# **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



# IBDN25P Multi-Conductor - Category 5e Nonbonded-Pair Cable



For more Information please call

1-800-Belden1



#### **General Description:**

CAT5e (100MHz), 25-Pair, U/UTP-Unshielded, Plenum-CMP, Premise Backbone Cable, 24 AWG solid bare copper conductors, FEP insulation, Ripcord, FEP jacket

### Usage (Overall) Suitable Applications: Premise Backbone Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, Noisy Environments **Physical Characteristics (Overall)** Conductor AWG: # Pairs AWG Stranding Conductor Material 24 Solid BC - Bare Copper **Total Number of Conductors:** 50 Insulation Insulation Material: **Insulation Material** FEP - Fluorinated Ethylene Propylene **Outer Shield** Outer Shield Material: **Outer Shield Material** Unshielded **Outer Jacket** Outer Jacket Material: **Outer Jacket Material** FEP - Fluorinated Ethylene Propylene Outer Jacket Diameter: Nom. Dia. (in.) 0.430 Outer Jacket Ripcord: Yes

### Pair

Pair Color Code Chart:

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

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22	Purple & Orange		
23	Purple & Green		
24	Purple & Brown		
25	Purple & Gray		

chanical Characteristics (Overall)			
Storage Temperature Range:	-40°C To +75°C		
Installation Temperature Range:	0°C To +60°C		
Operating Temperature Range:	-40°C To +60°C		
Bulk Cable Weight:	137 lbs/1000 ft.		
Max. Recommended Pulling Tension:	150 lbs.		
Min. Bend Radius/Minor Axis:	4.300 in.		
Min. Bend/Installation:	4.300 in.		

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

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

NEC/(UL) Specification:	CMP			
CEC/C(UL) Specification:	CMP			
EU Directive 2011/65/EU (ROHS II):	Yes			
EU Directive 2000/53/EC (ELV):	Yes			
EU Directive 2002/95/EC (RoHS):	Yes			
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			
Telecommunications Standards:	Category 5e - TIA 568.C.2			
Other Specification:	NEMA WC-63.1 Category 5e			
Flame Test				
C(UL) Flame Test:	FT6			
CSA Flame Test:	FT6			
Plenum/Non-Plenum				
Plenum (Y/N):	Yes			
Non-Plenum Number:	IBDN25R			

330

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

Nom. Mutual Capacitance:

Capacitance (pF/ft) 14.000

Maximum Capacitance Unbalance (pF/100 m):

Nominal Velocity of Propagation:

**VP (%)** 72.000

Maximum Delay:

**Delay (ns/100 m)** 538 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m) 45

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m) 9.38

Max. Operating Voltage - UL:

Voltage 300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)

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

#### Premise Cable Elelctricals:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. PSNEXT (dB)	Min. SRL (dB)	Fitted Imp. (Ohms)
.772	1.800	64		
1	2.000	62.3	20	100 ± 15%
4	4.100	53.3	23.0	100 ± 15%
8	5.800	48.8	24.5	100 ± 15%
10	6.500	47.3	25	100 ± 15%
16	8.200	44.3	25	100 ± 15%
20	9.300	42.8	25	100 ± 15%
25	10.400	41.3	24.3	100 ± 15%
31.25	11.700	39.9	23.6	100 ± 15%
62.5	17.000	35.4	21.5	100 ± 15%
100	22.000	32.3	20.1	100 ± 15%

#### Notes (Overall)

Notes: Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-B.2, Category 5e.

**Previous Part Number:** 24577123

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

Item #		Putup	Ship Weight	Color	Notes	Item Desc
IBDN25	5P 008CUT	1 FT	0.000	GRAY		CAT5E 25PR U/UTP CMP CUT
IBDN25	5P 0081000	1,000 FT	151.000 LB	GRAY		CAT5E 25PR U/UTP CMP REEL

Revision Date: 03-25-2014 Revision Number: 4

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