## METRIC MEASUREMENT VERSION



## 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	<b>Conductor Material</b>	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:



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

Page 1 of 4 11-08-2019

## **METRIC MEASUREMENT VERSION**



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

16 Gray/Yellow Stripe and Numbered 16

## **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	<b>Drain Wire Conductor Material</b>
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

Page 2 of 4 11-08-2019





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

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:

Curren

Page 3 of 4 11-08-2019

#### METRIC MEASUREMENT VERSION



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

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	С	16 FS PR #24 PVC FS PVC
1850F Z4B500	500 FT	208.000 LB	VIO Z4B	С	16 FS PR #24 PVC FS PVC

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 03-17-2014

© 2019 Belden, Inc All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and compliance date may be in stock at Beiden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).

Page 4 of 4

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Belden Wire & Cable:
1850F Z4B500 1850F Z4B1000