



**Product:** [BE43885](#)

DataTuff® 5E, 1Q #22 Str TC, PO ins, LSNH Jkt, PROFINET ECE R118, AWM 21286

## Product Description

DataTuff® 5E, 1 Quad AWG 22 Tinned Copper - Stranded, Polyolefin (PO, PE, PP) insulation, SF/UTP - Overall Braid+ Foil shielding, LSZH / FRNC jacket , PROFINET ECE R118, AWM 21286

## Technical Specifications

### Product Overview

Patent:	This product has one or more applicable patents. More information on patents can be found at <a href="https://www.belden.com/resources/patents">https://www.belden.com/resources/patents</a> .
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### Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material	Construction n x D	No. of Conductors
22	Stranded	TC - Tinned Copper	7x0.25 mm	4

Conductor Count:	4
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#### Insulation

Material	Nominal Diameter	Diameter +/- Tolerance
PO - Polyolefin	1.55 mm	0.05 mm

Bonded-Pair:	No
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#### Color Chart

Number	Color
Quad 1	White & Blue & Yellow & Orange

#### Inner Jacket Material

Material	Nominal Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	4.1 mm

Table Notes:	Bedding
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#### Outer Shield Material

Material
Bi-Laminate (Alum+Poly)
Tinned Copper (TC)

#### Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance
LSZH - Low Smoke Zero Halogen (Flame Retardant)	6.5 mm	0.2 mm

### Electrical Characteristics

#### Conductor DCR

Max. Conductor DCR
57.1 Ohm/km

#### Impedance

Frequency [MHz]	Nominal Characteristic Impedance	Nominal Characteristic Tolerance
1-100	100 Ohm	15 Ohm

#### Delay

Max. Delay	Nominal Velocity of Propagation (VP) [%]
530 ns/100m	68%

#### High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. ACRF (ELFEXT) [dB]	Min. SRL (Structural Return Loss)
1 MHz	2.1 dB/100m	65.3 dB	64 dB	
4 MHz	4.1 dB/100m	56.3 dB	52 dB	23 dB
10 MHz	6.5 dB/100m	50.3 dB	44 dB	25 dB
16 MHz	8.3 dB/100m	47.2 dB	40 dB	25 dB
31.25 MHz	11.7 dB/100m	43 dB	34 dB	23.6 dB
62.5 MHz	17 dB/100m	38.4 dB	28 dB	21.5 dB
100 MHz	22 dB/100m	35.3 dB	24 dB	20.1 dB

Table Notes:	Reference standard: ISO/IEC 11801 ed 2.0, Cat 5e
General Electrical Parameters Notes:	Reference standard: ISO/IEC 11801 ed 2.0, Cat 5e

#### Transfer Impedance

Frequency [MHz]
10 MHz

#### Temperature Range

Installation Temp Range:	-5°C To +50°C
Operating Temp Range:	-25°C To +70°C

#### Mechanical Characteristics

Oil Resistance:	IEC 60811-2-1
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#### Standards

IEC Compliance:	ISO/IEC 11801-1
CPR Euroclass:	Eca
Data Category:	Category 5e

#### Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Eca
EU RoHS Compliance Date (yyyy-mm-dd):	2017-03-31

#### Flammability, LS0H, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
Other Flammability:	ECE R118
IEC 60754-1 (EN50267-1)- Halogen Amount:	Zero
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Max. Conductivity:	2.5 µS/mm
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Min. pH:	4.3

#### Part Number

#### Variants

Item #	Color	Putup Type	Length	EAN
BE43885+00500	Green	Reel	500 m	8719605127426
BE43885.00500	Green	Reel	500 m	8719605190567

#### History

Update and Revision:	Revision Number: 0.91 Revision Date: 12-18-2020
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