ENGLISH MEASUREMENT VERSION



1852F Multi-Conductor - Multi-Pair Snake Cable





Description:

24 AWG stranded (7x32) TC conductor, Datalene® insulation, pairs individually shielded with bonded Beldfoil® with a drain wire and have numbered and color-coded PVC jackets, overall Beldfoil® shield/drain wire + overall PVC jacket w/nylon rip cord.

Physical Characteristics (Overall)

Conductor

AWG:

| # Pairs | AWG | Stranding | Conductor Material | Dia. (in.) |
|---------|-----|-----------|---------------------------|------------|
| 24 | 24 | 7x32 | TC - Tinned Copper | .024 |

Insulation

Insulation Material:

| Insulation Trade Name | Insulation Material | Dia. (in.) |
|-----------------------|--|------------|
| Datalene® | FHDPE - Foam High Density Polyethylene | .068 |

Inner Shield

Inner Shield Material:

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

Inner Shield Drain Wire AWG:



Inner Shield Drain Wire Stranding: Stranded

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

Inner Jacket

Inner Jacket Material:

| Inner Jacket Material | Nom. Dia. (in.) |
|--------------------------|-----------------|
| PVC - Polyvinyl Chloride | .167 |

Inner Jacket Color Code Chart:

| Number | Color |
|--------|------------------------------------|
| 1 | Brown and Numbered 1 |
| 2 | Red and Numbered 2 |
| 3 | Orange and Numbered 3 |
| 4 | Yellow and Numbered 4 |
| 5 | Green and Numbered 5 |
| 6 | Blue and Numbered 6 |
| 7 | Purple and Numbered 7 |
| 8 | Gray and Numbered 8 |
| 9 | White and Numbered 9 |
| 10 | Black and Numbered 10 |
| 11 | Tan and Numbered 11 |
| 12 | Pink and Numbered 12 |
| 13 | Gray/Brown Stripe and Numbered 13 |
| 14 | Gray/Red Stripe and Numbered 14 |
| 15 | Gray/Orange Stripe and Numbered 15 |
| 16 | Gray/Yellow Stripe and Numbered 16 |

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| 17 | Gray/Green Stripe and Numbered 17 |
|----|------------------------------------|
| 18 | Gray/Blue Stripe and Numbered 18 |
| 19 | Gray/Purple Stripe and Numbered 19 |
| 20 | Gray/Gray Stripe and Numbered 20 |
| 21 | Gray/White Stripe and Numbered 21 |
| 22 | Gray/Black Stripe and Numbered 22 |
| 23 | Gray/Tan Stripe and Numbered 23 |
| 24 | Gray/Pink Stripe and Numbered 24 |

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:

| | | Drain Wire Conductor Material |
|----|----------|--------------------------------------|
| 16 | Stranded | TC - Tinned Copper |

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Outer Jacket Ripcord: Yes

Overall Cabling

Overall Nominal Diameter: 1.205 in.

Pair

Pair Color Code Chart:

| Number | Color |
|--------|-------------|
| 1 | Red & Black |
| 2 | Red & Black |
| 3 | Red & Black |
| 4 | Red & Black |
| 5 | Red & Black |
| 6 | Red & Black |
| 7 | Red & Black |
| 8 | Red & Black |
| 9 | Red & Black |
| 10 | Red & Black |
| 11 | Red & Black |
| 12 | Red & Black |
| 13 | Red & Black |
| 14 | Red & Black |
| 15 | Red & Black |
| 16 | Red & Black |
| 17 | Red & Black |
| 18 | Red & Black |
| 19 | Red & Black |
| 20 | Red & Black |
| 21 | Red & Black |
| 22 | Red & Black |
| 23 | Red & Black |
| 24 | Red & Black |

| Mechanical Characteristics (Overall) | | | |
|--------------------------------------|------------------|--|--|
| Operating Temperature Range: | -30°C To +60°C | | |
| UL Temperature Rating: | 60°C | | |
| Bulk Cable Weight: | 625 lbs/1000 ft. | | |
| Max. Recommended Pulling Tension: | 400 lbs. | | |





1852F Multi-Conductor - Multi-Pair Snake Cable

Min. Bend Radius (Install)/Minor Axis: 9.500 in. **Applicable Specifications and Agency Compliance (Overall) Applicable Standards & Environmental Programs** NEC/(UL) Specification: CMG CEC/C(UL) Specification: CMG **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 Other Specification: AES/EBU Flame Test **UL Flame Test:** UL1685 FT4 Loading

FT4

No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

C(UL) Flame Test:

Plenum/Non-Plenum Plenum (Y/N):



Nom. Inductance:



Nom. Capacitance Conductor to Conductor:



Nom. Capacitance Cond. to Other Conductor & Shield:



Nominal Velocity of Propagation:



Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 23.7

Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
| .384 | .69 |
| .7056 | .93 |
| .768 | .96 |
| 1.024 | 1.07 |
| 1.4112 | 1.19 |
| 1.536 | 1.21 |
| 2.048 | 1.31 |
| 2.8224 | 1.41 |





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| 3.0720 | 1.45 |
|---------|------|
| 4.096 | 1.57 |
| 5.6448 | 1.76 |
| 6.144 | 1.83 |
| 8.192 | 2.01 |
| 11.2896 | 2.24 |
| 12.288 | 2.30 |
| 24.576 | 3.08 |

Notes (Overall)

Notes: Pair jackets and shields are bonded so both strip simultaneously with automatic stripping equipment. 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 |
|---------------|----------|-------------|---------|-------|-------------------------|
| 1852F Z4B1000 | 1,000 FT | 645.000 LB | VIO Z4B | С | 24 FS PR #24 PVC FS PVC |
| 1852F Z4B500 | 500 FT | 321.000 LB | VIO Z4B | С | 24 FS PR #24 PVC FS PVC |

Notes: C = CRATE REEL PUT-UP.

AES/EBU Digital Audio Cable

Multi-Pair Snake Cables Individually Shielded and Jacketed Pairs



Individually Shielded and Jacketed Pairs

NEC: CMG (CEC: CMG FT4)

Product Description

26 AWG or 24 AWG stranded tinned copper conductor. Datalene® insulation. Pairs individually shielded with bonded Beldfoil® with a drain wire and have numbered and color-coded PVC jackets (see Chart 7 in Technical Information Section for colors). Pair jackets and shields are bonded so both strip simultaneously with automatic stripping equipment. Overall Beldfoil shield/drain wire plus overall Purple PVC jacket and nylon rip cord.

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.

Color Code: Black, Red.

Specifications

| .019" (.48mm) |
|-------------------------------------|
| .024" (.60mm) |
| |
| .054" (1.37mm) |
| .070" (1.78mm) |
| |
| .136" (3.45mm) |
| .167" (4.24mm) |
| |
| CMG |
| CMG FT4 |
| |
| 37.3Ω/M' (122.3Ω/km) |
| $25.5\Omega/M'$ (83.6 Ω/km) |
| |
| $23.7\Omega/M'$ (77.7 Ω/km) |
| 18.9Ω/M′ (62.0Ω/km) |
| 110Ω ±10Ω |
| 76% |
| |
| 12.5 pF/Ft. (41 pF/m) |
| 25 pF/Ft. (82 pF/m) |
| |
| 12 pF/Ft. (39 pF/m) |
| 26 pF/Ft. (86 pF/m) |
| |

DCR = DC Resistance

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



| Part No. | No. of | Standard Lengths | | Standard Unit Weight | | Nominal OD | |
|-------------|-----------|---------------------|---|-------------------------|----|------------|----|
| | Pairs | Ft. | m | Lbs. | kg | Inch | mm |

| Individually Shielded & | Jacketed | NEC: CMG | (CEC: CMG F | T4) |
|-------------------------|-----------------|----------|-------------|-----|
|-------------------------|-----------------|----------|-------------|-----|

| 26 AW | 26 AWG (7x34) | | | | | | | | |
|---|----------------------|----------------------------------|-----------------------------------|-----------------------------|----------------------------|------|-------|--|--|
| 7891A | 2 | 500 1000 | 152.4 304.8 | 28.0 56.0 | 12.7 25.5 | .343 | 8.71 | | |
| 7890A | 4 | 100 250 500 1000 | 30.5 76.2 152.4 304.8 | 8.2 18.0 31.0 61.0 | 3.7 8.2 14.1 27.7 | .399 | 10.13 | | |
| 7880A [†] Fits metal sh | 8 nell 25-pin | 250 500 1000 D-sub conn | 76.2 152.4 304.8 ectors. | 28.0 57.0 142.0 | 12.7 25.9 64.4 | .541 | 13.74 | | |
| 7892A | 12 | 500 1000 | 152.4 304.8 | 85.5 174.0 | 37.9 79.1 | .679 | 17.25 | | |
| 7893A | 16 | 500 1000 | 152.4 304.8 | 109.5 240.0 | 49.8 109.1 | .770 | 19.56 | | |

Individually Shielded & Jacketed NEC: CMG (CEC: CMG FT4)

| 24 AWG (7x32) • Flexible | | | | | | | | |
|---------------------------------|----|-------------|----------------|----------------|----------------|-------|-------|--|
| 1803F | 4 | 500 1000 | 152.4 304.8 | 57.5 107.0 | 26.1 48.6 | .488 | 12.39 | |
| 1805F | 8 | 500 1000 | 152.4 304.8 | 106.5 211.0 | 48.3 95.7 | .661 | 16.79 | |
| 1806F | 12 | 500 1000 | 152.4 304.8 | 160.0 330.0 | 72.6 149.7 | .829 | 21.06 | |
| 1850F | 16 | 500 1000 | 152.4 304.8 | 208.0 407.0 | 94.4 184.6 | .944 | 23.98 | |
| 1852F | 24 | 500 1000 | 152.4 304.8 | 321.0 644.0 | 145.6 292.1 | 1.205 | 30.61 | |
| 1854F | 32 | 1000 | 304.8 | 841.0 | 381.5 | 1.346 | 34.19 | |

 † 7880A is designed to fit in 25-pin D-sub connectors used in digital console board equipment.

