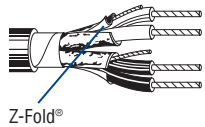


## Individually Shielded

Low-Capacitance 100 Ohm Computer Cables for EIA RS-422, and Digital Audio Applications

| Description   | Part No. | UL NEC/<br>C(UL) CEC<br>Type | No. of<br>Pairs | Color<br>Code | Standard<br>Lengths |        | Standard<br>Unit Weight |          | Nom. DCR |  | Nominal<br>OD                                   |      | Nom.<br>Imp.<br>(Ω) | Nom.<br>Vel.<br>of<br>Prop. | Nom. Capacitance |               |                  |                |  |  |
|---|----------|------------------------------|-----------------|---------------|---------------------|--------|-------------------------|----------|----------|--|---|------|---------------------|-----------------------------|------------------|---------------|------------------|----------------|--|--|
|   |          |                              |                 |               | Ft.                 | m      | Lbs.                    | kg       | Cond.    | Shield                                 | Inch  | mm   |                     |                             | *<br>pF/<br>Ft.  | *<br>pF/<br>m | **<br>pF/<br>Ft. | **<br>pF/<br>m |  |  |
| <b>24 AWG Stranded (7x32) TC Conductors • Twisted Pairs • Individually Shielded w/Beldfoil® (100% Coverage) • 24 AWG Stranded TC Drain Wire</b> |          |                              |                 |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
| <b>Datalene® Insulation • Chrome PVC Jacket</b>   |          |                              |                 |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
|  <p>Z-Fold®</p>  | 9729     | NEC:                         | 2               | See           | 100                 | 30.5   | 4.3                     | 2.0      | 24.0Ω/M' | 15.0Ω/M'                               | .266  | 6.76 | 100                 | 76%                         | 12.5             | 41.0          | 23.2             | 76.1           |  |  |
|   |          | CM                           |                 | Chart 3       | 500                 | 152.4  | 20.5                    | 9.3      | 78.7Ω/km | 49.2Ω/km                               | For Plenum version of 9729, see 89729 or 82729. |      |                     |                             |                  |               |                  |                |  |  |
|   |          | CEC:                         |                 | (Tech Info    | 1000                | 304.8  | 39.0                    | 17.7     |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   |          | CM                           |                 | Section)      | 10000†              | 3048.0 | 390.0                   | 177.8    |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   | 9730     | NEC:                         | 3               | See           | 100                 | 30.5   | 5.1                     | 2.3      | 24.0Ω/M' | 15.0Ω/M'                               | .334  | 8.48 | 100                 | 76%                         | 12.5             | 41.0          | 23.2             | 76.1           |  |  |
|   |          | CM                           |                 | Chart 3       | 500                 | 152.4  | 24.5                    | 11.1     | 78.7Ω/km | 49.2Ω/km                               | For Plenum version of 9730, see 89730.          |      |                     |                             |                  |               |                  |                |  |  |
|   |          | CEC:                         |                 | (Tech Info    | 1000                | 304.8  | 46.0                    | 20.9     |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   |          | CM                           |                 | Section)      | 10000†              | 3048.0 | 520.0                   | 236.4    |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   | 9728     | NEC:                         | 4               | See           | 100                 | 30.5   | 6.0                     | 2.7      | 24.0Ω/M' | 15.0Ω/M'                               | .363  | 9.22 | 100                 | 76%                         | 12.5             | 41.0          | 23.2             | 76.1           |  |  |
|   |          | CM                           |                 | Chart 3       | 500                 | 152.4  | 29.0                    | 13.2     | 78.7Ω/km | 49.2Ω/km                               | For Plenum version of 9728, see 89728.          |      |                     |                             |                  |               |                  |                |  |  |
| CEC:  |          | (Tech Info                   |                 | 1000          | 304.8               | 51.0   | 23.1                    |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
| CM  |          | Section)                     |                 |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
| 9731  | NEC:     | 6                            | See             | 100           | 30.5                | 7.4    | 3.4                     | 24.0Ω/M' | 15.0Ω/M' | .421                                   | 10.69   | 100  | 76%                 | 12.5                        | 41.0             | 23.2          | 76.1             |                |  |  |
|   | CM       |                              | Chart 3         | 500           | 152.4               | 42.0   | 19.1                    | 78.7Ω/km | 49.2Ω/km | For Plenum version of 9731, see 89731. |   |      |                     |                             |                  |               |                  |                |  |  |
|   | CEC:     |                              | (Tech Info      | 1000          | 304.8               | 83.0   | 37.7                    |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   | CM       |                              | Section)        |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
| 9732  | NEC:     | 9                            | See             | 100           | 30.5                | 9.9    | 4.5                     | 24.0Ω/M' | 15.0Ω/M' | .488                                   | 12.40   | 100  | 76%                 | 12.5                        | 41.0             | 23.2          | 76.1             |                |  |  |
|   | CM       |                              | Chart 3         | 500           | 152.4               | 57.0   | 26.0                    | 78.7Ω/km | 49.2Ω/km | For Plenum version of 9732, see 89732. |   |      |                     |                             |                  |               |                  |                |  |  |
|   | CEC:     |                              | (Tech Info      | 1000          | 304.8               | 106.0  | 48.1                    |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   | CM       |                              | Section)        |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
| 9733  | NEC:     | 11                           | See             | 500           | 152.4               | 75.0   | 34.1                    | 24.0Ω/M' | 15.0Ω/M' | .575                                   | 14.61   | 100  | 76%                 | 12.5                        | 41.0             | 23.2          | 76.1             |                |  |  |
|   | CM       |                              | Chart 3         |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   | CEC:     |                              | (Tech Info      |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   | CM       |                              | Section)        |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
| 9734  | NEC:     | 12                           | See             | 500           | 152.4               | 79.5   | 36.1                    | 24.0Ω/M' | 15.0Ω/M' | .575                                   | 14.61   | 100  | 76%                 | 12.5                        | 41.0             | 23.2          | 76.1             |                |  |  |
|   | CM       |                              | Chart 3         | 1000          | 304.8               | 154.0  | 70.0                    | 78.7Ω/km | 49.2Ω/km |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   | CEC:     |                              | (Tech Info      |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   | CM       |                              | Section)        |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
| 9735  | NEC:     | 15                           | See             | 500           | 152.4               | 95.0   | 43.2                    | 24.0Ω/M' | 15.0Ω/M' | .639                                   | 16.23   | 100  | 76%                 | 12.5                        | 41.0             | 23.2          | 76.1             |                |  |  |
|   | CM       |                              | Chart 3         | 1000          | 304.8               | 185.0  | 84.1                    | 78.7Ω/km | 49.2Ω/km |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   | CEC:     |                              | (Tech Info      |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   | CM       |                              | Section)        |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
| 9736  | NEC:     | 17                           | See             | 500           | 152.4               | 103.5  | 47.0                    | 24.0Ω/M' | 15.0Ω/M' | .671                                   | 17.04   | 100  | 76%                 | 12.5                        | 41.0             | 23.2          | 76.1             |                |  |  |
|   | CM       |                              | Chart 3         | 1000          | 304.8               | 210.0  | 95.5                    | 78.7Ω/km | 49.2Ω/km |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   | CEC:     |                              | (Tech Info      |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   | CM       |                              | Section)        |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
| 9737  | NEC:     | 19                           | See             | 1000          | 304.8               | 231.0  | 105.0                   | 24.0Ω/M' | 15.0Ω/M' | .671                                   | 17.04   | 100  | 76%                 | 12.5                        | 41.0             | 23.2          | 76.1             |                |  |  |
|   | CM       |                              | Chart 3         |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   | CEC:     |                              | (Tech Info      |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   | CM       |                              | Section)        |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
| 9738  | NEC:     | 27                           | See             | 1000          | 304.8               | 334.0  | 151.8                   | 24.0Ω/M' | 15.0Ω/M' | .797                                   | 20.24   | 100  | 76%                 | 12.5                        | 41.0             | 23.2          | 76.1             |                |  |  |
|   | CM       |                              | Chart 3         |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   | CEC:     |                              | (Tech Info      |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |
|   | CM       |                              | Section)        |               |                     |        |                         |          |          |  |   |      |                     |                             |                  |               |                  |                |  |  |

DCR = DC Resistance • TC = Tinned Copper

\*Capacitance between conductors.

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

† Final put-up length may vary -10% to +20% from length shown. May contain 2 pieces. Minimum length of any one piece is 1500 ft.

See Attenuation, Rise Time and Bit Rate Data for this series on page 5.34.

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.

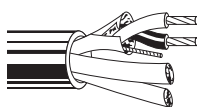
## Individually Shielded

Low-Capacitance Computer Cables for EIA RS-232, EIA RS-422, and Digital Audio Applications  
Plenum-Rated

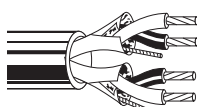
| Description | Part No. | UL NEC/<br>C(UL) CEC<br>Type | No. of<br>Pairs | Color<br>Code | Standard<br>Lengths |   | Standard<br>Unit Weight |    | Nom. DCR |        | Nominal<br>OD |    | Nom.<br>Imp.<br>(Ω) | Nom.<br>Vel.<br>of<br>Prop. | Nom. Capacitance |               |                  |                |
|-------------|----------|------------------------------|-----------------|---------------|---------------------|---|-------------------------|----|----------|--------|---------------|----|---------------------|-----------------------------|------------------|---------------|------------------|----------------|
|             |          |                              |                 |               | Ft.                 | m | Lbs.                    | kg | Cond.    | Shield | Inch          | mm |                     |                             | *<br>pF/<br>Ft.  | *<br>pF/<br>m | **<br>pF/<br>Ft. | **<br>pF/<br>m |

**24 AWG Stranded (7x32) TC Conductors • Twisted Pairs • Individually Shielded w/Beldfoil® (100% Coverage) • 24 AWG Stranded TC Drain Wire**

**Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket**

|  |          |              |                                |   |  |              |                |              |              |                      |                      |               |     |     |      |    |      |      |
|--|----------|--------------|--------------------------------|---|--|--------------|----------------|--------------|--------------|----------------------|----------------------|---------------|-----|-----|------|----|------|------|
|  | 300V RMS | <b>89729</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 2 | See<br>Chart 5<br>(Tech Info<br>Section) | 500<br>1000  | 152.4<br>304.8 | 17.0<br>31.0 | 7.7<br>14.1  | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .261<br>6.63  | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|  |          | <b>89730</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 3 | See<br>Chart 5<br>(Tech Info<br>Section) | 500<br>1000  | 152.4<br>304.8 | 21.5<br>40.0 | 9.8<br>18.2  | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .278<br>7.06  | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|  |          | <b>89728</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 4 | See<br>Chart 5<br>(Tech Info<br>Section) | 500<br>1000  | 152.4<br>304.8 | 26.5<br>50.0 | 12.0<br>22.7 | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .307<br>7.80  | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|  |          | <b>89731</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 6 | See<br>Chart 5<br>(Tech Info<br>Section) | 500<br>1000† | 152.4<br>304.8 | 35.0<br>71.0 | 15.9<br>32.3 | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .361<br>9.17  | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|  |          | <b>89732</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 9 | See<br>Chart 5<br>(Tech Info<br>Section) | 1000         | 304.8          | 108.0        | 49.0         | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .429<br>10.90 | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |

**Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket**

|  |          |              |                                |   |  |                |                  |              |              |                      |                      |              |     |     |      |    |      |      |
|--|----------|--------------|--------------------------------|---|--|----------------|------------------|--------------|--------------|----------------------|----------------------|--------------|-----|-----|------|----|------|------|
|  | 300V RMS | <b>82729</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 2 | See<br>Chart 5<br>(Tech Info<br>Section) | U-1000<br>1000 | U-304.8<br>304.8 | 26.0<br>28.0 | 11.8<br>12.7 | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .255<br>6.48 | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|--|----------|--------------|--------------------------------|---|--|----------------|------------------|--------------|--------------|----------------------|----------------------|--------------|-----|-----|------|----|------|------|

DCR = DC Resistance • TC = Tinned Copper

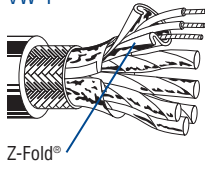
\*Capacitance between conductors.

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

† Spools are one piece, but length may vary ±10% from length shown.

# Individually Shielded Pairs with Overall Foil/Braid Shield

Low-Capacitance Computer Cables for EIA RS-232, EIA RS-422, and Digital Audio Applications

| Description   | Part No.    | UL NEC/<br>C(UL) CEC<br>Type | No. of<br>Pairs | Color<br>Code                            | Standard<br>Lengths |                        | Standard<br>Unit Weight |                     | Nom. DCR             |  | Nominal<br>OD |     | Nom.<br>Imp.<br>(Ω) | Nom.<br>Vel.<br>of<br>Prop. | Nom. Capacitance |               |                  |                |
|---|-------------|------------------------------|-----------------|--|---------------------|------------------------|-------------------------|---------------------|----------------------|--|---------------|-----|---------------------|-----------------------------|------------------|---------------|------------------|----------------|
|   |             |                              |                 |  | Ft.                 | m                      | Lbs.                    | kg                  | Cond.                | Shield   | Inch          | mm  |                     |                             | *<br>pF/<br>Ft.  | *<br>pF/<br>m | **<br>pF/<br>Ft. | **<br>pF/<br>m |
| <b>24 AWG Stranded (7x32) TC Conductors • Twisted Pairs Individually Beldfoil® Shielded + Overall Beldfoil (100% Coverage) + TC Braid Shield (65%) • Drain Wire<sup>▲</sup></b> |             |                              |                 |  |                     |                        |                         |                     |                      |  |               |     |                     |                             |                  |               |                  |                |
| <b>Datalene® Insulation • Chrome PVC Jacket</b>   |             |                              |                 |  |                     |                        |                         |                     |                      |  |               |     |                     |                             |                  |               |                  |                |
| UL AWM Style 2493<br>(60°C)<br>VW-1<br><br> Z-Fold®   | <b>8162</b> | NEC:<br>CM<br>CEC:<br>CM     | 2               | See<br>Chart 3<br>(Tech Info<br>Section) | 100<br>500<br>1000  | 30.5<br>152.4<br>304.8 | 6.2<br>30.0<br>57.0     | 2.8<br>13.6<br>25.9 | 24.0Ω/M'<br>78.7Ω/km | Individual:<br>18.0Ω/M'<br>59.1Ω/km<br>Overall:<br>4.3Ω/M'<br>14.1Ω/km | .343<br>8.71  | 100 | 78%                 | 12.5                        | 41               | 22            | 72.2             |                |
|   | <b>8163</b> | NEC:<br>CM<br>CEC:<br>CM     | 3               | See<br>Chart 3<br>(Tech Info<br>Section) | 100<br>500<br>1000  | 30.5<br>152.4<br>304.8 | 7.0<br>34.0<br>66.0     | 3.2<br>15.5<br>30.0 | 24.0Ω/M'<br>78.7Ω/km | Individual:<br>18.0Ω/M'<br>59.1Ω/km<br>Overall:<br>4.4Ω/M'<br>14.4Ω/km | .359<br>9.12  | 100 | 78%                 | 12.5                        | 41               | 22            | 72.2             |                |
|   | <b>8164</b> | NEC:<br>CM<br>CEC:<br>CM     | 4               | See<br>Chart 3<br>(Tech Info<br>Section) | 100<br>500<br>1000  | 30.5<br>152.4<br>304.8 | 8.2<br>39.5<br>79.0     | 3.7<br>18.0<br>35.9 | 24.0Ω/M'<br>78.7Ω/km | Individual:<br>18.0Ω/M'<br>59.1Ω/km<br>Overall:<br>3.2Ω/M'<br>10.5Ω/km | .388<br>9.86  | 100 | 78%                 | 12.5                        | 41               | 22            | 72.2             |                |
|   | <b>8165</b> | NEC:<br>CM<br>CEC:<br>CM     | 5               | See<br>Chart 3<br>(Tech Info<br>Section) | 100<br>500<br>1000  | 30.5<br>152.4<br>304.8 | 9.0<br>45.0<br>89.0     | 4.1<br>20.5<br>40.5 | 24.0Ω/M'<br>78.7Ω/km | Individual:<br>18.0Ω/M'<br>59.1Ω/km<br>Overall:<br>3.4Ω/M'<br>11.2Ω/km | .413<br>10.49 | 100 | 78%                 | 12.5                        | 41               | 22            | 72.2             |                |
|   | <b>8166</b> | NEC:<br>CM<br>CEC:<br>CM     | 6               | See<br>Chart 3<br>(Tech Info<br>Section) | 100<br>500<br>1000  | 30.5<br>152.4<br>304.8 | 9.0<br>50.0<br>99.0     | 4.1<br>22.7<br>45.0 | 24.0Ω/M'<br>78.7Ω/km | Individual:<br>18.0Ω/M'<br>59.1Ω/km<br>Overall:<br>2.8Ω/M'<br>9.2Ω/km  | .446<br>11.33 | 100 | 78%                 | 12.5                        | 41               | 22            | 72.2             |                |
|   | <b>8167</b> | NEC:<br>CM<br>CEC:<br>CM     | 7               | See<br>Chart 3<br>(Tech Info<br>Section) | 500<br>1000         | 152.4<br>304.8         | 52.5<br>103.0           | 23.9<br>46.7        | 24.0Ω/M'<br>78.7Ω/km | Individual:<br>18.0Ω/M'<br>59.1Ω/km<br>Overall:<br>2.8Ω/M'<br>9.2Ω/km  | .446<br>11.33 | 100 | 78%                 | 12.5                        | 41               | 22            | 72.2             |                |

<sup>▲</sup>24 AWG stranded TC drain wire

DCR = DC Resistance • TC = Tinned Copper

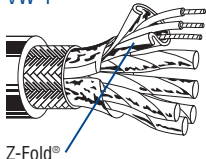
\*Capacitance between conductors.

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

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.

## Individually Shielded Pairs with Overall Foil/Braid Shield

Low-Capacitance Computer Cables for EIA RS-232, EIA RS-422, and Digital Audio Applications

| Description  | Part No.    | UL NEC/<br>C(UL) CEC<br>Type | No. of<br>Pairs | Color<br>Code | Standard<br>Lengths |       | Standard<br>Unit Weight |          | Nom. DCR |             | Nominal<br>OD |     | Nom.<br>Imp.<br>(Ω) | Nom.<br>Vel.<br>of<br>Prop. | Nom. Capacitance |               |                  |                |
|--|-------------|------------------------------|-----------------|---------------|---------------------|-------|-------------------------|----------|----------|-------------|---------------|-----|---------------------|-----------------------------|------------------|---------------|------------------|----------------|
|  |             |                              |                 |               | Ft.                 | m     | Lbs.                    | kg       | Cond.    | Shield      | Inch          | mm  |                     |                             | *<br>pF/<br>Ft.  | *<br>pF/<br>m | **<br>pF/<br>Ft. | **<br>pF/<br>m |
| <b>24 AWG</b> Stranded (7x32) TC Conductors • Twisted Pairs Individually Beldfoil® Shielded + Overall Beldfoil (100% Coverage) + TC Braid Shield (65%) • Drain Wire <sup>▲</sup> |             |                              |                 |               |                     |       |                         |          |          |             |               |     |                     |                             |                  |               |                  |                |
| <b>Datalene® Insulation • Chrome PVC Jacket</b>  |             |                              |                 |               |                     |       |                         |          |          |             |               |     |                     |                             |                  |               |                  |                |
| UL AWM Style 2493<br>(60°C)<br>VW-1<br><br><br>Z-Fold®  | <b>8168</b> | NEC:                         | 8               | See           | 100                 | 30.5  | 10.8                    | 4.9      | 24.0Ω/M' | Individual: | .479 12.17    | 100 | 78%                 | 12.5                        | 41               | 22            | 72.2             |                |
|  |             | CM                           |                 | Chart 3       | 500                 | 152.4 | 61.5                    | 28.0     | 78.7Ω/km | 18.0Ω/M'    |               |     |                     |                             |                  |               |                  |                |
|  |             | CEC:                         |                 | (Tech Info    | 1000                | 304.8 | 115.0                   | 52.3     | 59.1Ω/km | Overall:    |               |     |                     |                             |                  |               |                  |                |
|  |             | CM                           |                 | Section)      |                     |       |                         |          | 3.0Ω/M'  | 9.8Ω/km     |               |     |                     |                             |                  |               |                  |                |
|  |             |                              |                 |               |                     |       |                         |          |          |             |               |     |                     |                             |                  |               |                  |                |
|  | <b>8170</b> | NEC:                         | 10              | See           | 100                 | 30.5  | 18.0                    | 8.2      | 24.0Ω/M' | Individual: | .584 14.83    | 100 | 78%                 | 12.5                        | 41               | 22            | 72.2             |                |
| CM   |             | Chart 3                      |                 | 500           | 152.4               | 83.0  | 37.7                    | 78.7Ω/km | 18.0Ω/M' |             |               |     |                     |                             |                  |               |                  |                |
| CEC:   |             | (Tech Info                   |                 | 1000          | 304.8               | 164.0 | 74.5                    | 59.1Ω/km | Overall: |             |               |     |                     |                             |                  |               |                  |                |
| CM   |             | Section)                     |                 |               |                     |       |                         | 2.7Ω/M'  | 8.9Ω/km  |             |               |     |                     |                             |                  |               |                  |                |
|  |             |                              |                 |               |                     |       |                         |          |          |             |               |     |                     |                             |                  |               |                  |                |
|  | <b>8175</b> | NEC:                         | 15              | See           | 100                 | 30.5  | 22.6                    | 10.3     | 24.0Ω/M' | Individual: | .665 16.89    | 100 | 78%                 | 12.5                        | 41               | 22            | 72.2             |                |
| CM   |             | Chart 3                      |                 | 500           | 152.4               | 107.5 | 48.9                    | 78.7Ω/km | 18.0Ω/M' |             |               |     |                     |                             |                  |               |                  |                |
| CEC:   |             | (Tech Info                   |                 | 1000          | 304.8               | 210.0 | 95.5                    | 59.1Ω/km | Overall: |             |               |     |                     |                             |                  |               |                  |                |
| CM   |             | Section)                     |                 |               |                     |       |                         | 2.5Ω/M'  | 8.2Ω/km  |             |               |     |                     |                             |                  |               |                  |                |
|  |             |                              |                 |               |                     |       |                         |          |          |             |               |     |                     |                             |                  |               |                  |                |
|  | <b>8178</b> | NEC:                         | 18              | See           | 100                 | 30.5  | 24.6                    | 11.2     | 24.0Ω/M' | Individual: | .686 17.42    | 100 | 78%                 | 12.5                        | 41               | 22            | 72.2             |                |
| CM   |             | Chart 3                      |                 | 500           | 152.4               | 117.0 | 53.2                    | 78.7Ω/km | 18.0Ω/M' |             |               |     |                     |                             |                  |               |                  |                |
| CEC:   |             | (Tech Info                   |                 | 1000          | 304.8               | 238.0 | 108.2                   | 59.1Ω/km | Overall: |             |               |     |                     |                             |                  |               |                  |                |
| CM   |             | Section)                     |                 |               |                     |       |                         | 2.6Ω/M'  | 8.5Ω/km  |             |               |     |                     |                             |                  |               |                  |                |
|  |             |                              |                 |               |                     |       |                         |          |          |             |               |     |                     |                             |                  |               |                  |                |
|  | <b>8185</b> | NEC:                         | 25              | See           | 100                 | 30.5  | 32.3                    | 14.7     | 24.0Ω/M' | Individual: | .822 20.88    | 100 | 78%                 | 12.5                        | 41               | 22            | 72.2             |                |
| CM   |             | Chart 3                      |                 | 500           | 152.4               | 160.5 | 73.0                    | 78.7Ω/km | 18.0Ω/M' |             |               |     |                     |                             |                  |               |                  |                |
| CEC:   |             | (Tech Info                   |                 | 1000          | 304.8               | 356.0 | 161.8                   | 59.1Ω/km | Overall: |             |               |     |                     |                             |                  |               |                  |                |
| CM   |             | Section)                     |                 |               |                     |       |                         | 2.4Ω/M'  | 7.9Ω/km  |             |               |     |                     |                             |                  |               |                  |                |
|  |             |                              |                 |               |                     |       |                         |          |          |             |               |     |                     |                             |                  |               |                  |                |

<sup>▲</sup>24 AWG stranded TC drain wire

DCR = DC Resistance • TC = Tinned Copper

\*Capacitance between conductors.

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

## Plenum-Rated

Individually Shielded Pairs

Low-Capacitance Computer Cables for EIA RS-232, EIA RS-422, and Digital Audio Applications

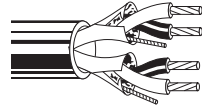
| Description | Part No. | UL NEC/<br>C(UL) CEC<br>Type | No. of<br>Pairs | Color<br>Code | Standard<br>Lengths |   | Standard<br>Unit Weight |    | Nom. DCR |        | Nominal<br>OD |    | Nom.<br>Imp.<br>(Ω) | Nom.<br>Vel.<br>of<br>Prop. | Nom. Capacitance |               |                  |                |
|-------------|----------|------------------------------|-----------------|---------------|---------------------|---|-------------------------|----|----------|--------|---------------|----|---------------------|-----------------------------|------------------|---------------|------------------|----------------|
|             |          |                              |                 |               | Ft.                 | m | Lbs.                    | kg | Cond.    | Shield | Inch          | mm |                     |                             | *<br>pF/<br>Ft.  | *<br>pF/<br>m | **<br>pF/<br>Ft. | **<br>pF/<br>m |

**24 AWG** Stranded (7x32) TC Conductors • Twisted Pairs • Individually Shielded w/Beldfoil® (100% Coverage) • 24 AWG Stranded TC Drain Wire

### Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket

|   |          |              |                                |    |  |             |                |                |              |                      |                      |               |     |     |      |    |      |      |
|---|----------|--------------|--------------------------------|----|--|-------------|----------------|----------------|--------------|----------------------|----------------------|---------------|-----|-----|------|----|------|------|
|  | 300V RMS | <b>89729</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 2  | See<br>Chart 5<br>(Tech Info<br>Section) | 500<br>1000 | 152.4<br>304.8 | 17.0<br>31.0   | 7.7<br>14.1  | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .261<br>6.63  | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|   |          | <b>89730</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 3  | See<br>Chart 5<br>(Tech Info<br>Section) | 500<br>1000 | 152.4<br>304.8 | 21.5<br>40.0   | 9.8<br>18.2  | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .278<br>7.06  | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|   |          | <b>89728</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 4  | See<br>Chart 5<br>(Tech Info<br>Section) | 500<br>1000 | 152.4<br>304.8 | 26.5<br>50.0   | 12.0<br>22.7 | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .307<br>7.80  | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|   |          | <b>89705</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 5  | See<br>Chart 5<br>(Tech Info<br>Section) | 500<br>1000 | 152.4<br>304.8 | 30.5<br>62.0   | 13.9<br>28.2 | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .333<br>8.50  | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|   |          | <b>89731</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 6  | See<br>Chart 5<br>(Tech Info<br>Section) | 500<br>1000 | 152.4<br>304.8 | 35.0<br>71.0   | 15.9<br>32.3 | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .361<br>9.17  | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|   |          | <b>89757</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 7  | See<br>Chart 5<br>(Tech Info<br>Section) | 500<br>1000 | 152.4<br>304.8 | 39.5<br>80.0   | 18.0<br>36.4 | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .361<br>9.17  | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|   |          | <b>89732</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 9  | See<br>Chart 5<br>(Tech Info<br>Section) | 1000        | 304.8          | 108.0          | 49.2         | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .433<br>10.90 | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|   |          | <b>89734</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 12 | See<br>Chart 5<br>(Tech Info<br>Section) | 500<br>1000 | 152.4<br>304.8 | 71.0<br>140.0  | 32.3<br>63.6 | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .498<br>12.65 | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|   |          | <b>89758</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 18 | See<br>Chart 5<br>(Tech Info<br>Section) | 500<br>1000 | 152.4<br>304.8 | 100.5<br>204.0 | 45.7<br>92.7 | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .616<br>15.65 | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |

### Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket

|   |          |              |                                |   |  |                |                  |              |              |                      |                      |              |     |     |      |    |      |      |
|---|----------|--------------|--------------------------------|---|--|----------------|------------------|--------------|--------------|----------------------|----------------------|--------------|-----|-----|------|----|------|------|
|  | 300V RMS | <b>82729</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 2 | See<br>Chart 5<br>(Tech Info<br>Section) | U-1000<br>1000 | U-304.8<br>304.8 | 26.0<br>28.0 | 11.8<br>12.7 | 23.3Ω/M'<br>76.4Ω/km | 14.4Ω/M'<br>47.2Ω/km | .255<br>6.48 | 100 | 76% | 13.5 | 44 | 22.5 | 73.8 |
|---|----------|--------------|--------------------------------|---|--|----------------|------------------|--------------|--------------|----------------------|----------------------|--------------|-----|-----|------|----|------|------|

DCR = DC Resistance • TC = Tinned Copper

\*Capacitance between conductors.

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

# AES/EBU Digital Audio Cable

## Overview



While digital audio has been around for over 25 years, only recently has there been an effort to standardize specifications. The Audio Engineering Society (U.S.) and the European Broadcast Union have established an international standard, called AES/EBU. The detailed specifications of this standard are:

**Sampling Rate:** from 32 KHz to 192 KHz  
**Bandwidth:** from 4.096 MHz to 24.5 MHz  
**Impedance:** 110Ω ± 20%

The key difference between twisted pair specifications for digital audio cable and standard analog audio cable is the impedance specification.

AES/EBU, with its broad tolerance, allows cables with impedances from 88 ohms to 132 ohms to be used. Standard analog audio cable impedance is 45 ohms to 70 ohms. This potential amount of mismatch can result in signal reflections and jitter, causing bit errors at the receiver. For this reason Belden recommends 100 to 120 ohm shielded twisted pair cable.

## Product Characteristics

Belden's product offering includes 110 ohm cable solutions and an entire line of single and multi-pair snake cable designed specifically for digital audio. These cables utilize Datalene® premium grade high density insulation. This provides exceptional crush resistance as compared to standard foam polyethylenes, making the new cables less susceptible to damage resulting from cable pulling or flexing. The high velocity of propagation further reduces capacitance and signal delay providing error-free transmissions over extended distances.

Belden's "Super Flexible" digital patch cable, part no. 1800F, utilizes Belden's patented "French Braid" shield technology and a special jacket compound formulation to provide the ultimate in flexibility and performance.

## Digital Audio Attenuation

| Part Number                              | 2 MHz      |         | 4 MHz      |         | 5 MHz      |         | 6 MHz      |         | 12 MHz     |         | 25 MHz     |         |
|--|------------|---------|------------|---------|------------|---------|------------|---------|------------|---------|------------|---------|
|  | dB/100 Ft. | dB/100m | dB/100 Ft. | dB/100m | dB/100 Ft. | dB/100m | dB/100 Ft. | dB/100m | dB/100 Ft. | dB/100m | dB/100 Ft. | dB/100m |
| <b>9180, 7880A Series</b>                | 1.67       | 5.48    | 2.11       | 6.92    | 2.30       | 7.55    | 2.46       | 8.07    | 3.16       | 10.37   | 4.22       | 13.85   |
| <b>1800F</b>                             | 1.28       | 4.20    | 2.17       | 7.12    | 2.62       | 8.60    | 3.01       | 9.88    | 4.72       | 15.49   | 7.17       | 23.52   |
| <b>1800B, 1801B, 1802B, 1803F Series</b> | 1.30       | 4.27    | 1.56       | 5.12    | 1.70       | 5.58    | 1.81       | 5.94    | 2.28       | 7.48    | 3.08       | 10.10   |
| <b>1696A</b>                             | .93        | 3.05    | 1.15       | 3.77    | 1.20       | 3.94    | 1.30       | 4.27    | 1.60       | 5.25    | 1.97       | 6.46    |
| <b>179DT (coax)</b>                      | 1.34       | 4.40    | 1.67       | 5.48    | 1.74       | 5.71    | 1.99       | 6.53    | 2.77       | 9.09    | 3.83       | 12.57   |
| <b>1855A (coax)</b>                      | .57        | 1.86    | .82        | 2.70    | .92        | 3.02    | 1.00       | 3.29    | 1.30       | 4.27    | 1.80       | 5.91    |
| <b>1505A (coax)</b>                      | .41        | 1.35    | .58        | 1.89    | .63        | 2.07    | .69        | 2.25    | .90        | 2.95    | 1.30       | 4.27    |
| <b>1505F (coax)</b>                      | .34        | 1.11    | .53        | 1.74    | .60        | 1.97    | .67        | 2.20    | .98        | 3.22    | 1.44       | 4.72    |
| <b>1694A (coax)</b>                      | .16        | .52     | .48        | 1.57    | .54        | 1.77    | .59        | 1.93    | .80        | 2.62    | 1.00       | 3.28    |

Values reflect typical results.

## Maximum Recommended Transmission Distance at Digital Audio Data Rates (AES3-2003)\*

| Part Number                              | 2 MHz |      | 4 MHz |      | 5 MHz |      | 6 MHz |      | 12 MHz |      | 25 MHz |     |
|--|-------|------|-------|------|-------|------|-------|------|--------|------|--------|-----|
|  | Ft.   | m    | Ft.   | m    | Ft.   | m    | Ft.   | m    | Ft.    | m    | Ft.    | m   |
| <b>9180, 7880A Series</b>                | 1198  | 365  | 948   | 289  | 870   | 265  | 813   | 248  | 633    | 193  | 474    | 144 |
| <b>7731A Series</b>                      | 8889  | 2709 | 6349  | 1935 | 5882  | 1793 | 5479  | 1670 | 3774   | 1150 | 2817   | 859 |
| <b>1800F</b>                             | 1563  | 476  | 922   | 281  | 763   | 233  | 664   | 203  | 424    | 129  | 279    | 85  |
| <b>1800B, 1801B, 1802B, 1803F Series</b> | 1538  | 469  | 1282  | 391  | 1176  | 359  | 1105  | 337  | 877    | 267  | 649    | 198 |
| <b>1696A</b>                             | 2151  | 655  | 1739  | 530  | 1667  | 508  | 1538  | 469  | 1250   | 381  | 1015   | 309 |
| <b>179DT (AES3)†♦</b>                    | 1493  | 455  | 1198  | 365  | 1149  | 350  | 1005  | 306  | 722    | 220  | 522    | 159 |
| <b>(AES-3id)††</b>                       | 597   | 182  | 479   | 146  | 460   | 140  | 402   | 123  | 289    | 88   | 209    | 64  |
| <b>1855A (AES3)†♦</b>                    | 3521  | 1073 | 2427  | 740  | 2174  | 663  | 1992  | 607  | 1538   | 469  | 1111   | 339 |
| <b>(AES-3id)††</b>                       | 1408  | 429  | 970   | 295  | 869   | 265  | 796   | 242  | 615    | 188  | 444    | 135 |
| <b>1505A (AES3)†♦</b>                    | 4866  | 1483 | 3478  | 1060 | 3175  | 968  | 2911  | 887  | 2222   | 677  | 1538   | 469 |
| <b>(AES-3id)††</b>                       | 1946  | 593  | 1391  | 424  | 1270  | 387  | 1164  | 355  | 888    | 270  | 615    | 188 |
| <b>1505F (AES3)†♦</b>                    | 5882  | 1793 | 3774  | 1150 | 3333  | 1016 | 2985  | 910  | 2041   | 622  | 1389   | 423 |
| <b>(AES-3id)††</b>                       | 2353  | 717  | 1509  | 460  | 1333  | 406  | 1194  | 364  | 816    | 249  | 556    | 169 |
| <b>1694A (AES3)†♦</b>                    | 5882  | 1793 | 4184  | 1275 | 3704  | 1129 | 3407  | 1039 | 2500   | 762  | 2000   | 610 |
| <b>(AES-3id)††</b>                       | 2353  | 717  | 1673  | 510  | 1482  | 452  | 1363  | 416  | 1000   | 305  | 800    | 244 |

\* Longer transmission distances are achievable but are contingent upon system component quality of input/output voltages.

† Transmission distance calculations assume minimum allowable output signal amplitude (2V per AES3-2003) and minimum allowable input signal amplitude (200mV per AES3-2003).

†† Per AES-3id-2001, when using analog video distribution equipment to implement AES-3id, maximum transmission distances are 40% of AES3 values assuming a minimum allowable output signal amplitude of 1V and a minimum allowable input signal amplitude of 320mV.

♦ Implementation of AES3 with coaxial cable and 110-75Ω baluns can be achieved with transmission distances of 91% of the AES3 coaxial distances listed above.

**AES/EBU Digital Audio Cable**

Single- and Double-Pair Cables



| Description | Part No. | UL NEC/<br>C(UL) CEC<br>Type | No.<br>of Pairs | Color<br>Code | Standard Lengths |   | Standard Unit Weight |    | Nom. DCR |        | Nominal OD |    | Nom. Imp.<br>(Ω) | Nom. Vel.<br>of Prop. | Nom. Capacitance |            |               |             |
|-------------|----------|------------------------------|-----------------|---------------|------------------|---|----------------------|----|----------|--------|------------|----|------------------|-----------------------|------------------|------------|---------------|-------------|
|             |          |                              |                 |               | Ft.              | m | Lbs.                 | kg | Cond.    | Shield | Inch       | mm |                  |                       | * pF/<br>Ft.     | * pF/<br>m | ** pF/<br>Ft. | ** pF/<br>m |

**110 Ohm • 26 AWG** Stranded (7x34) .018" TC Conductors • Twisted Pair • Beldfoil® Shield (100% Coverage) • 26 AWG Stranded TC Drain Wire**Datalene® Insulation • Chrome or Purple PVC Jacket**

|   |             |                                |   |                 |      |       |      |     |          |          |      |      |     |     |    |    |    |    |
|---|-------------|--------------------------------|---|-----------------|------|-------|------|-----|----------|----------|------|------|-----|-----|----|----|----|----|
| 2-Conductor Digital Video Time Code Cable<br>75°C | <b>9180</b> | NEC:<br>CMR<br>CEC:<br>CMG FT4 | 1 | Black,<br>White | 1000 | 304.8 | 10.0 | 4.5 | 37.3Ω/M' | 23.1Ω/M' | .144 | 3.66 | 110 | 76% | 13 | 43 | 26 | 85 |
|---|-------------|--------------------------------|---|-----------------|------|-------|------|-----|----------|----------|------|------|-----|-----|----|----|----|----|



Shorting Fold

For cross-connect use with 7891A (et al.)  
Digital Audio Snake Cables, see page 19.28.**24 AWG** Stranded (7x32) Tinned Copper Conductors • Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • 24 AWG Drain Wire**Datalene Insulation • Gray or Purple PVC Jacket**

|      |              |                                |   |               |        |         |      |      |          |          |      |      |     |     |    |    |    |    |
|------|--------------|--------------------------------|---|---------------|--------|---------|------|------|----------|----------|------|------|-----|-----|----|----|----|----|
| 60°C | <b>1800B</b> | NEC:<br>CMG<br>CEC:<br>CMG FT4 | 1 | Black,<br>Red | 500*   | 152.4   | 8.0  | 3.6  | 23.7Ω/M' | 18.9Ω/M' | .177 | 4.57 | 110 | 76% | 12 | 39 | 26 | 85 |
|      |              |                                |   |               | U-1000 | U-304.8 | 17.0 | 7.7  | 77.7Ω/km | 62.0Ω/km |      |      |     |     |    |    |    |    |
|      |              |                                |   |               | 1000   | 304.8   | 16.0 | 7.3  |          |          |      |      |     |     |    |    |    |    |
|      |              |                                |   |               | 5000*  | 1524.0  | 90.0 | 40.8 |          |          |      |      |     |     |    |    |    |    |

For cross-connect use with 1803F (et al.)  
Digital Audio Snake Cables, see page 19.28.  
For Plenum version of 1800B, see 1801B.\*500 ft. put-up available in Gray only. 5000 ft. put-up available in Purple only.  
The jacket and shield are bonded so both can be removed with automatic stripping equipment.**24 AWG** Stranded (42x40) HC BC Conductors • Conductors Cabled with Fillers • TC "French Braid" Shield (95% Coverage) • BC Drain Wire**Datalene Insulation • Matte PVC Jacket** (Available in Red, Yellow, Green, Blue, Gray or Black)

|  |              |              |   |               |        |         |      |      |          |          |      |      |     |     |    |    |    |    |
|--|--------------|--------------|---|---------------|--------|---------|------|------|----------|----------|------|------|-----|-----|----|----|----|----|
| Digital Mic Cable<br>High-Flex<br>60°C | <b>1800F</b> | NEC:<br>CL2R | 1 | Black,<br>Red | 500*   | 152.4   | 12.0 | 5.5  | 23.7Ω/M' | 5.0Ω/M'  | .211 | 5.36 | 110 | 76% | 12 | 39 | 26 | 85 |
|  |              |              |   |               | U-1000 | U-304.8 | 26.0 | 11.8 | 77.7Ω/km | 16.4Ω/km |      |      |     |     |    |    |    |    |
|  |              |              |   |               | 1000*  | 304.8   | 24.0 | 10.9 |          |          |      |      |     |     |    |    |    |    |



French Braid

\*500 ft. and 1000 ft. put-ups available in Black only.

**24 AWG** Stranded (7x32) TC Conductors • Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • 24 AWG TC Drain Wire**Plenum • Foam FEP Teflon® Insulation • Flam arrest® Jacket** (Available in Natural White or Purple)

|                   |              |                                |   |               |        |         |      |     |          |          |      |      |     |     |    |    |    |    |
|-------------------|--------------|--------------------------------|---|---------------|--------|---------|------|-----|----------|----------|------|------|-----|-----|----|----|----|----|
| 75°C, Non-conduit | <b>1801B</b> | NEC:<br>CMP<br>CEC:<br>CMP FT6 | 1 | Black,<br>Red | 500    | 152.4   | 6.0  | 2.7 | 23.7Ω/M' | 18.9Ω/M' | .165 | 4.19 | 110 | 78% | 12 | 39 | 26 | 85 |
|                   |              |                                |   |               | U-1000 | U-304.8 | 14.0 | 6.4 | 77.7Ω/km | 62.0Ω/km |      |      |     |     |    |    |    |    |
|                   |              |                                |   |               | 1000   | 304.8   | 12.0 | 5.5 |          |          |      |      |     |     |    |    |    |    |

**24 AWG** Stranded (7x32) TC Conductors • Dual Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • 24 AWG TC Drain Wire**Datalene Insulation • Purple PVC Jacket in Zip-Cord Construction**

|      |              |                                |   |               |        |         |      |      |          |          |      |      |     |     |    |    |    |    |
|------|--------------|--------------------------------|---|---------------|--------|---------|------|------|----------|----------|------|------|-----|-----|----|----|----|----|
| 60°C | <b>1802B</b> | NEC:<br>CMG<br>CEC:<br>CMG FT4 | 2 | Black,<br>Red | 500    | 152.4   | 16.5 | 7.5  | 23.7Ω/M' | 18.9Ω/M' | .180 | 4.57 | 110 | 76% | 12 | 39 | 26 | 85 |
|      |              |                                |   |               | U-1000 | U-304.8 | 35.0 | 15.9 | 77.7Ω/km | 62.0Ω/km | x    | x    |     |     |    |    |    |    |
|      |              |                                |   |               | 1000   | 304.8   | 37.0 | 16.8 |          |          | .360 | 9.14 |     |     |    |    |    |    |



The jacket and shield are bonded so both can be removed with automatic stripping equipment.

**22 AWG** Stranded (7x30) TC Conductors • Twisted Pair with Fillers • Overall Beldfoil + TC Braid Shield (90% Coverage) • 24 AWG Drain Wire**Datalene Insulation • Black High-Flex Matte PVC Jacket**

|                                  |              |   |   |                |        |         |      |      |          |          |      |      |     |     |    |    |    |    |
|----------------------------------|--------------|---|---|----------------|--------|---------|------|------|----------|----------|------|------|-----|-----|----|----|----|----|
| DMX512 Type<br>High-Flex<br>60°C | <b>1696A</b> | — | 1 | Blue,<br>White | 250    | 76.2    | 8.0  | 3.6  | 17.8Ω/M' | 4.6Ω/M'  | .234 | 5.94 | 110 | 76% | 13 | 43 | 26 | 85 |
|                                  |              |   |   |                | 500    | 152.4   | 14.5 | 6.6  | 48.5Ω/km | 15.2Ω/km |      |      |     |     |    |    |    |    |
|                                  |              |   |   |                | U-1000 | U-304.8 | 30.0 | 13.6 |          |          |      |      |     |     |    |    |    |    |
|                                  |              |   |   |                | 1000   | 304.8   | 32.0 | 14.5 |          |          |      |      |     |     |    |    |    |    |



Z-Fold®

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • HC = High-conductivity • TC = Tinned Copper

\*Capacitance between conductors.

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

Teflon is a DuPont trademark.

**BELDEN**

For more information, contact Belden Technical Support: 1-800-BELDEN-1 • www.belden.com

Belden114@CableCon.kr / 0707-434-7704 / Fax. 02-744-0909 / www.CableCon.co.kr

## 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

##### Nominal OD — Conductor

|        |               |
|--------|---------------|
| 26 AWG | .019" (.48mm) |
| 24 AWG | .024" (.60mm) |

##### Nominal OD — Insulation

|        |                |
|--------|----------------|
| 26 AWG | .054" (1.37mm) |
| 24 AWG | .070" (1.78mm) |

##### Inner Pair Jacket OD

|        |                |
|--------|----------------|
| 26 AWG | .136" (3.45mm) |
| 24 AWG | .167" (4.24mm) |

##### Approvals

|     |         |
|-----|---------|
| NEC | CMG     |
| CEC | CMG FT4 |

##### Nominal DCR (26 AWG)

|           |                      |
|-----------|----------------------|
| Conductor | 37.3Ω/M' (122.3Ω/km) |
| Shield    | 25.5Ω/M' (83.6Ω/km)  |

##### Nominal DCR (24 AWG)

|           |                     |
|-----------|---------------------|
| Conductor | 23.7Ω/M' (77.7Ω/km) |
| Shield    | 18.9Ω/M' (62.0Ω/km) |

##### Nominal Impedance

110Ω ±10Ω

##### Nominal Velocity of Propagation

76%

##### Nominal Capacitance (26 AWG)

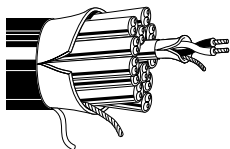
|                           |                       |
|---------------------------|-----------------------|
| Between Conductors        | 12.5 pF/Ft. (41 pF/m) |
| Between Conductor/Shield* | 25 pF/Ft. (82 pF/m)   |

##### Nominal Capacitance (24 AWG)

|                           |                     |
|---------------------------|---------------------|
| Between Conductors        | 12 pF/Ft. (39 pF/m) |
| Between Conductor/Shield* | 26 pF/Ft. (86 pF/m) |

DCR = DC Resistance

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



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

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

##### 26 AWG (7x34)

|                          |   |      |       |       |      |      |       |
|--------------------------|---|------|-------|-------|------|------|-------|
| <b>7891A</b>             | 2 | 500  | 152.4 | 28.0  | 12.7 | .343 | 8.71  |
|                          |   | 1000 | 304.8 | 56.0  | 25.5 |      |       |
| <b>7890A</b>             | 4 | 100  | 30.5  | 8.2   | 3.7  | .399 | 10.13 |
|                          |   | 250  | 76.2  | 18.0  | 8.2  |      |       |
|                          |   | 500  | 152.4 | 31.0  | 14.1 |      |       |
|                          |   | 1000 | 304.8 | 61.0  | 27.7 |      |       |
| <b>7880A<sup>†</sup></b> | 8 | 250  | 76.2  | 28.0  | 12.7 | .541 | 13.74 |
|                          |   | 500  | 152.4 | 57.0  | 25.9 |      |       |
|                          |   | 1000 | 304.8 | 142.0 | 64.4 |      |       |

Fits metal shell 25-pin D-sub connectors.

|              |    |      |       |       |       |      |       |
|--------------|----|------|-------|-------|-------|------|-------|
| <b>7892A</b> | 12 | 500  | 152.4 | 85.5  | 37.9  | .679 | 17.25 |
|              |    | 1000 | 304.8 | 174.0 | 79.1  |      |       |
| <b>7893A</b> | 16 | 500  | 152.4 | 109.5 | 49.8  | .770 | 19.56 |
|              |    | 1000 | 304.8 | 240.0 | 109.1 |      |       |

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

##### 24 AWG (7x32) • Flexible

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

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



**AES/EBU Digital Audio Cable**Multi-Pair Snake Cables  
Individually Shielded Pairs**Individually Shielded Pairs**

NEC: CM (CEC: CM)

**Product Description**

**24 AWG** stranded (7x32) tinned copper conductors. Datalene® insulation. Twisted pairs individually Beldfoil® shielded (100% Coverage). Overall Chrome PVC jacket and 24 AWG stranded tinned copper drain wire.

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.

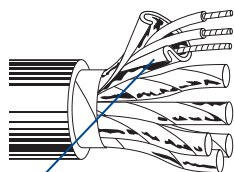
**Color Code:** See Chart 3 (in Technical Information Section)

**Specifications**

|  |                         |
|--|-------------------------|
| <b>Nominal OD — Conductor</b>          | .024" (.60mm)           |
| <b>Nominal OD — Insulation</b>         | .061" (1.55mm)          |
| <b>Approvals</b>                       |                         |
| NEC                                    | CM                      |
| CEC                                    | CM                      |
| <b>UL Ratings</b>                      | UL AWM Style 2493       |
| <b>Voltage Rating</b>                  | 300V                    |
| <b>Temperature Rating</b>              | 60°C                    |
| Non UL Temperature Rating              | 80°C                    |
| <b>Nominal DCR</b>                     |                         |
| Conductor                              | 24.0Ω/M' (78.7Ω/km)     |
| Shield                                 | 15.0Ω/M' (49.2Ω/km)     |
| <b>Nominal Impedance</b>               | 100Ω                    |
| <b>Nominal Velocity of Propagation</b> | 76%                     |
| <b>Nominal Capacitance</b>             |                         |
| Between Conductors                     | 12.5 pF/Ft. (41.0 pF/m) |
| Between Conductor/Shield*              | 23.2 pF/Ft. (76.1 pF/m) |

DCR = DC Resistance

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



Z-Fold®

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

**Individually Shielded Pairs** NEC: CM (CEC: CM)

| <b>24 AWG</b> |   |                    |        |       |       |      |      |
|---------------|---|--------------------|--------|-------|-------|------|------|
| <b>9729</b>   | 2 | 100                | 30.5   | 4.3   | 2.0   | .266 | 6.76 |
|               |   | 500                | 152.4  | 20.5  | 9.3   |      |      |
|               |   | 1000               | 304.8  | 39.0  | 17.7  |      |      |
|               |   | 10000 <sup>†</sup> | 3048.0 | 390.0 | 176.9 |      |      |

For Plenum version of 9729, see 89729 or 82729.

|             |   |                     |        |       |       |      |      |
|-------------|---|---------------------|--------|-------|-------|------|------|
| <b>9730</b> | 3 | 100                 | 30.5   | 5.1   | 2.3   | .334 | 8.48 |
|             |   | 500                 | 152.4  | 24.5  | 11.1  |      |      |
|             |   | 1000                | 304.8  | 46.0  | 20.9  |      |      |
|             |   | 10000 <sup>††</sup> | 3048.0 | 520.0 | 236.4 |      |      |

For Plenum version of 9730, see 89730.

|             |   |      |       |      |      |      |      |
|-------------|---|------|-------|------|------|------|------|
| <b>9728</b> | 4 | 100  | 30.5  | 6.0  | 2.7  | .363 | 9.22 |
|             |   | 500  | 152.4 | 29.0 | 13.2 |      |      |
|             |   | 1000 | 304.8 | 51.0 | 23.1 |      |      |

For Plenum version of 9728, see 89728.

|             |   |      |       |      |      |      |       |
|-------------|---|------|-------|------|------|------|-------|
| <b>9731</b> | 6 | 100  | 30.5  | 7.4  | 3.4  | .421 | 10.69 |
|             |   | 500  | 152.4 | 42.0 | 19.1 |      |       |
|             |   | 1000 | 304.8 | 83.0 | 37.7 |      |       |

For Plenum version of 9731, see 89731.

|             |   |      |       |       |      |      |       |
|-------------|---|------|-------|-------|------|------|-------|
| <b>9732</b> | 9 | 100  | 30.5  | 9.9   | 4.5  | .488 | 12.40 |
|             |   | 500  | 152.4 | 57.0  | 25.8 |      |       |
|             |   | 1000 | 304.8 | 106.0 | 48.1 |      |       |

For Plenum version of 9732, see 89732.

|             |    |      |       |       |      |      |       |
|-------------|----|------|-------|-------|------|------|-------|
| <b>9733</b> | 11 | 500  | 152.4 | 75.0  | 34.1 | .575 | 14.61 |
| <b>9734</b> | 12 | 500  | 152.4 | 79.5  | 36.1 | .575 | 14.61 |
|             |    | 1000 | 304.8 | 154.0 | 70.0 |      |       |

For Plenum version of 9734, see 89734.

|             |    |      |       |       |      |      |       |
|-------------|----|------|-------|-------|------|------|-------|
| <b>9735</b> | 15 | 500  | 152.4 | 95.0  | 43.2 | .639 | 16.23 |
|             |    | 1000 | 304.8 | 185.0 | 84.1 |      |       |

|             |    |      |       |       |      |      |       |
|-------------|----|------|-------|-------|------|------|-------|
| <b>9736</b> | 17 | 500  | 152.4 | 103.5 | 47.0 | .671 | 17.04 |
|             |    | 1000 | 304.8 | 210.0 | 95.5 |      |       |

|             |    |      |       |       |       |      |       |
|-------------|----|------|-------|-------|-------|------|-------|
| <b>9737</b> | 19 | 1000 | 304.8 | 231.0 | 105.0 | .671 | 17.04 |
|-------------|----|------|-------|-------|-------|------|-------|

|             |    |      |       |       |       |      |       |
|-------------|----|------|-------|-------|-------|------|-------|
| <b>9738</b> | 27 | 1000 | 304.8 | 334.0 | 151.8 | .797 | 20.24 |
|-------------|----|------|-------|-------|-------|------|-------|

<sup>†</sup> Total length may vary -10 to +5% from length shown and may contain 2 pieces.  
Minimum length of any one piece will be 1500 ft.

<sup>††</sup> Total length may vary -10 to +20% from length shown and may contain 2 pieces.  
Minimum length of any one piece will be 1500 ft.

**AES/EBU Digital Audio Cable**

Plenum-Rated, Multi-Pair Snake Cables  
Individually Shielded Pairs

**Individually Shielded Pairs**

NEC: CMP (CEC: CMP FT6)

**Product Description**

**24 AWG** stranded (7x32) tinned copper conductors. Foam FEP insulation. Twisted pairs individually Beldfoil® shielded (100% Coverage). Overall Gray fluorocopolymer jacket (except 82729 which has Natural Flamarrest® jacket). 24 AWG stranded tinned copper drain wire.

**Color Code:** See Chart 5 (in Technical Information Section)

**Specifications**

**Nominal OD — Conductor** .024" (.60mm)

**Nominal OD — Insulation** .062" (1.57mm)

**Approvals**

NEC CMP  
CEC CMP FT6

**UL Ratings** Non-conduit

**Voltage Rating** 300V RMS

**Nominal DCR**

Conductor 23.3Ω/M' (76.4Ω/km)  
Shield 14.4Ω/M' (47.2Ω/km)

**Nominal Impedance** 100Ω

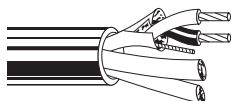
**Nominal Velocity of Propagation** 76%

**Nominal Capacitance**

Between Conductors 13.5 pF/Ft. (44 pF/m)  
Between Conductor/Shield\* 22.5 pF/Ft. (73.8 pF/m)

DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene

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



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

**Plenum Individually Shielded NEC: CMP (CEC: CMP FT6)**

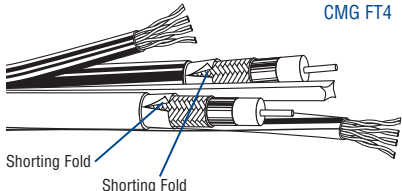
| <b>24 AWG</b> |    |                |                  |                |              |      |       |
|---------------|----|----------------|------------------|----------------|--------------|------|-------|
| <b>82729</b>  | 2  | U-1000<br>1000 | U-304.8<br>304.8 | 26.0<br>28.0   | 11.8<br>12.7 | .255 | 6.48  |
| <b>89729</b>  | 2  | 500<br>1000    | 152.4<br>304.8   | 17.0<br>31.0   | 7.7<br>14.1  | .261 | 6.63  |
| <b>89730</b>  | 3  | 500<br>1000    | 152.4<br>304.8   | 21.5<br>40.0   | 9.8<br>18.2  | .278 | 7.06  |
| <b>89728</b>  | 4  | 500<br>1000    | 152.4<br>304.8   | 26.5<br>50.0   | 12.0<br>22.7 | .307 | 7.80  |
| <b>89705</b>  | 5  | 500<br>1000    | 152.4<br>304.8   | 30.5<br>62.0   | 13.9<br>28.2 | .333 | 8.46  |
| <b>89731</b>  | 6  | 500<br>1000    | 152.4<br>304.8   | 35.0<br>71.0   | 15.9<br>32.3 | .361 | 9.17  |
| <b>89757</b>  | 7  | 500<br>1000    | 152.4<br>304.8   | 39.5<br>80.0   | 18.0<br>36.4 | .361 | 9.17  |
| <b>89732</b>  | 9  | 1000           | 304.8            | 108.0          | 49.0         | .433 | 10.99 |
| <b>89734</b>  | 12 | 500<br>1000    | 152.4<br>304.8   | 71.0<br>140.0  | 32.3<br>63.6 | .498 | 12.65 |
| <b>89758</b>  | 18 | 500<br>1000    | 152.4<br>304.8   | 100.5<br>204.0 | 45.7<br>92.7 | .616 | 15.65 |

Spools are one piece, but length may vary ±10% from length shown.  
Unreel® carton may vary -5% to +10% from length shown.

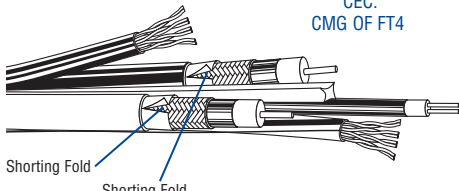
# Composite Data, Audio, Video, Security and Control Cable

## Banana Peel® Jacketless Cables

### Category 5e Bonded-Pairs

| Description   | Part No.     | UL NEC/<br>C(UL) CEC<br>Type   | Standard Lengths |                | Standard Unit Weight |              | Overall Nom. OD |       | Component Descriptions   | Shielding Materials & Nom. DCR  | Insulation Material & Color Code     | Component Jacket Material & Colors | Component Nom. OD |      |
|---|--------------|--------------------------------|------------------|----------------|----------------------|--------------|-----------------|-------|--|---|--------------------------------------|------------------------------------|-------------------|------|
|   |              |                                | Ft.              | m              | Lbs.                 | kg           | Inch            | mm    |  |   |                                      |                                    | Inch              | mm   |
| <b>Composite • (2) Cat 5e 4-Bonded-Pair UTP 24 AWG • (2) Series 6 Coax w/Duobond Plus® (Bonded Tri-Shield)</b>  |              |                                |                  |                |                      |              |                 |       |  |   |                                      |                                    |                   |      |
| <b>Polyolefin Insulation (Pairs) • Gas-injected FPE Insulation (Coax) • F-R PVC Jackets • No Overall Jacket</b>   |              |                                |                  |                |                      |              |                 |       |  |   |                                      |                                    |                   |      |
|   | <b>7876S</b> | NEC:<br>CMR<br>CEC:<br>CMG FT4 | 500<br>1000      | 152.4<br>304.8 | 63.0<br>119.0        | 28.6<br>54.0 | .550            | 13.97 | (2) 4-Pair UTP<br>Data Cables:<br>Cat 5e<br>Bonded-Pairs<br>24 AWG<br>(solid)<br>Bare Copper<br>Cond.<br>(1700R style) | None  | Polyolefin<br>(see chart<br>below)   | F-R PVC<br>(1) Blue<br>(1) Green   | .204              | 5.18 |
|    |              |                                |                  |                |                      |              |                 |       | (2) Coax:<br>Series 6<br>18 AWG<br>(solid)<br>Bare Copper<br>Cond.<br>(7915A style)                                    | Duobond Plus<br>(Bonded<br>Tri-Shield):<br>Duobond® +<br>77% AL Braid<br>+ AL Foil w/<br>Shorting Fold<br>4.6Ω/M'<br>15.1Ω/km | Gas-injected<br>Foam<br>Polyethylene | F-R PVC<br>(1) Black<br>(1) White  | .275              | 6.99 |
| U.S. Patents 7,049,523; 5,606,151; 5,734,126.<br>Third party verified to TIA/EIA-568-B.2, Category 5e<br>Coax sweep tested to 3.0 GHz and jacket sequentially marked.<br>Coax shield effectiveness 125dB @ 1GHz is better than Quad shield. |              |                                |                  |                |                      |              |                 |       |  |   |                                      |                                    |                   |      |

### Composite • (2) Cat 5e 4-Bonded-Pair UTP 24 AWG • (2) Series 6 Coax w/Duobond Plus • (1) 2-Fiber LANLite®

| <b>Polyolefin Insulation (Pairs) • Gas-injected FPE Insulation (Coax) • F-R PVC Jackets • No Overall Jacket</b>   |              |                                      |             |                |               |              |      |       |   |  |                                      |                                   |      |      |
|---|--------------|--------------------------------------|-------------|----------------|---------------|--------------|------|-------|---|--|--------------------------------------|-----------------------------------|------|------|
|   | <b>7878S</b> | NEC:<br>CMR OF<br>CEC:<br>CMG OF FT4 | 500<br>1000 | 152.4<br>304.8 | 71.5<br>137.0 | 32.4<br>62.1 | .595 | 15.11 | (2) 4-Pair UTP<br>Data Cables:<br>Cat 5e<br>Bonded-Pairs<br>24 AWG<br>(solid)<br>Bare Copper Cond.<br>(1700R style) | None   | Polyolefin<br>(see chart<br>below)   | F-R PVC<br>(1) Blue<br>(1) Green  | .204 | 5.18 |
|    |              |                                      |             |                |               |              |      |       | (2) Coax:<br>Series 6<br>18 AWG<br>(solid)<br>Bare Copper<br>Cond.<br>(7915A style)                                 | Duobond Plus<br>(Bonded<br>Tri-Shield):<br>Duobond +<br>77% AL Braid<br>+ AL Foil w/<br>Shorting Fold<br>4.6Ω/M'<br>15.1Ω/km | Gas-injected<br>Foam<br>Polyethylene | F-R PVC<br>(1) Black<br>(1) White | .275 | 6.99 |
|   |              |                                      |             |                |               |              |      |       | (1) 2-Fiber<br>LANLite:<br>Gigabit Ethernet<br>62.5µ/125µ/900µ<br>(core/clad/coating)<br>Tight Buffered             | None   | PVC<br>(1) Blue<br>(1) Orange        | F-R PVC<br>(1) Orange             | .175 | 4.45 |
| U.S. Patents 7,049,523; 5,606,151; 5,734,126.<br>Third party verified to TIA/EIA-568-B.2, Category 5e<br>Coax sweep tested to 3.0 GHz and jacket sequentially marked.<br>Coax shield effectiveness 125dB @ 1GHz is better than Quad shield. |              |                                      |             |                |               |              |      |       |   |  |                                      |                                   |      |      |

AL = Aluminum • BC = Bare Copper • DCR = DC Resistance • FPE = Foam Polyethylene • F-R = Flame-retardant • UTP = Unshielded Twisted Pair

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference: **1-800-BELDEN-1**.

Request quotations of cables not listed.

#### Color Codes: Cat 5e UTP

| Pair No. | Color Combination            |
|----------|------------------------------|
| 1        | White/Blue Stripe & Blue     |
| 2        | White/Orange Stripe & Orange |
| 3        | White/Green Stripe & Green   |
| 4        | White/Brown Stripe & Brown   |

# Composite Data, Audio, Video, Security and Control Cable


## Banana Peel® Jacketless Cables

### Category 5e

| Description | Part No. | UL NEC/ C(UL) CEC Type | Standard Lengths |   | Standard Unit Weight |    | Overall Nom. OD |    | Component Descriptions | Shielding Materials & Nom. DCR | Insulation Material & Color Code | Component Jacket Material & Colors |    | Component Nom. OD |  |
|-------------|----------|------------------------|------------------|---|----------------------|----|-----------------|----|------------------------|--------------------------------|----------------------------------|------------------------------------|----|-------------------|--|
|             |          |                        | Ft.              | m | Lbs.                 | kg | Inch            | mm |                        |                                |                                  | Inch                               | mm |                   |  |

#### Composite • (1) Cat 5e 4-Pair UTP 24 AWG • (2) Series 6 Coax w/Duobond® IV\* Quad Shield

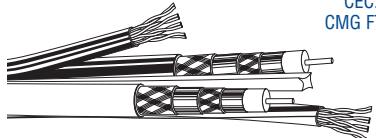
##### Polyolefin Insulation (Pairs) • Gas-injected FPE Insulation (Coax) • PVC Jackets • No Overall Jacket

|  |  |  |                                |                         |      |      |       |   |      |                              |                        |      |      |
|--|--|--|--------------------------------|-------------------------|------|------|-------|---|------|------------------------------|------------------------|------|------|
| <b>7956S</b><br><small>new</small>   | NEC:   | 500  | 152.4                          | 59.0                    | 26.8 | .596 | 15.14 | (2) 4-Pair UTP Data Cables:<br>Cat 5e<br>24 AWG (solid)<br>BC Cond. (1583R style) | None | Polyolefin (see chart below) | PVC (1) Blue (1) Green | .194 | 4.93 |
|  | CEC:<br>CMR<br>CMG FT4                                   | 1000   | 304.8                          | 112.0                   | 50.8 |      |       |   |      |                              |                        |      |      |
|  | (2) Coax: Series 6 18 AWG (solid) BC Cond. (7916A style) | Duobond IV Quad Shield: 60% & 40% AL Braids 4.8Ω/M' 15.7Ω/km | Gas-injected Foam Polyethylene | PVC (1) Black (1) White | .298 | 7.57 |       |   |      |                              |                        |      |      |

U.S. Patent 7,049,523.  
Third party verified to TIA/EIA-568-B.2, Category 5e.  
Coax shield effectiveness 110dB @ 1GHz.  
Coax sweep tested to 3.0 GHz and jacket sequentially marked.

#### Composite • (2) Cat 5e 4-Pair UTP 24 AWG • (2) Series 6 Coax w/Duobond® IV\* Quad Shield

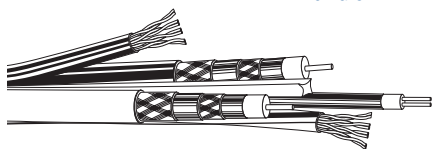
##### Polyolefin Insulation (Pairs) • Gas-injected FPE Insulation (Coax) • F-R PVC Jackets • No Overall Jacket

|   |  |  |                                |                             |      |      |       |   |      |                              |                            |      |      |
|---|--|--|--------------------------------|-----------------------------|------|------|-------|---|------|------------------------------|----------------------------|------|------|
| <b>7913S</b>  | NEC:   | 500  | 152.4                          | 68.5                        | 31.1 | .600 | 15.24 | (2) 4-Pair UTP Data Cables:<br>Cat 5e<br>24 AWG (solid)<br>BC Cond. (1583R style) | None | Polyolefin (see chart below) | F-R PVC (1) Blue (1) Green | .194 | 4.93 |
|   | CEC:<br>CMR<br>CMG FT4                                   | 1000   | 304.8                          | 130.0                       | 59.0 |      |       |   |      |                              |                            |      |      |
|  | (2) Coax: Series 6 18 AWG (solid) BC Cond. (7916A style) | Duobond IV Quad Shield: 60% & 40% AL Braids 4.8Ω/M' 15.7Ω/km | Gas-injected Foam Polyethylene | F-R PVC (1) Black (1) White | .298 | 7.57 |       |   |      |                              |                            |      |      |

U.S. Patent 7,049,523.  
Third party verified to TIA/EIA-568-B.2, Category 5e.  
Coax shield effectiveness 110dB @ 1GHz.  
Coax sweep tested to 3.0 GHz and jacket sequentially marked.

#### Composite • (2) Cat 5e 4-Pair UTP 24 AWG • (2) Series 6 Coax w/Duobond® IV\* Quad Shield • (1) 2-Fiber LANLite®

##### Polyolefin Insulation (Pairs) • Gas-injected FPE Insulation (Coax) • F-R PVC Jackets • No Overall Jacket

|  |  |  |                                |                             |      |      |       |   |      |                              |                            |      |      |
|--|--|--|--------------------------------|-----------------------------|------|------|-------|---|------|------------------------------|----------------------------|------|------|
| <b>7914S</b>   | NEC:   | 500  | 152.4                          | 77.0                        | 34.9 | .625 | 15.88 | (2) 4-Pair UTP Data Cables:<br>Cat 5e<br>24 AWG (solid)<br>BC Cond. (1583R style) | None | Polyolefin (see chart below) | F-R PVC (1) Blue (1) Green | .194 | 4.93 |
|  | CEC:<br>CMR OF<br>CMG OF FT4   | 1000   | 304.8                          | 148.0                       | 67.1 |      |       |   |      |                              |                            |      |      |
|  | (2) Coax: Series 6 18 AWG (solid) BC Cond. (7916A style)                                 | Duobond IV Quad Shield: 60% & 40% AL Braids 4.8Ω/M' 15.7Ω/km | Gas-injected Foam Polyethylene | F-R PVC (1) Black (1) White | .298 | 7.57 |       |   |      |                              |                            |      |      |
|  | (1) 2-Fiber LANLite: Gigabit Ethernet 62.5µ/125µ/900µ (core/clad/coating) Tight Buffered | None   | PVC (1) Blue (1) Orange        | F-R PVC (1) Orange          | .175 | 4.45 |       |   |      |                              |                            |      |      |

U.S. Patent 7,049,523.  
Third party verified to TIA/EIA-568-B.2, Category 5e.  
Coax shield effectiveness 110dB @ 1GHz.  
Coax sweep tested to 3.0 GHz and jacket sequentially marked.

AL = Aluminum • BC = Bare Copper • DCR = DC Resistance • FPE = Foam Polyethylene • F-R = Flame-retardant • UTP = Unshielded Twisted Pair

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference: **1-800-BELDEN-1**. Request quotations of cables not listed.

\*Duobond IV = Duobond II + 60% aluminum braid + Duofoil® + 40% aluminum braid.

#### Color Codes: Cat 5e UTP

| Pair No. | Color Combination            |
|----------|------------------------------|
| 1        | White/Blue Stripe & Blue     |
| 2        | White/Orange Stripe & Orange |
| 3        | White/Green Stripe & Green   |
| 4        | White/Brown Stripe & Brown   |

# Composite Data, Audio, Video, Security and Control Cable

## Jacketed Cables

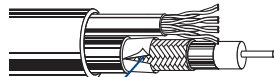
### Category 5e Bonded-Pairs

| Description | Part No. | UL NEC/<br>C(UL) CEC<br>Type | Standard Lengths |   | Standard Unit Weight |    | Overall Nom. OD |    | Component Descriptions | Shielding Materials & Nom. DCR | Insulation Material & Color Code | Component Jacket Material & Colors |    | Component Nom. OD |  |
|-------------|----------|------------------------------|------------------|---|----------------------|----|-----------------|----|------------------------|--------------------------------|----------------------------------|------------------------------------|----|-------------------|--|
|             |          |                              | Ft.              | m | Lbs.                 | kg | Inch            | mm |                        |                                |                                  | Inch                               | mm |                   |  |

#### Composite • (1) Cat 5e 4-Bonded-Pair UTP 24 AWG • (1) Series 6 Coax w/Duobond Plus® Bonded Tri-Shield

##### Polyolefin Insulation (Pairs) • Gas-injected FPE Insulation (Coax) • F-R PVC Jackets • Overall Green F-R PVC Jacket

|              |         |      |       |      |      |      |      |   |   |   |                      |      |      |
|--------------|---------|------|-------|------|------|------|------|---|---|---|----------------------|------|------|
| <b>7910A</b> | NEC:    | 500  | 152.4 | 48.5 | 22.0 | .335 | 8.51 | (1) 4-Pair UTP  | None  | Polyolefin<br>(see chart below)               | F-R PVC<br>(1) Blue  | .200 | 5.08 |
|              | CEC:    | 1000 | 304.8 | 91.0 | 41.3 | x    | x    | Data Cable:<br>Cat 5e<br>Bonded-Pairs<br>24 AW (solid)<br>BC Cond.<br>(1700R style) |   |   |                      |      |      |
|              | CMR:    |      |       |      |      |      |      | (1) Coax:   | Duobond Plus<br>Bonded                            | Gas-injected<br>Foam                          | F-R PVC<br>(1) Black | .275 | 6.99 |
|              | CEC:    |      |       |      |      |      |      | Series 6<br>18 AWG<br>(solid)   | Tri-Shield:<br>Duobond® +<br>Bare Copper<br>Cond. | 77% AL Braid<br>+ AL Foil w/<br>Shorting Fold |                      |      |      |
|              | CMG FT4 |      |       |      |      |      |      | (7915A style)   |   | 4.6Ω/M'<br>15.1Ω/km                           |                      |      |      |



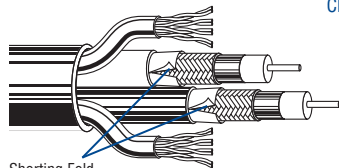
Shorting Fold

Third party verified to TIA/EIA-568-B.2, Category 5e  
Coax sweep tested to 3.0 GHz and jacket sequentially marked.  
Coax shield effectiveness 125dB @ 1GHz is better than Quad shield.

#### Composite • (2) Cat 5e 4-Bonded-Pair UTP • (2) Series 6 Coax w/Duobond Plus Bonded Tri-Shield

##### Polyolefin Insulation (Pairs) • Gas-injected FPE Insulation (Coax) • F-R PVC Jackets • Overall Green F-R PVC Jacket

|              |         |      |       |       |      |      |       |   |  |   |                                   |      |      |
|--------------|---------|------|-------|-------|------|------|-------|---|--|---|-----------------------------------|------|------|
| <b>7876A</b> | NEC:    | 500  | 152.4 | 77.0  | 35.0 | .610 | 15.49 | (2) 4-Pair UTP  | None   | Polyolefin<br>(see chart below)               | F-R PVC<br>(1) Blue<br>(1) Green  | .200 | 5.08 |
|              | CEC:    | 1000 | 304.8 | 148.0 | 67.2 |      |       | Data Cables:<br>Cat 5e<br>Bonded-Pairs<br>24 AWG (solid)<br>BC Cond.<br>(1700R style) |  |   |                                   |      |      |
|              | CMR:    |      |       |       |      |      |       | (2) Coax:   | Duobond Plus<br>Bonded                           | Gas-injected<br>Foam                          | F-R PVC<br>(1) Black<br>(1) White | .275 | 6.99 |
|              | CEC:    |      |       |       |      |      |       | Series 6<br>18 AWG<br>(solid)   | Tri-Shield:<br>Duobond +<br>Bare Copper<br>Cond. | 77% AL Braid<br>+ AL Foil w/<br>Shorting Fold |                                   |      |      |
|              | CMG FT4 |      |       |       |      |      |       | (7915A style)   |  | 4.6Ω/M'<br>15.1Ω/km                           |                                   |      |      |



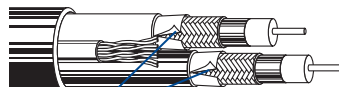
Shorting Fold

Third party verified to TIA/EIA-568-B.2, Category 5e  
Coax sweep tested to 3.0 GHz and jacket sequentially marked.  
Coax shield effectiveness 125dB @ 1GHz is better than Quad shield.

#### Composite • (1) Cat 5e 4-Bonded-Pair UTP • (2) Series 6 Coax w/Duobond Plus Bonded Tri-Shield

##### Polyolefin Insulation (Pairs) • Gas-injected FPE Insulation (Coax) • F-R PVC Jackets • Overall Green F-R PVC Jacket

|              |         |      |       |       |      |      |       |  |  |   |                                   |      |      |
|--------------|---------|------|-------|-------|------|------|-------|--|--|---|-----------------------------------|------|------|
| <b>7877A</b> | NEC:    | 500  | 152.4 | 67.0  | 30.5 | .610 | 15.49 | (1) 4-Pair UTP   | None   | Polyolefin<br>(see chart below)               | F-R PVC<br>(1) Blue               | .200 | 5.08 |
|              | CEC:    | 1000 | 304.8 | 128.0 | 58.2 |      |       | Data Cable:<br>Cat 5e<br>Bonded-Pairs<br>24 AWG (solid)<br>BC Cond.<br>(1700R style) |  |   |                                   |      |      |
|              | CMR:    |      |       |       |      |      |       | (2) Coax:  | Duobond Plus<br>Bonded                           | Gas-injected<br>Foam                          | F-R PVC<br>(1) Black<br>(1) White | .275 | 6.99 |
|              | CEC:    |      |       |       |      |      |       | Series 6<br>18 AWG<br>(solid)  | Tri-Shield:<br>Duobond +<br>Bare Copper<br>Cond. | 77% AL Braid<br>+ AL Foil w/<br>Shorting Fold |                                   |      |      |
|              | CMG FT4 |      |       |       |      |      |       | (7915A style)  |  | 4.6Ω/M'<br>15.1Ω/km                           |                                   |      |      |



Shorting Fold

Third party verified to TIA/EIA-568-B.2, Category 5e  
Coax sweep tested to 3.0 GHz and jacket sequentially marked.  
Coax shield effectiveness 125dB @ 1GHz is better than Quad shield.

AL = Aluminum • BC = Bare Copper • DCR = DC Resistance • FPE = Foam Polyethylene • F-R = Flame-retardant • UTP = Unshielded Twisted Pair

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference: **1-800-BELDEN-1**.  
Request quotations of cables not listed.

#### Color Codes: Cat 5e UTP

| Pair No. | Color Combination            |
|----------|------------------------------|
| 1        | White/Blue Stripe & Blue     |
| 2        | White/Orange Stripe & Orange |
| 3        | White/Green Stripe & Green   |
| 4        | White/Brown Stripe & Brown   |

# Composite Data, Audio, Video, Security and Control Cable

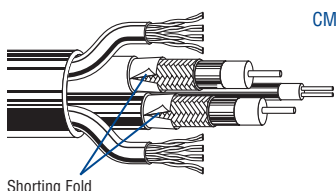
## Jacketed Cables

### Category 5e Bonded-Pairs and Category 5

| Description | Part No. | UL NEC/<br>C(UL) CEC<br>Type | Standard Lengths |   | Standard Unit Weight |    | Overall Nom. OD |    | Component Descriptions | Shielding Materials & Nom. DCR | Insulation Material & Color Code | Component Jacket Material & Colors |    | Component Nom. OD |  |
|-------------|----------|------------------------------|------------------|---|----------------------|----|-----------------|----|------------------------|--------------------------------|----------------------------------|------------------------------------|----|-------------------|--|
|             |          |                              | Ft.              | m | Lbs.                 | kg | Inch            | mm |                        |                                |                                  | Inch                               | mm |                   |  |

**Composite • (2) Cat 5e 4-Bonded-Pair UTP 24 AWG • (2) Series 6 Coax w/Duobond Plus® Tri-Shield • (1) 2-Fiber LANLite®**

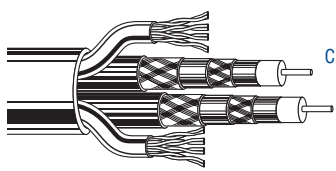
**Polyolefin Insulation (Pairs) • Gas-injected FPE Insulation (Coax) • F-R PVC Jackets • Overall Green F-R PVC Jacket**

|   |              |                                      |             |                |               |              |      |       |   |   |                                      |                                   |      |      |
|---|--------------|--------------------------------------|-------------|----------------|---------------|--------------|------|-------|---|---|--------------------------------------|-----------------------------------|------|------|
|  <p>Shorting Fold</p> | <b>7878A</b> | NEC:<br>CMR OF<br>CEC:<br>CMG OF FT4 | 500<br>1000 | 152.4<br>304.8 | 84.0<br>162.0 | 34.2<br>73.5 | .635 | 16.13 | (2) 4-Pair UTP<br>Data Cables:<br>Cat 5e Bonded-Pairs<br>24 AWG (solid)<br>BC Cond.<br>(1700R style)    | None  | Polyolefin<br>(see chart<br>below)   | F-R PVC<br>(1) Blue<br>(1) Green  | .200 | 5.08 |
|   |              |                                      |             |                |               |              |      |       | (2) Coax:<br>Series 6<br>18 AWG<br>(solid)<br>Bare Copper<br>Cond.<br>(7915A style)                     | Duobond Plus<br>Bonded<br>Tri-Shield:<br>Duobond® +<br>77% AL Braid<br>+ AL Foil w/<br>Shorting Fold<br>4.6Ω/M'<br>15.1Ω/km | Gas-injected<br>Foam<br>Polyethylene | F-R PVC<br>(1) Black<br>(1) White | .275 | 6.99 |
|   |              |                                      |             |                |               |              |      |       | (1) 2-Fiber<br>LANLite:<br>Gigabit Ethernet<br>62.5μ/125μ/900μ<br>(core/clad/coating)<br>Tight Buffered | None  | PVC<br>(1) Blue<br>(1) Orange        | F-R PVC<br>(1) Orange             | .175 | 4.45 |

Third party verified to TIA/EIA-568-B.2, Category 5e  
Coax sweep tested to 3.0 GHz and jacket sequentially marked.  
Coax shield effectiveness 125dB @ 1GHz is better than Quad shield.

**Composite • (2) Cat 5 4-Pair UTP 24 AWG • (2) Series 6 Coax w/Duobond IV\* Quad Shield**

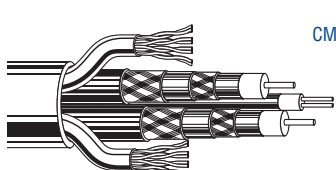
**Polyolefin Insulation (Pairs) • Gas-injected FPE Insulation (Coax) • F-R PVC Jackets • Overall Green F-R PVC Jacket**

|  |              |                                |             |                |               |              |      |       |   |   |                                      |                                   |      |      |
|--|--------------|--------------------------------|-------------|----------------|---------------|--------------|------|-------|---|---|--------------------------------------|-----------------------------------|------|------|
|  | <b>7913A</b> | NEC:<br>CMR<br>CEC:<br>CMG FT4 | 500<br>1000 | 152.4<br>304.8 | 82.0<br>157.0 | 37.2<br>71.3 | .660 | 16.76 | (2) 4-Pair UTP<br>Data Cables:<br>Cat 5e<br>24 AWG (solid)<br>BC Cond.<br>(1583R style) | None  | Polyolefin<br>(see chart<br>below)   | F-R PVC<br>(1) Blue<br>(1) Green  | .195 | 4.95 |
|  |              |                                |             |                |               |              |      |       | (2) Coax:<br>Series 6<br>18 AWG<br>(solid)<br>BC Cond.<br>(7916A style)                 | Duobond IV<br>Quad Shield:<br>60% & 40%<br>AL Braids<br>4.8Ω/M'<br>15.7Ω/km | Gas-injected<br>Foam<br>Polyethylene | F-R PVC<br>(1) Black<br>(1) White | .298 | 7.57 |
|  |              |                                |             |                |               |              |      |       |   |   |                                      |                                   |      |      |

Third party verified to TIA/EIA-568-B.2, Category 5e  
Coax sweep tested to 3.0 GHz and jacket sequentially marked.  
Coax shield effectiveness 110dB @ 1GHz.

**Composite • (2) Cat 5 4-Pair UTP 24 AWG • (2) Series 6 Coax w/Duobond IV\* Quad Shield • (1) 2-Fiber LANLite**

**Polyolefin Insulation (Pairs) • Gas-injected FPE Insulation (Coax) • F-R PVC Jackets • Overall Green F-R PVC Jacket**

|  |              |                                      |             |                |               |              |      |       |   |   |                                      |                                   |      |      |
|--|--------------|--------------------------------------|-------------|----------------|---------------|--------------|------|-------|---|---|--------------------------------------|-----------------------------------|------|------|
|  | <b>7914A</b> | NEC:<br>CMR OF<br>CEC:<br>CMG OF FT4 | 500<br>1000 | 152.4<br>304.8 | 88.0<br>169.0 | 40.0<br>76.7 | .660 | 16.76 | (2) 4-Pair UTP<br>Data Cables:<br>Cat 5e<br>24 AWG (solid)<br>BC Cond.<br>(1583R style)                 | None  | Polyolefin<br>(see chart<br>below)   | F-R PVC<br>(1) Blue<br>(1) Green  | .195 | 4.95 |
|  |              |                                      |             |                |               |              |      |       | (2) Coax:<br>Series 6<br>18 AWG<br>(solid)<br>BC Cond.<br>(7916A style)                                 | Duobond IV<br>Quad Shield:<br>60% & 40%<br>AL Braids<br>4.8Ω/M'<br>15.7Ω/km | Gas-injected<br>Foam<br>Polyethylene | F-R PVC<br>(1) Black<br>(1) White | .298 | 7.57 |
|  |              |                                      |             |                |               |              |      |       | (1) 2-Fiber<br>LANLite:<br>Gigabit Ethernet<br>62.5μ/125μ/900μ<br>(core/clad/coating)<br>Tight Buffered | None  | PVC<br>(1) Blue<br>(1) Orange        | F-R PVC<br>(1) Orange             | .175 | 4.45 |

Third party verified to TIA/EIA-568-B.2, Category 5e  
Coax sweep tested to 2.25 GHz and jacket sequentially marked.  
Coax shield effectiveness 110dB @ 1GHz.

AL = Aluminum • BC = Bare Copper • DCR = DC Resistance • FPE = Foam Polyethylene • F-R = Flame-retardant • UTP = Unshielded Twisted Pair

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference: 1-800-BELDEN-1.  
Request quotations of cables not listed.

\*Duobond IV = Duobond II + 60% aluminum braid + Duofoil® + 40% aluminum braid.

**Color Code: Cat 5e UTP**

| Pair No. | Color Combination            |
|----------|------------------------------|
| 1        | White/Blue Stripe & Blue     |
| 2        | White/Orange Stripe & Orange |
| 3        | White/Green Stripe & Green   |
| 4        | White/Brown Stripe & Brown   |

# Composite Data, Audio, Video, Security and Control Cable

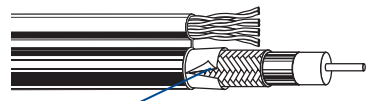
## Siamese Cables

### Category 5e Bonded-Pairs and Category 5

| Description | Part No. | UL NEC/<br>C(UL) CEC<br>Type | Standard Lengths |   | Standard Unit Weight |    | Overall Nom. OD |    | Component Descriptions | Shielding Materials & Nom. DCR | Insulation Material & Color Code |
|-------------|----------|------------------------------|------------------|---|----------------------|----|-----------------|----|------------------------|--------------------------------|----------------------------------|
|             |          |                              | Ft.              | m | Lbs.                 | kg | Inch            | mm |                        |                                |                                  |

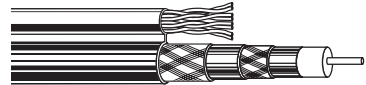
#### Composite • (1) Cat 5e 4-Bonded-Pair UTP 24 AWG • (1) Series 6 Coax w/Duobond Plus® Bonded Tri-Shield

##### Polyolefin Insulation (Pairs) • Gas-injected FPE Insulation (Coax) • Overall Green F-R PVC Jacket

|   |       |                                |             |                |              |              |                   |                    |  |   |  |                                      |
|---|-------|--------------------------------|-------------|----------------|--------------|--------------|-------------------|--------------------|--|---|--|--------------------------------------|
| Siamese Construction  | 7911A | NEC:<br>CMR<br>CEC:<br>CMG FT4 | 500<br>1000 | 152.4<br>304.8 | 35.0<br>60.0 | 15.9<br>27.2 | .275<br>x<br>.529 | 6.99<br>x<br>13.44 | (1) 4-Pair UTP<br>Data Cables:<br>Cat 5e<br>Bonded-Pairs<br>24 AWG<br>(solid)<br>BC Cond.<br>(1700R style) | None  | Polyolefin<br>(see chart<br>below)   |                                      |
|    |       |                                |             |                |              |              |                   |                    |  |   |  |                                      |
| <p>Shorting Fold</p>  |       |                                |             |                |              |              |                   |                    |  |   |  |                                      |
| <p>Third party verified to TIA/EIA-568-B.2, Category 5e<br/>Coax sweep tested to 3.0 GHz and jacket sequentially marked.<br/>Coax shield effectiveness 125dB @ 1GHz is better than Quad shield.</p> |       |                                |             |                |              |              |                   |                    |  |   |  |                                      |
|   |       |                                |             |                |              |              |                   |                    |  | (1) Coax:<br>Series 6<br>18 AWG<br>(solid)<br>Bare Copper<br>Cond.<br>(7915A style) | Duobond Plus<br>Bonded<br>Tri-Shield:<br>Duobond® +<br>77% AL Braid<br>+ AL Foil w/<br>Shorting Fold<br>4.6Ω/M'<br>5.1Ω/km | Gas-injected<br>Foam<br>Polyethylene |


#### Composite • (1) Cat 5 4-Pair UTP 24 AWG • (1) Series 6 Coax w/Duobond IV\* Quad Shield

##### Polyolefin Insulation (Pairs) • Gas-injected FPE Insulation (Coax) • Overall Green F-R PVC Jacket

|  |       |                                |             |                |              |              |                   |                    |  |  |   |                                      |
|--|-------|--------------------------------|-------------|----------------|--------------|--------------|-------------------|--------------------|--|--|---|--------------------------------------|
| Siamese Construction   | 7912A | NEC:<br>CMR<br>CEC:<br>CMG FT4 | 500<br>1000 | 152.4<br>304.8 | 37.5<br>65.0 | 17.0<br>29.5 | .297<br>x<br>.543 | 7.54<br>x<br>13.79 | (1) 4-Pair UTP<br>Data Cables:<br>Cat 5e<br>24 AWG<br>(solid)<br>BC Cond.<br>(1583R style) | None   | Polyolefin<br>(see chart<br>below)  |                                      |
|    |       |                                |             |                |              |              |                   |                    |  |  |   |                                      |
| <p>Third party verified to TIA/EIA-568-B.2, Category 5e<br/>Coax sweep tested to 3.0 GHz and jacket sequentially marked.<br/>Coax shield effectiveness 110dB @ 1GHz.</p> |       |                                |             |                |              |              |                   |                    |  |  |   |                                      |
|  |       |                                |             |                |              |              |                   |                    |  | (1) Coax:<br>Series 6<br>18 AWG<br>(solid)<br>AL Braids<br>BC Cond.<br>(7916A style) | Duobond IV<br>Quad Shield:<br>60% & 40%<br>AL Braids<br>4.8Ω/M'<br>15.7Ω/km | Gas-injected<br>Foam<br>Polyethylene |

#### Composite • (1) Cat 5 4-Pair UTP 24 AWG • (1) Series 6 Coax w/Duobond II\* Foil + Braid Shield

##### Polyolefin Insulation (Pairs) • Gas-injected Foam HDPE Insulation (Coax) • Overall Green F-R PVC Jacket

|  |       |                          |      |       |      |      |                   |                    |  |  |  |  |
|--|-------|--------------------------|------|-------|------|------|-------------------|--------------------|--|--|--|--|
| Siamese Construction   | 7917A | NEC:<br>CM<br>CEC:<br>CM | 1000 | 304.8 | 55.0 | 25.0 | .273<br>x<br>.504 | 6.93<br>x<br>12.80 | (1) 4-Pair UTP<br>Data Cables:<br>Cat 5e<br>24 AWG<br>(solid)<br>BC Cond.<br>(1583R style) | None   | Polyolefin<br>(see chart<br>below)   |  |
|   |       |                          |      |       |      |      |                   |                    |  |  |  |  |
| <p>Third party verified to TIA/EIA-568-B.2, Category 5e<br/>Coax sweep tested to 3.0 GHz and jacket sequentially marked.</p> |       |                          |      |       |      |      |                   |                    |  |  |  |  |
|  |       |                          |      |       |      |      |                   |                    |  | (1) Coax:<br>Series 6<br>18 AWG<br>(solid)<br>Bare Copper<br>Cond. | Duobond II:<br>Bonded Foil<br>(100%) +<br>AL Braid<br>(57%)<br>9.0Ω/M'<br>29.5Ω/km | Gas-injected<br>Foam<br>High-density<br>Polyethylene |

AL = Aluminum • BC = Bare Copper • DCR = DC Resistance • FPE = Foam Polyethylene • F-R = Flame-retardant • HDPE = High-Density Polyethylene • UTP = Unshielded Twisted Pair

Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference: **1-800-BELDEN-1**.  
Request quotations of cables not listed.

\* Duobond IV = Duobond II + 60% aluminum braid + Duofoil® + 40% aluminum braid.

#### Color Code: Cat 5e UTP

| Pair No. | Color Combination            |
|----------|------------------------------|
| 1        | White/Blue Stripe & Blue     |
| 2        | White/Orange Stripe & Orange |
| 3        | White/Green Stripe & Green   |
| 4        | White/Brown Stripe & Brown   |

# Composite Data, Audio, Video, Security and Control Cable

## Keypad and Control Cables

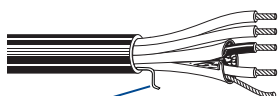
### Category 5e Bonded-Pairs and Category 5

| Description | Part No. | UL NEC/<br>C(UL) CEC<br>Type | Standard Lengths |   | Standard Unit Weight |    | Overall Nom. OD |    | Component Descriptions | Shielding Materials & Nom. DCR | Insulation Material & Color Code | Component Jacket Material & Colors | Component Nom. OD |    |
|-------------|----------|------------------------------|------------------|---|----------------------|----|-----------------|----|------------------------|--------------------------------|----------------------------------|------------------------------------|-------------------|----|
|             |          |                              | Ft.              | m | Lbs.                 | kg | Inch            | mm |                        |                                |                                  |                                    | Inch              | mm |

**Composite • (1) STP (Data) 22 AWG (7x30) TC Cond. w/Beldfoil®, Drain Wire • (2) TC Conductors (Power) 18 AWG (16x30) Unshielded**

**HDFPE Insulation (Data Pair) • F-R PVC Insulation (Power Cond.) • F-R PVC Jacket (Available in Black, White or Aqua)**

|           |              |                                |             |                |              |             |              |  |   |                               |                         |         |     |     |
|-----------|--------------|--------------------------------|-------------|----------------|--------------|-------------|--------------|--|---|-------------------------------|-------------------------|---------|-----|-----|
| 300V 75°C | <b>1502R</b> | NEC:<br>CMR<br>CEC:<br>CMG FT4 | 500<br>1000 | 152.4<br>304.8 | 20.0<br>44.0 | 9.1<br>20.0 | .250<br>6.35 |  | Data:<br>(1) Twisted Pair<br>22 AWG<br>(7x30)<br>TC Cond. | Beldfoil®<br>Shield<br>(100%) | HDFPE<br>Blue,<br>White | F-R PVC | N/A | N/A |
|           |              |                                |             |                |              |             |              |  | (2) Power Cond.:<br>18 AWG<br>(16x30)<br>TC Cond.         | None                          | FR-PVC<br>Red,<br>Black | —       | N/A | N/A |



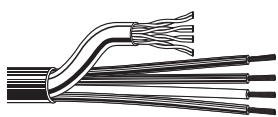
Rip Cord

Sequential footing marking every two feet.

**Composite • (1) Cat 5e 4-Bonded-Pair UTP 24 AWG • (4) 16 AWG Bare Copper Conductors Stranded (19x29)**

**Polyolefin Insulation (Pairs) • PVC Insulation (Conductors) • Overall Green F-R PVC Jacket**

|  |              |                                |             |                |              |              |              |  |   |      |                                    |                     |      |      |
|--|--------------|--------------------------------|-------------|----------------|--------------|--------------|--------------|--|---|------|------------------------------------|---------------------|------|------|
|  | <b>7949A</b> | NEC:<br>CMR<br>CEC:<br>CMG FT4 | 500<br>1000 | 152.4<br>304.8 | 54.5<br>99.0 | 24.7<br>44.9 | .355<br>9.02 |  | (1) 4-Pair UTP<br>Data Cable:<br>Bonded-Pairs<br>24 AWG (solid)<br>BC Cond. | None | Polyolefin<br>(see chart<br>below) | F-R PVC<br>(1) Blue | .200 | 5.08 |
|  |              |                                |             |                |              |              |              |  | (4) Conductors:<br>16 AWG<br>(19x29)<br>BC Cond.                            | None | PVC<br>Red, White,<br>Green, Black | —                   | .079 | 2.01 |

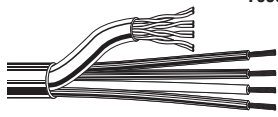


Jacket sequentially marked.  
Third party verified to TIA/EIA-568-B.2, Category 5e

**Composite • (1) Cat 5 4-Pair UTP 24 AWG • (4) 16 AWG Bare Copper Conductors Stranded (19x29)**

**Polyolefin Insulation (Pairs) • PVC Insulation (Conductors) • Overall Green F-R PVC Jacket**

|  |              |                                |             |                |              |              |              |  |   |      |                                    |                     |      |      |
|--|--------------|--------------------------------|-------------|----------------|--------------|--------------|--------------|--|---|------|------------------------------------|---------------------|------|------|
|  | <b>7950A</b> | NEC:<br>CMR<br>CEC:<br>CMG FT4 | 500<br>1000 | 152.4<br>304.8 | 54.0<br>98.0 | 24.5<br>44.5 | .390<br>9.91 |  | (1) 4-Pair UTP<br>Data Cable:<br>24 AWG (solid)<br>BC Cond. | None | Polyolefin<br>(see chart<br>below) | F-R PVC<br>(1) Blue | .195 | 4.95 |
|  |              |                                |             |                |              |              |              |  | (4) Conductors:<br>16 AWG<br>(19x29)<br>BC Cond.            | None | PVC<br>Red, White,<br>Green, Black | —                   | .079 | 2.01 |

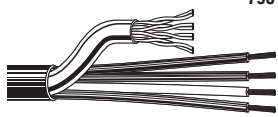


Jacket sequentially marked.  
Third party verified to TIA/EIA-568-B.2, Category 5

**Composite • (1) Cat 5 4-Pair UTP 24 AWG • (4) 18 AWG Bare Copper Conductors Stranded (19x30)**

**Polyolefin Insulation (Pairs) • PVC Insulation (Conductors) • Overall Green F-R PVC Jacket**

|  |              |                                |             |                |              |              |               |  |   |      |                                    |                     |      |      |
|--|--------------|--------------------------------|-------------|----------------|--------------|--------------|---------------|--|---|------|------------------------------------|---------------------|------|------|
|  | <b>7951A</b> | NEC:<br>CMR<br>CEC:<br>CMG FT4 | 500<br>1000 | 152.4<br>304.8 | 49.0<br>88.0 | 22.2<br>39.9 | .407<br>10.34 |  | (1) 4-Pair UTP<br>Data Cable:<br>24 AWG (solid)<br>BC Cond. | None | Polyolefin<br>(see chart<br>below) | F-R PVC<br>(1) Blue | .195 | 4.95 |
|  |              |                                |             |                |              |              |               |  | (4) Conductors:<br>18 AWG<br>(19x30)<br>BC Cond.            | None | PVC<br>Red, White,<br>Green, Black | —                   | .066 | 1.68 |



Jacket sequentially marked.  
Third party verified to TIA/EIA-568-B.2, Category 5

**Composite • (1) Cat 5 4-Pair UTP 24 AWG • (4) 14 AWG Bare Copper Conductors Stranded (19x26)**

**Polyolefin Insulation (Pairs) • PVC Insulation (Conductors) • Overall Green F-R PVC Jacket**

|                      |              |                                |     |       |      |      |               |      |  |      |                                    |                     |      |       |
|----------------------|--------------|--------------------------------|-----|-------|------|------|---------------|------|--|------|------------------------------------|---------------------|------|-------|
| Siamese Construction | <b>7952A</b> | NEC:<br>CMR<br>CEC:<br>CMG FT4 | 500 | 152.4 | 58.0 | 26.3 | .289<br>7.34  | .734 | (1) 4-Pair UTP<br>Data Cable:<br>24 AWG<br>(solid)<br>BC Cond. | None | Polyolefin<br>(see chart<br>below) | F-R PVC<br>(1) Blue | .216 | 5.49  |
|                      |              |                                |     |       |      |      | .535<br>13.59 |      | (4) Conductors:<br>14 AWG<br>(19x26)<br>BC Cond.               | None | PVC<br>Red, White,<br>Green, Black | —                   | .99  | 25.15 |



Jacket sequentially marked.  
Third party verified to TIA/EIA-568-B.2, Category 5

BC = Bare Copper • DCR = DC Resistance • F-R = Flame-retardant • HDFPE = High-density Foam Polyethylene • STP = Shielded Twisted Pair • TC = Tinned Copper • UTP = Unshielded Twisted Pair  
Contact the Belden Customer Service Department for a Comprehensive Connector Cross Reference: 1-800-BELDEN-1.  
Request quotations of cables not listed.

#### Color Code: Cat 5e UTP

| Pair No. | Color Combination            |
|----------|------------------------------|
| 1        | White/Blue Stripe & Blue     |
| 2        | White/Orange Stripe & Orange |
| 3        | White/Green Stripe & Green   |
| 4        | White/Brown Stripe & Brown   |



For more information, contact Belden Technical Support: 1-800-BELDEN-1 • www.belden.com

Belden114@CableCon.kr / 0707-434-7704 / Fax. 02-744-0909 / www.CableCon.co.kr




## Alarm, Security and Speaker Cable / Shielded Audio Cable

Multi-conductor Cables for Residential, Light Commercial and Institutional Applications, AES/EBU Digital Audio Cables, and Audio and Control Interconnect Cables


| Description | Part No. | UL NEC/<br>C(UL) CEC<br>Type | No. of<br>Cond. | Color<br>Code | Standard Lengths |   | Standard<br>Unit Weight |    | Insulation<br>Thickness |    | Outer Jacket<br>Thickness |    | Nominal OD |    |
|-------------|----------|------------------------------|-----------------|---------------|------------------|---|-------------------------|----|-------------------------|----|---------------------------|----|------------|----|
|             |          |                              |                 |               | Ft.              | m | Lbs.                    | kg | Inch                    | mm | Inch                      | mm | Inch       | mm |

### Multi-conductor • 22 AWG Stranded (7x30) Bare Copper Conductors

#### Non-Plenum • Polypropylene Insulation • PVC Jacket (Beige, Brown, Orange, Yellow, Green, Blue, Purple, Gray or Natural)

|  |               |                |   |               |        |         |     |     |      |     |      |     |      |      |
|--|---------------|----------------|---|---------------|--------|---------|-----|-----|------|-----|------|-----|------|------|
| 300V 75°C  | <b>5500UG</b> | NEC:<br>CM     | 2 | Black,<br>Red | C-500  | C-152.4 | 3.5 | 1.6 | .006 | .15 | .015 | .38 | .114 | 2.90 |
|  |               | CEC:<br>CM FT1 |   |               | U-500  | U-152.4 | 5.0 | 2.3 |      |     |      |     |      |      |
|  |               |                |   |               | C-1000 | C-304.8 | 7.0 | 3.2 |      |     |      |     |      |      |
|  |               |                |   |               | U-1000 | U-304.8 | 9.0 | 4.1 |      |     |      |     |      |      |


Jacket sequentially marked at 2 ft. intervals.

|  |               |                |   |                                   |         |         |      |     |      |     |      |     |      |      |
|--|---------------|----------------|---|-----------------------------------|---------|---------|------|-----|------|-----|------|-----|------|------|
| 300V 75°C  | <b>5502UG</b> | NEC:<br>CM     | 4 | Black,<br>Red,<br>White,<br>Green | C-500   | C-152.4 | 6.5  | 3.0 | .006 | .15 | .015 | .38 | .131 | 3.33 |
|  |               | CEC:<br>CM FT1 |   |                                   | U-500 * | U-152.4 | 7.5  | 3.4 |      |     |      |     |      |      |
|  |               |                |   |                                   | C-1000  | C-304.8 | 13.0 | 5.9 |      |     |      |     |      |      |
|  |               |                |   |                                   | U-1000  | U-304.8 | 14.0 | 6.4 |      |     |      |     |      |      |

\*U-500 ft. put-up available in Gray or White only.  
Jacket sequentially marked at 2 ft. intervals.

### Multi-conductor • 18 AWG Stranded (7x26) Bare Copper Conductors

#### Non-Plenum • Polypropylene Insulation • PVC Jacket (Available in Black, Gray or Natural)

|  |               |                |   |               |        |         |      |     |      |     |      |     |      |      |
|--|---------------|----------------|---|---------------|--------|---------|------|-----|------|-----|------|-----|------|------|
| 300V 75°C  | <b>5300UG</b> | NEC:<br>CM     | 2 | Black,<br>Red | C-500  | C-152.4 | 7.5  | 3.4 | .006 | .15 | .015 | .38 | .148 | 3.76 |
|  |               | CEC:<br>CM FT1 |   |               | U-500  | U-152.4 | 8.5  | 3.9 |      |     |      |     |      |      |
|  |               |                |   |               | U-1000 | U-304.8 | 16.0 | 7.3 |      |     |      |     |      |      |


Jacket sequentially marked at 2 ft. intervals.

## Shielded Audio Cable

| Description | Part No. | UL NEC/<br>C(UL) CEC<br>Type | No. of<br>Pairs | Color<br>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 |

### AES/EBU Digital Audio • 24 AWG Stranded (7x32) TC Conductors • Twisted Pairs • Overall Beldfoil® Shield (100% Coverage) • 24 AWG Drain Wire

#### Datalene® Insulation • Gray or Purple PVC Jacket

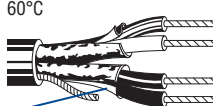
|  |              |                 |   |               |        |         |      |      |          |          |      |      |     |     |    |    |    |    |
|--|--------------|-----------------|---|---------------|--------|---------|------|------|----------|----------|------|------|-----|-----|----|----|----|----|
| 60°C   | <b>1800B</b> | NEC:<br>CMG     | 1 | Black,<br>Red | 500 *  | 152.4   | 8.0  | 3.6  | 23.7Ω/M' | 18.9Ω/M' | .177 | 4.50 | 110 | 76% | 12 | 39 | 26 | 85 |
|  |              | CEC:<br>CMG FT4 |   |               | U-1000 | U-304.8 | 17.0 | 7.7  | 77.7Ω/km | 62.0Ω/km |      |      |     |     |    |    |    |    |
|  |              |                 |   |               | 1000   | 304.8   | 16.0 | 7.3  |          |          |      |      |     |     |    |    |    |    |
|  |              |                 |   |               | 5000 * | 1524.0  | 90.0 | 40.9 |          |          |      |      |     |     |    |    |    |    |

\*500 ft. put-up available in Gray only. 5000 ft. put-up available in Purple only.  
The jacket and shield are bonded so both can be removed with automatic stripping equipment.

For cross-connect use with 1803F (et al.)  
Digital Audio Snake Cables, see page 19.28  
For Plenum version of 1800B, see 1801B.

### Audio and Control Interconnect • 22 AWG Stranded (7x30) TC Conductors • Twisted Pairs • 24 AWG Stranded TC Drain Wire

#### Polypropylene Insulation • Chrome PVC Jacket (Pairs Cabled on Common Axis to Reduce Diameter)

|  |             |            |   |                           |        |         |       |      |          |          |      |      |    |     |    |     |    |     |
|--|-------------|------------|---|---------------------------|--------|---------|-------|------|----------|----------|------|------|----|-----|----|-----|----|-----|
| 60°C   | <b>8723</b> | NEC:<br>CM | 2 | Red/Black,<br>Green/White | 100    | 30.5    | 2.3   | 1.0  | 14.7Ω/M' | 15.0Ω/M' | .160 | 4.06 | 45 | 66% | 35 | 115 | 62 | 203 |
|  |             | CEC:<br>CM |   |                           | U-500  | U-152.4 | 10.5  | 4.8  | 48.5Ω/km | 49.2Ω/km |      |      |    |     |    |     |    |     |
|  |             |            |   |                           | 500    | 152.4   | 10.0  | 4.5  |          |          |      |      |    |     |    |     |    |     |
|  |             |            |   |                           | U-1000 | U-304.8 | 20.0  | 9.1  |          |          |      |      |    |     |    |     |    |     |
|  |             |            |   |                           | 1000   | 304.8   | 20.0  | 9.1  |          |          |      |      |    |     |    |     |    |     |
|  |             |            |   |                           | 1640   | 499.9   | 32.8  | 14.9 |          |          |      |      |    |     |    |     |    |     |
|  |             |            |   |                           | U-2000 | U-609.6 | 38.0  | 17.2 |          |          |      |      |    |     |    |     |    |     |
|  |             |            |   |                           | 2000   | 609.6   | 40.0  | 18.2 |          |          |      |      |    |     |    |     |    |     |
|  |             |            |   |                           | 3280   | 999.7   | 65.6  | 29.8 |          |          |      |      |    |     |    |     |    |     |
|  |             |            |   |                           | 5000   | 1524.0  | 95.0  | 43.2 |          |          |      |      |    |     |    |     |    |     |
|  |             |            |   |                           | 10000  | 3048.0  | 200.0 | 90.9 |          |          |      |      |    |     |    |     |    |     |

BC = Bare Copper • DCR = DC Resistance • TC = Tinned Copper

For additional selection of Belden® Audio Cables, refer to the Broadcast Cables section of this catalog.

\*Capacitance between conductors.

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

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.

# BELDEN

For more information, contact Belden Technical Support: 1-800-BELDEN-1 • www.belden.com

Belden114@CableCon.kr / 0707-434-7704 / Fax. 02-744-0909 / www.CableCon.co.kr