Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



972127Z Multi-Conductor - DataBus® Fieldbus Cable



For more Information please call

1-800-Belden1



General Description:

1 pair, 16 AWG, Stranded (7x24) Tinned Copper, 100% Beldfoil Shield, Tinned Copper Drain Wires, XLP Insulation, Haloarrest XLink 2 jacket, Bronze Braid Armor

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
1	16	7x24	TC - Tinned Copper

Total Number of Conductors: 2

Insulation

Insulation Material:



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		
18	7x26	TC - Tinned Copper		

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
Haloarrest Xlink 2

Outer Jacket Ripcord: Yes

Outer Jacket over Armor

Outer Jacket Material Over Armor:



Armor

Armor Type: Bronze Braid

Overall Cable

Overall Nominal Diameter: 12.929 mm

Pair

Pair Color Code Chart:

Number	Color		
1	Blue & Orange		

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +90°C
UL Temperature Rating:	90C Wet/Dry

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Bulk Cable Weight:	233.647 Kg/Km
Max. Recommended Pulling Tension:	413.683 N
Min. Bend Radius/Minor Axis:	127 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental P	rograms		
NEC/(UL) Specification:	тс		
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		
IEEE Specification:	45		
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, ABS Type Approval 13-HS1085604		
Flame Test			
UL Flame Test:	UL1685 FT4 Loading		
CSA Flame Test:	FT4		
IEC Flame Test:	60332-3-22 (Category A)		
IEEE Flame Test:	1202		
Suitability			

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Sunlight Resistance:	Yes
Oil Resistance:	Yes - Oil Res II

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/m)

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 72.182

Maximum Capacitance Unbalance:

Capacitance (pF/m) 3.9372

Nominal Velocity of Propagation:

VP (%) 64.000

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Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 13.780

Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100m) 0.039 0.213

Max. Attenuation:

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

Max. Operating Voltage - UL:

Voltage 600 V RMS

Max. Operating Voltage - Other:

600 V RMS | CSA CIC type TC

Max. Recommended Current:

Description	Current
Per Conductor	11.6 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
972127Z 0105000	5,000 FT	865.000 LB	BLACK		1PR#16XLPOFS TSNH BBRDARM TSNH

Revision Date: 10-06-2014 Revision Number: 0

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