# **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



## 1696A Multi-Conductor - Single-Pair Cable

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EU Directive 2000/53/EC (ELV):

EU Directive 2002/95/EC (RoHS):

EU Directive 2002/96/EC (WEEE):

EU Directive 2003/11/EC (BFR):

EU RoHS Compliance Date (mm/dd/yyyy):

For more Information please call

1-800-Belden1



#### **General Description:**

22 AWG stranded (7x30) TC conductors, Datalene® insulation, twisted pair with fillers, overall Beldfoil® + TC braid shield (90% coverage), 24 AWG drain wire, PVC jacket.

#### **Physical Characteristics (Overall)** Conductor AWG: # Pairs AWG Stranding Conductor Material Dia. (in.) 22 7x30 TC - Tinned Copper | .030 **Total Number of Conductors:** 2 Insulation Insulation Material: Insulation Trade Name Insulation Material Dia. (in.) FHDPE - Foam High Density Polyethylene | .082 **Outer Shield** Outer Shield Material: Layer # Outer Shield Trade Name Type Outer Shield Material Coverage (%) Beldfoil® (Z-fold®) Tape | Aluminum Foil-Polyester Tape | 100 Braid TC - Tinned Copper 90 Outer Shield Drain Wire AWG: AWG Stranding Drain Wire Conductor Material 7x32 TC - Tinned Copper **Outer Jacket** Outer Jacket Material: **Outer Jacket Material** PVC - Polyvinyl Chloride **Overall Cable Overall Nominal Diameter:** 0.235 in. Pair Pair Color Code Chart: Number Color Light Blue & White **Mechanical Characteristics (Overall)** -30°C To +60°C **Operating Temperature Range:** Non-UL Temperature Rating: 60°C 30 lbs/1000 ft. **Bulk Cable Weight:** Max. Recommended Pulling Tension: 56 lbs. Min. Bend Radius/Minor Axis: 2.500 in Applicable Specifications and Agency Compliance (Overall) **Applicable Standards & Environmental Programs** EU Directive 2011/65/EU (ROHS II): Yes EU CE Mark: Yes

Yes

Yes

Yes

Yes

01/01/2004

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	CA Prop 65 (CJ for Wire & Cable):	Yes			
	MII Order #39 (China RoHS):	Yes			
	Other Specification:	AES/EBU			
Plei	Plenum/Non-Plenum				
	Plenum (Y/N):	No			

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm)
110

Nom. Inductance:

Inductance (µH/ft)
.18

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
13.0

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
26

Nominal Velocity of Propagation:

**VP (%)** 76

Nominal Delay:

Delay (ns/ft) 1.3

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 17.8

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 5.89

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
.384	.58
.7056	.69
.768	.7
1.024	.76
1.4112	.82
1.536	.84
2.048	.88
2.8224	.93
3.072	.95
4.096	1.09
5.6448	1.32
6.144	1.37
8.192	1.48
11.2896	1.74
12.288	1.77
24.576	2.41

Max. Operating Voltage - Non-UL:

Voltage 300 V RMS

Max. Recommended Current:

3.8 Amps per conductor @ 25°C

## **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1696A B59U1000	1,000 FT	32.000 LB	BLACK, MATTE		2 #22 FHDPE SHLD PVC
1696A B591000	1,000 FT	34.000 LB	BLACK, MATTE	С	2 #22 FHDPE SHLD PVC
1696A B59250	250 FT	8.500 LB	BLACK, MATTE		2 #22 FHDPE SHLD PVC
1696A B59500	500 FT	17.000 LB	BLACK, MATTE		2 #22 FHDPE SHLD PVC

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Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 10-18-2012

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