Product: 74003PU

DataTuff® 5E, 4PR #26 Str BC, PO ins, SF/UTP, PUR HF jkt, 2M flex Trailing

Product Description

DataTuff® 5E, 4 Pair AWG 26 Bare Copper - Stranded, Polyolefin (PO, PE, PP) insulation, SF/UTP - Overall Braid + Foil shielding, PUR Halogen Free jacket , 2M flex Trailing

Technical Specifications

Product Overview

Suitable Applications:	harsh environment, IIoT, factory or process automation, video, audio, data communication, etc. Not rodent protected.

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Construction n x D	No. of Pairs
26	Stranded	BC - Bare Copper	19x0.10 mm	4

Conductor Count:	8
Total Number of Pairs:	4

Insulation

Material	Nominal Diameter	Diameter +/- Tolerance
PO - Polyolefin	1 mm	0.05 mm

Bonded-Pair:	No

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

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

Table Notes:	Aluminum outside

Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance	Nominal Wall Thickness	Separator Material
PUR - Polyurethane (Halogen Free)	6.65 mm	0.2 mm	0.6 mm	non-Woven Tape

Table Notes:	Flame Retardant Sheath

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:	10.3 MPa

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalanced Within Pair [%]
145 Ohm/km	2 %

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%

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]
0.772 MHz		67 dB	64 dB			19.4 dB
1 MHz	3.2 dB/100m	65.3 dB	62.3 dB	63.8 dB	60.8 dB	20 dB
4 MHz	6 dB/100m	56.3 dB	53.3 dB	51.8 dB	48.8 dB	23 dB
10 MHz	9.5 dB/100m	50.3 dB	47.3 dB	43.8 dB	40.8 dB	25 dB
16 MHz	12.1 dB/100m	47.2 dB	44.2 dB	39.7 dB	36.7 dB	25 dB
20 MHz	13.6 dB/100m	45.8 dB	42.8 dB	37.8 dB	34.8 dB	25 dB
25 MHz	15.3 dB/100m	44.3 dB	41.3 dB	35.8 dB	32.8 dB	24.3 dB
31.25 MHz	17.1 dB/100m	42.9 dB	39.9 dB	33.9 dB	40.9 dB	23.6 dB
62.5 MHz	24.8 dB/100m	38.3 dB	35.4 dB	27.9 dB	24.9 dB	21.5 dB
100 MHz	32 dB/100m	35.3 dB	32.3 dB	23.8 dB	20.8 dB	20.1 dB

Current

Element	Max. Recommended Current [A]
Conductor	1 A

Voltage

Voltage Rating [V]
450 V DC and 300 V AC

Temperature Range

Installation Temp Range:	-15°C To +60°C
Storage Temp Range:	-40°C To +80°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
Min No. of Drag Chain Cycles:	2000000
Drag Chain Parameters:	a= 3m/s2 v= 3 m/s and r= 60 mm

Standards

UL AWM Style Compliance:	UL AWM 20549
IEC Compliance:	ISO/IEC 11801-1
CENELEC Compliance:	EN 50173-1
Data Category:	Category 5e
ANSI Compliance:	ANSI/TIA 568.2-D (2018)

Applicable Environmental and Other Programs

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

Suitability

Suitability - Burial:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only
Suitability - Sunlight Resistance:	Yes

Flammability, LS0H, Toxicity Testing

CSA Flammability:	FT2
IEC 60754-1 (EN50267-1)- Halogen Amount:	Zero
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Min. pH:	4.3

Part Number

Variants

Item #	Color	Putup Type	Length	EAN
74003PU.01B100	Black	Flat Box	100 m	8719605013132
74003PU.01305	Black	Reel	305 m	8719605013118
74003PU.01500	Black	Reel	500 m	8719605013125

History

Update and Revision:	Revision Number: 0.209 Revision Date: 12-18-2020