

558AFJ Composite - Lock Power, Card Reader, Door Contract, REX Applications



For more Information
please call

1-800-Belden1



General Description:

Access Control Cable, Riser-CMR, 3-22 AWG pairs, 4-18 AWG conductors, 4-22 AWG conductors, 2-22 AWG conductors, All conductors stranded bare copper with polyolefin insulation, Each cable has overall Beldfoil® shield and PVC jacket, Overall PVC jacket

Usage (Overall)

Suitable Applications: Access Control

Twisted Pair

Physical Characteristics

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
3	22	7x30	BC - Bare Copper	0.030

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
PP - Polypropylene	0.007

Twisted Pair Color Code Chart:

Number	Color	Description
1	Black and Red	Card Reader 1
2	Black and Green	Card Reader 2
3	Black and White	Card Reader 3

Individual Shield

Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100.000

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
24	(7x32)	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Outer Jacket Diameter:

Nom. Dia. (in.)
0.201

Outer Jacket Color Code Chart:

Number	Color	Description
1	Orange	Card Reader

Electrical Characteristics

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
43.250

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
24.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
16.300

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 13.900 Ohm/1000 ft

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Max. Recommended Current:

Description	Current
Card Reader	2

Multi Conductor

Physical Characteristics

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material	Dia. (in.)
2	22	7x30	BC - Bare Copper	0.030
4	22	7x30	BC - Bare Copper	0.030
4	18	7x26	BC - Bare Copper	0.047

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)	AWG
PP - Polypropylene	0.008	18
PP - Polypropylene	0.008	22

Insulation Color Code Chart:

Number	Color	Description
1	Black	Door Contact 1
2	Red	Door Contact 2
3	Black	Rex/Spare 1
4	Red	Rex/Spare 2
5	White	Rex/Spare 3
6	Green	Rex/Spare 4
7	Black	Lock/Power 1
8	Red	Lock/Power 2
9	White	Lock/Power 3
10	Green	Lock/Power 4

Individual Shield

Outer Shield

Outer Shield Material:

AWG	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)	Description
22	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100.000	Door Contact
22	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100.000	Rex/Spare
18	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100.000	Lock/Power

Outer Shield Drain Wire AWG:

Component	AWG	Stranding	Drain Wire Conductor Material
Door Contact	24	(7x32)	TC - Tinned Copper
Rex/Spare	24	(7x32)	TC - Tinned Copper
Lock/Power	24	(7x32)	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Outer Jacket Diameter:

Component #	Nom. Dia. (in.)
Door Contact	0.126
Rex/Spare	0.145
Lock/Power	0.188

Outer Jacket Ripcord:

Yes

Outer Jacket Color Code Chart:

Number	Color	Description
1	White	Door Contact
2	Blue	Rex/Spare
3	Gray	Lock/Power

Electrical Characteristics

Nom. Capacitance Conductor to Shield:

Description	Freq. (MHz)	Capacitance (pF/ft)
Door Contact	1.000	62.000
Rex/Spare	1.000	40.500
Lock Power	1.000	48.500

Nom. Capacitance Conductor to Conductor:

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Description	Freq. (MHz)	Capacitance (pF/ft)
Door Contact	1.000	34.500
Rex/Spare	1.000	22.500
Lock Power	1.000	27.000

Nom. Conductor DC Resistance:

Description	DCR @ 20°C (Ohm/1000 ft)
Door Contact	16.400
Rex/Spare	16.400
Lock Power	6.500

Nom. Inner Shield DC Resistance:

Description	DCR @ 20°C (Ohm/1000 ft)
Door Contact	16.100
Rex/Spare	16.100
Lock Power	7.200

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Recommended Current:

Description	Current
Door Contact	2.2 Amps
Rex/Spare	2.2 Amps
Lock Power	4 Amps

Physical Characteristics (Overall)

Conductor

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 0.472 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +75°C

Bulk Cable Weight: 127 lbs/1000 ft.

Max. Recommended Pulling Tension: 200 lbs.

Min. Bend Radius/Minor Axis: 4.750 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC(UL) Specification: CMR

CEC/C(UL) Specification: CMG

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): 06/20/2007

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire & Cable): Yes

MIL Order #39 (China RoHS): Yes

Flame Test

UL Flame Test: UL1666 Riser

CSA Flame Test: FT4

Suitability

Suitability - Indoor: Yes

Plenum/Non-Plenum

Plenum (Y/N): No

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Plenum Number: 658AFJ

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
558AFJ 0041000	1,000 FT	120.000 LB	YELLOW	C	3P22+2C22+4C22+4C18 IFS CMR

Notes:

C = CRATE REEL PUT-UP.

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