Cable Weight: | 43 lbs/1000ft |
| Max Recommended Pulling Tension: | 200 lbs |
| Min Bend Radius/Minor Axis: | 6.0 in |

Standards

| | |
|--------------------------|----------|
| NEC/(UL) Specification: | CM, PLTC |
| CEC/C(UL) Specification: | CM |
| CPR Euroclass: | Eca |

Applicable Environmental and Other Programs

| | |
|---------------------------------------|-------------------------------|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2002/96/EC (WEEE): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU: | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-10-01 |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |

Suitability

| | |
|------------------------------------|-----|
| Suitability - Hazardous Locations: | Yes |
| Suitability - Indoor: | Yes |
| Suitability - Oil Resistance: | Yes |
| Suitability - Sunlight Resistance: | Yes |

Flammability, LSOH, Toxicity Testing

| | |
|-----------------------|---------------------------|
| UL Flammability: | UL1685 UL Loading |
| CSA Flammability: | FT1 |
| ISO/IEC Flammability: | IEC 60332-1-2 |
| UL voltage rating: | 300 V RMS (NEC Type PLTC) |

Plenum/Non-Plenum

Plenum (Y/N): No

Part Number**Variants**

| Item # | Color | UPC | Length | Footnote |
|--------|-------|-----|--------|----------|
|--------|-------|-----|--------|----------|

| | | | | |
|----------------|-------|--------------|----------|-----|
| 3105A.001000 | Black | | 1,000 m | |
| 3105A.00152 | Black | | 152 m | |
| 3105A.001525 | Black | | 1,525 m | |
| 3105A.00305 | Black | | 305 m | |
| 3105A.003050 | Black | | 3,050 m | |
| 3105A.00610 | Black | | 610 m | |
| 3105A 0101000 | Black | 612825141594 | 1,000 ft | C |
| 3105A 010500 | Black | 612825141600 | 500 ft | C |
| 3105A 0105000 | Black | 612825141617 | 5,000 ft | C N |
| 3105A.K0305 | Black | | 305 m | |
| 3105A 01010000 | Black | 612825386551 | | |

| | |
|-----------|---|
| Footnote: | C - CRATE REEL PUT-UP. |
| Footnote: | N - FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN. |

Product Notes

| | |
|--------|---|
| Notes: | Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17. For CPE jacketed version order Part No. YR44345. |
|--------|---|

History

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| Update and Revision: | Revision Number: 0.316 Revision Date: 08-22-2019 |
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