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	0.021 in

Color Chart

Number	Color
1	Black
2	Red

Outer Shield

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Bi-Laminate (Alum+Poly)	Beldfoil®	100%	TC - Tinned Copper	20	Solid

Outer Jacket

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 25ºC

Voltage

UL Voltage Rating
150 V RMS

Temperature Range

UL Temp Rating:	75°C
Operating Temperature 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 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes

Flammability, LS0H, Toxicity Testing

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

Plenum/Non-Plenum

Plenum (Y/N):	No

Related Part Numbers

Variants

Item #	Color	UPC
5020FN 002500	Red	612825155904

History

Update and Revision:	Revision Number: 0.313 Revision Date: 02-03-2025

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