Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



5020FM Multi-Conductor - Commercial Applications - 2 Cond Cabled



For more Information please call

1-800-Belden1



Description:

12 AWG solid bare copper conductors, ceramifiable silicone insulation, Beldfoil® shield, 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	.034

Outer Shield

Outer Shield Material:

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

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
14	7x22	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
FRPE - Flame Retardant Polyethylene	.045

Overall Cable

Overall Cabling Lay Length & Direction:

Length (in.)	Twists (ft.)
4.5	2.67

Overall Cabling Color Code Chart:

Number	Color
1	Black
2	Red

Overall Nominal Diameter: 0.392 in.

Mechanical Characteristics (Overall)

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Operating Temperature Range:	-20°C To +105°C	
UL Temperature Rating:	105°C	
Bulk Cable Weight:	103 lbs/1000 ft.	

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 Max. Recommended Pulling Tension:
 99.400 lbs.

 Min. Bend Radius (Install)/Minor Axis:
 3.920 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	FPLR-CI	
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):	01/01/2005	
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	
ame Test		
UL Flame Test:	UL1666 Riser, UL2196 Two Hour Circuit Integrity	

No

Electrical Characteristics (Overall)

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

Plenum (Y/N):

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 1.6

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 2.5

Max. Operating Voltage - UL:

Voltage	Description	
300 V RMS	FPLR only applications	
41 V RMS	CI applications	

Related Documents:

No related documents are available for this product

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
5020FM 0021000	1,000 FT	112.000 LB	RED	С	FS PR #12 SIL FRNHPO

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 1 Revision Date: 07-18-2011

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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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