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

2

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:

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/Shorting Fold | 100 |

Outer Shield Drain Wire 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 | | |
|--------|-------|--|--|
| 1 | Black | | |
| 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 |

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| Max. Recommended Pulling Tension: | 557.804 N | | |
|-----------------------------------|-----------|--|--|
| Min. Bend Radius/Minor Axis: | 57.150 mm | | |
| | | | |

Applicable Specifications and Agency Compliance (Overall)

Ap

| Applicable Standards & Environmental Programs | | | |
|---|-----------------------|--|--|
| NEC/(UL) Specification: | CL3R, FPLR | | |
| NEC Articles: | 725, 760 | | |
| 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) 177.174

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 | | |

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Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|-----------------|----------|-------------|-------|-------|-------------------|
| 5100FE 002Z1000 | 1,000 FT | 41.000 LB | RED | | 2 #14 PO FS FRPVC |
| 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 008Z1000 | 1,000 FT | 41.000 LB | GRAY | | 2 #14 PO 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 |

Notes:

C = CRATE REEL PUT-UP.

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

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