Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



9570 Multi-Conductor - Audio, Control and Instrumentation Cable





Description:

24 AWG solid tinned copper conductors, PVC insulation, twisted pairs, PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

| # Pairs | AWG | Stranding | Conductor Material |
|---------|-----|-----------|---------------------------|
| 10 | 24 | Solid | TC - Tinned Copper |

Insulation

Insulation Material:

| Insulation Material | Wall Thickness (in.) |
|--------------------------|----------------------|
| PVC - Polyvinyl Chloride | .010 |

Outer Shield

Outer Shield Material:

Outer Shield Material Unshielded

Outer Jacket

Outer Jacket Material:

| Outer Jacket Material | Nom. Wall Thickness (in.) |
|--------------------------|---------------------------|
| PVC - Polyvinyl Chloride | .035 |

Overall Cabling

Overall Nominal Diameter: 0.310 in.

Pair

Pair Color Code Chart:

| Number | Color |
|--------|----------------|
| 1 | White & Blue |
| 2 | White & Orange |
| 3 | White & Green |
| 4 | White & Brown |
| 5 | White & Gray |
| 6 | Red & Blue |
| 7 | Red & Orange |
| 8 | Red & Green |
| 9 | Red & Brown |
| 10 | Red & Gray |

Mechanical Characteristics (Overall)

| Operating Temperature Range: | -20°C To +80°C |
|--|--------------------------|
| UL Temperature Rating: | 80°C (UL AWM Style 2576) |
| Bulk Cable Weight: | 56 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 102 lbs. |
| Min. Bend Radius (Install)/Minor Axis: | 3.250 in. |

Detailed Specifications & Technical Data





9570 Multi-Conductor - Audio, Control and Instrumentation Cable

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| NEC/(UL) Specification: | CMG |
|---------------------------------------|----------------------------|
| CEC/C(UL) Specification: | CMG |
| AWM Specification: | UL Style 2576 (150 V 80°C) |
| 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): | 04/01/2005 |
| 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 |
| me Test | |
| III. Flama Taati | LIL 4COE ETA Landing |

Flar

UL Flame Test: UL1685 FT4 Loading C(UL) Flame Test: FT4

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft) 22

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

Max. Operating Voltage - UL:

Voltage 300 V RMS 150 V RMS (UL AWM Style 2576)

Max. Recommended Current:

Current 1 Amp per conductor @ 20°C

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|--------------|----------|-------------|--------|-------|-------------------|
| 9570 0601000 | 1,000 FT | 63.000 LB | CHROME | С | 10 #24 PR PVC PVC |
| 9570 060500 | 500 FT | 31.500 LB | CHROME | | 10 #24 PR PVC PVC |

Notes:

C = CRATE REEL PUT-UP.

Introduction

Belden® multi-conductor cables are manufactured in a wide variety of gage sizes, dimensions, insulation materials, shielding configurations, and jacketing materials including Plenum and High-Temperature versions. These cables meet the technical requirements of many different types of systems. In fact, Belden offers one of the broadest lines of UL Listed, NEC and CEC multi-conductor cables available from any single source.

Applications for multi-conductor cables include computers, communications, instrumentation, sound, control, audio, and data transmission. Each of these cables is designed to protect signal integrity under critical conditions by reducing hum, noise, and crossfalk

To assist you in selecting the proper cable for your application, both the suggested working voltages and the maximum temperature ratings are indicated for each applicable product in this section.

Most of our multi-conductor cables are available from stock. Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find a multi-conductor cable in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1.

Multi-Conductor Cables Packaging

Belden's unique UnReel® cable dispenser is available for many of the multi-conductor products listed in this section. The letter "U" before the specified put-up length denotes UnReel packaging.

Selection Guide

Shielded Multi-Conductor Computer Cables for RS-232 Applications

| | | Cable Series* | | | | | | | |
|--------------|----------------|---------------|------|-------|----------|------|--|--|--|
| Specifica | ntions | | 9925 | 9608 | 9533 | 9939 | | | |
| Conductor Si | | 28 | | | | | | | |
| (AWG) | | 24 | 1 | 1 | 1 | | | | |
| | | 22 | | | - | 1 | | | |
| | | 20 | | | | | | | |
| | | 18 | | | | | | | |
| | Pac | je No. | 4.18 | 4.17 | 4.11 | 4.19 | | | |
| Insulation: | S-R PVC | , | | 1 | 1 | 1 | | | |
| | Polyethylene | | | | - | - | | | |
| | Polypropylene | 9 | | | | | | | |
| | Datalene® † | - | 1 | | | | | | |
| Shield: | Overall Foil | | , | | 1 | | | | |
| | Drain Wire | | 1 | | 1 | | | | |
| | Overall Foil/B | raid | 1 | 1 | - | 1 | | | |
| | Braid Coveraç | | 65% | 65% | | 65% | | | |
| Drain Wire O | | ,- | Yes | No | Yes | No | | | |
| No. of Cond. | | 1 | 100 | - 110 | | | | | |
| | | 2 | | | | | | | |
| | | 3 | 1 | 1 | 1 | 1 | | | |
| | | 4 | 1 | / | 1 | 1 | | | |
| | | 5 | 1 | / | 1 | 1 | | | |
| | | 6 | 1 | 1 | / | 1 | | | |
| | | 7 | 1 | / | 1 | 1 | | | |
| | | 8 | 1 | / | 1 | 1 | | | |
| | | 9 | 1 | / | 1 | 1 | | | |
| | | 10 | 1 | 1 | 1 | 1 | | | |
| | | 11 | · | • | • | • | | | |
| | | 12 | | | | | | | |
| | | 13 | | | | | | | |
| | | 15 | 1 | 1 | / | 1 | | | |
| | | 17 | · | | • | • | | | |
| | | 18 | | | | | | | |
| | | 19 | | | | | | | |
| | | 20 | | | / | | | | |
| | | 25 | 1 | 1 | ✓ | 1 | | | |
| | | 27 | Ť | • | • | • | | | |
| | | 30 | | | 1 | | | | |
| | 31 | | | _ | | | | | |
| | | | 1 | 1 | | 1 | | | |
| | | 37 40 | | | 1 | * | | | |
| | | 50 | | 1 | 1 | 1 | | | |
| | | J 00 | 12.0 | 30.0 | 30.0 | ٧ | | | |

^{*}All cables are UL-listed.



^{**}Capacitance may vary on some cables.

[†] Foam high density polyethylene.

Unshielded

Audio, Control and Instrumentation Cables Plenum-Rated and Non-Plenum

| Decembries | Dovi Ne | UL NEC/ | No. | Color | Standard | Lengths | Stan Unit V | dard Veight | | lation kness | Ja: Thic | cket kness | Nomi | nal OD |
|---|-----------|--------------------------------|-------------|---|---------------------------------------|--|-------------------------------------|-------------------------------------|------|-----------------|-------------|---------------|------|--------|
| Description | Part No. | C(UL) CEC Type | of Cond. | Code | Ft. | m | Lbs. | kg | Inch | mm | Inch | mm | Inch | mm |
| 22 AWG Stranded (7x30) Ti | nned Copp | er Conduc | tors • (| Conductors | Cabled (c | ontinued) | | | | | | | | |
| PVC Insulation • Chrom | e PVC J | acket | | | | | | | | | | | | |
| UL AWM Style 2576 (150V 80°C) | 8457 | NEC: CMG CEC: CMG FT4 | 12 | See Chart 1 (Tech Info Section) | 100 U-500 500 U-1000 1000 | 30.5 U-152.4 152.4 U-304.8 304.8 | 5.6 25.5 26.0 50.0 52.0 | 2.5 11.6 11.8 22.7 23.6 | .010 | .25 | .032 | .81 | .272 | 6.91 |
| | 8458 | NEC: CMG CEC: CMG FT4 | 15 | See Chart 2R (Tech Info Section) | 100 500 1000 | 30.5 152.4 304.8 | 7.3 35.5 72.0 | 3.3 16.1 32.7 | .010 | .25 | .040 | 1.02 | .315 | 8.00 |
| | 9431 | NEC: CMG CEC: CMG FT4 | 20 | See Chart 2R (Tech Info Section) | 100 500 1000 | 30.5 152.4 304.8 | 9.1 48.5 87.0 | 4.1 22.0 39.5 | .010 | .25 | .040 | 1.02 | .345 | 8.76 |
| | 8459 | NEC: CMG CEC: CMG FT4 | 25 | See Chart 2R (Tech Info Section) | 100 500 1000 | 30.5 152.4 304.8 | 11.1 55.0 109.0 | 5.0 25.0 49.5 | .010 | .25 | .040 | 1.02 | .387 | 9.83 |
| | 9432 | NEC: CMG CEC: CMG FT4 | 30 | See Chart 2R (Tech Info Section) | 100 500 1000 | 30.5 152.4 304.8 | 12.5 62.5 124.0 | 5.7 28.4 56.3 | .010 | .25 | .040 | 1.02 | .400 | 10.16 |
| | 9433 | NEC: CMG CEC: CMG FT4 | 40 | See Chart 2R (Tech Info Section) | 100 500 1000 | 30.5 152.4 304.8 | 16.6 83.0 161.0 | 7.5 37.7 73.1 | .010 | .25 | .040 | 1.02 | .455 | 11.56 |
| | 9434 | NEC: CMG CEC: CMG FT4 | 50 | See Chart 2R (Tech Info Section) | 500 1000 | | 100.5 206.0 | 45.7 93.5 | .010 | .25 | .045 | 1.14 | .500 | 12.70 |
| Plenum • FEP Insulation | n • Red F | EP Jack | et | | | | | | | | | | | |
| 300V RMS, Non-conduit | 88442* | NEC: CMP CEC: CMP FT6 | 2 | Black, Red | 100 500† 1000† | 30.5 152.4 304.8 | 2.3 5.5 8.0 | 1.0 2.5 3.7 | .006 | .15 | .012 | .30 | .102 | 2.59 |
| 300V RMS, Non-conduit | 88444 | NEC: CMP CEC: CMP FT6 | 4 | Black, White, Red, Green | 100 500† 1000† | 30.5 152.4 304.8 | 2.9 9.0 15.0 | 1.3 4.1 6.8 | .006 | .15 | .010 | .25 | .121 | 3.07 |
| Suitable for Outdoor and Direct Burial applic | | | | | | | | | | | | | | |
| Plenum • FEP Insulation | n • Natui | | | | | | | | | | | | | |
| 300V RMS, Non-conduit | 82442* | NEC: CMP CEC: CMP FT6 | 2 | Black, Red | U-1000 † 1000 † | U-304.8 304.8 | 9.0 8.0 | 4.1 3.7 | .006 | .15 | .015 | .38 | .113 | 2.87 |
| 300V RMS, Non-conduit | 82444 | NEC: CMP CEC: CMP FT6 | 4 | Black, White, Red, Green | U-500 † U-1000 † 1000 † | U-152.4 U-304.8 304.8 | 9.0 16.0 15.0 | 4.1 7.3 6.8 | .006 | .15 | .015 | .38 | .134 | 3.40 |



^{*} Twisted Pair
†Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.