# **Detailed Specifications & Technical Data**

### **METRIC MEASUREMENT VERSION**



## 5220FJ Multi-Conductor - Commercial Applications - 2 Cond Cabled



For more Information please call

1-800-Belden1



### **General Description:**

NEC/(UL) Specification:
NEC Articles:

Fire Alarm Cable, Rated-FPL, 2-16 AWG solid bare copper conductors with foamed polyolefin insulation, Overall Beldfoil® shield, PVC jacket with ripcord

Suitable Applications: Autor Circuits, Audor Circuits, Control Circuits, Notification Circuits, Power Limited, Mid-Capacithnece  Physical Characteristics (Overall)  Conductor  AWG:    Fooductors AWG Stranding Conductor Makerial   2	Usage (Overall)				
Coverage (%)   Cove					
Conductors AWG Stranding Conductor Material    Conductors AWG Stranding Conductor Material   Conductors AWG Stranding Conductors: 2   Insulation Insulation Material:	Physical Characteristics (Overall)				
Conductors AWG Standing Conductor Material   2	Conductor				
Total Number of Conductors: 2  Insulation Insulation Insulation Trade Name Insulation Material:   Insulation Trade Name Insulation Material   Datalene®   FHDPE - Foam High Density Polyethylene   0.381  Outer Shield Outer Shield Material:   Outer Shield Trade Name Type Outer Shield Material   Coverage (%)     Beddrail®   Tape   Aluminum Foil-Polyester Tape w/Shorting Foid   100  Outer Shield Drain Wire AWG:    AWG Stranding Train Wire Conductor Material   20 (7/28)   To - Tinned Copper    Outer Jacket Material   Nom. Wall Thickness (mm)     PVC - Polywing Chloride   0.8382     Outer Jacket Material   Nom. Wall Thickness (mm)     PVC - Polywing Chloride   0.8382     Overall Cabling Lay Length & Direction:   Length (mm) Twists (twistim)   17.8393     Overall Cabling Color Code Chart:   Number Color   1   Black   2   Red     Overall Cabling Color Code Chart:   Number Color   1   Black   2   Red     Overall Cabling Color Code Chart:   Number Color   1   Black   2   Red     Overall Temperature Range   -20°C To +75°C     Ut Temperature Rating   75°C     Bulk Cable Weight   43.009 KgKm     Max. Recommended Pulling Tension : 339.42 N     Min. Bend Radius/Minor Axis : 57.150 mm					
Insulation Insulation Material:	2 16 Solid BC - Bare Copper				
Insulation Material:   Insulation Trade Name   Insulation Material   Wall Thickness (mm)   Datalence®   PHDPE - Foam High Density Polyethylene   0.381     Outer Shield   Outer Shield Material:   Outer Shield Material   Trade Name   Type   Outer Shield Material   Outer Shield Material   Outer Shield Material   Outer Shield Data Wire Awro:   Trade Name   Type   Outer Shield Material   Outer Shield Data Wire Conductor Material   20   (7x28)   TC - Tinned Copper	Total Number of Conductors:	2			
Insulation Trade Name Insulation Material Wall Thickness (mm) Datalene®   FHDPE - Foam High Density Polyethylene   0.381  Outer Shield Outer Shield Material: Outer Shield Material   Tape   Aluminum Foil-Polyester Tape w/Shorting Foid   100  Outer Shield Drain Wire AWG:   AWG: Stranding Drain Wire Conductor Material   20   (7x.28)   TC - Tinned Copper    Outer Jacket Material: Outer Jacket Material   Non-Wall Thickness (mm)   PVC - Polyvinyl Chloride   0.8382    Outer Jacket Material   Shield M					
Outer Shield Material:  Outer Shield Trade Name Type Outer Shield Material  Beddoll®   Tape   Aluminum Foil-Polyester Tape w/Shorting Fold   100    Outer Shield Drain Wire AWS:  AWG Stranding Drain Wire Conductor Material  20   (7x28)   TC - Tinned Copper  Outer Jacket Material   Nom. Wall Thickness (mm)   P/C - Polyvinyl Chloride   0.8382    Outer Jacket Aluminum Foil-Polyester Tape w/Shorting Fold   100    Overall Cabling Lay Length & Direction:  Lingth (mm) Twists (twist/m)   157.14977   17.3893    Overall Cabling Color Code Chart:  Number Color   1   Black   2   Red    Overall Cabling Color Code Chart:  Number Color   1   Black   2   Red    Overall Characteristics (Overall)  Operating Temperature Range:   20°C To +78°C    UL Temperature Rating:   75°C    Bulk Cable Weight:   43.009 Kg/Km    Max. Recommended Pulling Tension:   339.842 N    Min. Bend Radius/Minor Axis:   57.150 mm		Mall Telebrace from			
Outer Shield Outer Shield Material:  Outer Shield Trade Name Type Outer Shield Material Outer Shield Trade Name Type Outer Shield Material Outer Shield Trade Name Tape [Aluminum Foil-Polyester Tape w/Shorting Fold   100  Outer Shield Drain Wire AWG:  AWG Stranding Drain Wire Conductor Material 20 [07x8]   TC-Tinned Copper  Outer Jacket Outer Jacket Material: Outer Jacket Material: Outer Jacket Material Outer Jacket Material Outer Jacket Material Outer Jacket Material Outer Jacket Shield					
Outer Shield Material:  Outer Shield Trade Name Type Outer Shield Material  Outer Shield Drain Wire AWG:  AWG Stranding Drain Wire Conductor Material  20   (7x28)   TC - Tinned Copper  Outer Jacket  Outer Jacket Material:  Outer Jacket Ripcord:   Yes  Overall Cable  Overall Cable  Overall Cabling Lay Length & Direction:  Length (mm) Twists (twistim)  57.149775   17.3893  Overall Cabling Color Code Chart:  Number Color  1   Black   2   Red  Overall Nominal Diameter:   5.969 mm   Mechanical Characteristics (Overall)  Operating Temperature Range:   -20°C To +75°C  UL Temperature Rating:   75°C  Bulk Cable Weight:   43.009 Kg/Km  Max. Recommended Pulling Tension:   339.842 N  Min. Bend Radius/Minor Axis:   57.150 mm	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0.301			
Couter Shield Trade Name   Type   Outer Shield Material   Tape   Aluminum Foil-Polyester Tape w/Shorting Fold   100					
Beldfoil® Tape Aluminum Foil-Polyester Tape wiShorting Foid 100  Outer Shield Drain Wire AWG:  AWG Stranding Drain Wire Conductor Material 20 [7x28] TC-Tinned Copper  Outer Jacket Outer Jacket Material: Out		Coverage (%)			
AWG Stranding Drain Wire Conductor Material 20 (7x28) TC - Tinned Copper  Outer Jacket Material: Outer Jacket Material: Outer Jacket Ripcord: Yes  Outer Jacket Ripcord: Yes  Overall Cabling Lay Length & Direction: Length (rmm) Twists (wist/m) 57.149775 17.3893  Overall Cabling Color Code Chart: Number Color 1 Black 2 Red Overall Nominal Diameter: 5.969 mm  Mechanical Characteristics (Overall)  Operating Temperature Range: -20°C To +75°C  UL Temperature Rating: 75°C  Bulk Cable Weight: 43.009 Kg/Km  Max. Recommended Pulling Tension: 339.842 N  Min. Bend Radius/Minor Axis: 57.150 mm	Beldfoil® Tape Aluminum Foil-Polyester Tape				
20    (7x28)   TC - Tinned Copper	Outer Shield Drain Wire AWG:				
Outer Jacket Material: Outer Jacket Material: Outer Jacket Material: Outer Jacket Material: Outer Jacket Ripcord: Overall Cabling Lay Length & Direction: Length (mm) Twists (twist/m) 57.149775   17.3893  Overall Cabling Color Code Chart: Number Color 1 Black 2 Red Overall Nominal Diameter: 5.969 mm  Mechanical Characteristics (Overall) Operating Temperature Range: -20°C To +75°C UL Temperature Rating: 75°C Bulk Cable Weight: 43.009 Kg/Km Max. Recommended Pulling Tension: 339.842 N Min. Bend Radius/Minor Axis: 57.150 mm					
Outer Jacket Material:   Outer Jacket Material   Nom. Wall Thickness (mm)     PVC - Polyvinyl Chloride   0.8382     Outer Jacket Ripcord: Yes    Overall Cabile   Overall Cabiling Lay Length & Direction:   Length (mm)   Twists (twist/m)     57.149775   17.3893     Overall Robing Color Code Chart:   Number Color   1	20 (7x28) TC - Tinned Copper				
Outer Jacket Material Nom. Wall Thickness (mm) PVC - Polyvinyl Chloride   0.8382  Outer Jacket Ripcord: Yes  Overall Cable Overall Cabling Lay Length & Direction:  Length (mm) Twists (twist/m) 57.149775   17.3893  Overall Cabling Color Code Chart:  Number Color 1	Outer Jacket				
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	Max. Recommended Pulling Tension:	339.842 N			
Annilla della Consellia di una sundi Annina su Consellia de a (Ourselli)	Min. Bend Radius/Minor Axis:	57.150 mm			
	Applicable Considerations and Approximations	(Overall)			

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Page 1 of 2 09-11-2017

# **Detailed Specifications & Technical Data**

### **METRIC MEASUREMENT VERSION**



### 5220FJ Multi-Conductor - Commercial Applications - 2 Cond Cabled

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):	01/01/2004
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
lame Test	
UL Flame Test:	UL1685 UL Loading
Plenum/Non-Plenum	
Plenum (Y/N):	No
Plenum Number:	6220FJ

### **Electrical Characteristics (Overall)**

Nom. Inductance:

Inductance (µH/m) 0.55777

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 103.352

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 185.377

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 12.7959

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 50.035

Max. Operating Voltage - UL:

300 V RMS

Max. Recommended Current:

6.3 Amps per conductor @ 25°C

### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
5220FJ 002U1000	1,000 FT	35.000 LB	RED		2 #16 FPE FS PVC
5220FJ 0021000	1,000 FT	37.000 LB	RED		2 #16 FPE FS PVC
5220FJ 002500	500 FT	18.000 LB	RED		2 #16 FPE FS PVC

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

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Page 2 of 2