

12558AFS Composite - Lock Power, Card Reader, Door Contact, REX Applications



For more Information
please call

1-800-Belden1



Description:

18 AWG stranded bare copper conductors, PP insulation, PVC jackets, no overall jacket, all cables are Beldfoil® shielded, cable jackets are color coded by application, aluminum interlocked armor and PVC outer jacket applied over composite core.

Usage (Overall)

Suitable Applications: Access Control

Twisted Pair

Physical Characteristics

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
3	22	7x30	BC - Bare Copper	0.030

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
PP - Polypropylene	0.007

Inner Jacket

Inner Jacket Color Code Chart:

Number	Color
Card Reader 1	Black and Red
Card Reader 2	White and Green
Card Reader 3	Orange and Brown

Individual Shield

Individual Shield Color Code Chart:

Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100.000

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
24	7x32	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
F-R PVC - Flame Retardant Polyvinyl Chloride

Outer Jacket Diameter:

Nom. Dia. (in.)
0.211

Outer Jacket Ripcord: Yes

Outer Jacket Color Code Chart:

Number	Color
--------	-------

12558AFS Composite - Lock Power, Card Reader, Door Contact, REX Applications

Card Reader	Orange
-------------	--------

Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/C(UL) Specification: CMG

Flame Test

UL Flame Test: UL1666 Vertical Shaft

Suitability

Suitability - Indoor: Yes

Electrical Characteristics

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

45.000

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

25.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

16.300

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 13.900 Ohm/1000 ft

Max. Operating Voltage - Other:

Voltage	Description
---------	-------------

null	300 V RMS
------	-----------

Max. Recommended Current:

Description	Current
-------------	---------

Card Reader	2
-------------	---

Multi Conductor

Physical Characteristics

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material	Dia. (in.)
2	22	7x30	BC - Bare Copper	0.030
4	22	7x30	BC - Bare Copper	0.030
4	18	7x26	BC - Bare Copper	0.047

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)	AWG
PP - Polypropylene	0.007	22
PP - Polypropylene	0.007	18

Insulation Color Code Chart:

Color	Description
Black	Door Contact 1
Red	Door Contact 2
Black	Rex/Spare 1
Red	Rex/Spare 2
White	Rex/Spare 3
Green	Rex/Spare 4
Black	Lock/Power 1
Red	Lock/Power 2
White	Lock/Power 3
Green	Lock/Power 4

12558AFS Composite - Lock Power, Card Reader, Door Contact, REX Applications

Individual Shield

Individual Shield Color Code Chart:

Outer Shield

Outer Shield Material:

AWG	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)	Description
22	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100.000	Door Contact
22	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100.000	Rex/Spare
18	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100.000	Lock/Power

Outer Shield Drain Wire AWG:

Component	AWG	Stranding	Drain Wire Conductor Material
Door Contact	24	7x32	TC - Tinned Copper
Rex/Spare	24	7x32	TC - Tinned Copper
Lock/Power	24	7x32	TC - Tinned Copper

Outer Jacket

Outer Jacket Diameter:

Component #	Nom. Dia. (in.)
Door Contact	0.127
Rex/Spare	0.145
Lock/Power	0.186

Outer Jacket Ripcord: Yes

Outer Jacket Color Code Chart:

Number	Color
Door Contact	White
Rex/Spare	Blue
Lock/Power	Gray

Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs

NEC/(UL) Specification: CM

CEC/C(UL) Specification: CMG

Flame Test

UL Flame Test: UL1685

Suitability

Suitability - Indoor: Yes

Electrical Characteristics

Nom. Capacitance Conductor to Shield:

Description	Freq. (MHz)	Capacitance (pF/ft)
Door Contact	1.000	69.000
Rex/Spare	1.000	43.250
Lock Power	1.000	51.250

Nom. Capacitance Conductor to Conductor:

Description	Freq. (MHz)	Capacitance (pF/ft)
Door Contact	1.000	38.250
Rex/Spare	1.000	24.000
Lock Power	1.000	28.500

Nom. Conductor DC Resistance:

Description	DCR @ 20°C (Ohm/1000 ft)
Door Contact	16.400
Rex/Spare	16.400
Lock Power	6.500

Nom. Inner Shield DC Resistance:

Description	DCR @ 20°C (Ohm/1000 ft)
Door Contact	16.100

12558AFS Composite - Lock Power, Card Reader, Door Contact, REX Applications

Rex/Spare	16.100
Lock Power	7.200

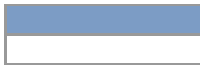
Max. Operating Voltage - Other:

Voltage
300 V RMS

Max. Recommended Current:

Description	Current
Door Contact	2.2 Amps
Rex/Spare	2.2 Amps
Lock Power	4 Amps

Physical Characteristics (Overall)



Overall Cabling

Overall Nominal Diameter: 0.448 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +75°C

Bulk Cable Weight: 95.000 lbs/1000 ft.

Max. Recommended Pulling Tension: 200.000 lbs.

Min. Bend Radius (Install)/Minor Axis: 4.400 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 04/01/2005

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire & Cable): Yes

MII Order #39 (China RoHS): Yes

Plenum/Non-Plenum

Plenum (Y/N): No

Notes (Overall)

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.

An aluminum interlocked armor and overall PVC jacket are applied over the 558AFS Belden Core

Diameter over aluminum interlocked armor:	.648"
Diameter over PVC outer Jacket:	.748"
Minimum bending radius:	9"

12558AFS Composite - Lock Power, Card Reader, Door Contact, REX Applications

Revision Number: 0 Revision Date: 12-12-2012

© 2008 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 herein 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 "AS IS" 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 EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure 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. This 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.