



Product: [558AFJ](#)

Access Control, 16c (#22-3pr, #18-4c, #22-6c), Shielded, 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 polyolefin insulation, Each cable has overall Beldfoil® shield and PVC jacket, overall PVC jacket

Technical Specifications

Product Overview

Suitable Applications:	Access Control
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Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	Nominal Diameter	No. of Conductors	No. of Pairs
Card Reader	22	7x30	BC - Bare Copper	0.03 in		3
Door Contact	22	7x30	BC - Bare Copper	0.03 in	2	
Rex/Spare	22	7x30	BC - Bare Copper	0.03 in	4	
Lock Power	18	7x26	BC - Bare Copper	0.047 in	4	

Conductor Count:	16
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Insulation

Element	Material	Nominal Wall Thickness
18	PP - Polypropylene	0.007 in
22	PP - Polypropylene	0.008 in
	PP - Polypropylene	0.008 in
	PP - Polypropylene	0.008 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

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG
Tape	Aluminum Foil-Polyester Tape	Beldfoil®	100.0 %	TC - Tinned Copper	24
Tape	Aluminum Foil-Polyester Tape	Beldfoil®	100.0 %		
Tape					

Inner Jacket Material

Element	Material	Nominal Diameter	Nominal Wall Thickness
Door Contact	PVC - Polyvinyl Chloride	0.211 in	0.020 in
Rex/Spare	PVC - Polyvinyl Chloride	0.132 in	0.020 in
Lock/Power	PVC - Polyvinyl Chloride	0.151 in	0.020 in
Door Contact	PVC - Polyvinyl Chloride	0.194 in	0.020 in
Rex/Spare			
Lock/Power			

Outer Shield Material

Description	Drainwire Construction n x D
Door Contact	(7x32)
Rex/Spare	(7x32)
Lock/Power	(7x32)
	(7x32)

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness	Ripcord
	0.492 in	0.035 in	Yes
PVC - Polyvinyl Chloride	0.132 in		
PVC - Polyvinyl Chloride	0.151 in		
	0.194 in		

Electrical Characteristics

Conductor DCR

Element	Individual Pair Nominal Shield DCR	Nominal Conductor DCR	Nominal Conductor DCR Conductor Resistance	Nominal Inner Shield DCR
Card reader	13.9 Ohm/1000ft	16.3 Ohm/1000ft	16.3 Ohm/1000ft	
Door Contact		16.4 Ohm/1000ft	16.4 Ohm/1000ft	16.1 Ohm/1000ft
Rex/Spare		16.4 Ohm/1000ft	16.4 Ohm/1000ft	7.2 Ohm/1000ft
Lock Power		6.5 Ohm/1000ft	6.5 Ohm/1000ft	

Capacitance

Element	Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Shield
Pair	24 pF/ft	43.25 pF/ft
Door Contact	34.5 pF/ft	62 pF/ft
Rex/Spare	22.5 pF/ft	40.5 pF/ft
Lock Power	27 pF/ft	48.5 pF/ft

Current

Element	Max. Recommended Current [A]
Card Reader	Per conductor @ 25°C: 2 A
Door Contact	Per conductor @ 25°C: 2.2 A
Rex/Spare	Per conductor @ 25°C: 2.2 A
Lock Power	4 Amps

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Operating Temp Range:	-20°C To +75°C
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Mechanical Characteristics

Bulk Cable Weight:	127 lbs/1000ft
Max Recommended Pulling Tension:	200 lbs
Min Bend Radius/Minor Axis:	5 in

Standards

NEC Articles:	800
NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/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):	2007-06-20
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
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Flammability, LSOH, Toxicity Testing

C(UL) Flammability:	FT4
UL Flammability:	UL1666 Riser
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	658AFJ

Part Number

Variants

Item #	Color	UPC	Length	Footnote
558AFJ 0041000	Yellow	612825164470	1,000 ft	C
558AFJ 004A400	Yellow	612825428732	400 ft	

Footnote:	C - CRATE REEL PUT-UP.
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History

Update and Revision:	Revision Number: 0.239 Revision Date: 11-04-2019
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