



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

Access Control, 16c (#22-3pr, #18-4c, #22-6c), Shielded, Outer Jacket, 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 cable has overall Beldfoil® shield and PVC jacket, overall PVC jacket

## Technical Specifications

### Product Overview

|                        |   |
|------------------------|---|
| Suitable Applications: | Access Control, Security System, Power Limited Controls |
|------------------------|---|

### Construction Details

#### Conductor

| Element Description | Element      | No. of Elements | 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 | 0.008 in (0.20 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)        |  |

#### 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) | 0.194 in (4.93 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. Thickness     | Nom. Diameter      | Ripcord |
|--------------------------|--------------------|--------------------|---------|
| PVC - Polyvinyl Chloride | 0.035 in (0.89 mm) | 0.492 in (12.5 mm) | Yes     |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.492 in (12.5 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)      | 16.9 Ohm/1000ft               | 13.9 Ohm/1000ft (45.6 Ohm/km) | 24 pF/ft (79 pF/m)            | 43.25 pF/ft (141.9 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) | 7.2 Ohm/1000ft (24 Ohm/km)    | 22.5 pF/ft (73.8 pF/m)        | 40.5 pF/ft (133 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. |
|-----------------|-------------------|
| 4.9 in (120 mm) | 4.9 in (120 mm)   |

|                    |                  |
|--------------------|------------------|
| Max. Pull Tension: | 220 lbs (100 kg) |
| Bulk Cable Weight: | 113 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:          | CMR   |
| 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) |
| UK Regulation Compliance:        | UKCA Mark   |
| APAC Compliance:                 | China RoHS II (GB/T 26572-2011)   |
| Plenum Number:                   | 658AFJ  |

## History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.492 Revision Date: 09-07-2025 |
|----------------------|--|

## Part Numbers

#### Variants

| Item #         | Color  | Putup Type  | Length   | UPC          | Footnote |
|----------------|--------|-------------|----------|--------------|----------|
| 558AFJ 004A400 | Yellow | Reel-in-Box | 400 ft   | 612825428732 |          |
| 558AFJ 0041000 | Yellow | Reel        | 1,000 ft | 612825164470 | C        |

|           |                        |
|-----------|------------------------|
| Footnote: | C - CRATE REEL PUT-UP. |
|-----------|------------------------|

© 2025 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.