

658GFS Composite - Lock Power, Card Reader, Door Contact, REX Applications

**Picture
Not Available**

For more Information
please call

1-800-Belden1



General Description:

Access Control Cable, Plenum-CMP, 6-22 AWG pairs, 4-18 AWG conductors, 2-22 AWG conductors, All conductors stranded bare copper with Flamarrest® insulation, Each cable has overall Beldfoil® shield and Flamarrest® jacket, Banana Peel® No overall jacket

Usage (Overall)

Suitable Applications: Access Control

Twisted Pair

Physical Characteristics

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
6	22	7x30	BC - Bare Copper	0.030

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (in.)
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride	0.047

Twisted Pair Color Code Chart:

Number	Color	Description
1	Black and Red	Card Reader 1 Pair 1
2	White and Green	Card Reader 1 Pair 2
3	Orange and Brown	Card Reader 1 Pair 3
4	Black and Red	Card Reader 2 Pair 1
5	White and Green	Card Reader 2 Pair 2
6	Orange and Brown	Card Reader 2 Pair 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 Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

Outer Jacket Diameter:

Nom. Dia. (in.)
0.218

Outer Jacket Ripcord: Yes

Outer Jacket Color Code Chart:

Number	Color	Description
1	Yellow	Card Reader 1
2	Orange	Card Reader 2

Applicable Specifications and Agency Compliance

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/C(UL) Specification: CMG

Flame Test

UL Flame Test: UL1666 Vertical Shaft

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Suitability

Suitability - Indoor: Yes

Electrical Characteristics

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
60.000

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 Deg. C: 13.900 Ohm/1000 ft

Max. Operating Voltage - Other:

Voltage
300 V RMS

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	18	7x26	BC - Bare Copper	0.046

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (in.)	AWG
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride	0.047	22
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride	0.066	18

Insulation Color Code Chart:

Number	Color	Description
1	Black	Door Contact 1
2	Red	Door Contact 2
3	Black	Lock/Power 1
4	Red	Lock/Power 2
5	White	Lock/Power 3
6	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
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
Lock/Power	24	(7x32)	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

Outer Jacket Diameter:

Component #	Nom. Dia. (in.)
Door Contact	0.142
Lock/Power	0.193

Outer Jacket Ripcord: Yes

Outer Jacket Color Code Chart:

Number	Color	Description
1	White	Door Contact

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2	Gray	Lock/Power
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Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG

Flame Test

UL Flame Test:	UL1666 Vertical Shaft
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Suitability

Suitability - Indoor:	Yes
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Electrical Characteristics

Nom. Capacitance Conductor to Shield:

Description	Freq. (MHz)	Capacitance (pF/ft)
Door Contact	1.000	99.000
Lock/Power	1.000	72.000

Nom. Capacitance Conductor to Conductor:

Description	Freq. (MHz)	Capacitance (pF/ft)
Door Contact	1.000	55.000
Lock Power	1.000	40.000

Nom. Conductor DC Resistance:

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

Nom. Inner Shield DC Resistance:

Description	DCR @ 20°C (Ohm/1000 ft)
Door Contact	16.700
Lock/Power	15.900

Max. Operating Voltage - Other:

Voltage
300 V RMS

Max. Recommended Current:

Description	Current
Door Contact	2.2 Amps
Lock/Power	4.0 Amps

Physical Characteristics (Overall)

Conductor

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
Unjacketed

Overall Cable

Overall Nominal Diameter:	0.456 in.
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Mechanical Characteristics (Overall)

Operating Temperature Range:	0°C To +75°C
Bulk Cable Weight:	95 lbs/1000 ft.
Max. Recommended Pulling Tension:	250 lbs.
Min. Bend Radius/Minor Axis:	4.750 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/02/2007
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes

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CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Flame Test

UL Flame Test:	NFPA 262 Plenum Flame Test (UL910)(FT6)
CSA Flame Test:	FT6

Suitability

Suitability - Indoor:	Yes
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Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	558GFS

Notes (Overall)

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. Banana Peel® US PATENT 7049523.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
658GFS 0001000	1,000 FT	112.000 LB	NONE	C	BONDED FILLER COMPOSITE
658GFS 000500	500 FT	56.500 LB	NONE	C	BONDED FILLER COMPOSITE

Notes:

C = CRATE REEL PUT-UP.

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