



Product: [70008PU](#)

DataTuff® 5E, 1Q #22 Str TC, PO ins, F/B, PUR HF jkt, PROFINET type C, 5M Trailing

[Request Sample](#)

Product Description

DataTuff® 5E, 1 Quad AWG 22 Tinned Copper - Stranded, Polyolefin (PO, PE, PP) insulation, Foil + Braid(s) shielding, PUR Halogen Free jacket , PROFINET type C, 5M trailing

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Suitable Applications: | PROFINET Cat5e, Flex trailing, harsh environment, IIoT, factory or process automation, IP cameras and devices, data communication, etc. |
|------------------------|---|

Construction Details

Conductor

| Size | Stranding | Material | No. of Pairs | No. of Elements |
|--------|-----------|--------------------|--------------|-----------------|
| 22 AWG | 19x34 | TC - Tinned Copper | 2 | 4 |

Insulation

| Material | Nom. Insulation Diameter | Color Code |
|-------------------|--------------------------|--------------------------------|
| PE - Polyethylene | 1.63 mm (0.0642 in) | White & Blue & Yellow & Orange |

Cable Core

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

Inner Jacket

| Material | Nom. Diameter |
|---|------------------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 4.2 mm (0.17 in) |

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

Outer Shield

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

Outer Jacket

| Separator | Material | Nom. Diameter |
|----------------|-----------------------------------|---------------|
| non-Woven Tape | PUR - Polyurethane (Halogen Free) | 6.5 mm |

| | |
|-----------------------------------|-------------------------------|
| Table Notes: | Jacket color green (RAL 6018) |
| Overall Cable Diameter (Nominal): | 6.5 mm (0.26 in) |

Electrical Characteristics

Electricals

| Max. Conductor DCR | Nom. Characteristic Impedance |
|-------------------------------|-------------------------------|
| 57.1 Ohm/km (17.4 Ohm/1000ft) | 100 Ohm |

Delay

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

| | |
|-------------|-----|
| 530 ns/100m | 68% |
|-------------|-----|

High Frequency

| Frequency [MHz] | Max. Insertion Loss (Attenuation) [dB/100m] | Min. NEXT [dB] | Min. ACRF (ELFEXT) [dB] | Min. SRL (Structural Return Loss) [dB] |
|-----------------|---|----------------|-------------------------|--|
| 1 | 2.1 | 65 | 64 | |
| 4 | 4 | 56 | 52 | 23 |
| 10 | 6.3 | 50 | 44 | 25 |
| 16 | 8 | 47 | 40 | 25 |
| 31.25 | 11.4 | 43 | 34 | 23.6 |
| 62.5 | 16.5 | 38 | 28 | 21.5 |
| 100 | 21.3 | 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

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

Mechanical Characteristics

Temperature

| UL Temperature | Operating | Installation | Storage |
|----------------|----------------|---------------|----------------|
| 80°C | -40°C to +80°C | -5°C To +60°C | -40°C To +80°C |

Trailing/Flexing Properties

| Motion | Number of Cycles | Radius | Speed | Acceleration | Traverse Length | Torsion Angle |
|------------------|------------------|--------|-------|--------------|-----------------|---------------|
| Trailing/Bending | 5,000,000 | 60 mm | 3 m/s | 3 | | |
| Torsion/Twisting | 1,000,000 | 60 mm | 12 | | 1 m | 180 ° |

| | |
|--------------|------------|
| Table Notes: | Drag chain |
|--------------|------------|

Bend Radius

| Stationary Min. | Installation Min. | Flexing Min. |
|-----------------|-------------------|----------------|
| 30 mm (1.2 in) | 65 mm (2.6 in) | 65 mm (2.6 in) |

| | |
|--------------------|----------------|
| Max. Pull Tension: | 160 N (36 lbf) |
|--------------------|----------------|

Standards and Compliance

| | |
|----------------------------------|---|
| Environmental Suitability: | Indoor, Indoor, Sunlight Resistance, Oil Resistance |
| Flammability / Reaction to Fire: | Horizontal flametest |
| AWM Compliance: | AWM 20549 |
| Data Category: | Category 5e |
| ISO/IEC Compliance: | ISO/IEC 11801 Ed. 2.2:2002/A2:2010/C1:2011 |
| European Halogen Free Standards: | IEC 60754-1 - Halogen Amount = Pass |
| European Directive Compliance: | EU CE Mark |

History

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| Update and Revision: | Revision Number: 0.283 Revision Date: 03-21-2024 |
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Part Numbers

Variants

| Item # | Color | Putup Type | Length | EAN |
|----------------|-------|------------|---------|---------------|
| 70008PU.01B100 | Green | Flat Box | 100 m | 8719605009463 |
| 70008PU.01305 | Green | Reel | 305 m | 8719605009449 |
| 70008PU.01500 | Green | Reel | 500 m | 8719605009456 |
| 70008PU.011000 | Green | Reel | 1,000 m | 8719605009432 |

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