



**Product:** [538AMJ](#)

Access Control, 16c (#18-3pr, #16-4c, #18-6c), Only Card Reader Pairs Shielded, Outer Jacket, CMR

### Product Description

Access Control Cable, Riser-CMR, 3-18 AWG pairs, 4-16 AWG conductors, 4-18 AWG conductors, 2-18 AWG conductors, All conductors stranded bare copper with polyolefin insulation, Only Card Reader pairs have overall Beldfoil® shield and PVC jackets, 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               | 18 AWG | 7x26      | BC - Bare Copper |
| Door Contact        | Conductor(s) | 2               | 18 AWG | 7x26      | BC - Bare Copper |
| REX/Spare           | Conductor(s) | 4               | 18 AWG | 7x26      | BC - Bare Copper |
| Lock Power          | Conductor(s) | 4               | 16 AWG | 19x29     | BC - Bare Copper |

##### Insulation

| Element Description | Element      | Material           | Nom. Insulation Diameter | Color Code                                 |
|---------------------|--------------|--------------------|--------------------------|--|
| Card Reader         | Pair(s)      | PP - Polypropylene |                          | Black & Red, White & Green, Brown & Orange |
| Door Contact        | Conductor(s) | PP - Polypropylene |                          | Black, Red                                 |
| REX/Spare           | Conductor(s) | PP - Polypropylene |                          | Black, Red, White, Green                   |
| Lock Power          | Conductor(s) | PP - Polypropylene | 0.073 in (1.9 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) | No Shield   |                         |          |                  |
| REX/Spare           | Conductor(s) | No Shield   |                         |          |                  |
| Lock Power          | Conductor(s) | No Shield   |                         |          |                  |

##### Inner Jacket

| Element Description | Element      | Material                 | Nom. Diameter      | Ripcord | Color  |
|---------------------|--------------|--------------------------|--------------------|---------|--------|
| Card Reader         | Pair(s)      | PVC - Polyvinyl Chloride | 0.272 in (6.91 mm) | Yes     | Orange |
| Door Contact        | Conductor(s) | PVC - Polyvinyl Chloride | 0.158 in (4.01 mm) | Yes     | White  |
| REX/Spare           | Conductor(s) | PVC - Polyvinyl Chloride | 0.184 in (4.67 mm) | Yes     | Blue   |
| Lock Power          | Conductor(s) | PVC - Polyvinyl Chloride | 0.210 in (5.33 mm) | Yes     | Gray   |

##### Outer Jacket

| Material                 | Nom. Diameter      | Ripcord |
|--------------------------|--------------------|---------|
| PVC - Polyvinyl Chloride | 0.570 in (14.5 mm) | Yes     |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.570 in (14.5 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)      | 6.6 Ohm/1000ft (22 Ohm/km) | 13.1 Ohm/1000ft (43.0 Ohm/km) | 29 pF/ft (95 pF/m)            | 52.25 pF/ft (171.4 pF/m)        | 4 Amps per Conductor at 25°C |
| Door Contact        | Conductor(s) | 6.6 Ohm/1000ft (22 Ohm/km) |                               |                               |                                 | 4 Amps per Conductor at 25°C |
| REX/Spare           | Conductor(s) | 6.6 Ohm/1000ft (22 Ohm/km) |                               |                               |                                 | 4 Amps per Conductor at 25°C |
| Lock Power          | Conductor(s) | 4 Ohm/1000ft (13 Ohm/km)   |                               |                               |                                 | 5 Amps per Conductor at 25°C |

#### Voltage

|                          |
|--------------------------|
| <b>UL Voltage Rating</b> |
| 300 V (UL CMR)           |

## Mechanical Characteristics

#### Temperature

|                  |
|------------------|
| <b>Operating</b> |
| -5°C to +75°C    |

|                    |                            |
|--------------------|----------------------------|
| Max. Pull Tension: | 235 lbs (107 kg)           |
| Bulk Cable Weight: | 170 lbs/1000ft (250 kg/km) |

## Standards and Compliance

|                                  |   |
|----------------------------------|---|
| Environmental Suitability:       | Indoor - Riser, Indoor  |
| Flammability / Reaction to Fire: | UL1666 Riser  |
| 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) |
| APAC Compliance:                 | China RoHS II (GB/T 26572-2011)   |
| Plenum Number:                   | 638AMJ  |

## History

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| Update and Revision: | Revision Number: 0.81 Revision Date: 05-31-2024 |
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