Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



2100A Multi-Conductor - DataBus® ISA/SP-50 FOUNDATION Fieldbus or PROFIBUS Cable





For more Information please call

1-800-Belden1



General Description:

1 pair, 18 AWG stranded (7x26) tinned copper conductors, XLP insulation, 100% Beldfoil shield, tinned copper drain wire, sunlight and oil-resistant FR-PVC jacket.

Physical Characteristics (Overall)	
Conductor AWG:	
#Pairs AWG Stranding Conductor Material	
1 18 7x26 TC - Tinned Copper	
7.11	2
Total Number of Conductors:	2
Insulation Insulation Material:	
Insulation Material	
XLP - Cross-linked Polyolefin	
Inner Shield	
Inner Shield Material:	
Inner Shield Trade Name Type Inner Shield Material Cove	erage (%)
Beldfoil® Tape Aluminum Foil-Polyester Tape 100	
Inner Shield Drain Wire AWG:	
AWG Stranding Conductor Material	
20 7x28 TC - Tinned Copper	
Outer Jacket	
Outer Jacket Material: Outer Jacket Material	
FR PVC - Polyvinyl Chloride	
Outer Jacket Ripcord:	Yes
Overall Cable	
Overall Nominal Diameter:	0.319 in.
Pair	
Pair Color Code Chart: Number Color	
1 Blue & Orange Numbered 1	
Mechanical Characteristics (Overall)	
Operating Temperature Range:	-25°C Cold Impact, -40°C To +90°C, -55°C Cold Bend
UL Temperature Rating:	90°C Wet/Dry
Installation Temperature Rating:	-25°C
Bulk Cable Weight:	51 lbs/1000 ft.
Max. Recommended Pulling Tension:	57 lbs.
Min. Bend Radius/Minor Axis:	3.250 in.
WIII. Dellu Radius/Williof Axis.	3.230 III.
Applicable Specifications and Agency Compliance (Ov	verall)
Applicable Standards & Environmental Programs	
NEC/(UL) Specification:	CMG, ITC, PLTC-ER
CSA Specification:	AWM I A/B II A/B, C22.2 #230 Type TC; C22.2#239 Type CIC
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
ELI Directive 2002/05/EC (PoHS):	Vac

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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
Other Specification:	IEC 61158-2 (ISA/SP-50) Type A
Flame Test	
UL Flame Test:	UL1685 FT4 Loading
CSA Flame Test:	FT4
IEC Flame Test:	60332-3-24 (Category C)
Suitability	
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Sunlight Resistance:	Yes
Oil Resistance:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	No
Electrical Characteristics (Overall)	
Unaveraged Impedance: Description Freq. (MHz) Start Freq. (MHz)	Stop Frog (MHz) Impedance (Ohm)
.03125	100
Nom. Inductance:	
Inductance (µH/ft)	
0.220	
Nom. Capacitance Conductor to Conductor: Capacitance (pF/ft)	
22.000	
Maximum Capacitance Unbalance:	
Capacitance (pF/ft)	
1.2	
Nominal Velocity of Propagation: VP (%)	
64.000	
Nom. Conductor DC Resistance:	
DCR @ 20°C (Ohm/1000 ft)	
5.86 Nom. Attenuation:	
) Stop Freq. (MHz) Attenuation (dB/100 ft.)
.039	.08
Max. Attenuation:	
() Freq. (MHz) Attenuation (dB/100 ft.) .091 0.039 0.091	
Max. Operating Voltage - UL:	
Voltage 300 V RMS	
Max. Operating Voltage - Other:	
Voltage Description 300V RMS CSA CIC type TC	
Max. Recommended Current:	
Per Conductor 8.7 Amps	
Other Electrical Characteristic 1:	Max Propagation Delay Change From 7.812 kHz to 39.06 kHz: 518 pS/ft
Other Electrical Characteristic 2:	31.25 KBits/sec
Put Ups and Colors:	

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
2100A 0031000	1,000 FT	55.000 LB	ORANGE		300V/PR/01/18AWG/7T/XLPE/ORGBL

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2100A 0035000	5,000 FT	350.000 LB	ORANGE	300V/PR/01/18AWG/7T/XLPE/ORGBL
2100A 0065000	5,000 FT	350.000 LB	BLUE, LIGHT	300V/PR/01/18AWG/7T/XLPE/ORGBL

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