# **Detailed Specifications & Technical Data**

METRIC MEASUREMENT VERSION



### 1800F Multi-Conductor - Single-Pair Cable

For more Information please call

1-800-Belden1



### **General Description:**

24 AWG stranded (42x40) HC BC conductors, Datalene® insulation, conductors cabled with fillers, TC "French Braid" Shield (95% coverage), BC drain wire, PVC jacket.

# **Physical Characteristics (Overall)**

### Conductor

#### AWG:

# Pairs AWG		Stranding	<b>Conductor Material</b>	Dia. (mm)	
1	24	42x40	BC - Bare Copper	0.6096	

Total Number of Conductors: 2

### Insulation

### **Insulation Material:**

Insulation Trade Name	Insulation Material	Dia. (mm)
Datalene®	FHDPE - Foam High Density Polyethylene	1.4732

### **Outer Shield**

### **Outer Shield Material:**

Туре		Outer Shield Material	Coverage (%)	
	French Braid	TC - Tinned Copper	95	

#### **Outer Shield Drain Wire AWG:**

AWG	Stranding	Drain Wire Conductor Material
26	Stranded	BC - Bare Copper

### **Outer Jacket**

### **Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

### **Overall Cable**

Overall Nominal Diameter: 5.359 mm

### Pair

### **Pair Color Code Chart:**

Number	Color
1	Red & Black

## **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-20°C To +60°C		
Non-UL Temperature Rating:	60°C		
Bulk Cable Weight:	35.717 Kg/Km		
Max. Recommended Pulling Tension:	184.600 N		
Min. Bend Radius/Minor Axis:	57.150 mm		

## Applicable Specifications and Agency Compliance (Overall)

### **Applicable Standards & Environmental Programs**

NEC/(UL) Specification: CL2R

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### 1800F Multi-Conductor - Single-Pair Cable

	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 Digital Audio
Fla	me Test	
	UL Flame Test:	UL1666 Riser
Ple	enum/Non-Plenum	
	Plenum (Y/N):	No

# **Electrical Characteristics (Overall)**

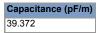
Nom. Characteristic Impedance:



Nom. Inductance:



Nom. Capacitance Conductor to Conductor:



Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 85.306

Nominal Velocity of Propagation:



Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 77.7597

**Nominal Outer Shield DC Resistance:** 

DCR @ 20°C (Ohm/km) 21.064

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
0.384	0.853
0.706	1.575
0.768	1.739
1.024	2.231
1.411	2.920
1.536	3.117
2.048	3.937
2.822	4.922
3.072	5.250
4.096	6.890
5.645	9.187
6.144	9.843

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# **Detailed Specifications & Technical Data**

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### 1800F Multi-Conductor - Single-Pair Cable

8.192	11.812	
11.290	14.765	
12.288	15.421	
24.576	23.295	

#### Max. Operating Voltage - UL:

Voltage 300 V RMS

#### Max. Recommended Current:

Current
2.75 Amps per conductor @ 25°C

### **Notes (Overall)**

**Notes:** 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
1800F B59U1000	1,000 FT	25.000 LB	BLACK, MATTE		#24 PR FHDPE BRD PVC
1800F B591000	1,000 FT	25.000 LB	BLACK, MATTE	С	#24 PR FHDPE BRD PVC
1800F B5910000	10,000 FT	250.000 LB	BLACK, MATTE		#24 PR FHDPE BRD PVC
1800F B59500	500 FT	13.000 LB	BLACK, MATTE	С	#24 PR FHDPE BRD PVC
1800F G7VU1000	1,000 FT	25.000 LB	RED, MATTE		#24 PR FHDPE BRD PVC
1800F G7WU1000	1,000 FT	25.000 LB	GREEN, MATTE		#24 PR FHDPE BRD PVC
1800F G7XU1000	1,000 FT	25.000 LB	BLUE, MATTE		#24 PR FHDPE BRD PVC
1800F G8MU1000	1,000 FT	25.000 LB	YELLOW, MATTE		#24 PR FHDPE BRD PVC
1800F U90U1000	1,000 FT	25.000 LB	GRAY, MATTE		#24 PR FHDPE BRD PVC
1800F Z4BU1000	1,000 FT	25.000 LB	VIO Z4B		#24 PR FHDPE BRD PVC

#### Notes:

C = CRATE REEL PUT-UP.

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

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