

Product: <u>658AFS</u> ⊠ Access Control, 16c (#22-3pr, #18-4c, #22-6c), Shielded, Banana Peel®, 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, Banana Peel® No overall jacket

Technical Specifications

Product Overview

Suitable Applications:	Access Control, Security System, Power Limited Controls
Patent:	This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/patents.

Construction Details

Conductor

Element Description	Element	Number of Element	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)	PVC - Polyvinyl Chloride	0.009 in (0.23 mm)	0.047 in (1.2 mm)	Black & Red, White & Green, Brown & Orange
Door Contact	Conductor(s)	PVC - Polyvinyl Chloride	0.009 in (0.23 mm)	0.047 in (1.2 mm)	Black, Red
REX/Spare	Conductor(s)	PVC - Polyvinyl Chloride	0.009 in (0.23 mm)	0.047 in (1.2 mm)	Black, Red, White, Green
Lock Power	Conductor(s)	PVC - Polyvinyl Chloride	0.010 in (0.25 mm)	0.066 in (1.7 mm)	Black, Red, White, Green

Inner Shield

Element Description	Element	Shield Type	Material	Coverage	Drainwire Type
Card Reader	Pair(s)	Таре	Bi-Laminate (Alum+Poly)	100%	24 AWG (7x32) TC
Door Contact	Conductor(s)	Таре	Bi-Laminate (Alum+Poly)	100%	24 AWG (7x32) TC
REX/Spare	Conductor(s)	Таре	Bi-Laminate (Alum+Poly)	100%	24 AWG (7x32) TC
Lock Power	Conductor(s)	Таре	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	0.015 in (0.38 mm)	0.216 in (5.49 mm)	Yes	Orange
Door Contact	Conductor(s)	PVC - Polyvinyl Chloride	0.015 in (0.38 mm)	0.128 in (3.25 mm)	Yes	White
REX/Spare	Conductor(s)	PVC - Polyvinyl Chloride	0.015 in (0.38 mm)	0.147 in (3.73 mm)	Yes	Blue
Lock Power	Conductor(s)	PVC - Polyvinyl Chloride	0.015 in (0.38 mm)	0.193 in (4.90 mm)	Yes	Gray

Outer Jacket

MaterialNom. DiameNo Jacket0.420 in (10.7)	
Table Notes:	Banana Peel®
Overall Cable Diameter (Nominal):	0.420 in (10.7 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)	16.3 Ohm/1000ft	17.42 Ohm/1000ft (57.15 Ohm/km)	33 pF/ft (110 pF/m)	60 pF/ft (200 pF/m)	2.2 Amps per Conductor at 25℃
Door Contact	Conductor(s)	16.4 Ohm/1000ft (53.8 Ohm/km)	16.19 Ohm/1000ft (53.12 Ohm/km)	55 pF/ft (180 pF/m)	99 pF/ft (320 pF/m)	2.2 Amps per Conductor at 25℃
REX/Spare	Conductor(s)	16.4 Ohm/1000ft (53.8 Ohm/km)	19.44 Ohm/1000ft (63.78 Ohm/km)	33 pF/ft (110 pF/m)	59 pF/ft (190 pF/m)	2.2 Amps per Conductor at 25°C
Lock Power	Conductor(s)	6.5 Ohm/1000ft (21 Ohm/km)	18.38 Ohm/1000ft (60.30 Ohm/km)	40 pF/ft (130 pF/m)	76 pF/ft (250 pF/m)	4 Amps per Conductor at 25°C

Voltage

UL Voltage Rating 300 V (CMP)

Mechanical Characteristics

Temperature

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

Bend Radius

Bulk Cable Weight:

Stationary Min.	Installat	
4.2 in (110 mm)	4.2 in (11	
Max. Pull Tensio	200 lbs	(91 kg)

100 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor - Plenum, Indoor
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
Flammability / Reaction to Fire:	NFPA 262, UL 910 (Plenum), FT6
CPR Compliance:	CPR Euroclass: Eca
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)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Non-Plenum Number:	558AFS

Product Notes

Notes:	Cold environment installation: When installing cables that have been stored at ambient temperatures of 32 degrees Fahrenheit (0 degrees Centigrade) or lower. Belden recommends conditioning of the cable for 12 hours at room temperature prior to individual cable leg separation.

History

Update and Revision: Revision Number: 0.519 Revision Date: 03-04-2023

Part Numbers

Variants

ltem #	Color	Putup Type	Length	UPC
658AFS 000500	Orange, White, Blue, Gray	Reel	500 ft	612825178620
658AFS 0001000	Orange, White, Blue, Gray	Reel	1,000 ft	612825340522

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