

## 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. (mm)
1	22	7x30	TC - Tinned Copper	0.762

Total Number of Conductors: 2

#### Insulation

##### Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (mm)
Datalene®	FHDPE - Foam High Density Polyethylene	2.0828

#### 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: 5.969 mm

#### 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:	44.646 Kg/Km
Max. Recommended Pulling Tension:	249.099 N
Min. Bend Radius/Minor Axis:	63.500 mm

### 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/m)

0.59058

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

42.653

#### Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)

85.306

#### Nominal Velocity of Propagation:

VP (%)

76

#### Nominal Delay:

Delay (ns/m)

4.2653

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

58.4018

#### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

19.3251

#### Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100m)

.384	1.90298
.7056	2.26389
.768	2.2967
1.024	2.49356
1.4112	2.69042
1.536	2.75604
2.048	2.88728
2.8224	3.05133
3.072	3.11695
4.096	3.57629
5.6448	4.33092
6.144	4.49497

## METRIC MEASUREMENT VERSION

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

8.192	4.85588
11.2896	5.70894
12.288	5.80737
24.576	7.90721

### 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	34.000 LB	BLACK, MATTE	C	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

### Notes:

C = CRATE REEL PUT-UP.

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