# **Detailed Specifications & Technical Data**

METRIC MEASUREMENT VERSION



## 5120FN Multi-Conductor - NPLF Systems - 2 Conductors Cabled

For more Information please call

1-800-Belden1



## **General Description:**

Fire Alarm Cable, Rated-NPLF, 2-14 AWG solid bare copper conductors with PVC/Nylon insulation, Overall Beldfoil® shield, PVC jacket with ripcord

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## **Usage (Overall)**

Suitable Applications:

Fire Alarm, Audio Circuits, Control Circuits, Initiating Circuits, Notification Circuits, Non-Power Limited Signaling Cable

# **Physical Characteristics (Overall)**

## Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
2	14	Solid	BC - Bare Copper

Total Number of Conductors:

## Insulation

#### **Insulation Material:**

Insulation Material	Wall Thickness (mm)
PVC/Nylon - Polyvinyl Chloride/Nylon	0.5334

#### **Outer Shield**

#### **Outer Shield Material:**

Outer Shield Trade Name Type		Туре	Outer Shield Material	Coverage (%)
	Beldfoil®	Tape	Aluminum Foil-Polyester Tape w/Shorting Fold	100

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

AWG	Stranding	<b>Drain Wire Conductor Material</b>
20	(7x28)	TC - Tinned Copper

#### **Outer Jacket**

## **Outer Jacket Material:**

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	1.0668

Outer Jacket Ripcord: Yes

## **Overall Cable**

#### Overall Cabling Lay Length & Direction:

Length (mm)	Twists (twist/m)
76.1997	13.124

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

Number	Color
1	Black
2	Red

Overall Nominal Diameter: 7.696 mm

## **Mechanical Characteristics (Overall)**

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

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Bulk Cable Weight:	81.553 Kg/Km
Max. Recommended Pulling Tension:	502.647 N
Min. Bend Radius/Minor Axis:	76.200 mm

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

## **Applicable Standards & Environmental Programs**

Applicable Standards & Environmental Programs		
NEC/(UL) Specification:	NPLF	
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):	07/01/2005	
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:	UL1685 UL Loading	
Suitability		
Suitability - Indoor:	Yes	
Plenum/Non-Plenum		
Plenum (Y/N):	No	

## **Electrical Characteristics (Overall)**

Nom. Inductance:

Inductance (µH/m) 0.55777

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 192.923

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 347.13

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 8.2025

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 34.451

Max. Operating Voltage - UL:

Voltage 150 V RMS

Max. Recommended Current:

Current 8 Amps per conductor @ 25°C

## **Put Ups and Colors:**

Item#	Putup	Ship Weight	Color	Notes	Item Desc
		p5			

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5120FN 0021000	1,000 FT	61.000 LB	RED	2 #14 PVC/NYL FS FRPVC
5120FN 002500	500 FT	32.000 LB	RED	2 #14 PVC/NYL FS FRPVC

Revision Number: 2 Revision Date: 01-20-2015

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