



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 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 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
---------------	----

Part Number

Variants

Item #	Color	UPC
5020FN 002500	Red	612825155904

History

Update and Revision:	Revision Number: 0.303 Revision Date: 08-27-2021
----------------------	--

© 2021 Belden, Inc
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief

at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.