



Product: [558AFJ](#) 

Access Control, 16c (#22-3pr, #18-4c, #22-4c, #22-2c), Shielded, Outer Jacket, 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 polypropylene insulation, Each cable has overall Beldfoil® shield and PVC jacket, overall PVC jacket

Technical Specifications

Product Overview

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

Conductor

Element Description	Element	No. of Elements	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)	PP - Polypropylene	0.009 in (0.23 mm)	0.045 in (1.1 mm)	Black & Red, White & Green, Brown & Orange
Door Contact	Conductor(s)	PP - Polypropylene	0.008 in (0.20 mm)	0.045 in (1.1 mm)	Black, Red
REX/Spare	Conductor(s)	PP - Polypropylene	0.008 in (0.20 mm)	0.045 in (1.1 mm)	Black, Red, White, Green
Lock Power	Conductor(s)	PP - Polypropylene	0.009 in (0.23 mm)	0.062 in (1.6 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. Thickness	Nom. Diameter	Ripcord	Color
Card Reader	Pair(s)	PVC - Polyvinyl Chloride	0.020 in (0.51 mm)	0.211 in (5.36 mm)	Yes	Orange
Door Contact	Conductor(s)	PVC - Polyvinyl Chloride	0.020 in (0.51 mm)	0.132 in (3.35 mm)	Yes	White
REX/Spare	Conductor(s)	PVC - Polyvinyl Chloride	0.020 in (0.51 mm)	0.194 in (4.93 mm)	Yes	Blue
Lock Power	Conductor(s)	PVC - Polyvinyl Chloride	0.020 in (0.51 mm)	0.194 in (4.93 mm)	Yes	Gray

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.035 in (0.89 mm)	0.492 in (12.5 mm)	Yes

Overall Cable Diameter (Nominal):	0.492 in (12.5 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)	16.9 Ohm/1000ft (55.4 Ohm/km)	13.9 Ohm/1000ft (45.6 Ohm/km)	24 pF/ft (79 pF/m)	43.25 pF/ft (141.9 pF/m)	4.2 Amps per Conductor @ 25°C
Door Contact	Conductor(s)	16.4 Ohm/1000ft (53.8 Ohm/km)	16.1 Ohm/1000ft (52.8 Ohm/km)	34.5 pF/ft (113 pF/m)	62 pF/ft (200 pF/m)	6 Amps per Conductor at 25°C
REX/Spare	Conductor(s)	16.4 Ohm/1000ft (53.8 Ohm/km)	7.2 Ohm/1000ft (24 Ohm/km)	22.5 pF/ft (73.8 pF/m)	40.5 pF/ft (133 pF/m)	10.5 Amps per Conductor at 25°C
Lock Power	Conductor(s)	6.5 Ohm/1000ft (21 Ohm/km)	7.2 Ohm/1000ft (24 Ohm/km)	27 pF/ft (89 pF/m)	48.5 pF/ft (159 pF/m)	11.2 Amps per Conductor at 25°C

Voltage

UL Voltage Rating
300 V

Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.	Installation Min.
4.9 in (120 mm)	4.9 in (120 mm)

Max. Pull Tension:	220 lbs (100 kg)
Bulk Cable Weight:	113 lbs/1000ft (168 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor - Riser, Indoor
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
Flammability / Reaction to Fire:	UL 1666 Riser, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 800, CMR
CEC / C(UL) Compliance:	CMR
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)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Plenum Number:	658AFJ

History

Update and Revision:	Revision Number: 0.638 Revision Date: 11-05-2025
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
558AFJ 004A400	Yellow	Reel-in-Box	400 ft	612825428732	
558AFJ 0041000	Yellow	Reel	1,000 ft	612825164470	C

Footnote:	C - CRATE REEL PUT-UP.
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