Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



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

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| 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 |

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:



Nom. Inductance:



Nom. Capacitance Conductor to Conductor:



Nom. Capacitance Cond. to Other Conductor & Shield:



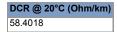
Nominal Velocity of Propagation:



Nominal Delay:



Nom. Conductor DC Resistance:



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 |

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| 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 | 14.969 KG | BLACK, MATTE | С | 2 #22 FHDPE SHLD PVC |
| 1696A B59250 | 76 MT | 3.742 KG | BLACK, MATTE | | 2 #22 FHDPE SHLD PVC |
| 1696A B59500 | 152 MT | 7.484 KG | BLACK, MATTE | | 2 #22 FHDPE SHLD PVC |

Notes:

C = CRATE REEL PUT-UP.

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

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