



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
Condu	ctor Count:		12
Total I	Number of Pa	airs:	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

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 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.
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History

Update and Revision:	Revision Number: 0.474 Revision Date: 02-03-2025

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