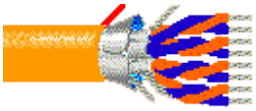
Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

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



For more Information please call

1-800-Belden1

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

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
16	Blue & Orange Numbered 16

Pair Lay Length & Direction:

Lay Length (in.)	Twists/ft. (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 (Install)/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 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

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

Nom. Mutual Capacitance:

Capacitance (pF/ft)
24.0

Maximum Capacitance Unbalance:

Capacitance (pF/ft)
1.2

Nominal Velocity of Propagation:

VP (%)
66

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
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

Related Documents:

No related documents are available for this product

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc

Revision Number: 0 Revision Date: 01-01-1900

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 73/23/EEC), as amended by directive 93/68/EEC.