

## 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. (in.)
0.540

#### 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
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

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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:	200 lbs/1000 ft.
Max. Recommended Pulling Tension:	300 lbs.
Min. Bend Radius/Minor Axis:	5.500 in.
Min. Bend/Installation:	5.500 in.

### 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

#### Flame Test

UL Flame Test:	UL1666 Riser
C(UL) Flame Test:	FT4

#### Plenum/Non-Plenum

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

### Electrical Characteristics (Overall)

#### Maximum Conductor DC Resistance:

<b>DCR @ 20°C (Ohm/100 m)</b>
9.380

#### Maximum DCR Unbalanced:

<b>DCR Unbalance @ 20°C (%)</b>
5.000

### Electrical Characteristics-Premise (Overall)

#### Premise Cable Electricals:

Freq. (MHz)	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
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### Put Ups and Colors:

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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 SMI80
DIW50 7322500	2,500 FT	475.000 LB	GRAY, LIGHT OLIVE		CAT3 50PR U/UTP CMR REEL

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