


**Product:** [72001PU](#) 

DataTuff® 5E, 2PR #24 Sol BC, PO ins, SF/UTP, PUR HF jkt, AWM 20549



## Product Description

DataTuff® 5E, 2 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 Applications:	harsh environment, IIoT, factory or process automation, video, audio, data communication, etc.
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### Construction Details

#### Conductor

Size	Stranding	Material	Number of Pairs	Number of Element
24 AWG	Solid	BC - Bare Copper	2	4

#### Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene	1.1 mm (0.043 in)	White/Blue & Blue, White/Orange & Orange

#### Cable Core

Description
2 pairs and 2 fillers twisted to cable core covered with a polyester foil

#### Outer Shield

Shield Type	Material	Coverage
Tape	Bi-Laminate (Alum+Poly)	
Braid	Tinned Copper (TC)	80%

Table Notes:	Aluminum outside
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#### Outer Jacket

Material	Nom. Diameter
PUR - Polyurethane (Halogen Free)	6 mm (0.24 in)

Table Notes:	Flame Retardant Sheath
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Overall Cable Diameter (Nominal):	6 mm (0.24 in)
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### Electrical Characteristics

#### 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)	Min. NEXT [dB]	Min. ACRF (ELFEXT) [dB]	Min. RL (Return Loss) [dB]
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0.772		67		19.4
1	3.2 dB/100m	65.3	63.8	20
4	6 dB/100m	56.3	51.8	23
10	9.5 dB/100m	50.3	43.8	25
16	12.1 dB/100m	47.2	39.7	25
20	13.6 dB/100m	45.8	37.8	25
25	15.3 dB/100m	44.3	35.8	24.3
31.25	17.1 dB/100m	42.9	33.9	23.6
62.5	24.8 dB/100m	38.3	27.9	21.5
100	32 dB/100m	35.3	23.8	20.1

#### Voltage

Voltage Rating
450 V DC and 300 V AC

## Mechanical Characteristics

#### Temperature

Operating	Installation	Storage
-40°C to +80°C	-5°C To +50°C	-40°C To +80°C

#### Bend Radius

Stationary Min.	Installation Min.
30 mm (1.2 in)	60 mm

Max. Pull Tension:	40 N (9.0 lbf)
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## Standards and Compliance

Environmental Suitability:	Indoor, Indoor, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	FT2
AWM Compliance:	AWM 20549
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
European Directive Compliance:	EU CE Mark

## History

Update and Revision:	Revision Number: 0.241 Revision Date: 04-08-2022
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## Part Numbers

#### Variants

Item #	Color	Putup Type	Length	EAN
72001PU.01305	Black	Reel	305 m	8719605012784
72001PU.01500	Black	Reel	500 m	8719605012791

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