

5002FM Multi-Conductor - Commercial Applications



For more Information
please call

1-800-Belden1

**General Description:**

12 AWG stranded (7x20) bare copper conductors, ceramifiable silicone insulation, Beldfoil® shield, FRPE (low smoke non-halogen) jacket, sequential footage marking every two feet.

Usage (Overall)**Suitable Applications:**

Survivability, Survivability from Attack by Fire, Fire Alarm Circuit Integrity, CI, Survivability by NFPA72, Sim to MI, Similar to Mineral Insulated, FPLR-CI, Emergency Circuits, Notification Devices, Fire Pumps, 2 hour fire rating

Physical Characteristics (Overall)**Conductor****AWG:**

| # Conductors | AWG | Stranding | Conductor Material |
|--------------|-----|-----------|--------------------|
| 4 | 12 | 7x20 | BC - Bare Copper |

Total Number of Conductors:

4

Insulation**Insulation Material:**

| Insulation Material | Wall Thickness (in.) |
|---------------------|----------------------|
| Silicone Rubber | .034 |

Outer Shield**Outer Shield Material:**

| Outer Shield Trade Name | Type | Outer Shield Material | Coverage (%) |
|-------------------------|------|------------------------------|--------------|
| Beldfoil® | Tape | Polyester Tape-Aluminum Foil | 100 |

Outer Shield Drain Wire AWG:

| AWG | Stranding | Drain Wire Conductor Material |
|-----|-----------|-------------------------------|
| 14 | 7x22 | TC - Tinned Copper |

Outer Jacket**Outer Jacket Material:**

| Outer Jacket Material | Nom. Wall Thickness (in.) |
|-------------------------------------|---------------------------|
| FRPE - Flame Retardant Polyethylene | .045 |

Overall Cable**Overall Cabling Lay Length & Direction:**

| Length (in.) | Twists (twist/ft) |
|--------------|-------------------|
| 6.0 | 2.0 |

Overall Cabling Color Code Chart:

| Number | Color |
|--------|---------|
| 1 | Black#1 |
| 2 | Black#2 |
| 3 | Black#3 |
| 4 | Black#4 |

Overall Nominal Diameter:

0.484 in.

Mechanical Characteristics (Overall)

| | |
|-----------------------------------|------------------|
| Operating Temperature Range: | -20°C To +105°C |
| UL Temperature Rating: | 105°C |
| Bulk Cable Weight: | 182 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 347.200 lbs. |
| Min. Bend Radius/Minor Axis: | 4.800 in. |

Applicable Specifications and Agency Compliance (Overall)**Applicable Standards & Environmental Programs**

NEC/(UL) Specification:

FPLR-CI

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| | |
|---------------------------------------|------------|
| NEC Articles: | 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): | 01/01/2005 |
| 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 Riser, UL2196 Two Hour Circuit Integrity |
|----------------|---|

Plenum/Non-Plenum

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Electrical Characteristics (Overall)

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

40

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

1.6

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

2.5

Max. Operating Voltage - UL:

| Voltage | Description |
|-----------|------------------------|
| 300 V RMS | FPLR only applications |
| 41 V RMS | CI applications |

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|--------|-------|-------------|-------|-------|-----------|
|--------|-------|-------------|-------|-------|-----------|

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