**METRIC MEASUREMENT VERSION** 



## 1803F 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)
4	24	7x32	TC - Tinned Copper	0.6096

Total Number of Conductors: 8

### 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

#### **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:**

		<b>Drain Wire Conductor Material</b>		
16	Stranded	TC - Tinned Copper		

# **Outer Jacket**

**Outer Jacket Material:** 

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**Outer Jacket Material** PVC - Polyvinyl Chloride

**Outer Jacket Ripcord:** Yes

**Overall Cable** 

**Overall Nominal Diameter:** 12.395 mm

**Pair** 

Pair Color Code Chart:

Number	Color
1	Red & Black
2	Red & Black
3	Red & Black
4	Red & Black

# **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-30°C To +60°C
UL Temperature Rating:	60°C
Bulk Cable Weight:	148.820 Kg/Km
Max. Recommended Pulling Tension:	366.976 N
Min. Bend Radius/Minor Axis:	127 mm

# **Applicable Specifications and Agency Compliance (Overall)**

## **Applicable Standards & Environmental Programs**

CA Prop 65 (CJ for Wire & Cable):	Yes
EU Directive 2002/96/EC (WEEE): EU Directive 2003/11/EC (BFR):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004 Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU CE Mark:	Yes
EU Directive 2011/65/EU (ROHS II):	CMG Yes
NEC/(UL) Specification:	CMG

## Flai

C(UL) Flame Test: FT4

# Plenum/Non-Plenum

Plenum (Y/N): No

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm)

Nom. Inductance:

Inductance (µH/m) 0.59058

Nom. Capacitance Conductor to Conductor:

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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
1803F B591000	1,000 FT	111.000 LB	BLACK, MATTE		4 #24 FHDPE FS PR PVC FS PVC
1803F Z4B1000	1,000 FT	111.000 LB	VIO Z4B	С	4 #24 FHDPE FS PR PVC FS PVC
1803F Z4B500	500 FT	57.500 LB	VIO Z4B	С	4 #24 FHDPE FS PR PVC FS PVC
1803F Z4B5000	5,000 FT	565.000 LB	VIO Z4B		4 #24 FHDPE FS PR PVC FS PVC

Notes:

C = CRATE REEL PUT-UP.

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### 1803F Multi-Conductor - Multi-Pair Snake Cable

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