Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



2181LA Multi-Conductor - Media, Automation and Lighting Control



For more Information please call

1-800-Belden1



General Description:

Lighting & Automation Cable, Rated-CL3, 2-12 AWG bare copper conductors unshielded, PVC insulation (power), 1-18 AWG bare copper conductor unshielded, PVC insulation and 1 (data) pair 22 AWG stranded bare copper, Polypropylene insulation, Beldfoil®shield w drain, PVC jacket.

Usage (Overall)

Suitable Applications:

Automation/Lighting Control

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	# Pairs	AWG	Stranding	Conductor Material
	1	22	7x30	BC - Bare Copper
1		18	7x26	BC - Bare Copper
2		12	7X20	BC - Bare Copper

Total Number of Conductors:

5

Insulation

Insulation Material:

Insulation Material	AWG
PP - Polypropylene	22
PP - Polypropylene	18
PP - Polypropylene	12

Inner Shield

Inner Shield Material:

Layer #	Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)	Stranding	Dia. (mm)	Conductor Material
22 AWG Pair	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100			

Inner Shield Drain Wire AWG:



Inner Shield Drain Wire Stranding: 7x32

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Outer Jacket Ripcord: No

Overall Cable

Overall Nominal Diameter: 7.010 mm

Page 1 of 3 11-03-2020

Detailed Specifications & Technical Data





2181LA Multi-Conductor - Media, Automation and Lighting Control

Pair

Pair Color Code Chart:

Color
Purple & White (22AWG)
Red & Black (12AWG)
Org (18AWG)

Mechanical Characteristics (Overall)		
	Operating Temperature Range:	-20°C To +60°C
	Bulk Cable Weight:	148.820 Kg/Km
	Max. Recommended Pulling Tension:	867.399 N
	Min. Bend Radius/Minor Axis:	76.200 mm

Applicable Standards & Environmental Programs

Applicable Standards & Environmental Pi	rograms
NEC/(UL) Specification:	CL3R
CEC/C(UL) Specification:	CL3R
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
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
Flame Test	
UL Flame Test:	UL1666 Riser
CSA Flame Test:	FT4
Suitability	
Suitability - Indoor:	Yes

Suit

Plenum/Non-Plenum

Plenum (Y/N): No Plenum Number: 2181LP

Electrical Characteristics (Overall)

Nom. Capacitance Conductor to Conductor:

Description	Capacitance (pF/m)	
22 AWG Pair	82.025	

Nom. Conductor DC Resistance:

Description	DCR @ 20°C (Ohm/km)
22AWG	52.824
18AWG	21.327
12AWG	5.250

Max. Operating Voltage - UL:

	Voltage
ı	300 V RMS

Max. Recommended Current:

Description		
22AWG	3.8 Amps per conductor @ 25°C	

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



2181LA Multi-Conductor - Media, Automation and Lighting Control

18AWG	7.2 Amps per conductor @ 25°C
12AWG	17.2 Amps per conductor @ 25°C

Notes (Overall)

Notes: Sequential footage marking every two feet.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc

Revision Number: 0 Revision Date: 04-08-2015

© 2020 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. Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).