



Product: [IBDN25P](#)

Category 5e Backbone Cable, 25 Pair, U/UTP, CMP

Product Description

Category 5e Premise Backbone Cable (100MHz), 25 Pair, 24 AWG Solid Bare Copper Conductors, U/UTP, Plenum-CMP, PVC-LS Jacket

Technical Specifications

Product Overview

Suitable Applications:	Premise Backbone Cable, Ethernet 1000BASE-T, Ethernet 100BASE-TX, Ethernet 10BASE-T, PoE++, PoE+, PoE
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Construction Details

Conductor

Size	Stranding	Material	No. of Pairs
24 AWG	Solid	BC - Bare Copper	25

Insulation

Material	Color Code
FEP - Fluorinated Ethylene Propylene	Western Electric (Non-Striped)

Outer Jacket

Material	Nom. Diameter	Ripcord
FEP - Fluorinated Ethylene Propylene	0.478 in (12.1 mm)	Yes

Overall Cable Diameter (Nominal):	0.478 in (12.1 mm)
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Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
93.8 Ohm/km (28.6 Ohm/1000ft)	330 pF/100m

Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	537.6 ns/100m	45 ns/100m	72%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. PSNEXT [dB]	Min. RL (Return Loss) [dB]	Max./Min. Fitted Impedance [Ohm]
1	2.0 dB/100m	62.3	20.0	100 ± 15%
4	4.1 dB/100m	53.3	23.0	100 ± 15%
8	5.8 dB/100m	48.8	24.5	100 ± 15%
10	6.5 dB/100m	47.3	25.0	100 ± 15%
16	8.2 dB/100m	44.3	25.0	100 ± 15%
20	9.3 dB/100m	42.8	25.0	100 ± 15%
25	10.4 dB/100m	41.3	24.3	100 ± 15%
31.25	11.7 dB/100m	39.9	23.6	100 ± 15%
62.5	17.0 dB/100m	35.4	21.5	100 ± 15%
100	22.0 dB/100m	32.3	20.1	100 ± 15%

Voltage

UL Voltage Rating
300 V (CMP)

Mechanical Characteristics

Temperature

UL Temperature	Operating	Installation	Storage
60°C	-40°C To +60°C	0°C To +60°C	-40°C To +60°C

Bend Radius

Stationary Min.	Installation Min.
4.5 in (110 mm)	8.75 in (222 mm)

Max. Pull Tension:	150 lbs (68 kg)
Bulk Cable Weight:	137 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Plenum, Indoor
Flammability / Reaction to Fire:	NFPA 262, UL 910 (Plenum), FT6, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	CMP
CEC / C(UL) Compliance:	CMP
ICEA Compliance:	S-90-661
NEMA Compliance:	NEMA WC-63.1
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 5e
Third Party Performance Verification:	Category 5e
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Non-Plenum Number:	IBDN25R

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: 0.475 Revision Date: 04-29-2024
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
IBDN25P 008CUT	Gray	Cut to Length		612825061885
IBDN25P 008CUT	Gray	Cut to Length	1 ft	612825061885
IBDN25P 0081000	Gray	Reel	1,000 ft	612825061892
IBDN25P 0081000	Gray	Reel	1,000 ft	612825061892

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