



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

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|------------------------|---------------------------------------------------------|
| 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) | 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. 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

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|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.489 Revision Date: 01-20-2023 |
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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 |

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