Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



2125a Multi-Conductor - DataBus® ISA/SP-50 FOUNDATION Fieldbus or PROFIBUS Cable





For more Information please call

1-800-Belden1



General Description:

24 pair, 18 AWG, Stranded (7x26) Tinned Copper, 600V, Individually Foil Shielded Pairs, Overall Beldfoil Shield, Tinned Copper Drain Wires, XLP Insulation, Sunlight- and oil-resistant TPE jacket

Physical Characteristics (Overall) Conductor AWG: # Pairs AWG Stranding Conductor Material 18 7x26 TC - Tinned Copper **Total Number of Conductors:** 48 Insulation Insulation Material: **Insulation Material** XLP - Cross-linked 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** TC - Tinned Copper 7x28 **Outer Shield Outer Shield Material:** Outer Shield Trade Name Type Outer Shield Material 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** TPE - Thermoplastic Elastomer Outer Jacket Ripcord: Yes **Overall Cable Overall Nominal Diameter:** 35.281 mm 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

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15	Blue & Orange Numbered 15
16	Blue & Orange Numbered 16
17	Blue & Orange Numbered 17
18	Blue & Orange Numbered 18
19	Blue & Orange Numbered 19
20	Blue & Orange Numbered 20
21	Blue & Orange Numbered 21
22	Blue & Orange Numbered 22
23	Blue & Orange Numbered 23
24	Blue & Orange Numbered 24

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:	1186.095 Kg/Km 6227.480 N				
	Max. Recommended Pulling Tension:					
	Min. Bend Radius/Minor Axis:	355.600 mm				
Applicable Specifications and Agency Compliance (Overall)						
Ар	Applicable Standards & Environmental Programs					
	NEC/(UL) Specification:	TC-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				
	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				
	Other Specification:	IEC 61158-2 (ISA/SP-50) Type A				
Flame Test						
	UL Flame Test:	UL1581 Vertical Tray				
	CSA Flame Test:	FT4				

Sui	tability
	Suitabil

ility - Indoor: Yes Suitability - Outdoor: Yes Sunlight Resistance: Oil Resistance: Yes

60332-3-24 (Category C)

Plenum/Non-Plenum

IEC Flame Test:

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/m) 0.722

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 72.182

Maximum Capacitance Unbalance:

Capacitance (pF/m)

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3.9372

Nominal Velocity of Propagation:

VP (%) 64.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 19.2267

Nom. Attenuation:

Description Freq. (MHz) Start Freq. (MHz) Stop Freq. (MHz) Attenuation (dB/100m) 0.26248

Max. Attenuation:

Freq. (MHz) Attenuation (dB/100m) 0.298571 0.039 0.299

Max. Operating Voltage - UL:

Voltage 600 V RMS

Max. Operating Voltage - Other:

600V RMS | CSA CIC type TC

Max. Recommended Current:

Description Per Conductor 5.4 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
2125A 0031000	1,000 FT	965.000 LB	ORANGE		600V/PR/24/18AWG/7T/XLPE/ORGBL
2125A 0061000	1,000 FT	965.000 LB	BLUE, LIGHT		600V/PR/24/18AWG/7T/XLPE/ORGBL

Revision Number: 1 Revision Date: 11-30-2015

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

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