

S1331NH Multi-Conductor - DataBus® ISA/SP-50 FOUNDATION Fieldbus or PROFIBUS Cable



For more Information
please call

1-800-Belden1



General Description:

18 AWG stranded (7x26) tinned copper conductors, polyolefin insulation, individual & overall Beldfoil® shield (100% coverage), tinned copper drain wire, LSZH jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
16	18	7x26	TC - Tinned Copper	.048

Total Number of Conductors: 32

Insulation

Insulation Material:

Insulation Material
PO - Polyolefin

Inner Shield

Inner Shield Material:

Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

Inner Shield Drain Wire AWG:

AWG	Stranding	Conductor Material
20	7x28	TC - Tinned Copper

Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
18	7x26	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
FRPE - FLAME RETARDANT POLYETHYLENE

Outer Jacket Ripcord: Yes

Overall Cable

Overall Nominal Diameter: 0.920 in.

Pair

Pair Color Code Chart:

Number	Color
1	Blue & Orange Numbered 1
2	Blue & Orange Numbered 2
3	Blue & Orange Numbered 3
4	Blue & Orange Numbered 4
5	Blue & Orange Numbered 5
6	Blue & Orange Numbered 6
7	Blue & Orange Numbered 7
8	Blue & Orange Numbered 8
9	Blue & Orange Numbered 9
10	Blue & Orange Numbered 10
11	Blue & Orange Numbered 11
12	Blue & Orange Numbered 12
13	Blue & Orange Numbered 13
14	Blue & Orange Numbered 14
15	Blue & Orange Numbered 15

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16	Blue & Orange Numbered 16
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Pair Lay Length & Direction:

Lay Length (in.)	Twists (twist/ft)
2.000	6.000

Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +90°C
UL Temperature Rating:	90°C
Max. Recommended Pulling Tension:	940 lbs.
Min. Bend Radius/Minor Axis:	9.200 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM, ITC, PLTC
CEC/C(UL) Specification:	CM
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 RoHS Compliance Date (mm/dd/yyyy):	03/28/2008
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:	UL1685 UL Loading
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
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Electrical Characteristics (Overall)

Unaveraged Impedance:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Impedance (Ohm)
	.03125			100

Nom. Inductance:

Inductance (µH/ft)	.19
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Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)	45.0
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Nom. Mutual Capacitance:

Capacitance (pF/ft)	24.0
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Maximum Capacitance Unbalance:

Capacitance (pF/ft)	1.2
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Nominal Velocity of Propagation:

VP (%)	66
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Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)	
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ENGLISH MEASUREMENT VERSION

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5.86

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

4.9

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 7.500 Ohm/1000 ft

Nom. Attenuation:

Description	Freq. (MHz)	Start Freq. (MHz)	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. Recommended Current:

Description	Current
Per Conductor	5.2 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:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
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