

## Description:

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

## Physical Characteristics (Overall)

### Conductor

#### AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
16	24	7x32	TC - Tinned Copper	.024

### Insulation

#### Insulation Material:

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

### Inner Shield

#### Inner Shield Material:

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

#### Inner Shield Drain Wire AWG:

AWG
24

Inner Shield Drain Wire Stranding: Stranded

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

### Inner Jacket

#### Inner Jacket Material:

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

#### Inner Jacket Color Code Chart:

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

## 1850F Multi-Conductor - Multi-Pair Snake Cable

### Outer Shield

**Outer Shield Material:**

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

**Outer Shield Drain Wire AWG:**

AWG	Stranding	Drain Wire Conductor Material
16	Stranded	TC - Tinned Copper

### Outer Jacket

**Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

**Outer Jacket Ripcord:** Yes

### Overall Cabling

**Overall Nominal Diameter:** 0.944 in.

### Pair

**Pair Color Code Chart:**

Number	Color
1	Red & Black
2	Red & Black
3	Red & Black
4	Red & Black
5	Red & Black
6	Red & Black
7	Red & Black
8	Red & Black
9	Red & Black
10	Red & Black
11	Red & Black
12	Red & Black
13	Red & Black
14	Red & Black
15	Red & Black
16	Red & Black

### Mechanical Characteristics (Overall)

<b>Operating Temperature Range:</b>	-30°C To +60°C
<b>UL Temperature Rating:</b>	60°C
<b>Bulk Cable Weight:</b>	400 lbs/1000 ft.
<b>Max. Recommended Pulling Tension:</b>	264 lbs.
<b>Min. Bend Radius (Install)/Minor Axis:</b>	9.500 in.

### Applicable Specifications and Agency Compliance (Overall)

**Applicable Standards & Environmental Programs**

<b>NEC/(UL) Specification:</b>	CMG
<b>CEC/C(UL) Specification:</b>	CMG
<b>EU CE Mark:</b>	Yes
<b>EU Directive 2000/53/EC (ELV):</b>	Yes
<b>EU Directive 2002/95/EC (RoHS):</b>	Yes
<b>EU RoHS Compliance Date (mm/dd/yyyy):</b>	01/01/2004
<b>EU Directive 2002/96/EC (WEEE):</b>	Yes
<b>EU Directive 2003/11/EC (BFR):</b>	Yes

## 1850F Multi-Conductor - Multi-Pair Snake Cable

CA Prop 65 (CJ for Wire & Cable): Yes

MII Order #39 (China RoHS): Yes

Other Specification: AES/EBU

### Flame Test

UL Flame Test: UL1685 FT4 Loading

C(UL) Flame Test: FT4

### Plenum/Non-Plenum

Plenum (Y/N): No

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

110

### Nom. Inductance:

Inductance (µH/ft)

.18

### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

12

### Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)

26

### Nominal Velocity of Propagation:

VP (%)

76

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

23.7

### Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100 ft.)

.384

.69

.7056

.93

.768

.96

1.024

1.07

1.4112

1.19

1.536

1.21

2.048

1.31

2.8224

1.41

3.0720

1.45

4.096

1.57

5.6448

1.76

6.144

1.83

8.192

2.01

11.2896

2.24

12.288

2.30

24.576

3.08

### Max. Operating Voltage - UL:

Voltage

300 V RMS

### Max. Recommended Current:

Current

2.75 Amps per conductor @ 25°C

## 1850F Multi-Conductor - Multi-Pair Snake Cable

### Notes (Overall)

**Notes:** Pair jackets and shields are bonded so both strip simultaneously with automatic stripping equipment. Datalene® insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1850F Z4B1000	1,000 FT	407.000 LB	VIO Z4B	C	16 FS PR #24 PVC FS PVC
1850F Z4B500	500 FT	208.000 LB	VIO Z4B	C	16 FS PR #24 PVC FS PVC

**Notes:**

C = CRATE REEL PUT-UP.

# AES/EBU Digital Audio Cable

## Multi-Pair Snake Cables

### Individually Shielded and Jacketed Pairs



#### Individually Shielded and Jacketed Pairs

NEC: CMG (CEC: CMG FT4)

#### Product Description

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

Datalene insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

**Color Code:** Black, Red.

#### Specifications

##### 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)

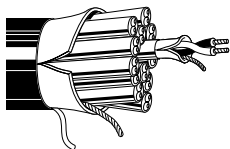
Between Conductors	12.5 pF/Ft. (41 pF/m)
Between Conductor/Shield*	25 pF/Ft. (82 pF/m)

##### 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.