# **Detailed Specifications & Technical Data**

#### **METRIC MEASUREMENT VERSION**





# DIW50 Multi-Conductor - Category 3 Nonbonded-Pair Cable

For more Information please call

1-800-Belden1



### **General Description:**

CAT3 (16MHz), DIW 50-Pair, U/UTP-Unshielded, Riser-CMR, Premise Backbone Cable, 24 AWG solid bare copper conductors, PVC insulation, Ripcord, PVC jacket

### **Usage (Overall)**

Suitable Applications:

Premise Backbone Cable

### **Physical Characteristics (Overall)**

#### Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
50	24	Solid	BC - Bare Copper

**Total Number of Conductors:** 

100

#### Insulation

Insulation Material:

Insulation Material
PVC - Polyvinyl Chloride

#### **Outer Jacket**

**Outer Jacket Material:** 

Outer Jacket Material
PVC - Polyvinyl Chloride

#### **Outer Jacket Diameter:**

Nom. Dia. (mm) 13.716

#### **Overall Cable**

**Overall Cabling Color Code Chart:** 

Number	Group/Cond. Color
1	Blue/White
2	Orange/White

#### **Pair**

### Pair Color Code Chart:

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

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14	Black/Brown
15	Black/Slate
16	Yellow/Blue
17	Yellow/Orange
18	Yellow/Green
19	Yellow/Brown
20	Yellow/Slate
21	Violet/Blue
22	Violet/Orange
23	Violet/Green
24	Violet/Brown
25	Violet/Slate

Mechanical	Characteristics (	(Overall)

Operating Temperature Range:	-30°C To +60°C
UL Temperature Rating:	60°C
Bulk Cable Weight:	297.640 Kg/Km
Max. Recommended Pulling Tension:	1334.460 N
Min. Bend Radius/Minor Axis:	139.700 mm
Min. Bend/Installation:	139.700 mm

# **Applicable Specifications and Agency Compliance (Overall)**

### **Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMR
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	08/19/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Other Specification:	Meets Category 3 transmission performance requirements for multi-pair backbone cables as specified by TIA/EIA 568 B-2, including power-sum NEXT
mo Tost	

# **Flame Test**

UL Flame Test:	UL1666 Riser
C(UL) Flame Test:	FT4
enum/Non-Plenum	

# Ple

Plenum (Y/N):	No
Plenum Number:	DPLN50

### **Electrical Characteristics (Overall)**

**Maximum Conductor DC Resistance:** 

DCR @ 20°C (Ohm/100 m) 9.380

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%) 5.000

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### DIW50 Multi-Conductor - Category 3 Nonbonded-Pair Cable

### **Electrical Characteristics-Premise (Overall)**

#### **Premise Cable EleIctricals:**

Freq. (MF	lz) Max. Attenuation	(dB/100 m) Min. PSNEXT	(dB) Min. SRL	(dB) Fitted Imp. (Ohms)
.772	2.200	43		
1.0	2.600	41	12	100 +/- 15
4.0	5.600	32	12	100 +/- 15
8.0	8.500	28	12	100 +/- 15
10.0	9.700	26	12	100 +/- 15
16.0	13.100	23	10	100 +/- 15

#### **Notes (Overall)**

Notes: Jacket sequentially printed with dual footage and meter markings.

#### Reference (Overall)

**Previous Part Number:** 24501876

### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
DIW50 732CUT	1 FT	0.000	GRAY, LIGHT OLIVE		CAT3 50PR U/UTP CMR CUT
DIW50 7321000	1,000 FT	190.000 LB	GRAY, LIGHT OLIVE		CAT3 50PR U/UTP CMR REEL
DIW50 7322500	2,500 FT	475.000 LB	GRAY, LIGHT OLIVE		CAT3 50PR U/UTP CMR REEL

Revision Number: 2 Revision Date: 08-14-2013

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