

## 558GMS 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, Riser-CMR, 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 FR-PVC insulation, Each cable has PVC jacket, Banana Peel® No overall jacket

### Usage (Overall)

Suitable Applications: Access Control

### Twisted Pair

Physical Characteristics  
Individual Shield

### Multi Conductor

Physical Characteristics  
Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material	Dia. (mm)
4	22	7x30	BC - Bare Copper	0.737
4	22	7x30	BC - Bare Copper	0.737
6	22	7x30	BC - Bare Copper	0.737
4	18	7x26	BC - Bare Copper	1.168

### Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)	Dia. (mm)	AWG
PVC - Polyvinyl Chloride	0.254	1.245	22
PVC - Polyvinyl Chloride	0.254	1.676	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	Black	Card Reader 1
14	Red	Card Reader 2
15	White	Card Reader 3
16	Green	Card Reader 4
17	Yellow	Card Reader 5
18	Orange	Card Reader 6

### Individual Shield

#### Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)	Description
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	7X32	TC - Tinned Copper

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### Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC	0.508

Outer Jacket Diameter:

Component #	Nom. Dia. (mm)
Door Contact	4.013
Rex/Spare	4.013
Reader	4.801
Lock/Power Card	5.029

Outer Jacket Ripcord: Yes

Outer Jacket Color Code Chart:

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

### Mechanical Characteristics

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

UL Temperature Rating: 75C

### Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

NEC Articles: 800

CEC/C(UL) Specification: CMG

### Flame Test

UL Flame Test: UL1666 Vertical Shaft

### Suitability

Suitability - Indoor: Yes

### Electrical Characteristics

Nom. Capacitance Conductor to Shield:

Description	Freq. (MHz)	Capacitance (pF/m)
Card Reader	0.001	183.736

Nom. Capacitance Conductor to Conductor:

Description	Freq. (MHz)	Capacitance (pF/m)
Door Contact	0.001	78.744
Rex/Spare	0.001	78.744
Card Reader	0.001	101.711
Lock Power	0.001	95.149

Nom. Conductor DC Resistance:

Description	DCR @ 20°C (Ohm/km)
Door Contact	52.824
Rex/Spare	52.824
Card Reader	53.480
Lock Power	21.327

Nominal Outer Shield DC Resistance:

Description	DCR @ 20°C (Ohm/km)
Card Reader	45.606

Max. Operating Voltage - UL:

Voltage	Description
300V	UL type CMR

Max. Recommended Current:

Description	Current
Door Contact	2.8 Amps @ 25C ambient (10C temperature rise)
Rex/Spare	2.8 Amps @ 25C ambient (10C temperature rise)
Card Reader	2.0 Amps @ 25C ambient (10C temperature rise)
Lock Power	4.0 Amps @ 25C ambient (10C temperature rise)

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### Physical Characteristics (Overall)

**Conductor**

**Outer Shield**

Outer Shield Material:

<b>Outer Shield Material</b>
Unshielded

**Outer Jacket**

Outer Jacket Material:

<b>Outer Jacket Material</b>
Unjacketed

**Overall Cable**

Overall Nominal Diameter: 10.795 mm

### Mechanical Characteristics (Overall)

Bulk Cable Weight: 139.891 Kg/Km

Max. Recommended Pulling Tension: 965.259 N

Min. Bend Radius/Minor Axis: 107.950 mm

### Applicable Specifications and Agency Compliance (Overall)

**Applicable Standards & Environmental Programs**

NEC/(UL) Specification: CMR

NEC Articles: 800

CEC/C(UL) Specification: CMG

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:

<b>Country</b>
www.belden.com/p

**Flame Test**

UL Flame Test: UL1666 Vertical Shaft

C(UL) Flame Test: FT4

**Suitability**

Suitability - Indoor: Yes

**Plenum/Non-Plenum**

Plenum (Y/N): No

Plenum Number: 658GMS

### 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
558GMS 0001000	1,000 FT	103.000 LB	NONE	C	4C22+4C22+6C22FS+4C18 CMR BP

**Notes:**

C = CRATE REEL PUT-UP.

## METRIC MEASUREMENT VERSION

### 558GMS Composite - Lock Power, Card Reader, Door Contact, REX Applications

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