



Product: NN01302 ☐

DataTwist 2400 Category 6+ Cable, 2 x 4 Pair, U/UTP, LSZH Indoor CPR Dca

Product Description

Category 6 Enhanced Premise Horizontal Cable (300MHz) shotgun, 2 x 4-Pair, 24 AWG Solid Bare Copper Conductors, U/UTP, Polyethylene Insulation, LSZH Jacket

Technical Specifications

Product Overview

| Suitable Applications: | Horizontal and building backbone cable; Support current and future Category 6 and 5e applications, such as: 1000Base - T (Gigabit Ethernet), 100 Base - T, 10 Base - T, FDDI, ATM |
|------------------------|---|
| | FDDI, ATM |

Construction Details

Conductor

| Element | Size | Stranding | Material | No. of Pairs |
|-----------------|--------|-----------|------------------|--------------|
| Individual Pair | 24 AWG | Solid | BC - Bare Copper | 8 |

Insulation

| Element | Material | Nom. Insulation Diameter | Color Code |
|-----------------|-------------------|--------------------------|--|
| Individual Pair | PE - Polyethylene | 1 mm (0.039 in) | White/Blue & Blue, White/Orange & Orange, White/Green & Green, White/Brown & Brown |

Cable Core

Description
4 pairs twisted together

Outer Jacket

| Material | Material | | |
|--|-----------------------------------|---|--|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) 5.5 mm (0.22 in) | | | |
| Table Notes: | able Notes: Figure 8 construction | | |
| Overall Cable Diameter (Nominal): | 5.5 mm (0.22 in) |) | |

Electrical Characteristics

Electricals

| Max. Conductor DCR | Max. Mutual Capacitance | Max. Capacitance Unbalance | Nom. Characteristic Impedance |
|--------------------|-------------------------|----------------------------|-------------------------------|
| 94 Ohm/km | 56 pF/m (17 pF/ft) | 160 pF/100m | 100 Ohm |

Delay

| Max. Delay Skew | Nom. Velocity of Prop. |
|-----------------|------------------------|
| 45 ns/100m | 60% |

High Frequency

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Min. NEXT [dB] | Min. PSNEXT [dB] | Min. ACR [dB] | Min. PSACR [dB] | Min. ACRF (ELFEXT) [dB] | Min. PSACRF (PSELFEXT) [dB] | Min. RL (Return Loss) [dB] | Min. TCL [dB] | Min. ELTCTL [dB] |
|--------------------|--------------------------------------|-------------------|---------------------|------------------|--------------------|----------------------------|--------------------------------|-------------------------------|------------------|---------------------|
| 1 | 2 dB/100m | 75.3 | 73.3 | 73.3 | 71.3 | 70.8 | 67.8 | 20 | 40 | 35 |
| 4 | 3.7 dB/100m | 66.3 | 64.3 | 62.6 | 60.6 | 58.8 | 55.8 | 23 | 40 | 23 |
| 10 | 5.8 dB/100m | 61.8 | 59.8 | 56 | 54 | 50.8 | 47.8 | 25 | 40 | 15 |
| 16 | 7.4 dB/100m | 58.6 | 56.6 | 51.2 | 49.2 | 46.7 | 43.7 | 25 | 38 | 10.9 |
| 31.2 | 10.4 dB/100m | 54 | 52 | 43.6 | 41.6 | 40.9 | 37.9 | 23.6 | 35.1 | 5.1 |

| 62.5 | 15 dB/100m | 49.1 | 47.1 | 34.1 | 32.1 | 34.9 | 31.9 | 21.5 | 32 | |
|--------------|--------------|---------------------|------------------|-------------------|------------------|-------------|------|------|----|--|
| 100 | 19.3 dB/100m | 45.8 | 43.8 | 26.5 | 24.5 | 30.8 | 27.8 | 20.8 | 30 | |
| 155 | 24.5 dB/100m | 42.7 | 40.7 | 18.2 | 16.2 | 27 | 24 | 19.5 | 29 | |
| 200 | 28.3 dB/100m | 40.9 | 38.9 | 12.6 | 10.6 | 24.8 | 21.8 | 18.7 | 27 | |
| 250 | 32.1 dB/100m | 39.3 | 37.3 | 7.2 | 5.2 | 22.8 | 19.8 | 18 | 26 | |
| 300 | 35.6 dB/100m | 38.1 | 36.1 | 2.5 | | 21.3 | 18.3 | 17.5 | | |
| 350 | 38.9 dB/100m | 37.1 | 35.1 | | | 19.9 | 16.9 | 17 | | |
| 450 | 45 dB/100m | 35.5 | 33.5 | | | 17.7 | 14.7 | 16.2 | | |
| Table Notes: | | Limits above 300 MF | z are for inforr | nation only. Refe | erence standard: | IEC 61156-5 | | | | |

Voltage

Voltage Rating 72 V DC

Mechanical Characteristics

Temperature

| Operating | Installation |
|----------------|--------------|
| -30°C to +60°C | 0°C To +50°C |

Stationary Min. Installation Min

Bend Radius

| 23 mm (| 0.91 in) | 46 mm | |
|----------|-----------|-------|----------------|
| Max. Pu | II Tensio | n: | 130 N (29 lbf) |
| Bulk Cal | ole Weig | ht: | 68 kg/km |

Standards and Compliance

| Environmental Suitability: | Indoor - Euroclass Dca |
|----------------------------------|---|
| Flammability / Reaction to Fire: | IEC 60332-1-2 |
| CPR Compliance: | CPR Euroclass: Dca-s2,d2,a1 |
| IEEE Compliance: | PoE: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4 |
| Data Category: | Category 6 |
| TIA/EIA Compliance: | ANSI/TIA 568.2-D |
| ISO/IEC Compliance: | ISO/IEC 11801-1 |
| CENELEC Compliance: | EN 50173-1, Segregation class according EN50174-2 = a |
| European Directive Compliance: | EU CE Mark |
| UK Regulation Compliance: | UKCA Mark |

Product Notes

| Notes: | Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. |
|--------|--|
|--------|--|

History

| Update and Revision: | Revision Number: 0.260 Revision Date: 09-04-2024 |
|----------------------|--|
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Part Numbers

Variants

| Item # | Color | Putup Type | Length | EAN |
|---------------|-------|------------|--------|---------------|
| NN01302.00500 | White | Reel | 500 m | 8719605103642 |

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