

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

BELDEN
SENDING ALL THE RIGHT SIGNALS

658GMS Composite - Composite - Access Control Composite

**Picture
Not Available**

For more Information
please call

1-800-Belden1



General Description:

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

Usage (Overall)

Suitable Applications: Access Control, Access Control Doors, Lock Power, Card Reader, Door Contract, REX/Spare

Twisted Pair

Physical Characteristics
Individual Shield

Multi Conductor

Physical Characteristics
Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material	Dia. (in.)
4	22	7x30	BC - Bare Copper	0.030
4	22	7x30	BC - Bare Copper	0.030
4	18	7x26	BC - Bare Copper	0.047
6	22	7x30	BC - Bare Copper	0.030

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	0.064	18

Insulation Color Code Chart:

Number	Color	Description
1	Black	Door Contact 1
2	Red	Door Contact 2
3	White	Door Contact 3
4	Green	Door Contact 4
5	Black	Rex/Spare 1
6	Red	Rex/Spare 2
7	White	Rex/Spare 3
8	Green	Rex/Spare 4
9	Black	Lock/Power 1
10	Red	Lock/Power 2
11	White	Lock/Power 3
12	Green	Lock/Power 4
13	Red	Card Reader 1
14	White	Card Reader 2
15	Green	Card Reader 3
16	Brown	Card Reader 4
17	Blue	Card Reader 5
18	Black	Card Reader 6

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	Card Reader

Outer Shield Drain Wire AWG:

Component	AWG	Stranding	Drain Wire Conductor Material
Card Reader	24	Solid	TC - Tinned Copper

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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	0.147
Rex/Spare	0.147
Lock/Power	0.190
Card Reader	0.179

Outer Jacket Ripcord:

Yes

Outer Jacket Color Code Chart:

Color	Description
White	Door Contact
Blue	Rex/Spare
Gray	Lock/Power
Orange	Card Reader

Applicable Specifications and Agency Compliance

Applicable Standards & Environmental Programs

NEC/UL Specification:

CMP

CEC/C(UL) Specification:

CMP

Flame Test

UL Flame Test:

NFPA 262

Suitability

Suitability - Indoor:

Yes

Electrical Characteristics

Nom. Capacitance Conductor to Shield:

Description	Capacitance (pF/ft)
Card Reader	60.000

Nom. Capacitance Conductor to Conductor:

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

Nom. Conductor DC Resistance:

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

Nom. Inner Shield DC Resistance:

Description	DCR @ 20°C (Ohm/1000 ft)
Card Reader	13.900

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Recommended Current:

Description	Current
Door Contact	2.2 Amps @ 25C ambient (10C temperature rise)
Rex/Spare	2.2 Amps @ 25C ambient (10C temperature rise)
Lock Power	4.0 Amps @ 25C ambient (10C temperature rise)
Card Reader	2.2 Amps @ 25C ambient (10C temperature rise)

Physical Characteristics (Overall)

Conductor

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
Unjacketed

Overall Cable

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Overall Nominal Diameter: 0.401 in.

Mechanical Characteristics (Overall)

Bulk Cable Weight: 100 lbs/1000 ft.
Max. Recommended Pulling Tension: 217 lbs.
Min. Bend Radius/Minor Axis: 4 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP
NEC Articles: 800
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): 04/01/2005
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

Applicable Patents:

Country
www.belden.com/p

Flame Test

UL Flame Test: NFPA 262
CSA Flame Test: FT6

Suitability

Suitability - Indoor: Yes

Plenum/Non-Plenum

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

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.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
658GMS 0001000	1,000 FT	94.000 LB	NONE	C	BONDED FILLER COMPOSITE

Notes:

C = CRATE REEL PUT-UP.

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