
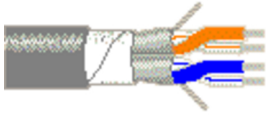


Product: [7838A](#) 



T1/DS1 Central Office, 2 Pair 22 AWG, CM

Product Description

2 Twisted Pair 22 AWG solid tinned copper conductors, Datalene® insulation, individually shielded with 100% Beldfoil® shield, 24 AWG solid tinned copper drain wire each pair, PVC jacket, CM rated.

Technical Specifications

Product Overview

| | |
|------------------------|---------------|
| Suitable Applications: | T1, DS1, Data |
|------------------------|---------------|

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | Nominal Diameter | No. of Pairs |
|-----|-----------|--------------------|------------------|--------------|
| 22 | Solid | TC - Tinned Copper | 0.025 in | 2 |

Insulation

| Material | Material Trade Name | Nominal Diameter |
|--------------------------|---------------------|------------------|
| PE - Polyethylene (Foam) | Datalene® | 0.072 in |

Color Chart

| Number | Color |
|--------|-----------------------|
| 1 | Blue & White/Blue |
| 2 | Orange & White/Orange |

Inner Shield

| Type | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire Diameter | Drainwire AWG | Drainwire Construction n x D | Drainwire Position |
|------|-------------------------|---------------------|--------------|--------------------|--------------------|---------------|------------------------------|--|
| Tape | Bi-Laminate (Alum+Poly) | Beldfoil® | 100% | TC - Tinned Copper | 0.021 in | 24 | Solid | Over shield tape, under polyester separator tape |

Outer Jacket

| Material | Nominal Diameter |
|--------------------------|------------------|
| PVC - Polyvinyl Chloride | .202 x .360 in |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR |
|-----------------------|
| 16.7 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Conductor |
|---|
| 14.5 pF/ft |

Inductance

| Nominal Inductance |
|--------------------|
| 0.24 µH/ft |

Impedance

| Max. Differential Impedance (1MHz) |
|------------------------------------|
| 105 |

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 772 kHz | 4.3 dB/100ft |

Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|---------------|--|
| 1.41 ns/ft | 72% |

Current

| Max. Recommended Current [A] |
|---------------------------------|
| 2.25 Amps per Conductor at 25°C |

Voltage

| UL Voltage Rating |
|-------------------|
| 300 V RMS |

Temperature Range

| | |
|-----------------------|----------------|
| UL Temp Rating: | 75°C |
| Operating Temp Range: | -20°C To +75°C |

Mechanical Characteristics

| | |
|------------------------------|---------------|
| Bulk Cable Weight: | 34 lbs/1000ft |
| Max. Pull Tension: | 34 lbs |
| Min. Bend Radius/Minor Axis: | 2 in |

Standards

| | |
|-----------------------|----|
| NEC/(UL) Compliance: | CM |
| CEC/C(UL) Compliance: | CM |

Applicable Environmental and Other Programs

| | |
|--|------------------------------------|
| Environmental Space: | Indoor Rated (Not Riser or Plenum) |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| EU Directive 2011/65/EU (RoHS 2): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU (RoHS 2 amendment): | Yes |
| EU Directive Compliance: | Yes |
| MII Order #39 (China RoHS): | Yes |

Suitability

| | |
|------------------------------------|--|
| Suitability - Aerial: | Yes - Black only, when supported by messenger wire |
| Suitability - Burial: | No |
| Suitability - Hazardous Locations: | No |
| Suitability - Indoor: | Yes |
| Suitability - Outdoor: | Yes - Black only |

Flammability, LSOH, Toxicity Testing

| | |
|--------------------|-------------------|
| UL Flammability: | UL1685 UL Loading |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Part Number

Variants

| Item # | Color | Put-Up Type | Length | UPC |
|---------------|--------|-------------|----------|--------------|
| 7838A 0601000 | Chrome | Reel | 1,000 ft | 612825190127 |
| 7838A 0602000 | Chrome | Reel | 2,000 ft | 612825190134 |
| 7838A 0605000 | Chrome | Reel | 5,000 ft | 612825190141 |

Footnote: C - CRATE REEL PUT-UP.

Product Notes

Notes: Single conductors are dual insulated. The outer layer of insulation must be stripped off before attaching modular connectors. Use a stripping tool such as Cooper Tools Xcelite model 103-S, or equivalent with a mechanical stop to avoid nicking the inner insulation. RJ-45 Compatible.

History

Update and Revision: Revision Number: 0.279 Revision Date: 12-15-2021

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