



Product: <u>IBDN25R</u> ☑

Category 5e Backbone Cable, 25 Pair, U/UTP, CMR

Product Description

Category 5e Premise Backbone Cable (100MHz), 25 Pair, 24 AWG Solid Bare Copper Conductors, U/UTP, Riser-CMR, PVC Jacket

Technical Specifications

Product Overview

| Suitable Applications: Premise Backbone Cable, Ethernet 1000BASE-T, Ethernet 100BASE-TX, Ethernet 10BASE-T, PoE++, PoE+, | PUET. POE |
|--|-----------|
| | |
| | |
| Conductor | |
| AWG Stranding Material Number of Pairs | |
| 24 Solid BC - Bare Copper 25 | |
| Insulation | |
| Material Color Code | |
| PO - Polyolefin Western Electric (Non-Striped) | |
| Bonded-Pair: No | |

| Material | Nom. Diameter | Ripcord |
|--------------------------|---------------|---------|
| PVC - Polyvinyl Chloride | 0.510 in | Yes |

Electrical Characteristics

Electricals

| Max. Conductor DCR | Max. DCR Unbalance | Max. Capacitance Unbalance | Nom. Mutual Capacitance |
|--------------------|--------------------|----------------------------|-------------------------|
| 93.8 Ohm/km | 5% | 330 pF/100m | 14 pF/ft |

Delay

| Frequency [MHz] | Max. Delay | Max. Delay Skew | Nom. Velocity of Propagation (VP) [%] |
|-----------------|---------------|-----------------|---------------------------------------|
| 100 MHz | 537.6 ns/100m | 45 ns/100m | 68% |

High Freq

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Min. PSNEXT [dB] | Min. RL (Return Loss) [dB] | Max./Min. Fitted Impedance |
|-----------------|-----------------------------------|------------------|----------------------------|----------------------------|
| 1 MHz | 2.0 dB/100m | 62.3 dB | 20.0 dB | 100 ± 15% |
| 4 MHz | 4.1 dB/100m | 53.3 dB | 23.0 dB | 100 ± 15% |
| 8 MHz | 5.8 dB/100m | 48.8 dB | 24.5 dB | 100 ± 15% |
| 10 MHz | 6.5 dB/100m | 47.3 dB | 25.0 dB | 100 ± 15% |
| 16 MHz | 8.2 dB/100m | 44.3 dB | 25.0 dB | 100 ± 15% |
| 20 MHz | 9.3 dB/100m | 42.8 dB | 25.0 dB | 100 ± 15% |
| 25 MHz | 10.4 dB/100m | 41.3 dB | 24.3 dB | 100 ± 15% |
| 31.25 MHz | 11.7 dB/100m | 39.9 dB | 23.6 dB | 100 ± 15% |
| 62.5 MHz | 17.0 dB/100m | 35.4 dB | 21.5 dB | 100 ± 15% |
| 100 MHz | 22.0 dB/100m | 32.3 dB | 20.1 dB | 100 ± 15% |

Mechanical Characteristics

Temperature

| UL Rating. | Operating | Installation | Storage |
|------------|----------------|--------------|----------------|
| 60°C | -30°C To +60°C | 0°C To +60°C | -30°C To +60°C |

Bend Radius

| Stationary Min. | Installation Mi |
|-------------------|-----------------|
| 5.25 in | 10.25 in |
| Max. Pull Tension | ו: |
| Bulk Cable Weigl | nt: |

Standards and Compliance

| Environmental Suitability: | Riser, Indoor |
|-----------------------------------|--|
| Flammability / Fire Resistance: | UL1666 Riser, FT4, FT4 |
| NEC / UL Compliance: | CMR |
| CEC / C(UL) Compliance: | CMR |
| ICEA Compliance: | S-90-661-2012 |
| NEMA Compliance: | NEMA WC-63.1 |
| Data Category: | Category 5e |
| TIA/EIA Compliance: | ANSI/TIA-568.2-D Category 5e |
| CPR Euroclass: | Fca |
| European Directive Compliance: | EU CE Mark, EU Directive 2015/863/EU, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16 |
| APAC Compliance: | China RoHS II (GB/T 26572-2011) |

Part Number

Plenum Number:

Variants

| Item # | Color | Putup Type | Length | UPC |
|-----------------|-------|---------------|----------|--------------|
| IBDN25R 006500 | Blue | Reel | 500 ft | 612825061922 |
| IBDN25R 006500 | Blue | Reel | 500 ft | 612825061922 |
| IBDN25R 008CUT | Gray | Cut to Length | | 612825061908 |
| IBDN25R 008CUT | Gray | Cut to Length | 1 ft | 612825061908 |
| IBDN25R 0081000 | Gray | Reel | 1,000 ft | 612825061915 |
| IBDN25R 0081000 | Gray | Reel | 1,000 ft | 612825061915 |
| IBDN25R 0085000 | Gray | Reel | 5,000 ft | 612825061946 |

IBDN25P

Product Notes

| Notes: | Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Print Includes Descending Footage/Meter Markings. |
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| History | |
| Update and Revision: | Revision Number: 0.364 Revision Date: 09-30-2020 |

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