




**Product:** [558AFS](#) 

Access Control, 16c (#22-3pr, #18-4c, #22-6c), Shielded, Banana Peel®, CMR

### Product Description

Access Control Cable, Riser-CMR, 3-22 AWG pairs, 4-18 AWG conductors, 4-22 AWG conductors, 2-22 AWG conductors, All conductors stranded bare copper with polypropylene insulation, Each component has overall Beldfoil® shield and PVC jacket, Banana Peel® No overall jacket

### Technical Specifications

#### Product Overview

|                        |                                                                                                                                                                            |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Suitable Applications: | Access Control, Security System, Power Limited Controls                                                                                                                    |
| Patent:                | This product has one or more applicable patents. More information on patents can be found at <a href="https://www.belden.com/patents">https://www.belden.com/patents</a> . |

#### Construction Details

##### Conductor

| Element Description | Element      | Number of Element | Size   | Stranding | Material         |
|---------------------|--------------|-------------------|--------|-----------|------------------|
| Card Reader         | Pair(s)      | 3                 | 22 AWG | 7x30      | BC - Bare Copper |
| Door Contact        | Conductor(s) | 2                 | 22 AWG | 7x30      | BC - Bare Copper |
| REX/Spare           | Conductor(s) | 4                 | 22 AWG | 7x30      | BC - Bare Copper |
| Lock Power          | Conductor(s) | 4                 | 18 AWG | 7x26      | BC - Bare Copper |

##### Insulation

| Element Description | Element      | Material           | Nom. Thickness     | Nom. Insulation Diameter | Color Code                                 |
|---------------------|--------------|--------------------|--------------------|--------------------------|--------------------------------------------|
| Card Reader         | Pair(s)      | PP - Polypropylene | 0.009 in (0.23 mm) | 0.045 in (1.1 mm)        | Black & Red, White & Green, Brown & Orange |
| Door Contact        | Conductor(s) | PP - Polypropylene | 0.009 in (0.23 mm) | 0.045 in (1.1 mm)        | Black, Red                                 |
| REX/Spare           | Conductor(s) | PP - Polypropylene | 0.008 in (0.20 mm) | 0.045 in (1.1 mm)        | Black, Red, White, Green                   |
| Lock Power          | Conductor(s) | PP - Polypropylene | 0.009 in (0.23 mm) | 0.062 in (1.6 mm)        | Black, Red, White, Green                   |

##### Inner Shield

| Element Description | Element      | Shield Type | Material                | Coverage | Drainwire Type   |
|---------------------|--------------|-------------|-------------------------|----------|------------------|
| Card Reader         | Pair(s)      | Tape        | Bi-Laminate (Alum+Poly) | 100%     | 24 AWG (7x32) TC |
| Door Contact        | Conductor(s) | Tape        | Bi-Laminate (Alum+Poly) | 100%     | 24 AWG (7x32) TC |
| REX/Spare           | Conductor(s) | Tape        | Bi-Laminate (Alum+Poly) | 100%     | 24 AWG (7x32) TC |
| Lock Power          | Conductor(s) | Tape        | Bi-Laminate (Alum+Poly) | 100%     | 24 AWG (7x32) TC |

##### Inner Jacket

| Element Description | Element      | Material                 | Nom. Thickness     | Nom. Diameter      | Ripcord | Color  |
|---------------------|--------------|--------------------------|--------------------|--------------------|---------|--------|
| Card Reader         | Pair(s)      | PVC - Polyvinyl Chloride | 0.020 in (0.51 mm) | 0.211 in (5.36 mm) | Yes     | Orange |
| Door Contact        | Conductor(s) | PVC - Polyvinyl Chloride | 0.020 in (0.51 mm) | 0.132 in (3.35 mm) | Yes     | White  |
| REX/Spare           | Conductor(s) | PVC - Polyvinyl Chloride | 0.020 in (0.51 mm) | 0.151 in (3.84 mm) | Yes     | Blue   |
| Lock Power          | Conductor(s) | PVC - Polyvinyl Chloride | 0.020 in (0.51 mm) | 0.194 in (4.93 mm) | Yes     | Gray   |

##### Outer Jacket

| Material  | Nom. Diameter      |
|-----------|--------------------|
| No Jacket | 0.448 in (11.4 mm) |

|                                   |                    |
|-----------------------------------|--------------------|
| Table Notes:                      | Banana Peel®       |
| Overall Cable Diameter (Nominal): | 0.448 in (11.4 mm) |

## Electrical Characteristics

### Electricals

| Element Description | Element      | Nom. Conductor DCR            | Nom. Inner Shield DCR         | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Shield | Max. Current                    |
|---------------------|--------------|-------------------------------|-------------------------------|-------------------------------|---------------------------------|---------------------------------|
| Card Reader         | Pair(s)      | 16.3 Ohm/1000ft               | 13.9 Ohm/1000ft (45.6 Ohm/km) | 25 pF/ft (82 pF/m)            | 45 pF/ft (150 pF/m)             | 4.2 Amps per Conductor @ 25°C   |
| Door Contact        | Conductor(s) | 16.4 Ohm/1000ft (53.8 Ohm/km) | 16.1 Ohm/1000ft (52.8 Ohm/km) | 34.5 pF/ft (113 pF/m)         | 62 pF/ft (200 pF/m)             | 6 Amps per Conductor at 25°C    |
| REX/Spare           | Conductor(s) | 16.4 Ohm/1000ft (53.8 Ohm/km) | 16.1 Ohm/1000ft (52.8 Ohm/km) | 22.5 pF/ft (73.8 pF/m)        | 40 pF/ft (130 pF/m)             | 10.5 Amps per Conductor at 25°C |
| Lock Power          | Conductor(s) | 6.5 Ohm/1000ft (21 Ohm/km)    | 7.2 Ohm/1000ft (24 Ohm/km)    | 27 pF/ft (89 pF/m)            | 48.5 pF/ft (159 pF/m)           | 11.2 Amps per Conductor at 25°C |

### Voltage

| UL Voltage Rating |
|-------------------|
| 300 V             |

## Mechanical Characteristics

### Temperature

| UL Temperature | Operating    |
|----------------|--------------|
| 75°C           | 0°C to +75°C |

### Bend Radius

| Stationary Min.  | Installation Min. |
|------------------|-------------------|
| 4.48 in (114 mm) | 4.48 in (114 mm)  |

|                    |                 |
|--------------------|-----------------|
| Max. Pull Tension: | 200 lbs (91 kg) |
| Bulk Cable Weight: | 97 lbs/1000ft   |

## Standards and Compliance

|                                  |                                                                                                                           |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Environmental Suitability:       | Indoor - Riser, Indoor                                                                                                    |
| Sustainability:                  | Product Lens™, Environmental Product Declaration (EPD) Available                                                          |
| Flammability / Reaction to Fire: | UL 1666 Riser, IEC 60332-1-2                                                                                              |
| CPR Compliance:                  | CPR Euroclass: Eca                                                                                                        |
| NEC / UL Compliance:             | Article 800, CMR                                                                                                          |
| CEC / C(UL) Compliance:          | CMG                                                                                                                       |
| European Directive Compliance:   | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance:                 | China RoHS II (GB/T 26572-2011)                                                                                           |
| Plenum Number:                   | 658AFS                                                                                                                    |

## Product Notes

|        |                                                                                                                                                                                                                                                                                      |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.462 Revision Date: 08-04-2022 |
|----------------------|--------------------------------------------------|

## Part Numbers

### Variants

| Item #         | Color                     | Putup Type | Length   | UPC          |
|----------------|---------------------------|------------|----------|--------------|
| 558AFS 000500  | Orange, White, Blue, Gray | Reel       | 500 ft   | 612825164494 |
| 558AFS 0001000 | Orange, White, Blue, Gray | Reel       | 1,000 ft | 612825164487 |

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