



Product: [IBDN25R](#)

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

**Product Description**

Category 5e Premise Backbone Cable (100MHz), 25 Pair, 24 AWG Solid Bare Copper Conductors, U/UTP, Riser-CMR, PVC 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
PO - Polyolefin	Western Electric (Non-Striped)

**Outer Jacket**

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.510 in (13.0 mm)	Yes

Overall Cable Diameter (Nominal):	0.510 in (13.0 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	68%

**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 (CMR)

## Mechanical Characteristics

### Temperature

UL Temperature	Operating	Installation	Storage
60°C	-30°C To +60°C	0°C To +60°C	-30°C To +60°C

### Bend Radius

Stationary Min.	Installation Min.
5.25 in (133 mm)	10.25 in (260.4 mm)

Max. Pull Tension:	150 lbs (68 kg)
Bulk Cable Weight:	146 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Riser, Indoor
Flammability / Reaction to Fire:	UL1666 Riser, FT4
CPR Compliance:	CPR Euroclass: Fca; CPR UKCA Class: Fca
NEC / UL Compliance:	CMR
CEC / C(UL) Compliance:	CMR
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)
Plenum Number:	IBDN25P

## 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: 04-29-2024
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## Part Numbers

### Variants

Item #	Color	Putup Type	Length	UPC
IBDN25R 006500	Blue	Reel	500 ft	612825061922
IBDN25R 006500	Blue	Reel	500 ft	612825061922
IBDN25R 008CUT	Gray	Cut to Length		612825061908
IBDN25R 008CUT	Gray	Cut to Length	1 ft	612825061908
IBDN25R 0081000	Gray	Reel	1,000 ft	612825061915
IBDN25R 0081000	Gray	Reel	1,000 ft	612825061915
IBDN25R 0085000	Gray	Reel	5,000 ft	612825061946

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