



**Product:** [558ALY](#) 

Access Control, 16c (#22-3pr, #18-4c, #22-6c), Shielded, LSZH Banana Peel®, CMG-LS

## 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 cable has overall Beldfoil® shield and LSZH 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 <a href="https://www.belden.com/patents">https://www.belden.com/patents</a> .

### Construction Details

#### Conductor

Element Description	Element	No. of Elements	Size	Stranding	Material
Card Reader	Pair(s)	3	22 AWG	7x30	TC - Tinned Copper
Door Contact	Conductor(s)	2	22 AWG	7x30	TC - Tinned Copper
REX/Spare	Conductor(s)	4	22 AWG	7x30	TC - Tinned 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	0.0085 in (0.22 mm)	0.046 in (1.2 mm)	Black & Red, White & Green, Brown & Orange
Door Contact	Conductor(s)	PP - Polypropylene	0.0085 in (0.22 mm)	0.046 in (1.2 mm)	Black, Red
REX/Spare	Conductor(s)	PP - Polypropylene	0.0085 in (0.22 mm)	0.046 in (1.2 mm)	Black, Red, White, Green
Lock Power	Conductor(s)	PO - Polyolefin	0.0085 in (0.22 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%	22 AWG (7x30) TC
REX/Spare	Conductor(s)	Tape	Bi-Laminate (Alum+Poly)	100%	22 AWG (19x34) TC
Lock Power	Conductor(s)	Tape	Bi-Laminate (Alum+Poly)	100%	20 AWG (7x28) TC

#### Inner Jacket

Element Description	Element	Material	Nom. Thickness	Nom. Diameter	Ripcord	Color
Card Reader	Pair(s)	LSZH - Low Smoke Zero Halogen (Flame Retardant)	0.035 in (0.89 mm)	0.252 in (6.40 mm)	Yes	Orange
Door Contact	Conductor(s)	LSZH - Low Smoke Zero Halogen (Flame Retardant)	0.035 in (0.89 mm)	0.165 in (4.19 mm)	Yes	White
REX/Spare	Conductor(s)	LSZH - Low Smoke Zero Halogen (Flame Retardant)	0.035 in (0.89 mm)	0.233 in (5.92 mm)	Yes	Blue
Lock Power	Conductor(s)	LSZH - Low Smoke Zero Halogen (Flame Retardant)	0.035 in (0.89 mm)	0.233 in (5.92 mm)	Yes	Gray

#### Outer Jacket

Nom. Diameter	
0.493 in (12.5 mm)	
Outer Jacket1 Table Notes:	Banana Peel®
Overall Cable Diameter (Nominal):	0.493 in (12.5 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	13.9 Ohm/1000ft (45.6 Ohm/km)	23 pF/ft (75 pF/m)	41 pF/ft (130 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)	36 pF/ft (120 pF/m)	65 pF/ft (210 pF/m)	6 Amps per Conductor at 25°C
REX/Spare	Conductor(s)	16.4 Ohm/1000ft (53.8 Ohm/km)	16.1 Ohm/1000ft (52.8 Ohm/km)	23 pF/ft (75 pF/m)	41 pF/ft (130 pF/m)	10.5 Amps per Conductor at 25°C
Lock Power	Conductor(s)	6.5 Ohm/1000ft (21 Ohm/km)	7.3 Ohm/1000ft (24 Ohm/km)	30 pF/ft (98 pF/m)	54 pF/ft (180 pF/m)	11.2 Amps per Conductor at 25°C

### Voltage

UL Voltage Rating
300 V

## Mechanical Characteristics

### Temperature

UL Temperature	Operating
105°C	-20°C to +105°C

### Bend Radius

Stationary Min.	Installation Min.
4.93 in (125 mm)	4.93 in (125 mm)

Max. Pull Tension:	200 lbs (91 kg)
Bulk Cable Weight:	153 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Indoor (Not Riser or Plenum), Indoor
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
Flammability / Reaction to Fire:	UL 1685 FT4 Loading, Limited Smoke, FT4
CPR Compliance:	CPR Euroclass: Dca-s1,d1,a1
NEC / UL Compliance:	Article 800, CMG-LS
CEC / C(UL) Compliance:	CMG-LS
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:	658AFS
Non-Plenum Number:	558ALY

## 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: 0.192 Revision Date: 09-07-2025
----------------------	--

## Part Numbers

### Variants

Item #
558ALY 0001000

© 2025 Belden, Inc  
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.