

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



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.)
1	22	7x30	TC - Tinned Copper	.030

Total Number of Conductors: 2

#### Insulation

##### Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (in.)
Datalene®	FHDPE - Foam High Density Polyethylene	.082

#### Outer Shield

##### Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil® (Z-fold®)	Tape	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	90

##### Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
24	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
1	Light Blue & White

### Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +60°C

Non-UL Temperature Rating: 60°C

Bulk Cable Weight: 30 lbs/1000 ft.

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
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

**Plenum/Non-Plenum**

Plenum (Y/N):	No
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**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

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8.192	1.48
11.2896	1.74
12.288	1.77
24.576	2.41

**Max. Operating Voltage - Non-UL:**

<b>Voltage</b>
300 V RMS

**Max. Recommended Current:**

<b>Current</b>
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	33.000 LB	BLACK, MATTE	C	2 #22 FHDPE SHLD PVC
1696A B59250	250 FT	8.250 LB	BLACK, MATTE		2 #22 FHDPE SHLD PVC
1696A B59500	500 FT	16.500 LB	BLACK, MATTE		2 #22 FHDPE SHLD PVC

**Notes:**

C = CRATE REEL PUT-UP.

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