



Part Number: 658AFJ

16c (#22-3pr, #18-4c, #22-4c, #22-2c), Shielded, CMP

Product Description

Access Control Cable, Plenum-CMP, 3-22 AWG pairs, 4-18 AWG conductors, 4-22 AWG conductors, 2-22 AWG conductors, All conductors stranded bare copper with Flamarrest® insulation, Each cable has overall Beldfoil® shield and Flamarrest® jacket, overall Flamarrest® jacket

Technical Specifications

Product Overview

| | |
|------------------------|----------------|
| Environmental Space: | Plenum |
| Suitable Applications: | Access Control |

Physical Characteristics (Overall)

Conductor

| Element | AWG | Stranding | Material | Construction n x D | Nominal Diameter | No. of Conductors | No. of Pairs |
|--------------|-----|-----------|------------------|--------------------|------------------|-------------------|--------------|
| Card Reader | 22 | Stranded | BC - Bare Copper | 7x30 | 0.029 in | | 3 |
| Door Contact | 22 | Stranded | BC - Bare Copper | 7x30 | 0.029 in | 2 | |
| Rex/Spare | 22 | Stranded | BC - Bare Copper | 7x30 | 0.029 in | 4 | |
| Lock/Power | 18 | Stranded | BC - Bare Copper | 7x26 | 0.046 in | 4 | |

| | |
|------------------|----|
| Conductor Count: | 16 |
|------------------|----|

Insulation

| Element | Material | Material Trade Name | Nominal Diameter |
|--------------|---------------------------------------|---------------------|------------------|
| Card Reader | LS PVC - Low Smoke Polyvinyl Chloride | Flamarrest® | 0.047 in |
| Door Contact | LS PVC - Low Smoke Polyvinyl Chloride | Flamarrest® | 0.047 in |
| Rex/Spare | LS PVC - Low Smoke Polyvinyl Chloride | Flamarrest® | 0.047 in |
| Lock/Power | LS PVC - Low Smoke Polyvinyl Chloride | Flamarrest® | 0.066 in |

Color Chart

| Number | Color |
|----------------|------------------|
| Card Reader 1 | Black and Red |
| Card Reader 2 | Green and White |
| Card Reader 3 | Orange and Brown |
| Door Contact 1 | Black |
| Door Contact 2 | Red |
| Rex/Spare 1 | Black |
| Rex/Spare 2 | Red |
| Rex/Spare 3 | White |
| Rex/Spare 4 | Green |
| Lock/Power 1 | Black |
| Lock/Power 2 | Red |
| Lock/Power 3 | White |
| Lock/Power 4 | Green |

Color Chart 4

| Number | Color |
|-------------|--------|
| Card Reader | Orange |

| | |
|--------------|-------|
| Door Contact | White |
| Rex/Spare | Blue |
| Lock/Power | Gray |

Inner Shield Material

| Element | Type | Layer | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire Diameter | Drainwire AWG | Drainwire Construction n x D | Drainwire Position |
|--------------|------|------------------|------------------------------|---------------------|--------------|--------------------|--------------------|---------------|------------------------------|--------------------|
| Card Reader | Tape | 3 x 22 AWG Pairs | Aluminum Foil-Polyester Tape | Beldfoil® | 100 % | TC - Tinned Copper | .024 in | 24 | 7X32 | Over Shield Tape |
| Door Contact | Tape | 2 x 22 AWG | Aluminum Foil-Polyester Tape | Beldfoil® | 100 % | TC - Tinned Copper | .024 in | 24 | 7X32 | Over Shield Tape |
| Rex/Spare | Tape | 4 x 22 AWG | Aluminum Foil-Polyester Tape | Beldfoil® | 100 % | TC - Tinned Copper | .024 in | 24 | 7X32 | Over Shield Tape |
| Lock/Power | Tape | 4 x 18 AWG | Aluminum Foil-Polyester Tape | Beldfoil® | 100 % | TC - Tinned Copper | .024 in | 24 | 7X32 | Over Shield Tape |

Inner Jacket Material

| Element | Material | Material Trade Name | Nominal Diameter | Ripcord |
|--------------|---------------------------------------|---------------------|------------------|---------|
| Card Reader | LS PVC - Low Smoke Polyvinyl Chloride | Flamarrest® | .216 in | Yes |
| Door Contact | LS PVC - Low Smoke Polyvinyl Chloride | Flamarrest® | .128 in | Yes |
| Rex/Spare | LS PVC - Low Smoke Polyvinyl Chloride | Flamarrest® | .147 in | Yes |
| Lock/Power | LS PVC - Low Smoke Polyvinyl Chloride | Flamarrest® | .193 in | Yes |

Outer Jacket Material

| Material | Material Trade Name | Nominal Diameter |
|---------------------------------------|---------------------|------------------|
| LS PVC - Low Smoke Polyvinyl Chloride | Flamarrest® | 0.463 in |

Electrical Characteristics

Conductor DCR

| Element | Nominal Conductor DCR | Nominal Inner Shield DCR |
|--------------|-----------------------|--------------------------|
| Card Reader | 16.1 Ohm/1000ft | 14.9 Ohm/1000ft |
| Door Contact | 16.1 Ohm/1000ft | 17.2 Ohm/1000ft |
| Rex/Spare | 16.1 Ohm/1000ft | 17.2 Ohm/1000ft |
| Lock/Power | 6.4 Ohm/1000ft | 16.4 Ohm/1000ft |

Capacitance

| Element | Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Shield |
|--------------|---|--------------------------------------|
| Card Reader | 33 pF/ft | 60 pF/ft |
| Door Contact | 55 pF/ft | 99 pF/ft |
| Rex / Spare | 33 pF/ft | 59 pF/ft |
| Lock / Power | 42 pF/ft | 76 pF/ft |

Current

| Element | Max. Recommended Current [A] |
|--------------|------------------------------|
| Card Reader | 2.0 Amps |
| Door Contact | 2.2 Amps |
| Rex/Spare | 2.2 Amps |
| Lock Power | 4 Amps |

Voltage

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

Temperature Range

| | |
|-----------------------|--------------|
| Operating Temp Range: | 0°C To +75°C |
|-----------------------|--------------|

Mechanical Characteristics

| | |
|----------------------------------|----------------|
| Bulk Cable Weight: | 108 lbs/1000ft |
| Max Recommended Pulling Tension: | 200 lbs |
| Min Bend Radius/Minor Axis: | 4.75 in |

Standards

| | |
|-------------------------|-----|
| NEC Articles: | 800 |
| NEC/(UL) Specification: | CMP |

| | |
|--------------------------|-----|
| CEC/C(UL) Specification: | CMP |
|--------------------------|-----|

Applicable Environmental and Other Programs

| | |
|---------------------------------------|------------|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| EU Directive 2003/96/EC (BFR): | Yes |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU: | Yes |
| EU Directive Compliance: | Yes |
| EU CE Mark: | Yes |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2007-05-09 |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |

Suitability

| | |
|-----------------------|-----|
| Suitability - Indoor: | Yes |
|-----------------------|-----|

Flammability, LSOH, Toxicity Testing

| | |
|--------------------|-----------|
| UL Flammability: | NFPA 262 |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

| | |
|---------------|-----|
| Plenum (Y/N): | Yes |
|---------------|-----|

Part Number

| | |
|--------------------|--------|
| Non-Plenum Number: | 558AFJ |
|--------------------|--------|

Variants

| Item # | Color | UPC |
|----------------|--------|--------------|
| 658AFJ 0041000 | Yellow | 612825178613 |

History

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| Update and Revision: | Revision Number: 0.283 Revision Date: 08-22-2019 |
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