

Product: 638AFJ

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

Product Description

Access Control Cable, Plenum-CMP, 3-18 AWG pairs, 4-16 AWG conductors, 4-18 AWG conductors, 2-18 AWG conductors, All conductors stranded bare copper with Flamarrest® insulation, Each cable has overall Beldfoil® shield and Flamarrest® jackets, Overall Flamarrest® jacket

Technical Specifications

Product Overview

Suitable Applications:	Access Control, Security System, Power Limited Controls

Construction Details

Conductor

Element Description	Element	No. of Elements	Size	Stranding	Material
Card Reader	Pair(s)	3	18 AWG	7x26	BC - Bare Copper
Door Contact	Conductor(s)	2	18 AWG	7x26	BC - Bare Copper
REX/Spare	Conductor(s)	4	18 AWG	7x26	BC - Bare Copper
Lock Power	Conductor(s)	4	16 AWG	19x29	BC - Bare Copper

Insulation

Element Description	Element	Material	Nom. Insulation Diameter	Color Code
Card Reader	Pair(s)	PVC - Polyvinyl Chloride		Black & Red, White & Green, Brown & Orange
Door Contact	Conductor(s)	PVC - Polyvinyl Chloride		Black, Red
REX/Spare	Conductor(s)	PVC - Polyvinyl Chloride		Black, Red, White, Green
Lock Power	Conductor(s)	PVC - Polyvinyl Chloride	0.075 in (1.9 mm)	

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. Diameter	Ripcord	Color
Card Reader	Pair(s)	PVC - Polyvinyl Chloride	0.288 in (7.32 mm)	Yes	Orange
Door Contact	Conductor(s)	PVC - Polyvinyl Chloride	0.168 in (4.27 mm)	Yes	White
REX/Spare	Conductor(s)	PVC - Polyvinyl Chloride	0.197 in (5.00 mm)	Yes	Blue
Lock Power	Conductor(s)	PVC - Polyvinyl Chloride	0.224 in (5.69 mm)	Yes	Gray

Outer Jacket

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.582 in (14.8 mm)	Yes

Overall Cable Diameter (Nominal):	0.582 in (14.8 mm)

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)	6.6 Ohm/1000ft (22 Ohm/km)	13.1 Ohm/1000ft (43.0 Ohm/km)	40 pF/ft (130 pF/m)	72 pF/ft (240 pF/m)	4 Amps per Conductor at 25ºC
Door Contact	Conductor(s)	6.6 Ohm/1000ft (22 Ohm/km)	16.7 Ohm/1000ft (54.8 Ohm/km)	70 pF/ft (230 pF/m)	126 pF/ft (413 pF/m)	4 Amps per Conductor at 25ºC
REX/Spare	Conductor(s)	6.6 Ohm/1000ft (22 Ohm/km)	15.9 Ohm/1000ft (52.2 Ohm/km)	42 pF/ft (140 pF/m)	76 pF/ft (250 pF/m)	4 Amps per Conductor at 25ºC
Lock Power	Conductor(s)	4 Ohm/1000ft (13 Ohm/km)	15.9 Ohm/1000ft (52.2 Ohm/km)	45 pF/ft (150 pF/m)	81 pF/ft (270 pF/m)	5 Amps per Conductor at 25ºC

Voltage

UL Voltage Rating
300 V (UL CMP)

Mechanical Characteristics

Temperature

Operating
0°C to +75°C

Max. Pull Tension:	253 lbs (115 kg)
Bulk Cable Weight:	181 lbs/1000ft (269 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor - Plenum, Indoor
Flammability / Reaction to Fire:	NFPA 262
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:	538AFJ

History

Update and Revision:	Revision Number: 0.108 Revision Date: 05-31-2024

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