



Product Description

DataTuff® 5E, 4 Pair AWG 24 Bare Copper - Solid, Polyolefin (PO, PE, PP) insulation, SF/UTP - Overall Braid + Foil shielding, LSZH / FRNC jacket , AWM 21286

Technical Specifications

Physical Characteristics (Overall)

Conduc	Conductor			
AWG	Stranding	Material	No. of Pairs	
24	Solid	BC - Bare Copper	4	
Conductor Count:				
Total Number of Pairs:				

Insulation

Material	rial Nominal Diameter	Diameter +/- Tolerance
PO - Polyolefin	yolefin 1.1 mm	0.05 mm
Bonded-Pair:	Pair:	

Color Chart

Number	Color
Pair 1	White/Blue & Blue
Pair 2	White/Orange & Orange
Pair 3	White/Green & Green
Pair 4	White/Brown & Brown

Outer Shield Material

Туре	Material	Min. Coverage [%]
Tape	Bi-Laminate (Alum+Poly)	
Braid	Tinned Copper (TC)	80%
Table	Notes:	

Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance	Min. Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	6.8 mm	0.3 mm	0.8 mm

Construction and Dimensions

Min Elongation at Breakof Conductors:	10 %
Min Elongation at Breakof Insulation:	100 %
Min Elongation at Breakof Jacket:	100 %
Min Tensile Strength of Jacket:	9 MPa

Electrical Characteristics

Conductor DCR

Max. Conductor DCR Max. Conductor Loop Max. DCR Unbalanced Within Pair [%]

93.8 Ohm/km	19 Ohm/1000ft	2 %	
Canacitance			

Capacitance

Max. Capacitance Unbalance	Max. Mutual Capacitance
1.6 pF/m	56 pF/m

Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance	Nominal Input Impedance
100 Ohm	5 Ohm	100 +/- 15 Ohm

Delay

Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
40 ns/100m	60%

Current

Element	Max. Recommended Current [A]
Conductor	1.4 Amps per Conductor

Voltage

Voltage Rating [V]

450 V DC and 300 V AC

Temperature Range

Installation Temp Range:	-5°C To +50°C
Operating Temp Range:	-40°C To +80°C

Mechanical Characteristics

Oil Resistance:	IEC 60811-2-1
Max. Pull Tension:	80 N
Min Bend Radius (W/o Pulling Strength):	70 mm
Min Setting Radius:	35 mm

Standards

IEC Compliance:	ISO/IEC 11801-1	
CPR Euroclass:	Eca	
CENELEC Compliance:	EN 50173-1	
Data Category:	Category 5e	
ANSI Compliance:	ANSI/TIA 568.2-D (2018)	
IEEE Compliance:	PoE: IEEE 802.3bt Type 1, Type 2, Type 3	

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Eca		
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01		
Cuitability			

Suitability

Suitability - Oil Resistance:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LS0H, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
IEC 60754-1 (EN50267-1)- Halogen Amount:	Zero
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Max. Conductivity:	2.5 μS/mm
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Min. pH:	4.3

Part Number

Variants

Item #	Color	Putup Type	Length	EAN
74001NH.01B100	Black	Flat Box	100 m	8719605012999
74001NH.01305	Black	Reel	305 m	8719605012975
74001NH.01500	Black	Reel	500 m	8719605012982

74001NH.04500	Blue	Reel	500 m	8719605173737
74001NH.02500	Green	Reel	500 m	8719605169228
74001NH.06B100	Light Blue	Flat Box	100 m	8719605181688
74001NH.06500	Light Blue	Reel	500 m	8719605175649
74001NH.07500	Pink	Reel	500 m	8719605175656

History

Update and Revision:

Revision Number: 0.212 Revision Date: 12-18-2020

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