

## 1696A Paired - Single-Pair Cable

	<p>For more information please call <b>1-800-Belden1</b></p> <p><u>See Put-ups and Colors</u></p>
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### 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:

#### CONDUCTOR:

Number of Pairs	1
Total Number of Conductors	2
AWG	22
Stranding	7x30
Conductor Diameter	.030 in.
Conductor Material	TC - Tinned Copper

#### INSULATION:

Insulation Material Trade Name	Datalene®
Insulation Material	FHDPE - Foam High Density Polyethylene
Insulation Diameter	.082 in.
Lay Length	2.5 in.
Twists/ft.	4.80

#### Pair Color Code Chart :

Number	Color
1	Light Blue & White

#### OUTER SHIELD:

Outer Shield Material Trade Name	Beldfoil® (Z-Fold®)
Outer Shield Type	Tape/Braid

#### Outer Shield Material :

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

Outer Shield % Coverage	100 %
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#### OUTER SHIELD DRAIN WIRE :

Outer Shield Drain Wire AWG	24
Outer Shield Drain Wire Stranding	7x32

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Outer Shield Drain Wire Conductor Material	TC - Tinned Copper
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### OUTER JACKET:

Outer Jacket Material	PVC - Polyvinyl Chloride
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### OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	.234 in.
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### MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-30°C To +60°C
Non-UL Temperature Rating	60°C
Bulk Cable Weight	31 lbs/1000 ft.
Max. Recommended Pulling Tension	56 lbs.
Min. Bend Radius (Install)	2.2 in.

### APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

#### APPLICABLE STANDARDS:

EU CE Mark (Y/N)	Yes
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
Other Specification	AES/EBU

### PLENUM/NON-PLENUM:

Plenum (Y/N)	N
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### ELECTRICAL CHARACTERISTICS:

Nom. Characteristic Impedance	110 Ohms
Nom. Inductance	.18 µH/ft
Nom. Capacitance Conductor to Conductor @ 1 KHz	13.0 pF/ft
Nom. Cap. Cond. to Other Cond. & Shield @ 1 KHz	26 pF/ft
Nominal Velocity of Propagation	76 %
Nominal Delay	1.3 ns/ft
Nom. Conductor DC Resistance @ 20 Deg. C	17.8 Ohms/1000 ft
Nominal Outer Shield DC Resistance @ 20 Deg. C	5.89 Ohms/1000 ft
Nom. Attenuation (dB/100 ft) :	

## 1696A Paired - Single-Pair Cable

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. 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 300 V RMS

Max. Recommended Current 3.8 Amps per conductor @ 25°C

### PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
1696A B591000	2 #22 FHDPE SHLD PVC	1000	32	BLACK, MATTE	C
1696A B59250	2 #22 FHDPE SHLD PVC	250	7.25	BLACK, MATTE	
1696A B59500	2 #22 FHDPE SHLD PVC	500	14.5	BLACK, MATTE	
1696A B59U1000	2 #22 FHDPE SHLD PVC	U1000	30	BLACK, MATTE	

C = CRATE REEL PUT-UP.

Revision Number: 1      Revision Date: 08-26-2005

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