

Product: 74005PU

DataTuff® 7, 4PR #26 Str BC, PO ins, S/FTP, PUR HF jkt, AWM 21292

Product Description

DataTuff® 7, 4 Pair AWG 26 Bare Copper - Stranded, Polyolefin (PO, PE, PP) insulation, S/FTP - Overall Braid / Individual Foil shielding, PUR Halogen Free jacket , AWM 21292

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	7x0.16 mm	4

Conductor Count:	8
Total Number of Pairs:	4

Insulation

Material	Nominal Diameter	Diameter +/- Tolerance
PO - Polyolefin (Foam)	1.05 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

Inner Shield Material

Type	Material
Tape	Bi-Laminate (Alum+Poly)

Table Notes:	Aluminum outside

Outer Shield Material

Type	Material	Min. Coverage [%]
Braid	Tinned Copper (TC)	65%

Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance	Nominal Wall Thickness
PUR - Polyurethane (Halogen Free)	6.8 mm	0.3 mm	0.5 mm

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	70%

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]
1 MHz	2.7 dB/100m	80 dB	77 dB			
4 MHz	5.5 dB/100m	80 dB	77 dB	58 dB	55 dB	23 dB
10 MHz	8.5 dB/100m	80 dB	77 dB	50 dB	47 dB	25 dB
16 MHz	10.8 dB/100m	80 dB	77 dB	46 dB	43 dB	25 dB
20 MHz	12.1 dB/100m	80 dB	77 dB	44 dB	41 dB	25 dB
31.25 MHz	15.2 dB/100m	80 dB	77 dB	40 dB	37 dB	23.6 dB
62.5 MHz	27.8 dB/100m	75.1 dB	72.1 dB	34 dB	31 dB	21.5 dB
100 MHz	27.8 dB/100m	72.4 dB	69.4 dB	30 dB	27 dB	20.1 dB
200 MHz	40.1 dB/100m	67.9 dB	64.9 dB	24 dB	21 dB	18 dB
300 MHz	50 dB/100m	65.3 dB	62.3 dB	20 dB	17 dB	17.3 dB
600 MHz	73.3 dB/100m	60.8 dB	57.8 dB	14 dB	11 dB	17.3 dB

Transfer Impedance

Frequency [MHz]	Transfer Impedance
10 Mhz	Max. 5 mOhm/m

Current

Element	Max. Recommended Current [A]
Conductor	1 A

Voltage

UL Voltage Rating	Voltage Rating [V]
30 V RMS	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):	65 mm
Min Setting Radius:	30 mm

Standards

UL AWM Style Compliance:	AWM 21292
IEC Compliance:	ISO/IEC 11801-1
CENELEC Compliance:	EN 50173-1

Data Category:	Category 7
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 - Oil Resistance:	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 - Max. Conductivity:	10 µS/mm
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Min. pH:	4.3

Part Number

Variants

Item #	Color	Putup Type	Length	EAN
74005PU.02B100	Black	Flat Box	100 m	8719605013361
74005PU.02305	Black	Reel	305 m	8719605013347
74005PU.02500	Black	Reel	500 m	8719605013354
74005PU.01500	Blue, Water	Reel	500 m	8719605013330

History

Update and Revision:	Revision Number: 0.216 Revision Date: 03-16-2021

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