



Product: [5020FN](#)

Fire Alarm, #12-2c BC, Shielded, NPLF

Product Description

Fire Alarm Cable, Rated-NPLF, 2-12 AWG solid bare copper conductors with PVC/nylon insulation, overall Beldfoil® shield, PVC jacket with ripcord

Technical Specifications

Product Overview

| | |
|------------------------|--|
| Suitable Applications: | Fire Alarm, Non-Power Limited, Circuits: Audio, Control, Initiating, Notification, Noisy Environment |
|------------------------|--|

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | No. of Conductors |
|-----|-----------|------------------|-------------------|
| 12 | Solid | BC - Bare Copper | 2 |

| | |
|------------------|---|
| Conductor Count: | 2 |
|------------------|---|

Insulation

| Material | Nominal Wall Thickness |
|---|------------------------|
| PVC/Nylon - Polyvinyl Chloride/Nylon Skin | 0.021 in |

Color Chart

| Number | Color |
|--------|-------|
| 1 | Black |
| 2 | Red |

Outer Shield Material

| Type | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|------|-------------|---------------------|--------------|--------------------|---------------|------------------------------|
| Tape | Alum / Poly | Beldfoil® | 100% | TC - Tinned Copper | 20 | Solid |

Outer Jacket Material

| Material | Nominal Diameter | Nominal Wall Thickness | Ripcord |
|--------------------------|------------------|------------------------|---------|
| PVC - Polyvinyl Chloride | 0.337 in | 0.042 in | Yes |

Construction and Dimensions

Cabling

| Twists |
|---------------|
| 3.74 twist/ft |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Nominal Outer Shield DCR |
|-----------------------|--------------------------|
| 1.58 Ohm/1000ft | 6.9 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |
|---|---|
| 66.9 pF/ft | 120.4 pF/ft |

Inductance

Nominal Inductance

0.16 µH/ft

Current

Max. Recommended Current [A]

12 Amps per Conductor at 25°C

Voltage

UL Voltage Rating

150 V RMS

Temperature Range

| | |
|-----------------------|----------------|
| UL Temp Rating: | 75°C |
| Operating Temp Range: | -20°C To +75°C |

Mechanical Characteristics

| | |
|-----------------------------|-----------------|
| Bulk Cable Weight: | 73.4 lbs/1000ft |
| Max. Pull Tension: | 172 lbs |
| Min Bend Radius/Minor Axis: | 3.25 in |

Standards

| | |
|----------------------|-------------|
| NEC Articles: | Article 760 |
| NEC/(UL) Compliance: | NPLF |

Applicable Environmental and Other Programs

| | |
|---------------------------------------|-------------------------------|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/96/EC (BFR): | Yes |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-07-01 |
| MII Order #39 (China RoHS): | Yes |

Suitability

| | |
|-----------------------|-----|
| Suitability - Indoor: | Yes |
|-----------------------|-----|

Flammability, LSOH, Toxicity Testing

| | |
|--------------------|-------------------|
| UL Flammability: | UL1685 UL Loading |
| UL voltage rating: | 150 V RMS |

Plenum/Non-Plenum

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

Part Number

Variants

| Item # | Color | UPC |
|---------------|-------|--------------|
| 5020FN 002500 | Red | 612825155904 |

History

| | |
|----------------------|--|
| Update and Revision: | Revision Number: 0.229 Revision Date: 06-24-2020 |
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