



Product Description

DataTuff® 5E, 4 Pair AWG 24 Bare Copper - Solid, Polyethylene insulation, SF/UTP - Overall Braid + Foil shielding, PUR Halogen Free jacket , AWM 20549

Technical Specifications

Product Overview

Suitable Ap	nliantionau	CatEa hay	rah anviranmant llaT faat	ory or process automation, video, auc	lia data communication ata	
Suitable Ap	plications:	Calbe, har	sn environment, nor, lact	bry of process automation, video, aut	ilo, data communication, etc.	
Construc	tion Details					
Conductor						
	Stranding Materi		of Pairs No. of Elements			
24 AWG S	Solid BC - Bare C	Copper 4	8			
Insulation						
Materia	al Nom. Insulati	on Diameter		Color Code		
PE - Polyeti	hylene 1.1 mm (0.043	in)	White/Blue & Blue, White	/Orange & Orange, White/Green & G	een, White/Brown & Brown	
Cable Core						
4 pairs byiet	Description ted to cable core cover		ootor foil			
4 pairs twist	ted to cable core cover	ed with a poly	esterion			
Outer Shield	d					
Shield Type	e Material	Cover	age			
Таре	Bi-Laminate (Alum+	Poly)				
Braid	Tinned Copper (TC)	80%				
Table Notes	S:	Aluminum	outside			
Outer Jacke	at .					
	Material	Nom. Diar	meter			
PUR - Polyu	urethane (Halogen Free					
Table Notes		· ·	tardant Sheath			
	s. ble Diameter (Nominal):					
		0.0 mm (0	.20 mj			
Electrica	I Characteristics	i				
Electricals						

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance						
93.8 Ohm/km	56 pF/m (17 pF/ft)	160 pF/100m	100 Ohm						

Delay

Max. Delay Skew	Nom. Velocity of Prop.
40 ns/100m	60%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation) [dB/100m]		Min. PSNEXT [dB]			Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]
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1	2.1	65.3	62.3	63.2	60.2	64	61	20
4	4.0	56.3	53.3	52.32	49.3	52	49	23
10	6.3	50.3	47.3	44	41	44	41	25
16	8.0	47.2	44.2	39.2	36.2	39.9	36.9	25
20	9.0	45.8	42.8	36.8	33.8	38	35	25
31.25	11.4	42.9	39.9	31.5	28.5	34.1	31.5	23.6
62.5	16.5	38.4	35.4	21.9	18.9	28.1	25.1	21.5
100	21.3	35.3	32.3	14	11	24	21	20.1

Voltage

Voltage Rating

450 V DC and 300 V AC

Mechanical Characteristics

Temperature		
Operating	Installation	Storage
-40°C to +80°C	-15°C To +60°C	-40°C To +80°C
Bend Radius		
Stationary Min.	Installation Min	
35 mm (1.4 in)	70 mm	
Max. Pull Tensio	in:	80 N (18 lbf)

Standards and Compliance

Environmental Suitability:	Indoor, Indoor, Sunlight Resistance, Oil Resistance
AWM Compliance:	AWM 20549
IEEE Compliance:	PoE: IEEE 802.3bt Type 1, Type 2, Type 3
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA 568.2-D
ISO/IEC Compliance:	ISO/IEC 11801-1
CENELEC Compliance:	EN 50173-1
European Halogen Free Standards:	IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 10 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3
European Directive Compliance:	EU CE Mark

History

Update and Revision: Revision Number: 0.248 Revision Date: 01-10-2024

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
74001PU.01305	Black	Reel	305 m	8719605013002
74001PU.01500	Black	Reel	500 m	8719605013019

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