Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

8125 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422

For more Information please call



1-800-Belden1



General Description:

24 AWG stranded (7x32) TC conductors, Datalene® insulation, twisted pairs, overall Beldfoil® (100% coverage) + TC braid shield (65% coverage), 24 AWG stranded TC drain wire, PVC jacket.

| DI | | | , | - , |
|------------------|--|--|----------------------------|-----|
| - | Characteristics (Ove | rall) | | |
| Conducto AWG: | or | | | |
| # Pair | s AWG Stranding Conductor | Material | | |
| 25 | 24 7x32 TC - Tinned | Copper | | |
| Total | Number of Conductors: | 50 | | |
| Insulatio | n on Material: | | | |
| | ation Trade Name Insulation M | laterial Wall Thickness (mm) | | |
| Datale | | Polyethylene 0.381 | | |
| | | | | |
| Outer Sh | ield hield Material: | | | |
| | | Curre Outen Obield Meterial | 0 | |
| Layer | # Outer Shield Trade Name 1 Beldfoil® | | Coverage (%) 100 | |
| 2 | | Fape Aluminum Foil-Polyester Tape w/Shorting Fold Braid TC - Tinned Copper | 65 | |
| | | | 00 | |
| | hield Drain Wire AWG: | | | |
| | Stranding Drain Wire Conduc | | | |
| 24 | 7x32 TC - Tinned Copper | | | |
| Outer Ja | cket | | | |
| | acket Material: | | | |
| Outer | Jacket Material Nom. Wall | Thickness (mm) | | |
| | Polyvinyl Chloride 1.270 | | | |
| | | | | |
| Overall C | able | | | |
| Overa | II Nominal Diameter: | 16.053 mm | | |
| Pair | | | | |
| Pair Co | lor Code Chart: | | | |
| Numb | oer Color | | | |
| 1 | White/Blue & Blue/White | | | |
| 2 | White/Orange & Orange/Whi | ite | | |
| 3 | White/Green & Green/White | | | |
| 4 | White/Brown & Brown/White | | | |
| 5 | White/Gray & Gray/White | | | |
| 6 | Red/Blue & Blue/Red | | | |
| 7 | Red/Orange & Orange/Red | | | |
| 8 | Red/Green & Green/Red | | | |
| 9 | Red/Brown & Brown/Red | | | |
| 10 | Red/Gray & Gray/Red | | | |
| 11 | Black/Blue & Blue/Black | | | |
| 12 | Black/Orange & Orange/Blac | <u>.</u> | | |
| 13 | Black/Green & Green/Black | | | |
| 14 | Black/Brown & Brown/Black | | | |



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| 15 | Black/Gray & Gray/Black |
|----|-------------------------------|
| 16 | Yellow/Blue & Blue/Yellow |
| 17 | Yellow/Orange & Orange/Yellow |
| 18 | Yellow/Green & Green/Yellow |
| 19 | Yellow/Brown & Brown/Yellow |
| 20 | Yellow/Gray & Gray/Yellow |
| 21 | Purple/Blue & Blue/Purple |
| 22 | Purple/Orange & Orange/Purple |
| 23 | Purple/Green & Green/Purple |
| 24 | Purple/Brown & Brown/Purple |
| 25 | Purple/Gray & Gray/Purple |

Mechanical Characteristics (Overall)

| Operating Temperature Range: | -30°C To +80°C |
|-----------------------------------|--------------------------|
| UL Temperature Rating: | 80°C (UL AWM Style 2919) |
| Bulk Cable Weight: | 260.435 Kg/Km |
| Max. Recommended Pulling Tension: | 1247.720 N |
| Min. Bend Radius/Minor Axis: | 165.100 mm |

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| NEC/(UL) Specification: | СМ |
|---------------------------------------|---------------------------|
| CEC/C(UL) Specification: | СМ |
| AWM Specification: | UL Style 2919 (30 V 80°C) |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU CE Mark: | Yes |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2002/95/EC (RoHS): | Yes |
| EU RoHS Compliance Date (mm/dd/yyyy): | 01/01/2004 |
| EU Directive 2002/96/EC (WEEE): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |
| Flame Test | |
| UL Flame Test: | UL1685 UL Loading |
| Plenum/Non-Plenum | |
| Plenum (Y/N): | No |
| Plenum Number: | 88125 |

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

100

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

41.0125

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 72.182

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Nominal Velocity of Propagation:

| | | • | | |
|----|---------------------------|--------------|----------|--------|
| | VP (%) 78 | | | |
| No | om. Conduc | tor DC Re | sistance | ə: |
| | DCR @ 20°0 | C (Ohm/km) | | |
| | 78.744 | | | |
| Nc | minal Oute | er Shield D | C Resis | tance: |
| | DCR @ 20°0 | C (Ohm/km) | | |
| | 6.562 | | | |
| Ma | ax. Operatii | ng Voltage | - UL: | |
| | Voltage | Description | l - | |
| | 30 V RMS | UL AWM St | yle 2919 | |
| | 300 V RMS | СМ | | |
| Ma | Max. Recommended Current: | | | |
| | Current | | | |
| | 1 Amp per c | onductor @ 2 | 25°C | |
| | | | | |

Notes (Overall)

Notes: Datalene® insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|--------------|----------|-------------|--------|-------|------------------------|
| 8125 060100 | 100 FT | 20.700 LB | CHROME | С | 25 PR #24 FHDPE SH PVC |
| 8125 0601000 | 1,000 FT | 191.000 LB | CHROME | С | 25 PR #24 FHDPE SH PVC |
| 8125 060500 | 500 FT | 95.000 LB | CHROME | С | 25 PR #24 FHDPE SH PVC |

Notes:

C = CRATE REEL PUT-UP.

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