# **Detailed Specifications & Technical Data**

**METRIC MEASUREMENT VERSION** 



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

For more Information please call

1-800-Belden1



## **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

#### 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	<b>Drain Wire Conductor Material</b>
26	Stranded	BC - Bare Copper

### **Outer Jacket**

#### **Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

### **Overall Cabling**

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 (Install)/Minor Axis:	57.150 mm	

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

## **Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CL2R
EU CE Mark:	Yes

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

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
ame Test	
UL Flame Test:	UL1666 Riser

### Fla

## Plenum/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:



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)
.384	1.50926
.706	2.19827
.768	2.2967
1.024	2.72323
1.411	3.41224
1.536	3.57629
2.048	4.2653
2.822	5.44646
3.072	5.74175
4.096	7.31663
5.645	9.48209
6.144	10.0727
8.192	12.1725
11.290	14.8629
12.288	15.6832

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24.576 23.3279

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended 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	305 MT	11.793 KG	BLACK, MATTE		#24 PR FHDPE BRD PVC
1800F B591000	305 MT	10.886 KG	BLACK, MATTE	С	#24 PR FHDPE BRD PVC
1800F B59500	152 MT	5.443 KG	BLACK, MATTE	С	#24 PR FHDPE BRD PVC
1800F G7VU1000	305 MT	11.793 KG	RED, MATTE		#24 PR FHDPE BRD PVC
1800F G7WU1000	305 MT	11.793 KG	GREEN, MATTE		#24 PR FHDPE BRD PVC
1800F G7XU1000	305 MT	11.793 KG	BLUE, MATTE		#24 PR FHDPE BRD PVC
1800F G8MU1000	305 MT	11.793 KG	YELLOW, MATTE		#24 PR FHDPE BRD PVC
1800F U90U1000	305 MT	11.793 KG	GRAY, MATTE		#24 PR FHDPE BRD PVC

#### Notes:

C = CRATE REEL PUT-UP.

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