

9841 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-485 Applications

For more Information
please call

1-800-Belden1



General Description:

24 AWG stranded (7x32) TC conductors, polyethylene insulation, twisted pairs, overall Beldfoil® (100% coverage) + TC braid shield (90% coverage), 24 AWG stranded TC drain wire, PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

| # Pairs | AWG | Stranding | Conductor Material |
|---------|-----|-----------|--------------------|
| 1 | 24 | 7x32 | TC - Tinned Copper |

Total Number of Conductors: 2

Insulation

Insulation Material:

| Insulation Material | Wall Thickness (in.) |
|---------------------|----------------------|
| PE - Polyethylene | 0.023 |

Outer Shield

Outer Shield Material:

| Layer # | Outer Shield Trade Name | Type | Outer Shield Material | Coverage (%) |
|---------|------------------------------|-------|------------------------------|--------------|
| 1 | Beldfoil® (w/ shorting fold) | Tape | Aluminum Foil-Polyester Tape | 100.000 |
| 2 | | Braid | TC - Tinned Copper | 90.000 |

Outer Shield Drain Wire AWG:

| AWG | Stranding | Drain Wire | Conductor Material |
|-----|-----------|--------------------|--------------------|
| 24 | 7x#32 | TC - Tinned Copper | |

Outer Jacket

Outer Jacket Material:

| Outer Jacket Material | Nom. Wall Thickness (in.) |
|--------------------------|---------------------------|
| PVC - Polyvinyl Chloride | 0.035 |

Overall Cable

Overall Cabling Fillers: Fibrous Polypropylene

Overall Cabling Lay Length & Direction:

| Length (in.) | Direction | Twists (twist/ft) |
|--------------|-----------|-------------------|
| 2.500 | Left Hand | 4.800 |

Overall Nominal Diameter: 0.232 in.

Pair

Pair Color Code Chart:

| Color |
|---------------------------|
| White/Blue and Blue/White |

Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +80°C

Bulk Cable Weight: 36 lbs/1000 ft.

Max. Recommended Pulling Tension: 72.300 lbs.

Min. Bend Radius/Minor Axis: 2.500 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CM

NEC Articles: 800

CEC/C(UL) Specification: CM

AWM Specification: UL Style 2919 (30 V 80°C)

EU Directive 2011/65/EU (ROHS II): Yes

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| | |
|---------------------------------------|------------|
| 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 |
| MIL Order #39 (China RoHS): | Yes |

Flame Test

| | |
|-----------------|-------------------|
| UL Flame Test: | UL1685 UL Loading |
| CSA Flame Test: | FT1 |

Suitability

| | |
|-----------------------|-----|
| Suitability - Indoor: | Yes |
|-----------------------|-----|

Plenum/Non-Plenum

| | |
|----------------|--------------|
| Plenum (Y/N): | No |
| Plenum Number: | 82841, 89841 |

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

| Impedance (Ohm) |
|-----------------|
| 120 |

Nom. Capacitance Conductor to Conductor:

| Capacitance (pF/ft) |
|---------------------|
| 12.8 |

Nom. Capacitance Cond. to Other Conductor & Shield:

| Capacitance (pF/ft) |
|---------------------|
| 23 |

Nominal Velocity of Propagation:

| VP (%) |
|--------|
| 66 |

Nominal Delay:

| Delay (ns/ft) |
|---------------|
| 1.6 |

Nom. Conductor DC Resistance:

| DCR @ 20°C (Ohm/1000 ft) |
|--------------------------|
| 24 |

Nominal Outer Shield DC Resistance:

| DCR @ 20°C (Ohm/1000 ft) |
|--------------------------|
| 3.4 |

Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
| 1.000 | 0.600 |

Max. Operating Voltage - UL:

| Voltage | Description |
|-----------|-------------|
| 300 V RMS | Type CM |
| 30 V RMS | AWM2919 |

Max. Recommended Current:

| Description | Current |
|----------------------|---------------------------------------|
| 10C temperature rise | 2.1 Amps per conductor @ 25°C ambient |

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|-----------|-------------|--------|-------|--------------------|
| 9841 060100 | 100 FT | 4.300 LB | CHROME | | 1 PR #24 PE SH PVC |
| 9841 0601000 | 1,000 FT | 40.000 LB | CHROME | C | 1 PR #24 PE SH PVC |
| 9841 06010000 | 10,000 FT | 380.000 LB | CHROME | C | 1 PR #24 PE SH PVC |
| 9841 060500 | 500 FT | 20.000 LB | CHROME | C | 1 PR #24 PE SH PVC |
| 9841 0605000 | 5,000 FT | 200.000 LB | CHROME | | 1 PR #24 PE SH PVC |

Notes:

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C = CRATE REEL PUT-UP.

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