



Product: [70007PU](#)

DataTuff® 5E, 1Q #22 Str TC, PO ins, F/B, PUR jkt, PROFINET Type B

Product Description

DataTuff® 5E, 1 Quad AWG 22 Tinned Copper - Stranded, Polyethylene insulation, SF/UTP - Overall Braid + Foil shielding, PUR jacket , PROFINET Type B

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 | 7x0.25 mm | TC - Tinned Copper | 2               | 4                 |

Insulation

| Material          | Nom. Insulation Diameter | Color Code                     |
|-------------------|--------------------------|--------------------------------|
| PE - Polyethylene | 1.55 mm (0.0610 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) | 4.1 mm (0.16 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    |
|--------------------|------------------|
| PUR - Polyurethane | 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             | 64                      |                                        |
| 4               | 4.1 dB/100m                       | 56             | 52                      | 23                                     |
| 10              | 6.5 dB/100m                       | 50             | 44                      | 25                                     |
| 16              | 8.3 dB/100m                       | 47             | 40                      | 25                                     |
| 31.25           | 11.7 dB/100m                      | 43             | 34                      | 23.6                                   |
| 62.5            | 17 dB/100m                        | 38             | 28                      | 21.5                                   |
| 100             | 22 dB/100m                        | 35             | 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 +80°C | -5°C To +50°C | -40°C to +80°C |

Standards and Compliance

|                                  |                                                     |
|----------------------------------|-----------------------------------------------------|
| Environmental Suitability:       | Indoor, Indoor, Sunlight Resistance, Oil Resistance |
| Flammability / Reaction to Fire: | IEC 60332-1-2                                       |
| AWM Compliance:                  | AWM 20549                                           |
| Data Category:                   | Category 5e                                         |
| ISO/IEC Compliance:              | ISO/IEC 11801-1                                     |
| European Directive Compliance:   | EU CE Mark                                          |

History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.248 Revision Date: 04-08-2022 |
|----------------------|--------------------------------------------------|

Part Numbers

Variants

| Item #        | Color | Putup Type | Length | EAN           |
|---------------|-------|------------|--------|---------------|
| 70007PU.01305 | Green | Reel       | 305 m  | 8719605009418 |
| 70007PU.01500 | Green | Reel       | 500 m  | 8719605009425 |

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