



Product: [74010EPE](#)

DataTuff® 6A, 4PR #22 Sol BC, PO ins, S/FTP, PO jkt, PROFINET Type A, Outdoor

Product Description

DataTuff® 6A, 4 Pair AWG 22 Bare Copper - Solid, Polyolefin (PO, PE, PP) insulation, S/FTP - Overall Braid / Individual Foil shielding, Polyolefin (PO, PE, PP) jacket , PROFINET Type A, Outdoor

Technical Specifications

Product Overview

Suitable Applications:	Profinet CAT6A, TCP/IP Ethernet. Not rodent protected.
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
22	Solid	BC - Bare Copper	4

Conductor Count:	8
Total Number of Pairs:	4

Insulation

Material	Nominal Diameter
PO - Polyolefin (Foam)	1.54 mm

Bonded-Pair:	No
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Color Chart

Number	Color
Pair 1	White & Blue
Pair 2	White & Orange
Pair 3	White & Green
Pair 4	White & Brown

Inner Shield Material

Type	Material	Coverage [%]
Tape	Bi-Laminate (Alum+Poly)	100%

Outer Shield Material

Type	Material
Braid	Tinned Copper (TC)

Outer Jacket Material

Material	Nominal Diameter
PE - Polyethylene	8.7 mm

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max DCR Unbalanced Between Pairs [%]
59.1 Ohm/km	4 %

Capacitance

Max. Capacitance Unbalance	Max. Mutual Capacitance
1.6 pF/m	56 pF/m

Impedance

Nominal Characteristic Impedance
100 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	1.9 dB/100m
4 MHz	3.4 dB/100m
10 MHz	5.5 dB/100m
16 MHz	6.9 dB/100m
31.2 MHz	9.7 dB/100m
62.5 MHz	13.9 dB/100m
100 MHz	17.7 dB/100m
125 MHz	19.9 dB/100m
200 MHz	25.6 dB/100m
250 MHz	28.8 dB/100m
300 MHz	31.8 dB/100m
600 MHz	46.6 dB/100m

Delay

Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
25 ns/100m	78%

High Freq

Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. ELTCTL [dB]
2 dB/100m	78 dB	76 dB	73 dB	78 dB	20 dB	35 dB
3.7 dB/100m	78 dB	74.3 dB	71.3 dB	78 dB	23 dB	23 dB
5.9 dB/100m	78 dB	72.1 dB	69.1 dB	75.3 dB	25 dB	15 dB
7.4 dB/100m	78 dB	70.6 dB	67.6 dB	71.2 dB	25 dB	10.9 dB
10.4 dB/100m	78 dB	67.6 dB	64.6 dB	65.4 dB	23.6 dB	5.1 dB
14.9 dB/100m	75.5 dB	60.6 dB	57.6 dB	59.4 dB	21.5 dB	
19 dB/100m	72.4 dB	53.4 dB	50.4 dB	55.3 dB	20.1 dB	
21.4 dB/100m	70.9 dB	49.6 dB	46.6 dB	53.4 dB	19.4 dB	
27.5 dB/100m	67.9 dB	40.4 dB	37.4 dB	49.3 dB	18 dB	
31 dB/100m	66.4 dB	35.5 dB	32.5 dB	47.3 dB	17.3 dB	
34.2 dB/100m	65.2 dB	31.1 dB	28.1 dB	45.8 dB	17.3 dB	
50.1 dB/100m	60.7 dB	10.6 dB	7.6 dB	39.7 dB	17.3 dB	

Table Notes:	Limits below 4MHz are for information only
Coupling Attenuation Class:	Type I
Segregation class according EN50174-2:	d

Current

Max. Recommended Current [A]
1.5 Amps per Conductor

Temperature Range

Installation Temp Range:	0°C To +60°
Storage Temp Range:	-40°C To +80°C
Operating Temp Range:	-40°C To +80°C

Mechanical Characteristics

Min Bend Radius During Installation:	90 mm
Min Bend Radius During Operation:	45 mm

Standards

IEC Compliance:	ISO/IEC 11801-1
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Data Category:	Category 6A
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Applicable Environmental and Other Programs

Environmental Space:	Indoor/Outdoor
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Suitability

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

Part Number

Variants

Item #	Color	Putup Type	Length	EAN
74010EPE.00305	Black	Reel	305 m	8719605177407

History

Update and Revision:	Revision Number: 0.51 Revision Date: 12-10-2020
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