



Product: [70006NH](#)

DataTuff® 5E, 1Q #22 Sol BC, PO ins, F/B, LSNH Jkt, PROFINET Type A, AWG 21286

[Request Sample](#)

Product Description

DataTuff® 5E, 1 Quad AWG 22 Bare Copper - Solid, Polyethylene insulation, SF/UTP - Overall Braid + Foil shielding, LSZH / FRNC jacket , PROFINET Type A, AWG 21286

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Suitable Applications: | PROFINET, harsh environment, IIoT, factory or process automation, IP cameras and devices, data communication, etc |
|------------------------|---|

Construction Details

Conductor

| Size | Stranding | Material | Number of Pairs | Number of Element |
|--------|-----------|------------------|-----------------|-------------------|
| 22 AWG | Solid | BC - Bare Copper | 2 | 4 |

Insulation

| Material | Nom. Insulation Diameter | Color Code |
|-------------------|--------------------------|--------------------------------|
| PE - Polyethylene | 1.5 mm (0.059 in) | White & Blue & Yellow & Orange |
| | | 1 Quad |

Cable Core

| Description |
|---------------------------|
| 1 quad with center filler |

Inner Jacket

| Material | Nom. Diameter |
|---|------------------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 3.9 mm (0.15 in) |

| | |
|--------------|---------|
| Table Notes: | Bedding |
|--------------|---------|

Outer Shield

| Shield Type | Material | Coverage |
|-------------|-------------------------|----------|
| Tape | Bi-Laminate (Alum+Poly) | |
| Braid | Tinned Copper (TC) | 85% |

Outer Jacket

| Material | Nom. Diameter |
|---|------------------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 6.5 mm (0.26 in) |

| | |
|-----------------------------------|------------------|
| Overall Cable Diameter (Nominal): | 6.5 mm (0.26 in) |
|-----------------------------------|------------------|

Electrical Characteristics

Electricals

| Max. Conductor DCR | Nom. Characteristic Impedance |
|--------------------|-------------------------------|
| 57.1 Ohm/km | 100 Ohm |

Delay

| Max. Delay | Nom. Velocity of Prop. |
|------------|------------------------|
| | |

530 ns/100m 68%

High Frequency

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Min. NEXT [dB] | Min. ACRF (ELFEXT) [dB] | Min. SRL (Structural Return Loss) [dB] |
|-----------------|-----------------------------------|----------------|-------------------------|--|
| 1 | 2.1 dB/100m | 65.3 | 64 | |
| 4 | 4.1 dB/100m | 56.3 | 52 | 23 |
| 10 | 6.5 dB/100m | 50.3 | 44 | 25 |
| 16 | 8.3 dB/100m | 47.2 | 40 | 25 |
| 31.25 | 11.7 dB/100m | 42.9 | 34 | 23.6 |
| 62.5 | 17 dB/100m | 38.4 | 28 | 21.5 |
| 100 | 22 dB/100m | 35.3 | 24 | 20.1 |

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

Transfer Impedance

| Frequency | Max. Transfer Impedance |
|-----------|-------------------------|
| 10 Mhz | Max. 10 mOhm/m |

Voltage

| Voltage Rating |
|----------------|
| 300 V |

Mechanical Characteristics

Temperature

| Operating | Installation | Storage |
|----------------|---------------|----------------|
| -40°C to +70°C | -5°C To +50°C | -40°C to +70°C |

Standards and Compliance

| | |
|----------------------------------|---|
| Environmental Suitability: | Indoor - Euroclass Eca, Sunlight Resistance, Oil Resistance |
| Flammability / Reaction to Fire: | IEC 60332-1-2 |
| CPR Compliance: | CPR Euroclass: Eca |
| Data Category: | Category 5e |
| ISO/IEC Compliance: | ISO/IEC 11801-1 |
| European Halogen Free Standards: | IEC 60754-1 - Halogen Amount = Zero |
| European Directive Compliance: | EU CE Mark |

History

| | |
|----------------------|--|
| Update and Revision: | Revision Number: 0.250 Revision Date: 12-15-2021 |
|----------------------|--|

Variants

| Item # | Color | Putup Type | Length | EAN |
|----------------|-------|------------|---------|---------------|
| 70006NH.01B100 | Green | Flat Box | 100 m | 8719605009265 |
| 70006NH.01305 | Green | Reel | 305 m | 8719605009241 |
| 70006NH.01500 | Green | Reel | 500 m | 8719605009258 |
| 70006NH.011000 | Green | Reel | 1,000 m | 8719605009234 |

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