

Part Number: 74009PU

# DataTuff® Industrial Ethernet Cat 5e HiFlex Torsion Cable



## **Product Description**

DataTuff® Industrial Ethernet Cat 5e HiFlex Torsion Cable, AWG 26(19), Foil + 80% Braid, PUR No Halogen Jacket, UL AWM 20549

# **Technical Specifications**

## **Physical Characteristics (Overall)**

Conduc	Conductor				
AWG	Stranding	Material	Construction n	хD	No. of Pairs
26	Stranded	BC - Bare Copper	19x0.10 mm		4
Conductor Count: Total Number of Pairs:		8			
		4			

#### Insulation

Material	Nominal Diameter	Diameter +/-	Tolerance
PP - Polypropylene	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 [%]
Таре	Aluminum/Polyester	
Braid	TC - Tinned Copper	80 %
Outer Shield Table Note:		

#### **Outer Jacket Material**

Material	Nominal Diameter	Diameter +/- Tolerance	Separator Material
PUR (Halogenfree and weld-splatter resistant)	6.4 mm	0.3 mm	Non-woven foil

## **Construction and Dimensions**

Min Elongation at Breakof Jacket:	300 %
Min Tensile Strength of Jacket:	15 MPa

## **Electrical Characteristics**

## Conductor DCR

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

#### Capacitance

Max. Capacitance Unbalance Max. Mutual Capacitance

4.0 =/	50 E/
1.6 pF/m	56 pF/m
1.0 pt /iii	00 pi /iii

#### 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)
1 MHz	3.2 dB/100m
4 MHz	6.2 dB/100m
10 MHz	9.5 dB/100m
16 MHz	12.1 dB/100m
20 MHz	13.6 dB/100m
31.25 MHz	17.9 dB/100m
62.5 MHz	24.8 dB/100m
100 MHz	32 dB/100m

#### Current

Element	Max. Recommended Current [A]
Conductor	1.4 A

#### Voltage

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

## **Temperature Range**

Installation Temp Range:	-5°C To +50°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
	Min Setting Radius:	30 mm

# **Standards**

ISO/IEC Compliance:	ISO/IEC 11801 Ed. 2.2:2002/A2:2010/C1:2011 and ISO/IEC 24702
CENELEC Compliance:	EN 50173-1 Ed. 3:2011
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):	2016-05-17

# Flammability, LS0H, Toxicity Testing

CSA Flammability:	FT2	
Amount of Halogen acc. to IEC 60754-1 & EN50267-1:	Zero	

## **Part Number**

#### Variants

Item #	Color	Length
74009PU.01500	Black	500 m
Patent:		

# History

Update and Revision:	Revision Number: 0.176 Revision Date: 09-02-2019

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