**ENGLISH MEASUREMENT VERSION** 



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



For more Information please call

1-800-Belden1



# **Description:**

3 pr. - 22 stranded (7x30) BC cond., PVC insul., Beldfoil® shield, drain wire, PVC jacket; 10 cond. - 22 AWG stranded (7x30) & 18 AWG (7x26) BC cond., PVC insul., Beldfoil® shield, drain wire, PVC jacket with ripcord; 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	Dia. (in.)
PVC - Polyvinyl Chloride	0.049

# **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

#### **Outer Shield**

#### Outer Shield Material:

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

#### **Outer Shield Drain Wire AWG:**

	Stranding	<b>Drain Wire Conductor Material</b>
24	7x32	TC - Tinned Copper

## **Outer Jacket**

#### **Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

## **Outer Jacket Diameter:**

Nom. Dia. (in.) 0.223

### **Outer Jacket Color Code Chart:**

Number	Color	Description
1	Orange	Card Reader

## **Electrical Characteristics**

Nom. Capacitance Conductor to Shield:



Page 1 of 4 02-04-2009





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

## Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft) 33.000

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 16.300

Ind. Pair Nominal Shield DC Resistance @ 20

13.900 Ohm/1000 ft

Deg. C:

# Max. Recommended Current:



## **Multi Conductor**

## **Physical Characteristics**

### Conductor

AWG:

# Conductors	AWG	Stranding	<b>Conductor Material</b>	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	Dia. (in.)	AWG
PVC - Polyvinyl Chloride	0.049	22
PVC - Polyvinyl Chloride	0.066	18

#### **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

## **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	<b>Drain Wire Conductor Material</b>
Door Contact	24	7x32	TC - Tinned Copper
Rex/Spare	24	7x32	TC - Tinned Copper
Lock/Power	20	7x28	TC - Tinned Copper

#### **Outer Jacket**

### **Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

### **Outer Jacket Diameter:**

•	Nom. Dia. (in.)
Door Contact	0.130

Page 2 of 4 02-04-2009

### **ENGLISH MEASUREMENT VERSION**



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

Rex/Spare	0.151		
Lock/Power	0.192		

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	99.000	
Rex/Spare	1.000	59.000	
Lock Power	1.000	76.000	

### Nom. Capacitance Conductor to Conductor:

Description	Freq. (MHz)	55.000 Capacitance (pF/ft)	
Door Contact	1.000		
Rex/Spare	1.000	33.000	
Lock Power	1.000	42.000	

### 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	15.300
Rex/Spare	15.300
Loxk Power	7.300

## 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 Cabling**

Overall Nominal Diameter: 0.493 in.

Me	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 (Install)/Minor Axis:	5 in.				

Page 3 of 4 02-04-2009





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

Applicable Specifications and Agency Compliance (Overall)				
Applicable Standards & Environmental Programs				
NEC/(UL) Specification:	CMR			
CEC/C(UL) Specification:	CMG			
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			
MII 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			
Plenum Number:	658AFJ			

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

Item #	Putup	Ship Weight	Color	Notes	Item Desc
558AFJ 0041000	1,000 FT	124.000 LB	YELLOW	С	COMPOSITE CABLE FRPVC
558AFJ 004500	500 FT	66.000 LB	YELLOW	С	COMPOSITE CABLE FRPVC

#### Notes:

C = CRATE REEL PUT-UP.

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Page 4 of 4 02-04-2009