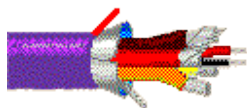


## 1850F Multi-Conductor - Multi-Pair Snake Cable



For more Information  
please call

1-800-Belden1



### General 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. (mm)
16	24	7x32	TC - Tinned Copper	0.6096

Total Number of Conductors: 32

#### Insulation

##### Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (mm)
Datalene®	FHDPE - Foam High Density Polyethylene	1.7272

#### 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. (mm)
PVC - Polyvinyl Chloride	4.2418

##### Inner Jacket Color Code Chart:

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

16	Gray/Yellow Stripe and Numbered 16
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### 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 Cable

Overall Nominal Diameter: 23.978 mm

### 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)

Operating Temperature Range:	-30°C To +60°C
UL Temperature Rating:	60°C
Bulk Cable Weight:	546.169 Kg/Km
Max. Recommended Pulling Tension:	1174.320 N
Min. Bend Radius/Minor Axis:	241.300 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMG
CEC/C(UL) Specification:	CMG
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

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

MII Order #39 (China RoHS): Yes

Other Specification: AES/EBU

### Flame Test

UL Flame Test: UL1685 FT4 Loading

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/m)  
0.59058

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)  
39.372

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

Capacitance (pF/m)  
85.306

#### Nominal Velocity of Propagation:

VP (%)  
76

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)  
77.7597

#### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
0.384	0.951
0.706	2.330
0.768	2.526
1.024	3.084
1.411	3.609
1.536	3.609
2.048	4.265
2.822	4.593
3.072	4.593
4.096	4.922
5.645	5.578
6.144	5.906
8.192	6.562
11.290	7.218
12.288	7.546
24.576	10.171

#### Max. Operating Voltage - UL:

Voltage  
300 V RMS

#### Max. Recommended Current:

Current

2.75 Amps per conductor @ 25°C

### 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.

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