

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION

BELDEN
SENDING ALL THE RIGHT SIGNALS

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

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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
8.192	4.85588
11.2896	5.70894
12.288	5.80737
24.576	7.90721

Max. Operating Voltage - Non-UL:

Voltage
300 V RMS

Max. Recommended Current:

Current
3.8 Amps per conductor @ 25°C

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1696A B59U1000	305 MT	14.515 KG	BLACK, MATTE		2 #22 FHDPE SHLD PVC
1696A B591000	305 MT	15.422 KG	BLACK, MATTE	C	2 #22 FHDPE SHLD PVC
1696A B59250	76 MT	3.856 KG	BLACK, MATTE		2 #22 FHDPE SHLD PVC
1696A B59500	152 MT	7.711 KG	BLACK, MATTE		2 #22 FHDPE SHLD PVC

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Notes:

C = CRATE REEL PUT-UP.

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