# **Detailed Specifications & Technical Data**

**METRIC MEASUREMENT VERSION** 



# 5100FE Multi-Conductor - Commercial Audio Systems - 2 Conductors Cabled

For more Information please call

1-800-Belden1



### **General Description:**

Security & Commercial Audio Cable, Riser-CL3R-FPLR, 2-14 AWG stranded bare copper conductors with polyolefin insulation, Beldfoil® shield and PVC jacket with ripcord

| Usage (Overall)   |  |  |  |  |
|---|--|--|--|--|
| Suitable Applications:  | Intercom/PA Systems, Sound/Audio Systems, Fire Alarm Systems |  |  |  |
| Physical Characteristics (Overall)  |  |  |  |  |
| Conductor   |  |  |  |  |
| AWG:  |  |  |  |  |
| # Conductors AWG Stranding Conductor Material 2   14   19x27   BC - Bare Copper |  |  |  |  |
|   |  |  |  |  |
| Total Number of Conductors:   | 2  |  |  |  |
| Insulation Insulation Material:   |  |  |  |  |
| Insulation Material Wall Thickness (mm)   |  |  |  |  |
| PP - Polypropylene 0.279  |  |  |  |  |
| Outer Shield  |  |  |  |  |
| Outer Shield Material:  |  |  |  |  |
| Outer Shield Trade Name Type Outer Shield Material                              | Coverage (%)   |  |  |  |
| Beldfoil® Tape Aluminum Foil-Polyester Tape w/Si                                | horting Fold 100   |  |  |  |
| Outer Shield Drain Wire AWG:  |  |  |  |  |
| AWG Stranding Drain Wire Conductor Material                                     |  |  |  |  |
| 22   7x#30   TC - Tinned Copper   |  |  |  |  |
| Outer Jacket Outer Jacket Material:   |  |  |  |  |
| Outer Jacket Material Nom. Wall Thickness (mm)                                  |  |  |  |  |
| PVC - Polyvinyl Chloride 0.432  |  |  |  |  |
| Outer Jacket Ripcord:   | Yes  |  |  |  |
| Overall Cable   |  |  |  |  |
| Overall Cabling Lay Length & Direction:   |  |  |  |  |
| Length (mm) Direction Twists (twist/m)  69.850   Left Hand   14.436             |  |  |  |  |
|   |  |  |  |  |
| Overall Cabling Color Code Chart:   |  |  |  |  |
| Number Color  |  |  |  |  |
| 2 White   |  |  |  |  |
|   |  |  |  |  |
| Overall Nominal Diameter:   | 5.639 mm   |  |  |  |
| Mechanical Characteristics (Overall)  |  |  |  |  |
| Operating Temperature Range:  | -20°C To +75°C   |  |  |  |
| UL Temperature Rating:  | 75°C   |  |  |  |
| Bulk Cable Weight:  | 68.160 Kg/Km   |  |  |  |
| Max. Recommended Pulling Tension:   | 557.804 N  |  |  |  |
| Min. Bend Radius/Minor Axis:  | 57.150 mm  |  |  |  |
| Applicable Specifications and Agency Compliance (O                              | verall)  |  |  |  |
| Applicable Standards & Environmental Programs                                   |  |  |  |  |
| NEC/(UL) Specification:   | CL3R, FPLR   |  |  |  |
| NEC Articles:   | 725, 760   |  |  |  |
|   |  |  |  |  |

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## 5100FE Multi-Conductor - Commercial Audio Systems - 2 Conductors Cabled

| 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): | 04/01/2005            |
| 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                   |
| Flame Test                            |                       |
| UL Flame Test:                        | UL1666 Vertical Shaft |
| CSA Flame Test:                       | FT4                   |
| Suitability                           |                       |
| Suitability - Indoor:                 | Yes                   |
| Plenum/Non-Plenum                     |                       |
| Plenum (Y/N):                         | No                    |
| Plenum Number:                        | 6100FE                |

#### **Electrical Characteristics (Overall)**

Nom. Inductance:

Inductance (µH/m) 0.49215

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 319.077

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 8.33374

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 32.810

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

| Description          | Current                             |  |
|----------------------|-------------------------------------|--|
| 10C Temperature Rise | 8 Amps per conductor @ 25°C ambient |  |

### **Put Ups and Colors:**

| Item #          | Putup    | Ship Weight | Color | Notes | Item Desc         |
|-----------------|----------|-------------|-------|-------|-------------------|
| 5100FE 0021000  | 1,000 FT | 39.000 LB   | RED   | С     | 2 #14 PP FS FRPVC |
| 5100FE 008U1000 | 1,000 FT | 39.000 LB   | GRAY  |       | 2 #14 PP FS FRPVC |
| 5100FE 0081000  | 1,000 FT | 39.000 LB   | GRAY  | С     | 2 #14 PP FS FRPVC |
| 5100FE 008500   | 500 FT   | 20.000 LB   | GRAY  |       | 2 #14 PP FS FRPVC |

C = CRATE REEL PUT-UP.

Revision Number: 4 Revision Date: 01-20-2015

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