



**Product:** [658AFJ](#)

Access Control, 16c (#22-3pr, #18-4c, #22-6c), Shielded, Outer Jacket, 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

Suitable Applications:	Access Control, Security System, Power Limited Controls
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### 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)	PVC - Polyvinyl Chloride	0.009 in (0.23 mm)	0.047 in (1.2 mm)	Black & Red, White & Green, Brown & Orange
Door Contact	Conductor(s)	PVC - Polyvinyl Chloride	0.009 in (0.23 mm)	0.047 in (1.2 mm)	Black, Red
REX/Spare	Conductor(s)	PVC - Polyvinyl Chloride	0.009 in (0.23 mm)	0.047 in (1.2 mm)	Black, Red, White, Green
Lock Power	Conductor(s)	PVC - Polyvinyl Chloride	0.010 in (0.25 mm)	0.066 in (1.7 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	0.015 in (0.38 mm)	0.216 in (5.49 mm)	Yes	Orange
Door Contact	Conductor(s)	PVC - Polyvinyl Chloride	0.015 in (0.38 mm)	0.128 in (3.25 mm)	Yes	White
REX/Spare	Conductor(s)	PVC - Polyvinyl Chloride	0.015 in (0.38 mm)	0.147 in (3.73 mm)	Yes	Blue
Lock Power	Conductor(s)	PVC - Polyvinyl Chloride	0.015 in (0.38 mm)	0.193 in (4.90 mm)	Yes	Gray

#### Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.020 in (0.51 mm)	0.463 in (11.8 mm)	Yes

Overall Cable Diameter (Nominal):	0.463 in (11.8 mm)
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### 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	16.19 Ohm/1000ft (53.12 Ohm/km)	33 pF/ft (110 pF/m)	60 pF/ft (200 pF/m)	2.2 Amps per Conductor at 25°C
Door Contact	Conductor(s)	16.4 Ohm/1000ft (53.8 Ohm/km)	18.38 Ohm/1000ft (60.30 Ohm/km)	55 pF/ft (180 pF/m)	99 pF/ft (320 pF/m)	2.2 Amps per Conductor at 25°C
REX/Spare	Conductor(s)	16.4 Ohm/1000ft (53.8 Ohm/km)	19.44 Ohm/1000ft (63.78 Ohm/km)	33 pF/ft (110 pF/m)	59 pF/ft (190 pF/m)	2.2 Amps per Conductor at 25°C
Lock Power	Conductor(s)	6.5 Ohm/1000ft (21 Ohm/km)	17.42 Ohm/1000ft (57.15 Ohm/km)	42 pF/ft (140 pF/m)	76 pF/ft (250 pF/m)	4 Amps per Conductor at 25°C

#### Voltage

UL Voltage Rating
300 V (CMP)

## Mechanical Characteristics

#### Temperature

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

#### Bend Radius

Stationary Min.	Installation Min.
4.63 in (118 mm)	4.63 in (118 mm)

Max. Pull Tension:	157 lbs (71.2 kg)
Bulk Cable Weight:	108 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Indoor - Plenum, Indoor
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
Flammability / Reaction to Fire:	NFPA 262, UL 910 (Plenum), FT6
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 800, CMP
CEC / C(UL) Compliance:	CMP
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)
Non-Plenum Number:	558AFJ

## History

Update and Revision:	Revision Number: 0.498 Revision Date: 06-30-2022
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## Part Numbers

#### Variants

Item #	Color	Putup Type	Length	UPC
658AFJ 0041000	Yellow	Reel	1,000 ft	612825178613

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