



Product: [2424DC](#)

DataTwist 2400 Category 6+ Cable, 4 Pair, U/UTP, LSZH, Indoor CPR Cca

Product Description
Category 6 Enhanced Premise Horizontal Cable (350MHz), 4-Pair, 24 AWG Solid Bare Copper Conductors, U/UTP, Polyethylene Insulation, LSZH Jacket

Technical Specifications

Product Overview

Suitable Applications:	Horizontal and building backbone cable; Support current and future Category 6 and 5e applications, such as: 1000Base - T (Gigabit Ethernet), 100 Base - T, 10 Base - T, FDDI, ATM
------------------------	---

Construction Details

Conductor

Element	Size	Stranding	Material	No. of Pairs	No. of Elements
Individual Pair	24 AWG	Solid	BC - Bare Copper	4	8

Insulation

Element	Material	Nom. Insulation Diameter	Color Code
Individual Pair	PE - Polyethylene	1 mm (0.039 in)	White/Blue & Blue, White/Orange & Orange, White/Green & Green, White/Brown & Brown

Cable Core

Description
4 pairs twisted together

Outer Jacket

Material	Nom. Diameter	Ripcord
LSZH - Low Smoke Zero Halogen (Flame Retardant)	6.1 mm (0.24 in)	Yes

Overall Cable Diameter (Nominal):	6.1 mm (0.24 in)
-----------------------------------	------------------

Electrical Characteristics

Electricals			
Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
93.8 Ohm/km	56 pF/m (17 pF/ft)	160 pF/100m	100 Ohm
Delay			
Max. Delay Skew	Nom. Velocity of Prop.		
35 ns/100m	70%		

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2 dB/100m	75.3	73.3	73.3	71.3	70.8	67.8	20	40	35
4	3.7 dB/100m	66.3	64.3	62.6	60.6	58.8	55.8	23	40	23
10	5.8 dB/100m	61.8	59.8	56	54	50.8	47.8	25	40	15
16	7.4 dB/100m	58.6	56.6	51.2	49.2	46.7	43.7	25	38	10.9
20	8.3 dB/100m	57.1	55.1	48.8	46.8	44.8	41.8	25	37	9
31.2	10.4 dB/100m	54	52	43.6	41.6	40.9	37.9	23.6	35.1	5.1

62.5	15 dB/100m	49.1	47.1	34.1	32.1	34.9	31.9	21.5	32.6	
100	19.3 dB/100m	45.8	43.8	26.5	24.5	30.8	27.8	20.8	30	
200	28.3 dB/100m	40.9	38.9	12.6	10.6	22.8	21.8	19.5	27	
250	32.1 dB/100m	39.3	37.3	7.2	5.2	22.8	19.8	18	26.0	
300	35.6 dB/100m	38.1	36.1	2.5	0.5	21.3	18.3	17.5	25.2	
350	38.8 dB/100m	37.1	35.1			19.9	16.9	17.0	24.6	

Table Notes:	Limits below 4MHz are for information only.
--------------	---

Voltage

Voltage Rating
72 V DC

Mechanical Characteristics

Temperature

Operating	Installation
-20°C to +75°C	0°C To +50°C

Bend Radius

Stationary Min.	Installation Min.
26 mm (1.0 in)	52 mm

Max. Pull Tension:	110 N (25 lbf)
Bulk Cable Weight:	52 kg/km

Standards and Compliance

Environmental Suitability:	Indoor - Euroclass Cca
Flammability / Reaction to Fire:	IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Cca-s1a,d1,a1; CPR UKCA Class: Cca-s1a,d1,a1
IEEE Compliance:	PoE: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Data Category:	Category 6
TIA/EIA Compliance:	ANSI/TIA 568.2-D
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61034-2 - Smoke Density Min Transmittance = 80%
CENELEC Compliance:	EN 50173-1, Segregation class according EN50174-2 = a
European Halogen Free Standards:	IEC 62821-1 Halogen Free Compliance = Yes, IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 2.5 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3
European Directive Compliance:	EU CE Mark
UK Regulation Compliance:	UKCA Mark

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system.
--------	--

History

Update and Revision:	Revision Number: 0.201 Revision Date: 07-31-2024
----------------------	--

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
2424DC.06305	Blue	Reel	305 m	8719605133953
2424DC.06500	Blue	Reel	500 m	8719605142924
2424DC.08A250	Gray	Reel-in-Box	250 m	8719605167262
2424DC.08305	Gray	Reel	305 m	8719605142931
2424DC.08500	Gray	Reel	500 m	8719605142948
2424DC.09305	White	Reel	305 m	8719605194572

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.