



**558AFS Composite - Lock Power, Card Reader, Door Contact, REX Applications**

Number	Color
Card Reader	Orange

**MULTICONDUCTOR CABLE(S):**

**CONDUCTOR :**

Number of Conductors 10

Multi-Conductor AWG :

Number of Conductor	AWG	Stranding	Conductor Material	Conductor Diameter (in.)
2	22	7x30	BC - Bare Copper	.030
4	22	7x30	BC - Bare Copper	.030
4	18	7x26	BC - Bare Copper	.047

Multi-Conductor Stranding 7x30, 7x26

Multi-Conductor Conductor Material BC - Bare Copper

**INSULATION :**

Multi-Conductor Insulation Material F-R PVC - Flame Retardant Polyvinyl Chloride

Multi-Conductor Insulation Material (Multi-AWG) :

AWG	Layer Number	Material Trade Name	Material	Wall Thickness (in.)	Diameter (in.)
22			F-R PVC - Flame Retardant Polyvinyl Chloride		.049
18			F-R PVC - Flame Retardant Polyvinyl Chloride		.066

Multi-Conductor Insulation Color Code Chart :

Number	Color	Number	Color
Door Contact 1	Black	Rex/Spare 4	Green
Door Contact 2	Red	Lock/Power 1	Black
Rex/Spare 1	Black	Lock/Power 2	Red
Rex/Spare 2	Red	Lock/Power 3	White
Rex/Spare 3	White	Lock/Power 4	Green

**OUTER SHIELD :**

Multi-Conductor Outer Shield Material Trade Name Beldfoil®

Multi-Conductor Outer Shield Type Tape

Multi-Conductor Outer Shield Material Aluminum Foil-Polyester Tape

Multi-Conductor Outer Shield Material (Multi-AWG) :

AWG	Layer Number	Material Trade Name	Type	Material	% Coverage	Diameter (in.)	Description
22		Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100		Door Contact
22		Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100		Rex/Spare
18		Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100		Lock/Power

Multi-Conductor Outer Shield %Coverage 100 %

Multi-Conductor Outer Shield Drain Wire AWG 24, 20

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Multi-Conductor Outer Shield Drain Wire Stranding 7x32, 7x28  
 Multi-Cond. Outer Shld Drain Wire Cond. Material TC - Tinned Copper

Multi-Conductor Outer Shield Drain Wire :

Drain Wire Component	Drain Wire AWG	Drain Wire Material	Drain Wire Stranding
Door Contact	24	TC - Tinned Copper	7x32
Rex/Spare	24	TC - Tinned Copper	7x32
Lock/Power	20	TC - Tinned Copper	7x28

**OUTER JACKET :**

Multi-Conductor Outer Jacket Diameter :

Component Number	Nominal Diameter (in.)	Component Number	Nominal Diameter (in.)
Door Contact	.140	Lock/Power	.202
Rex/Spare	.161		

Multi-Conductor Outer Jacket Ripcord Yes

Multi-Conductor Outer Jacket Color Code Chart :

Number	Color
Door Contact	White
Rex/Spare	Blue
Lock/Power	Gray

**OVERALL CABLING:**

**CONDUCTOR :**

Total Number of Conductors 16

**OUTER JACKET :**

Overall Cabling Outer Jacket Material Unjacketed

**OVERALL DIAMETER :**

Overall Composite Cabling Nominal Diameter .448 in.

**MECHANICAL CHARACTERISTICS:**

**OVERALL CABLING:**

Overall Cabling Operating Temperature Range 0°C To +75°C  
 Overall Cabling Bulk Cable Weight 95 lbs/1000 ft.  
 Overall Cabling Max. Recommended Pulling Tension 200 lbs.  
 Overall Cabling Min. Bend Radius (Install) 4.4 in.

**APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:**

**COAX:**

**APPLICABLE STANDARDS :**

Coax EU CE Mark (Y/N) Yes

**TWISTED PAIR CABLE(S):**

**APPLICABLE STANDARDS :**

Twisted Pair NEC/(UL) Specification CMR  
 Twisted Pair CEC/C(UL) Specification CMG



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Description	Frequency (kHz)	Start Frequency (kHz)	Stop Frequency (kHz)	Nom. Capacitance Conductor to Conductor (pF/ft)
Door Contact	1			46
Rex/Spare	1			31
Lock Power	1			38

Multi-Conductor Nom. Cond. DC Resist. @ 20 Deg. C :

Description	Nom. Conductor DC Resistance @ 20 Deg. C (Ohms/1000 ft)
Door Contact	16.4
Rex/Spare	16.4
Lock Power	6.5

Multi-Conductor Nom. Inner Shield DC Resistance :

Description	Nom. Inner Shield DC Resistance @ 20 Deg. C (Ohms/1000 ft)
Door Contact	16.1
Rex/Spare	16.1
Lock Power	7.3

Multi-Conductor Max. Operating Voltage - Other 300 V RMS

Multi-Conductor Max. Recommended Current :

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

**NOTES:**

**OVERALL CABLING:**

Overall Cabling Notes Cold environment installation: When installing cables that have been stored at ambient temperatures of 32 degrees Fahrenheit (0 degrees Centigrade) or lower, Belden recommends conditioning of the cable for 12 hours at room temperature prior to individual cable leg separation.

Overall Cabling Notes - cont'd. Banana Peel® US PATENT 7049523.

**PUT-UPS AND COLORS:**

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
558AFS 0001000	4C18 + 4C22 + 3P22 + 2C22 SHLD	1000	106	NONE	C
558AFS 000500	4C18 + 4C22 + 3P22 + 2C22 SHLD	500	53.5	NONE	C

C = CRATE REEL PUT-UP.

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