



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
Conductor Size:	22 AWG

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

Shielding:	Foil(s) or Copper Tape(s)
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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
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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
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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
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Flammability, LS0H, Toxicity Testing

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

Plenum/Non-Plenum

Plenum (Y/N):	Yes
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Part Number

Non-Plenum Number:	558AFJ
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Variants

Item #	Color
658AFJ 0041000	Yellow

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