Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

9430 Multi-Conductor - Audio, Control and Instrumentation Cable



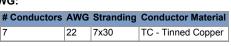
=



22 AWG stranded (7x30) tinned copper conductors, conductors cabled, PVC insulation, PVC Jacket. Physical Characteristics (Overall) Conductor

AWG:

Description:



Insulation Insulation

| sulation Material: | |
|----------------------|----------------------|
| Insulation Material | Wall Thickness (in.) |
| DVO DUL 'S LOUIS 'IS | 040 |

PVC - Polyvinyl Chloride .010

Outer Shield

| Outer | Shield | Mater | ial: |
|-------|--------|-------|------|
| Outer | omeru | water | ai. |

Outer Shield Material

Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material Nom. Wall Thickness (in.) PVC - Polyvinyl Chloride |.032

Overall Cabling

Overall Cabling Lay Length & Direction:

Length (in.) 3.50

Overall Cabling Color Code Chart:

| Color |
|--------|
| Black |
| White |
| Red |
| Green |
| Brown |
| Blue |
| Orange |

Overall Nominal Diameter:

0.214 in.

| chanical Characteristics (Overall) | |
|--|--------------------------|
| Operating Temperature Range: | -20°C To +80°C |
| UL Temperature Rating: | 80°C (UL AWM Style 2576) |
| Bulk Cable Weight: | 30.700 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 64 lbs. |
| Min. Bend Radius (Install)/Minor Axis: | 2.100 in. |

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

=



9430 Multi-Conductor - Audio, Control and Instrumentation Cable

| licable Standards & Environmental Prog | |
|--|----------------------------|
| NEC/(UL) Specification: | CMG |
| CEC/C(UL) Specification: | CMG |
| AWM Specification: | UL Style 2576 (150 V 80°C) |
| CSA Specification: | FT4 |
| 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 |

Electrical Characteristics (Overall)

Nom. Inductance:

| uctance (µH/ft) |
|-----------------|
|-----------------|

.17

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

34

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

15.6

Max. Operating Voltage - UL:

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

Max. Recommended Current:

Current

2.1 Amps per conductor @ 25°C

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|----------|-------------|--------|-------|---------------|
| 9430 060U1000 | 1,000 FT | 31.000 LB | CHROME | | 7 #22 PVC PVC |
| 9430 060U500 | 500 FT | 16.500 LB | CHROME | | 7 #22 PVC PVC |
| 9430 0601000 | 1,000 FT | 33.000 LB | CHROME | С | 7 #22 PVC PVC |
| 9430 060500 | 500 FT | 16.500 LB | CHROME | С | 7 #22 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 crosstalk.

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

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

4.2

| | | | | Cable | | |
|---------------------|------------------------------------|--------|------|-------|------|------|
| Specifica | tions | | 9925 | 9608 | 9533 | 9939 |
| Conductor Si | ze: | 28 | | | | |
| (AWG) | | 24 | 1 | 1 | 1 | |
| | | 22 | | | | 1 |
| | | 20 | | | | |
| | | 18 | | | | |
| | Pac | ge No. | 4.18 | 4.17 | 4.11 | 4.19 |
| Insulation: | , | | 1 | 1 | 1 | |
| | Polyethylene | | | | | |
| | Polypropylen | e | | | | |
| | Datalene [®] [†] | | 1 | | | |
| Shield: | Overall Foil | | | | 1 | |
| | Drain Wire | | 1 | | 1 | |
| | Overall Foil/B | raid | 1 | 1 | | 1 |
| | Braid Covera | | 65% | 65% | | 65% |
| Drain Wire O | | | Yes | No | Yes | No |
| No. of Cond. | 1 | | | | | |
| | | 2 | | | | |
| | | 3 | 1 | 1 | 1 | 1 |
| | | 4 | 1 | 1 | 1 | 1 |
| | | 5 | 1 | 1 | 1 | 1 |
| | | 6 | 1 | 1 | 1 | 1 |
| | | 7 | 1 | 1 | 1 | 1 |
| | | 8 | 1 | 1 | 1 | 1 |
| | | 9 | 1 | 1 | 1 | 1 |
| | | 10 | 1 | 1 | 1 | 1 |
| | | 11 | | | | |
| | | 12 | | | | |
| | | 13 | | | | |
| | | 15 | 1 | 1 | 1 | 1 |
| | | 17 | | | | |
| | | 18 | | | | |
| | | 19 | | | | |
| | | 20 | | | 1 | |
| | | 25 | 1 | 1 | 1 | 1 |
| | | 27 | | | | |
| | | 30 | | | 1 | |
| | | 31 | | | | |
| | | 37 | 1 | 1 | | 1 |
| | | 40 | | | 1 | |
| | | 50 | | 1 | 1 | 1 |
| Capacitance | ** (pF/ft.) | | 12.0 | 30.0 | 30.0 | 35.0 |

*All cables are LII -listed

**Capacitance may vary on some cables [†]Foam high density polyethylene.

Unshielded

Audio, Control and Instrumentation Cables Non-Plenum

| Description | Dard Ma | UL NEC/ | | Color Code | Standard Lengths | | Standard Unit Weight | | Insulation Thickness | | Jacket Thickness | | Nominal OD | |
|----------------------------------|-----------|--------------------------|-------------|------------------------------------|-------------------------|-----------------------------|-------------------------|---------------------|-------------------------|-----|---------------------|-----|------------|------|
| Description | Part No. | C(UL) CEC Type | of Cond. | | Ft. | m | Lbs. | kg | Inch | mm | Inch | mm | Inch | mm |
| 22 AWG Solid Bare Copper | Conductor | s • Conduc | tors Ca | abled | | | | | | | | | | |
| Polyethylene Insulation | • Rose | Gray PVC | Jack | et | | | | | | | | | | |
| UL AWM Style 2092 (300V 60°C) | 8795 | NEC: CM CEC: CM | 2 | Red, Green | U-500 U-1000 1000 | U-152.4 U-304.8 304.8 | 10.0 19.0 17.0 | 4.5 8.6 7.8 | .018 | .46 | .022 | .56 | .168 | 4.27 |
| UL AWM Style 2093 (300V 60°C) | 8794 | NEC: CM | 3 | Green, Red, Yellow | U-1000 1000 | U-304.8 304.8 | 22.0 21.0 | 10.0 9.6 | .018 | .46 | .022 | .56 | .178 | 4.52 |
| UL AWM Style 2094 (300V 60°C) | 9794 | NEC: MP, CM | 4 | Green, Red, Yellow, Black | U-500 U-1000 1000 | U-152.4 U-304.8 304.8 | 14.0 26.0 25.0 | 6.4 11.8 11.4 | .018 | .46 | .025 | .64 | .200 | 5.08 |
| UL AWM Style 2094 (300V 60°C) | 1242A | NEC: CM CEC: CM | 4 | Green, Red, Yellow, Black | U-1000 | U-304.8 | 16.0 | 7.2 | .018 | .46 | .025 | .64 | .154 | 3.91 |

22 AWG Stranded (7x30) Tinned Copper Conductors • Conductors Cabled

| PVC Insulation • Ch | rome PV <u>C</u> | Jacket | | | | | | | | | | | | |
|----------------------------------|------------------|--------------------------------|----|--|--|--|--|---|------|-----|--------------------------------|-----|-----------------|------|
| *Twisted pair | 8442* | NEC: CMG CEC: CMG FT4 | 2 | Black, Red | 100 U-500 500 U-1000 1000 10000 † | 30.5 U-152.4 152.4 U-304.8 304.8 3048.0 | 2.4 8.0 7.5 15.0 15.0 150.0 | 1.1 3.7 3.4 6.8 6.8 68.2 | .015 | | .025 Ienum vei 8442 or 8 | | .170 f 8442, | 4.32 |
| UL AWM Style 2576 (150V 80°C) | 8443 | NEC: CMG CEC: CMG FT4 | 3 | Black, Red, Green | 100 U-500 500 U-1000 1000 | 30.5 U-152.4 152.4 U-304.8 304.8 | 2.7 9.5 9.5 18.0 18.0 | 1.2 4.3 4.3 8.2 8.2 | .010 | .25 | .032 | .81 | .172 | 4.37 |
| | 8444 | NEC: CMG CEC: CMG FT4 | 4 | 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 | 3.1 11.5 11.5 22.0 23.0 | 1.4 5.2 5.2 10.0 10.5 | .010 | | .032 lenum vei 8444 or 8 | | .185 f 8444, | 4.70 |
| | 8445 | NEC: CMG CEC: CMG FT4 | 5 | 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 | 3.5 13.5 13.5 25.0 26.0 | 1.6 6.1 6.1 11.4 11.8 | .010 | .25 | .032 | .81 | .194 | 4.93 |
| | 9430 | NEC: CMG CEC: CMG FT4 | 7 | See Chart 1 (Tech Info Section) | U-500 500 U-1000 1000 | U-152.4 152.4 U-304.8 304.8 | 17.0 17.0 32.0 34.0 | 7.7 7.7 14.5 15.9 | .010 | .25 | .032 | .81 | .214 | 5.44 |
| | 9421 | NEC: CMG CEC: CMG FT4 | 8 | 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 | 4.2 19.0 18.5 36.0 38.0 | 1.9 8.7 8.4 16.3 17.2 | .010 | .25 | .032 | .81 | .229 | 5.82 |
| | 9423 | NEC: CMG CEC: CMG FT4 | 9 | 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 | 4.7 21.0 21.5 41.0 43.0 | 2.1 9.6 9.8 18.6 19.5 | .010 | .25 | .032 | .81 | .244 | 6.20 |
| | 8456 | NEC: CMG CEC: CMG FT4 | 10 | 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 | 5.0 22.5 23.0 44.0 46.0 | 2.3 10.2 10.5 20.0 20.9 | .010 | .25 | .032 | .81 | .264 | 6.71 |

[†]Final put-up may vary -10% to +20%. May contain two pieces, minimum length of any one piece is 1500 ft.

