## **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



### S1330NH 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.) 18 7x26 TC - Tinned Copper | .048 **Total Number of Conductors:** 24 Insulation Insulation Material: Insulation Material PO - Polyolefin Inner Shield Inner Shield Material: Inner Shield Trade Name Type Inner Shield Material Coverage (%) 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 Beldfoil® Tape | Aluminum Foil-Polyester Tape | 100 Outer Shield Drain Wire AWG: **AWG Stranding Drain Wire Conductor Material** TC - Tinned Copper 18 7x26 **Outer Jacket Outer Jacket Material: Outer Jacket Material** FRPE - Flame Retardant Polyethylene **Outer Jacket Ripcord:** Yes Overall Cable **Overall Nominal Diameter:** 0.810 in Pair Pair Color Code Chart: Number Color Blue & Orange Numbered 1 Blue & Orange Numbered 2 Blue & Orange Numbered 3 Blue & Orange Numbered 4 Blue & Orange Numbered 5 Blue & Orange Numbered 6

Pair Lay Length & Direction:

10

12

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

Blue & Orange Numbered 7
Blue & Orange Numbered 8
Blue & Orange Numbered 9

Blue & Orange Numbered 10
Blue & Orange Numbered 11

Blue & Orange Numbered 12

Page 1 of 3 09-11-2017

# **Detailed Specifications & Technical Data**





### S1330NH Multi-Conductor - DataBus® ISA/SP-50 FOUNDATION Fieldbus or PROFIBUS Cable

2.000 6.000 **Mechanical Characteristics (Overall) Operating Temperature Range:** -30°C To +90°C +90°C Dry **UL Temperature Rating:** Max. Recommended Pulling Tension: 311 lbs. Min. Bend Radius/Minor Axis: 8.100 in. Applicable Specifications and Agency Compliance (Overall) **Applicable Standards & Environmental Programs** NEC/(UL) Specification: CM, ITC, PLTC CEC/C(UL) Specification: СМ EU Directive 2011/65/EU (ROHS II): Yes EU CE Mark: 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

Yes

Yes

Yes

No

## **Electrical Characteristics (Overall)**

Unaveraged Impedance:

Suitability - Outdoor:

Sunlight Resistance:

Oil Resistance:

Plenum/Non-Plenum
Plenum (Y/N):

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

Nom. Inductance:

Inductance (µH/ft)
.19

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)

Page 2 of 3 09-11-2017

## **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



### S1330NH Multi-Conductor - DataBus® ISA/SP-50 FOUNDATION Fieldbus or PROFIBUS Cable

4.9										
Ind. Pa	air Nominal Shield DC Resistan	ce @ 20 Deg. C:	7.500 Ohm/1000 f	t						
Nom. Attenuation:										
Descript	tion Freq. (MHz) Start Freq. (M	Hz) Stop Freq. (MHz) Att	enuation (dB/100 ft.)							
	.039	.08								
Max. Attenuation:										
() Fro	eq. (MHz) Attenuation (dB/100	ft.)								
.091 0.0	0.091									
Max. Opera	Max. Operating Voltage - UL:									
Voltage 300 V RI										
Max. Recommended Current:										
Descript Per Cond	ductor 5.2 Amps									
Other	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:										
Itam #	Dutun	Chin Waight		Color	Notes	Itom Doos				

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

© 2017 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, 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 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

product.

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

Page 3 of 3