



Product: [658AFS](#) 

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
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Physical Characteristics (Overall)

Conductor							
Element	AWG	Stranding	Material	Construction n x D	Nominal Diameter	No. of Conductors	No. of Pairs
Card Reader	22	7x30	BC - Bare Copper	7x30	0.029 in		3
Door Contact	22	7x30	BC - Bare Copper	7x30		2	
REX/Spare	22	7x30	BC - Bare Copper	7x30		4	
Lock Power	18	7x26	BC - Bare Copper	7x26		4	
Conductor Count:		16					

Insulation		
Element	Material	Material Trade Name
Card Reader	PVC-LS - Polyvinyl Chloride (Low Smoke)	Flamarrest®
Door Contact	PVC-LS - Polyvinyl Chloride (Low Smoke)	Flamarrest®
REX/Spare	PVC-LS - Polyvinyl Chloride (Low Smoke)	Flamarrest®
Lock Power	PVC-LS - Polyvinyl Chloride (Low Smoke)	Flamarrest®

Color Chart	
Number	Color
Card Reader 1	Black & Red
Card Reader 2	White & Green
Card Reader 3	Orange & 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

Inner Shield Material							
Element	Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Card Reader	Tape	Alum / Poly	Beldfoil®	100 %	TC - Tinned Copper	24	7x32
Door Contact	Tape	Alum / Poly	Beldfoil®	100 %	TC - Tinned Copper	24	7x32

REX/Spare	Tape	Alum / Poly	Beldfoil®	100 %	TC - Tinned Copper	24	7x32
Lock Power	Tape	Alum / Poly	Beldfoil®	100 %	TC - Tinned Copper	24	7x32

Inner Jacket Material

Element	Material	Material Trade Name	Color	Nominal Diameter	Ripcord
Card Reader	PVC-LS - Polyvinyl Chloride (Low Smoke)	Flamarrest®	Orange	0.216 in	Yes
Door Contact	PVC-LS - Polyvinyl Chloride (Low Smoke)	Flamarrest®	White	0.128 in	Yes
REX/Spare	PVC-LS - Polyvinyl Chloride (Low Smoke)	Flamarrest®	Blue	0.147 in	Yes
Lock Power	PVC-LS - Polyvinyl Chloride (Low Smoke)	Flamarrest®	Gray	0.193 in	Yes

Outer Jacket Material

Nominal Diameter
0.420 in

Electrical Characteristics

Conductor DCR

Element	Nominal Conductor DCR	Nominal Inner Shield DCR
Card Reader	16.3 Ohm/1000ft	14.9 Ohm/1000ft
Door Contact	16.4 Ohm/1000ft	17.2 Ohm/1000ft
REX/Spare	16.4 Ohm/1000ft	17.2 Ohm/1000ft
Lock Power	6.5 Ohm/1000ft	16.4 Ohm/1000ft

Capacitance

Element	Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Shield
Card Reader	33 pF/ft	60 pF/ft
Door Contact	55 pF/ft	99 pF/ft
REX/Spare	33 pF/ft	59 pF/ft
Lock Power	40 pF/ft	76 pF/ft

Current

Element	Max. Recommended Current [A]
Card Reader	2A @ 25C ambient
Door Contact	2.2A @ 25C ambient
REX/Spare	2.2 Amps @ 25C ambient
Lock Power	4A @ 25C ambient

Voltage

UL Description	UL Voltage Rating
Card Reader	300 V RMS
Door Contact	300 V RMS
REX/Spare	300 V RMS
Lock Power	300 V RMS

Temperature Range

Operating Temp Range:	0°C To +75°C
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Mechanical Characteristics

Bulk Cable Weight:	100 lbs/1000ft
Max Recommended Pulling Tension:	200 lbs
Min Bend Radius/Minor Axis:	4.2 in

Standards

NEC Articles:	800
NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
CPR Euroclass:	Eca

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Plenum
EU Directive 2000/53/EC (ELV):	Yes

EU Directive 2003/96/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:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-04-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
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Flammability, LS0H, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes
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Part Number

Non-Plenum Number:	558AFS
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Variants

Item #	UPC
658AFS 0001000	612825340522
658AFS 000500	612825178620
Footnote:	C - CRATE REEL PUT-UP.
Patent:	https://www.belden.com/resources/patents

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.
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History

Update and Revision:	Revision Number: 0.260 Revision Date: 02-18-2020
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