



Product: [DIW300](#) 

CAT3 Backbone, 300pr, UTP, PVC Jkt, CMR

Product Description

CAT3, DIW 300-Pair, U/UTP-unshielded, Riser-CMR, Premise Backbone Cable, 24 AWG solid bare copper conductors, PVC insulation, ripcord, PVC jacket

Technical Specifications

Product Overview

| | |
|------------------------|------------------------|
| Suitable Applications: | Premise Backbone Cable |
|------------------------|------------------------|

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | No. of Pairs |
|-----|-----------|------------------|--------------|
| 24 | Solid | BC - Bare Copper | 300 |

| | |
|------------------------|-----|
| Conductor Count: | 600 |
| Total Number of Pairs: | 300 |

Insulation

| Material |
|--------------------------|
| PVC - Polyvinyl Chloride |

| | |
|--------------|-----|
| Bonded-Pair: | N/A |
|--------------|-----|

Color Chart

| Number | Color |
|--------|-------------------------------|
| 1 | White/Blue & Blue/White |
| 2 | White/Orange & Orange/White |
| 3 | White/Green & Green/White |
| 4 | White/Brown & Brown/White |
| 5 | White/Slate & Slate/White |
| 6 | Red/Blue & Blue/Red |
| 7 | Red/Orange & Orange/Red |
| 8 | Red/Green & Green/Red |
| 9 | Red/Brown & Brown/Red |
| 10 | Red/Slate & Slate/Red |
| 11 | Black/Blue & Blue/Black |
| 12 | Black/Orange & Orange/Black |
| 13 | Black/Green & Green/Black |
| 14 | Black/Brown & Brown/Black |
| 15 | Black/Slate & Slate/Black |
| 16 | Yellow/Blue & Blue/Yellow |
| 17 | Yellow/Orange & Orange/Yellow |
| 18 | Yellow/Green & Green/Yellow |
| 19 | Yellow/Brown & Brown/Yellow |
| 20 | Yellow/Slate & Slate/Yellow |
| 21 | Violet/Blue & Blue/Violet |
| 22 | Violet/Orange & Orange/Violet |

| | |
|---------------------|-----------------------------|
| 23 | Violet/Green & Green/Violet |
| 24 | Violet/Brown & Brown/Violet |
| 25 | Violet/Slate & Slate/Violet |
| Group One Binder | White/Blue |
| Group Two Binder | White/Orange |
| Group Three Binder | White/Green |
| Group Four Binder | White/Brown |
| Group Five Binder | White/Slate |
| Group Six Binder | Red/Blue |
| Group Seven Binder | Red/Orange |
| Group Eight Binder | Red/Green |
| Group Nine Binder | Red/Brown |
| Group Ten Binder | Red/Slate |
| Group Eleven Binder | Black/Blue |
| Group Twelve Binder | Black/Orange |

Color Chart 2

| Number | Color |
|--------|--------------|
| 1 | Blue/White |
| 2 | Orange/White |
| 3 | Green/White |
| 4 | Brown/White |
| 5 | Gray/White |
| 6 | Blue/Red |
| 7 | Orange/Red |
| 8 | Green/Red |
| 9 | Red/Brown |
| 10 | Red/Gray |
| 11 | Black/Blue |
| 12 | Black/Orange |

Outer Jacket Material

| Material | Nominal Diameter | Ripcord |
|--------------------------|------------------|---------|
| PVC - Polyvinyl Chloride | 1.210 in | Yes |

Electrical Characteristics

Conductor DCR

| Max. Conductor DCR | Max. DCR Unbalance |
|--------------------|--------------------|
| 93.8 Ohm/km | 5 % |

Capacitance

| Max. Capacitance Unbalance | Nom. Mutual Capacitance |
|----------------------------|-------------------------|
| 330 pF/100m | 17 pF/ft |

Delay

| Frequency [MHz] | Max. Delay | Max. Delay Skew |
|-----------------|-------------|-----------------|
| 16 MHz | 543 ns/100m | 45 ns/100m |

High Freq

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Min. NEXT [dB] | Min. PSNEXT [dB] | Min. ACR [dB] | Min. PSACR [dB] | Min. RL (Return Loss) [dB] | Max./Min. Fitted Impedance |
|-----------------|-----------------------------------|----------------|------------------|---------------|-----------------|----------------------------|----------------------------|
| 0.772 MHz | 2.2 dB/100m | 47.0 dB | 43.0 dB | 50.1 dB | 46.1 dB | | |
| 1 MHz | 2.6 dB/100m | 45.0 dB | 41.0 dB | 47.8 dB | 43.8 dB | 12.0 dB | 100 ± 15 Ohm |
| 4 MHz | 5.6 dB/100m | 36.0 dB | 32.0 dB | 36.0 dB | 32.0 dB | 12.0 dB | 100 ± 15 Ohm |
| 8 MHz | 8.5 dB/100m | 31.0 dB | 28.0 dB | 28.3 dB | 24.3 dB | 12.0 dB | 100 ± 15 Ohm |
| 10 MHz | 9.7 dB/100m | 30.0 dB | 26.0 dB | 26.2 dB | 22.3 dB | 12.0 dB | 100 ± 15 Ohm |
| 16 MHz | 13.1 dB/100m | 27.0 dB | 23.0 dB | 20.1 dB | 16.1 dB | 10.0 dB | 100 ± 15 Ohm |

Voltage

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

Temperature Range

| | |
|--------------------------|----------------|
| Installation Temp Range: | -30°C To +60°C |
| UL Temp Rating: | 60°C |
| Storage Temp Range: | -30°C To +60°C |
| Operating Temp Range: | -30°C To +60°C |

Mechanical Characteristics

| | |
|--------------------------------------|-----------------|
| Bulk Cable Weight: | 1028 lbs/1000ft |
| Max. Pull Tension: | 1800 lbs |
| Min Bend Radius During Installation: | 24.25 in |
| Min Bend Radius/Minor Axis: | 12.25 in |

Standards

| | |
|-----------------------|--------------------------------------------------------|
| NEC/(UL) Compliance: | CMR |
| CEC/C(UL) Compliance: | CMR |
| Data Category: | Category 3 |
| ANSI Compliance: | S-90-661-2012 Category 3, ANSI/NEMA WC-63.1 Category 3 |
| TIA/EIA Compliance: | ANSI/TIA-568-C.2 Category 3 |

Applicable Environmental and Other Programs

| | |
|----------------------------------------|------------|
| Environmental Space: | Riser |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| EU Directive 2003/96/EC (BFR): | Yes |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU: | Yes |
| EU Directive Compliance: | Yes |
| EU CE Mark: | Yes |
| EU REACH SVHC Compliance (yyyy-mm-dd): | 2017-07-10 |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-08-19 |
| MII Order #39 (China RoHS): | Yes |

Suitability

| | |
|------------------------------------|-----|
| Suitability - Aerial: | No |
| Suitability - Burial: | No |
| Suitability - Hazardous Locations: | No |
| Suitability - Indoor: | Yes |
| Suitability - Non-Halogenated: | No |
| Suitability - Oil Resistance: | No |
| Suitability - Outdoor: | No |
| Suitability - Sunlight Resistance: | No |

Flammability, LS0H, Toxicity Testing

| | |
|---------------------|---------------|
| C(UL) Flammability: | FT4 |
| UL Flammability: | UL 1666 Riser |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

| | |
|----------------|---------|
| Plenum (Y/N): | No |
| Plenum Number: | DPLN300 |

Part Number

Variants

| Item # | Color | Putup Type | Length | UPC |
|---------------|-------|---------------|--------|--------------|
| DIW300 732CUT | Olive | Cut to Length | | 612825060710 |
| DIW300 732CUT | Olive | Cut to Length | 1 ft | 612825060710 |

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. |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

History

| | |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.322 Revision Date: 04-28-2020 |
|----------------------|--------------------------------------------------|

© 2021 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.