Product: 658GFS

Access Control, 18c (#22-6pr, #18-4c, #22-2c), Shielded, CMP

Product Description

Access Control Cable, Plenum-CMP, 6-22 AWG pairs, 4-18 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	No. of Elements	Size	Stranding	Material
Card Reader	Pair(s)	3	22 AWG	7x30	BC - Bare Copper
Card Reader	Pair(s)	3	22 AWG	7x30	BC - Bare Copper
Door Contact	Conductor(s)	2	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
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
Lock Power	Conductor(s)	PVC - Polyvinyl Chloride	0.010 in (0.25 mm)	0.066 in (1.7 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
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
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	0.015 in (0.38 mm)	0.216 in (5.49 mm)	Yes	Orange
Card Reader	Pair(s)	PVC - Polyvinyl Chloride	0.015 in (0.38 mm)	0.216 in (5.49 mm)	Yes	Yellow
Door Contact	Conductor(s)	PVC - Polyvinyl Chloride	0.015 in (0.38 mm)	0.128 in (3.25 mm)	Yes	White
Lock Power	Conductor(s)	PVC - Polyvinyl Chloride	0.015 in (0.38 mm)	0.193 in (4.90 mm)	Yes	Gray

Outer Jacket

Material
No Jacket

Table Notes:	Banana Peel®
Overall Cable Diameter (Nominal):	0.456 in (11.6 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	16.19 Ohm/1000ft (53.12 Ohm/km)	33 pF/ft (110 pF/m)	60 pF/ft (200 pF/m)	2.2 Amps per Conductor at 25ºC
Card Reader	Pair(s)	16.3 Ohm/1000ft (53.5 Ohm/km)	19.44 Ohm/1000ft (63.78 Ohm/km)	33 pF/ft (110 pF/m)	60 pF/ft (200 pF/m)	2.2 Amps per Conductor at 25ºC
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 25ºC
Lock Power	Conductor(s)	6.5 Ohm/1000ft (21 Ohm/km)	17.42 Ohm/1000ft (57.15 Ohm/km)	40 pF/ft (130 pF/m)	72 pF/ft (240 pF/m)	4 Amps per Conductor at 25ºC

Voltage

UL Voltage Rating
300 V (CMP)

Mechanical Characteristics

Temperature

UL Temperature	Operating	Installation
75°C	-5°C to +75°C	-5°C To +75°C

Bend Radius

Stationary Min.	Installation Min.
4.56 in (116 mm)	4.56 in (116 mm)

Max. Pull Tension:	148.7 lbs (67.45 kg)
Bulk Cable Weight:	105 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor - Plenum, Indoor
Flammability / Reaction to Fire:	NFPA 262, UL 910 (Plenum), FT6
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:	558GFS

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. Banana Peel® US PATENT 7049523.

History

Update and Revision:	Revision Number: 0.466 Revision Date: 12-22-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
658GFS 000500	Orange, Yellow, White, Gray	Reel	500 ft	612825178651	C
658GFS 0001000	Orange, Yellow, White, Gray	Reel	1,000 ft	612825178644	C