Part Number: 558AFS

16c (#22-3pr, #18-4c, #22-6c), Shielded, CMR, Banana Peel®

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 component has overall Beldfoil® shield and PVC jacket, Banana Peel® No overall jacket

Technical Specifications

Product Overview

Suitable Applications:	Access Control

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors	No. of Pairs
Card Reader	22	7x30	BC - Bare Copper	6	3
Door Contact	22	7x30	BC - Bare Copper	2	
Rex/Spare	22	7x30	BC - Bare Copper	4	
Lock Power	18	7x26	BC - Bare Copper	4	

Conductor Count:	16
Total Number of Pairs:	3

Insulation

Element	Material	Nominal Diameter	Nominal Wall Thickness
Card Reader	PP - Polypropylene	0.042 in	0.007 in
Door Contact	PP - Polypropylene	0.045 in	0.008 in
Rex/Spare	PP - Polypropylene	0.045 in	0.008 in
Lock Power	PP - Polypropylene	0.062 in	0.008 mm

Color Chart

Number	Color
Card Reader 1	Black and Red
Card Reader 2	Orange and Brown
Card Reader 3	White and Green
Door Contact 1	Red
Door Contact 2	Black
Rex/Spare 1	Red
Rex/Spare 2	Green
Rex/Spare 3	White
Rex/Spare 4	Black
Lock Power 1	Red
Lock Power 2	Green
Lock Power 3	White
Lock Power 4	Black

Inner Shield Material

Type	Material	Coverage [%]	Drainwire AWG	Drainwire Construction n x D
Tape	Al/poly	100 %	24	7x32
Tape	Al/poly	100 %	24	7x32
Tape	Al/poly	100 %	24	7x32
Tape	Al/poly	100 %	24	7x32

Inner Jacket Material

Element	Material	Nominal Diameter	Ripcord
Card Reader	F-R PVC - Flame Retardant Polyvinyl Chloride	0.211 in	Yes
Door Contact	F-R PVC - Flame Retardant Polyvinyl Chloride	0.132 in	Yes
Rex/Spare	F-R PVC - Flame Retardant Polyvinyl Chloride	0.151 in	Yes
Lock Power	F-R PVC - Flame Retardant Polyvinyl Chloride	0.194 in	Yes

Outer Jacket Material

Material
Unjacketed

Electrical Characteristics

Conductor DCR

Element	Nominal Conductor DCR	Nominal Conductor DCR Conductor Resistance	Nominal Inner Shield DCR
Card Reader	16.4 Ohm/1000ft	16.3 Ohm/1000ft	13.9 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	16.1 Ohm/1000ft
Lock Power	6.5 Ohm/1000ft	6.5 Ohm/1000ft	7.2 Ohm/1000ft

Capacitance

Element	Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Shield
Card Reader	25 pF/ft	45 pF/ft
Door Contact	34.5 pF/ft	62 pF/ft
Rex/Spare	22.5 pF/ft	40 pF/ft
Lock Power	27 pF/ft	48.5 pF/ft

Current

Element	Max. Recommended Current [A]
Card Reader	2.0 amps @ 25C ambient
Door Contact	2.2 Amps @ 25C ambient
Rex/Spare	2.2 Amps @ 25C ambient
Lock Power	4 Amps @ 25C ambient

Voltage

UL Description	UL Voltage Rating
Card Reader	300 V RMS
Door Contact	300V RMS
Rex/Spare	300V RMS

Temperature Range

Operating Temp Range:	0°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	97 lbs/1000ft
Max Recommended Pulling Tension:	200 lbs
Min Bend Radius/Minor Axis:	4.5 in

Standards

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

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	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:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-04-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1666 Vertical Shaft

Part Number

Plenum (Y/N):	No
Plenum Number:	658AFS

Variants

Item #	Color	Footnote
558AFS 0001000	Orange/White/Blue/Gray	C
558AFS 000500	Orange/White/Blue/Gray	C

Footnote:	C - CRATE REEL PUT-UP.

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.