# **Detailed Specifications & Technical Data**

**ENGLISH MEASUREMENT VERSION** 



## 5020FZ Multi-Conductor - Circuit Integrity in a Conduit

For more Information please call

1-800-Belden1



# **Description:**

16 AWG solid bare copper conductors, ceramifiable silicone insulation, FRPE (low smoke non-halogen) jacket, sequential footage marking every two feet.

## **Usage (Overall)**

Suitable Applications:

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

## **Physical Characteristics (Overall)**

### Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
2	12	Solid	BC - Bare Copper

### Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
Silicone Rubber	.035

## **Outer Shield**

**Outer Shield Material:** 

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

### **Outer Shield Drain Wire AWG:**

AWG	Stranding	<b>Drain Wire Conductor Material</b>
14	7x22	TC - Tinned Copper

### **Outer Jacket**

**Outer Jacket Material:** 

Outer Jacket Material	Nom. Wall Thickness (in.)
FRPE - Flame Retardant Polyethylene	.056

### **Overall Cable**

## **Overall Cabling Color Code Chart:**

Number	Color
1	Black
2	Red

Overall Nominal Diameter: 0.420 in.

## **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-20°C To +105°C
UL Temperature Rating:	105°C
Bulk Cable Weight:	108 lbs/1000 ft.
Max. Recommended Pulling Tension:	208 lbs.
Min. Bend Radius (Install)/Minor Axis:	4.200 in.

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## **Applicable Specifications and Agency Compliance (Overall)**

#### **Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	FPLR, Electrical Circuit Protective Systems (FHIT #30)		
NEC Articles:	760		
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):	11/14/2005		
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		
me Test			
UL Flame Test:	UL1666 Riser, UL2196 Two Hour Circuit Integrity (in conduit only)		

# **Electrical Characteristics (Overall)**

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
27

Plenum (Y/N):

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

Max. Operating Voltage - UL:

Voltage 300 V RMS

### **Notes (Overall)**

Notes: UL 2196 (2 Hour Flame Rated) - Only when installed in conduit per FHIT #30 of the UL fire resistance directory.

No

### **Related Documents:**

No related documents are available for this product

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

Item #	Putup	Ship Weight	Color	Notes	Item Desc
5020FZ 0021000	1,000 FT	117.000 LB	RED		1 FS PR #12 SIL FRNHPO

Revision Number: 1 Revision Date: 06-04-2009

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Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.

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