

Part Number: 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
Conductor Size:	22 AWG

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

Shielding: Individually Foiled + No Overall

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

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	Footnote
558AFJ 0041000	Yellow	C

Footnote:	C - CRATE REEL PUT-UP.
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