



Product: [DIW6](#) 

CAT3 Backbone, 6pr, UTP, PVC Jkt, CMR

Product Description

CAT3, DIW 6-Pair, U/UTP-unshielded, Riser-CMR, Premise Horizontal 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	6

Conductor Count:	12
Total Number of Pairs:	6

Insulation

Material	
PVC - Polyvinyl Chloride	
Bonded-Pair:	N/A

Color Chart

Number	Color
1	White/Blue & Blue
2	White/Orange & Orange
3	White/Green & Green
4	White/Brown & Brown
5	White/Slate & Slate
6	Red/Blue & Blue

Outer Jacket

Material	Nominal Diameter	Ripcord
PVC - Polyvinyl Chloride	0.203 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	Nominal Velocity of Propagation (VP) [%]
-----------------	------------	-----------------	--

16 MHz	543 ns/100m	45 ns/100m	68%
--------	-------------	------------	-----

High Frequency

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

Mechanical Characteristics

Bulk Cable Weight:	23 lbs/1000ft
Max. Pull Tension:	55 lbs
Min. Bend Radius During Installation:	2.0 in
Min. Bend Radius/Minor Axis:	1.0 in

Standards

NEC/(UL) Compliance:	CMR
CEC/C(UL) Compliance:	CMR
CPR Euroclass:	Eca
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
Third Party Performance Verification:	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 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	Yes
EU CE Mark:	Yes
EU REACH SVHC Compliance (yyyy-mm-dd):	2017-07-10
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

CSA/C(UL) Flammability:	FT4
UL Flammability:	UL 1666 Riser
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
DIW6 7321000	Olive	Reel	1,000 ft	612825060864
DIW6 7321000	Olive	Reel	1,000 ft	612825060864

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: 0.471 Revision Date: 12-12-2023
----------------------	--

© 2024 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.