



Product: [3105A](#)

RS-485, 1 Pr, 22AWG, Str TC, PE Ins, OS+TC Brd, PVC Jkt, CM, PLTC, Sun Res, Oil Resistant

[Request Sample](#)

Product Description

RS-485, 120 Ohm, 1 pair 22AWG (7x30) tinned copper Datalene® insulation, Overall Foil + 65% Tinned Copper Braid, PVC jacket, CM, PLTC, SUN RES and oil-resistant

Technical Specifications

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

Conductor

| Element | Number of Element | AWG | Stranding | Material |
|---------|-------------------|-----|-----------|--------------------|
| Pair(s) | 1 | 22 | 7x30 | TC - Tinned Copper |

Insulation

| Element | Material | Thickness [in.] | Color Code | Notes |
|---------|--------------------------|-----------------|---------------------------------------|-------|
| Pair(s) | PE - Polyethylene (Foam) | 0.029 | White/Blue Stripe & Blue/White Stripe | HDPE |

Outer Shield Material

| Shield Type | Material | Coverage | Drainwire Type |
|--------------|----------------------------------|------------|------------------|
| Tape + Braid | Alum / Poly + Tinned Copper (TC) | 100% + 65% | 22 AWG (7x30) TC |

Outer Jacket Material

| Material | Thickness | Nom. Diameter |
|--------------------------|-----------|---------------|
| PVC - Polyvinyl Chloride | 0.041 in | 0.281 in |

Cable Diameter (Nominal): 0.281 in

Electricals

| Element | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Characteristic Impedance | Nom. Velocity of Prop. | Max. Current |
|--------------|--------------------|-------------------------------|---|--------------------------|------------------------|--------------------------------|
| Pair(s) | 14.7 Ohm/1000ft | 11 pF/ft | 20.9 pF/ft | 120 Ohm | 78% | 2.7 Amps per Conductor at 25°C |
| Conductor(s) | | | | | | |

Nom Outer Shield DCR: 2.8 Ohm/1000ft

High Frequency (Nominal/Typical)

| Element | Frequency [MHz] | Nom. Insertion Loss |
|---------|-----------------|---------------------|
| Pair(s) | 1 MHz | 0.5 dB/100ft |

Voltage

| UL Voltage Rating |
|-------------------|
| 300 V (CM, PLTC) |

Temperature

| UL Rating | Operating |
|-----------|----------------|
| 60°C | -20°C to +60°C |

Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 6.0 in | 6.0 in |

| | |
|---------------------------------|---|
| Max. Pull Tension: | 200 lbs |
| Bulk Cable Weight: | 43 lbs/1000ft |
| Environmental Suitability: | Indoor, Sunlight Resistance, Oil Resistance |
| Flammability / Fire Resistance: | UL1685 UL Loading, FT1, IEC 60332-1-2 |
| NEC / UL Compliance: | Article 725, Article 800, CM, PLTC |
| 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) |
| Notes: | Oil Resistance: Passes Oil Res II Per UL1277, Table 10.17. For CPE jacketed version order Part No. YR44345. |
| Update and Revision: | Revision Number: 0.371 Revision Date: 07-31-2020 |

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