



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

Awg Stranding Material No. of Conductors 12 Solid BC - Bare Copper 2 Conductor Count: 2 nsulation Material Nominal Wall Thickness PVC/Nylon - Polyvinyl Chloride/Nylon Skin 0.021 in Color Chart Number Color 1 Black 2 Red Duter Shield Material Material Trade Name Coverage [%] Drainwire Material Drainwire Construction n x D Tape Alum / Poly Bedfoll® 100% TC - Tinned Copper 20 Solid Duter Jacket Material Nominal Diameter Nominal Wall Thickness Ripcord PVC - Polyvinyl Chloride 0.042 in Yes Construction and Dimensions Construction Constructions Solid Solid Conductor DCR Nominal Outer Shield DCR Solom/10000t Solom/1000t Solom/10						
12 Solid BC - Bare Copper 2 Conductor Count: 2 Insulation Material Nominal Wall Thickness PVC/Nylon - Polyvinyl Chloride/Nylon Skin 0.021 in Other Skind Material Number Color 1 Black 2 Red Outer Shield Material Material Trade Name Coverage (%) Drainwire Material Drainwire Construction n x D Tape Alum / Poly Beldfoll® 100% TC - Tinned Copper 20 Solid Other Skield Material Type Material Nominal Diameter Nominal Wall Thickness Ripcord PVC - Polyvinyl Chloride 0.337 in 0.042 in Yes Solid Construction and Dimensions Electrical Characteristics Conductor DCR Naminal Conductor DCR Nominal Outer Shield DCR Nominal Conductor DCR Nominal Cuer Shield DCR 13 80 hm/1000t 6.9 0hm/100tt 6.9 0hm/100tt Solid Solid Solid	Suitable Applications	÷	Fire Alarm, No	n-Power Limited, Circu	its: Audio, Control	Initiating, Notification, Noisy Envir
Awd Stranding Material No. of Conductors 12 Solid BC - Bare Copper 2 Conductor Count 2	hysical Chara	cteristics (Ov	verall)			
Awd Stranding Material No. of Conductors 12 Solid BC - Bare Copper 2 Conductor Count 2						
12 Solid BC - Bare Copper 2 Conductor Count: 2 Insulation Material Nominal Wall Thickness PVC/Nylon - Polyvinyl Chloride/Nylon Skin 0.021 in Other Skind Material Number Color 1 Black 2 Red Outer Shield Material Material Trade Name Coverage (%) Drainwire Material Drainwire Construction n x D Tape Alum / Poly Beldfoll® 100% TC - Tinned Copper 20 Solid Other Skield Material Type Material Nominal Diameter Nominal Wall Thickness Ripcord PVC - Polyvinyl Chloride 0.337 in 0.042 in Yes Solid Construction and Dimensions Electrical Characteristics Conductor DCR Naminal Conductor DCR Nominal Outer Shield DCR Nominal Conductor DCR Nominal Cuer Shield DCR 13 80 hm/1000t 6.9 0hm/100tt 6.9 0hm/100tt Solid Solid Solid						
Conductor Count: 2 insulation Material Nominal Wall Thickness PVC/Nyton - Polyvinyl Chloride/Nyton Skin 0.021 in Color Chart Number Color Number Color Black 2 Red Outer Shield Material Material Trade Name Type Material Trade Name Coverage [%] Drainwire Material Drainwire Construction n x D Tape Alum / Poly Beldfoil® 100% T C - 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 Construction and Dimensions Construction Characteristics Conductor DCR Nominal Conductor DCR Nominal Outer Shield DCR Nominal C						
nsulation Material Nominal Wall Thickness PVC/Nylon - Polyvinyl Chloride/Nylon Skin 0.021 in Color Chart Number Color Number Color 1 Black 2 Red Outer Shield Material Material Trade Namo Coverage [%] Drainwire Material Drainwire Construction n x D Tape Alum / Poly Beldfoli® 100% TC - Tinned Copper 20 Solid Outer Jacket Material Material I Trade Namo Coverage [%] Drainwire Material Drainwire Construction n x D Solid 100% TC - Tinned Copper 20 Solid Solid Outer Jacket Material Nominal Diameter Nominal Wall Thickness Ripcord PVC - Polyvinyl Chloride 0.337 in 0.042 in Yes Construction and Dimensions Electrical Characteristics Solid Solid Conductor DCR Nominal Outer Shield DCR 6.9 Ohm/1000ft 6.9 Ohm/1000ft						
Material Nominal Wall Thickness PVC/Nylon - Polyvinyl Chloride/Nylon Skin 0.021 in Color Chart Number Color Number Color Black Red Outer Shield Material Material Trade Name Coverage [%] Drainwire Material Drainwire Construction n x D Tape Alum / Poly Beldfoli@ 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 Solid <			2			
Material Nominal Diameter Nominal Vall Rel Outer Shield Material Tape Alum / Poly Beldfoll® 100% TC - Tinned Copper 20 Solid Outer Shield Material Tape Alum / Poly Beldfoll® 100% TC - Tinned Copper 20 Solid Outer Jacket Material Material Nominal Diameter Nominal Vall Thickness Ripcord PVC - Polyvinyl Chlorde 0.337 in 0.042 in Yes Construction and Dimensions Electrical Characteristics Conductor DCR Nominal Conductor DCR Nominal Outer Shield DCR 1.58 Ohm/1000ft 6.9 Ohm/1000ft 6.9 Ohm/1000ft			No	Thisburger		
Color Chart Number Color 1 Black 2 Red Outer Shield Material Tape Material Material Material Trade Name Coverage [%] Drainwire Material 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 Electrical Characteristics Conductor DCR Nominal Conductor DCR Nominal Outer Shield DCR 6.9 Ohm/1000ft				Thickness		
Number Color 1 Black 2 Red Puter Shield Material Type Material Material Trade Name Coverage [%] Drainwire Material Drainwire AWG Drainwire Construction n x D Tape Alum / Poly Beldfoll® 100% TC - Tinned Copper 20 Solid Puter Jacket Material Material Nominal Diameter Nominal Wall Thickness Ripcord PVC - Polyvinyl Chloride 0.337 in 0.042 in Yes Construction and Dimensions Stabling Electrical Characteristics conductor DCR Nominal Outer Shield DCR 1.58 Ohm/1000ft 6.9 Ohm/1000ft						
Tape Alum / Poly Beldfoil® 100% TC - Tinned Copper 20 Solid Solid Duter Jacket Material Nominal Diameter Nominal Wall Thickness Ripcord PVC - Polyvinyl Chloride 0.337 in 0.042 in Yes Construction and Dimensions Twists 3.74 twist/ft Electrical Characteristics Sonductor DCR Nominal Outer Sheld DCR 1.58 Ohm/1000ft 6.9 Ohm/1000ft	2 Red	1				
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 Outer Shield DCR 1.58 Ohm/1000ft 6.9 Ohm/1000ft	Type Material I	Material Trade Na	ame Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Material Nominal Diameter Nominal Wall Thickness Ripcord PVC - Polyvinyl Chloride 0.337 in 0.042 in Yes Construction and Dimensions Ves Twists 3.74 twist/ft Electrical Characteristics Ves Conductor DCR Nominal Outer Shield DCR 1.58 Ohm/1000ft 6.9 Ohm/1000ft						
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 Conductor DCR 1.58 Ohm/1000ft 6.9 Ohm/1000ft	Tape Alum / Poly	Beldfoil®	100%	TC - Tinned Copper	20	Solid
Construction and Dimensions Cabling Twists 3.74 twist/ft Electrical Characteristics Conductor DCR Nominal Conductor DCR 1.58 Ohm/1000ft 6.9 Ohm/1000ft			100%	TC - Tinned Copper	20	Solid
Cabling Twists 3.74 twist/ft Electrical Characteristics Conductor DCR Nominal Conductor DCR 1.58 Ohm/1000ft 6.9 Ohm/1000ft	uter Jacket Materia	1			_	Solid
Cabling Twists 3.74 twist/ft Electrical Characteristics Conductor DCR Nominal Conductor DCR 1.58 Ohm/1000ft 6.9 Ohm/1000ft	uter Jacket Materia Material	I Nominal Dia	ameter Nominal W	all Thickness Ripco	_	Solid
Twists 3.74 twist/ft Electrical Characteristics Conductor DCR Nominal Conductor DCR 1.58 Ohm/1000ft 6.9 Ohm/1000ft	uter Jacket Materia Material PVC - Polyvinyl Chlo	Nominal Dia ride 0.337 in	ameter Nominal W 0.042 in	all Thickness Ripco	_	Solid
3.74 twist/ft Electrical Characteristics Conductor DCR Nominal Conductor DCR 1.58 Ohm/1000ft 6.9 Ohm/1000ft	uter Jacket Materia Material PVC - Polyvinyl Chlo	Nominal Dia ride 0.337 in	ameter Nominal W 0.042 in	all Thickness Ripco	_	Solid
Electrical Characteristics Conductor DCR Nominal Conductor DCR 1.58 Ohm/1000ft 6.9 Ohm/1000ft	uter Jacket Materia Material PVC - Polyvinyl Chlo Construction al	Nominal Dia ride 0.337 in	ameter Nominal W 0.042 in	all Thickness Ripco	_	Solid
Nominal Conductor DCR Nominal Outer Shield DCR 1.58 Ohm/1000ft 6.9 Ohm/1000ft	uter Jacket Materia Material PVC - Polyvinyl Chlo Construction at abling	Nominal Dia ride 0.337 in	ameter Nominal W 0.042 in	all Thickness Ripco	_	Solid
Nominal Conductor DCRNominal Outer Shield DCR1.58 Ohm/1000ft6.9 Ohm/1000ft	uter Jacket Materia Material PVC - Polyvinyl Chlo Construction al abling Twists	Nominal Dia ride 0.337 in	ameter Nominal W 0.042 in	all Thickness Ripco	_	Solid
1.58 Ohm/1000ft 6.9 Ohm/1000ft	uter Jacket Materia Material PVC - Polyvinyl Chlo Construction al abling Twists 3.74 twist/ft	Nominal Dia ride 0.337 in nd Dimension	ameter Nominal W 0.042 in	all Thickness Ripco	_	Solid
1.58 Ohm/1000ft 6.9 Ohm/1000ft	uter Jacket Materia Material PVC - Polyvinyl Chlo Construction al abling Twists 3.74 twist/ft	Nominal Dia ride 0.337 in nd Dimension	ameter Nominal W 0.042 in	all Thickness Ripco	_	Solid
	uter Jacket Materia Material PVC - Polyvinyl Chlo Construction al abling Twists 3.74 twist/ft Electrical Chara onductor DCR	Nominal Dia ride 0.337 in and Dimension	ameter Nominal W 0.042 in ns	all Thickness Ripco	_	Solid
Capacitance	uter Jacket Materia Material PVC - Polyvinyl Chlo Construction at abling Twists 3.74 twist/ft Electrical Chara onductor DCR Nominal Conductor	Nominal Dia ride 0.337 in nd Dimension acteristics	ameter Nominal W 0.042 in NS	all Thickness Ripco	_	Solid
	uter Jacket Materia Material PVC - Polyvinyl Chlo Construction at abling Twists 3.74 twist/ft Electrical Chara onductor DCR Nominal Conductor	Nominal Dia ride 0.337 in nd Dimension acteristics	ameter Nominal W 0.042 in NS	all Thickness Ripco	_	Solid

Conductor DCR		
Nominal Conductor DCR	Nominal Outer Sh	ield DCR
1.58 Ohm/1000ft	6.9 Ohm/1000ft	
Capacitance		
Nom. Capacitance Condu	ictor to Conductor	Nom. Ca
66.9 pF/ft		120.4 pF/

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, 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: 0.229 Revision Date: 06-24-2020

© 2020 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.