

9309 Multi-Conductor - Audio, Control and Instrumentation Cable



Description:

22 AWG solid tinned copper conductors, PVC insulation, twisted pairs, overall Beldfoil shield (100% coverage), 22 AWG stranded TC drain wire, PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

| # Pairs | AWG | Stranding | Conductor Material |
|---------|-----|-----------|--------------------|
| 9 | 22 | Solid | TC - Tinned Copper |

Insulation

Insulation Material:

| Insulation Material | Wall Thickness (in.) |
|--------------------------|----------------------|
| PVC - Polyvinyl Chloride | .013 |

Outer Shield

Outer Shield Material:

| Outer Shield Trade Name | Type | Outer Shield Material | Coverage (%) |
|-------------------------|------|------------------------------|--------------|
| Beldfoil® | Tape | Aluminum Foil-Polyester Tape | 100 |

Outer Shield Drain Wire AWG:

| AWG | Stranding | Drain Wire | Conductor Material |
|-----|-----------|--------------------|--------------------|
| 22 | 7x30 | TC - Tinned Copper | |

Outer Jacket

Outer Jacket Material:

| Outer Jacket Material | Nom. Wall Thickness (in.) |
|--------------------------|---------------------------|
| PVC - Polyvinyl Chloride | .033 |

Overall Cabling

Overall Nominal Diameter: 0.363 in.

Pair

Pair Color Code Chart:

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

Mechanical Characteristics (Overall)

| | |
|-----------------------------------|--------------------------|
| Operating Temperature Range: | -20°C To +80°C |
| UL Temperature Rating: | 80°C (UL AWM Style 2464) |
| Bulk Cable Weight: | 80.100 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 149 lbs. |

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Min. Bend Radius (Install)/Minor Axis: 3.730 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| | |
|---------------------------------------|----------------------------|
| NEC/(UL) Specification: | CMG |
| CEC/C(UL) Specification: | CMG |
| AWM Specification: | UL Style 2464 (300 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 |

Flame Test

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

Plenum/Non-Plenum

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

Electrical Characteristics (Overall)

Nom. Inductance:

Inductance (µH/ft)

.02

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

50

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

35

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

16.5

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

12.5

Max. Operating Voltage - UL:

Voltage

300 V RMS (UL AWM Style 2464)

Max. Recommended Current:

Current

1.4 Amps per conductor @ 25°C

Put Ups and Colors:

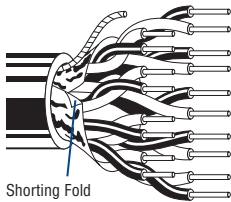
| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|--------------|----------|-------------|--------|-------|-----------------|
| 9309 0601000 | 1,000 FT | 86.000 LB | CHROME | C | 9 #22 PR FS PVC |
| 9309 060500 | 500 FT | 44.500 LB | CHROME | C | 9 #22 PR FS PVC |

Notes:


C = CRATE REEL PUT-UP.

Overall Beldfoil® Shield

Audio, Control and Instrumentation Cables

| Description | Part No. | UL NEC/ C(UL) CEC Type | No. of Pairs | Color Code | Standard Lengths | | Standard Unit Weight | | Insulation Thickness | | Jacket Thickness | | Nominal OD | | Nominal Capacitance | | | | |
|--|-----------------|----------------------------------|------------------------|---------------|------------------|---------|-------------------------|------|-------------------------|------|---------------------|-------|---------------|------|---------------------|---------------|------------------|----------------|--|
| | | | | | Ft. | m | Lbs. | kg | Inch | mm | Inch | mm | Inch | mm | * pF/ Ft. | * pF/ m | ** pF/ Ft. | ** pF/ m | |
| 22 AWG Solid Tinned Copper Conductors • Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • 22 AWG Stranded TC Drain Wire | | | | | | | | | | | | | | | | | | | |
| PVC Insulation • Chrome PVC Jacket | | | | | | | | | | | | | | | | | | | |
|  <p>Shorting Fold</p> | 9302 | UL AWM Style 2464 (300V 80°C) | NEC: 2 | See | U-500 | U-152.4 | 15.5 | 7.0 | .013 | .33 | .032 | .81 | .244 | 6.20 | 35 | 115 | 50 | 164 | |
| | | CMG | Chart 3 | 500 | 152.4 | 15.0 | 6.8 | | | | | | | | | | | | |
| | | CEC: CMG FT4 | (Tech Info Section) | 1000 | 304.8 | 29.0 | 13.2 | | | | | | | | | | | | |
| | 9305 | NEC: 4 | See | 100 | 30.5 | 4.9 | 2.2 | .013 | .33 | .032 | .81 | .265 | 6.73 | 35 | 115 | 50 | 164 | | |
| | | CMG | Chart 3 | U-500 | U-152.4 | 22.0 | 10.0 | | | | | | | | | | | | |
| | | CEC: CMG FT4 | (Tech Info Section) | 500 | 152.4 | 22.5 | 10.2 | | | | | | | | | | | | |
| | 9306 | NEC: 6 | See | 500 | 152.4 | 31.5 | 14.3 | .013 | .33 | .032 | .81 | .315 | 8.00 | 35 | 115 | 50 | 164 | | |
| | | CMG | Chart 3 | 1000 | 304.8 | 62.0 | 28.2 | | | | | | | | | | | | |
| | | CEC: CMG FT4 | (Tech Info Section) | | | | | | | | | | | | | | | | |
| | 9309 | NEC: 9 | See | 500 | 152.4 | 44.5 | 20.2 | .013 | .33 | .033 | .84 | .363 | 9.22 | 35 | 115 | 50 | 164 | | |
| CMG | | Chart 3 | 1000 | 304.8 | 86.0 | 39.1 | | | | | | | | | | | | | |
| CEC: CMG FT4 | | (Tech Info Section) | | | | | | | | | | | | | | | | | |
| 9315 | NEC: 15 | See | 500 | 152.4 | 67.0 | 30.5 | .013 | .33 | .037 | .94 | .449 | 11.41 | 35 | 115 | 50 | 164 | | | |
| | CMG | Chart 3 | 1000 | 304.8 | 133.0 | 60.5 | | | | | | | | | | | | | |
| | CEC: CMG FT4 | (Tech Info Section) | | | | | | | | | | | | | | | | | |
| 9319 | NEC: 19 | See | 500 | 152.4 | 85.0 | 38.6 | .013 | .33 | .040 | 1.02 | .495 | 12.57 | 35 | 115 | 50 | 164 | | | |
| | CMG | Chart 3 | 1000 | 304.8 | 165.0 | 75.0 | | | | | | | | | | | | | |
| | CEC: CMG FT4 | (Tech Info Section) | | | | | | | | | | | | | | | | | |
| 9327 | NEC: 27 | See | 500 | 152.4 | 116.0 | 52.7 | .013 | .33 | .045 | 1.14 | .615 | 15.62 | 35 | 115 | 50 | 164 | | | |
| | CMG | Chart 3 | 1000 | 304.8 | 230.0 | 104.5 | | | | | | | | | | | | | |
| | CEC: CMG FT4 | (Tech Info Section) | | | | | | | | | | | | | | | | | |
| 300V RMS, 60°C | 8751 | NEC: 51 | Request | 1000† | 304.8 | 384.0 | 174.5 | .010 | .25 | .050 | 1.27 | .710 | 18.03 | 30 | 98 | 42.8 | 140 | | |
| | | CMG | Technical | | | | | | | | | | | | | | | | |
| | | CEC: CMG FT4 | Bulletin | | | | | | | | | | | | | | | | |

For 38-pair polypropylene version of 8751, see 8752.

| Description | Part No. | UL NEC/ C(UL) CEC Type | No. of Pairs | Color Code | Standard Lengths | | Standard Unit Weight | | Nom. DCR | | Nominal OD | | Nom. Imp. (Ω) | Nom. Vel. of Prop. | Nom. Capacitance | | | |
|---|----------|----------------------------------|-----------------|--------------------|---------------------|-------|-------------------------|-----------|----------|---------|---------------|------|---------------------|-----------------------------|------------------|---------------|------------------|----------------|
| | | | | | Ft. | m | Lbs. | kg | Cond. | Shield | Inch | mm | | | * pF/ Ft. | * pF/ m | ** pF/ Ft. | ** pF/ m |
| 22 AWG Solid Tinned Copper Conductors • Twisted Pairs • Duofoil® Shield (100% Coverage) • 22 AWG Stranded Tinned Copper Drain Wire | | | | | | | | | | | | | | | | | | |
| Datalene® Insulation • Black PVC Jacket | | | | | | | | | | | | | | | | | | |
|  | 9184 | UL AWM Style 2668 (300V 60°C) | NEC: 2 | Black & Yellow, | 500 | 152.4 | 29.0 | 13.2 | 16.5Ω/M' | 8.0Ω/M' | .385 | 9.78 | 150 | 78% | 8.7 | 28.5 | 14.1 | 46.3 |
| | | CM | Red & Blue | 1000 | 304.8 | 59.0 | 26.8 | 54.13Ω/km | 26.2Ω/km | | | | | | | | | |
| | | CEC: CM | | | | | | | | | | | | | | | | |

DCR = DC Resistance • TC = Tinned Copper

* Capacitance between conductors.

** Capacitance between one conductor and other conductors connected to shield.

† Spools are one piece, but length may vary -0 to +20% from length shown.

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.