Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



2181LP Multi-Conductor - Lighting Control Cable

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For more Information please call

1-800-Belden1



General Description:

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

Usage (Overall)

Suitable Applications:

Automation/Lighting Control

Physical Characteristics (Overall)

Conductor

AWG:

#	# Conductors	# Pairs	AWG	Stranding	Conductor Material
Γ		1	22	7x30	BC - Bare Copper
1	1		18	7x26	BC - Bare Copper
[2	2		12	7x20	BC - Bare Copper

Total Number of Conductors:

5

Insulation

Insulation Material:

Insulation Material	AWG
FEP - Fluorinated Ethylene Propylene	22
FEP - Fluorinated Ethylene Propylene	18
FEP - Fluorinated Ethylene Propylene	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			

No

Inner Shield Drain Wire AWG:

AWG 24

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 Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

Outer Jacket Ripcord:

Overall Cable

Overall Nominal Diameter: 6.502 mm

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Pair

Pair Color Code Chart:

Number	Color
1	Purple & White (22awg)
2	Red & Black (12awg)
3	Org (18awg)

N	lec	hani	ical	C	hara	cter	ist	ics (C	Overal	I)	
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Operating Temperature Range:	0°C To +60°C
Bulk Cable Weight:	116.080 Kg/Km
Max. Recommended Pulling Tension:	862.951 N
Min. Bend Radius/Minor Axis:	69.850 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

Applicable Standards & Environmental Pi	rograms
NEC/(UL) Specification:	CL2P
CEC/C(UL) Specification:	CL2P
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:	NFPA 262
CSA Flame Test:	FT6
Suitability	
Suitability - Indoor:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	Yes

2181LA

Electrical Characteristics (Overall)

Non-Plenum Number:

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 300 V RMS

Max. Recommended Current:

Description	Current
22AWG	3.8 Amps per conductor @ 25°C

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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	s Item Desc
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