

Product: 10GXE02D

10GX Category 6A Enhanced Cable, 4 Pair, S/FTP, LSZH Indoor CPR Dca

Product Description

Category 6A Enhanced Premise Horizontal Cable (625MHz), 4-Pair, 23 AWG Solid Bare Copper conductors, S/FTP, Foam Polyethylene insulation, each pair with Beldfoil® shield, tinned copper braid shield (30%), LSZH jacket, CPR Euroclass Dca

Technical Specifications

Product Overview

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

Construction Details

Conductor

Element	Size	Stranding	Material	No. of Pairs
Individual Shielded Pair	23 AWG	Solid	BC - Bare Copper	4

Insulation

Element	Material	Nom. Insulation Diameter	Color Code
Individual Shielded Pair	PE - Polyethylene (Foam)	1.32 mm (0.0520 in)	White & Blue, White & Orange, White & Green, White & Brown

Cable Core

Description
4 pairs twisted together

Inner Shield

Element	Shield Type	Material	Coverage
Individual Shielded Pair	Tape	Bi-Laminate (Alum+Poly)	100%

Table Notes:	Aluminum facing outside

Outer Shield

Shield Type	Material	Coverage
Braid	Tinned Copper (TC)	30%

Outer Jacket

Material	Nom. Diameter	Ripcord
LSZH - Low Smoke Zero Halogen (Flame Retardant)	7.0 mm (0.28 in)	Yes

Overall Cable Diameter (Nominal):	7.0 mm (0.28 in)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
95 Ohm/km	56 pF/m (17 pF/ft)	160 pF/100m	100 Ohm

Delay

Max. Delay Skew	Nom. Velocity of Prop.
45 ns/100m	77%

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. PSANEXT [dB]	Min. PSAACRF [dB]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2.1 dB/100m	75.3	72.3	73.2	70.2	68	65	20	67	67	40	35
4	3.8 dB/100m	66.3	63.3	62.5	59.5	56	53	23	67	66.2	34	23
10	5.9 dB/100m	60.3	57.3	54.4	51.4	48	45	25	67	58.2	30	15
16	7.5 dB/100m	57.2	54.2	49.8	46.8	43.9	40.9	25	67	54.1	28	10.9
31.2	10.5 dB/100m	52.9	49.9	42.4	39.4	38.1	35.1	23.6	67	48.3	25.1	5.1
62.5	15 dB/100m	48.4	45.4	33.4	30.4	32.1	29.1	21.5	65.6	42.3	22	
100	19.1 dB/100m	45.3	42.3	26.2	23.2	28	25	20.1	62.5	38.2	20	
125	21.5 dB/100m	43.8	40.8	22.3	19.3	26.1	23.1	19.4	61	36.3	19	
200	27.6 dB/100m	40.8	37.8	13.2	10.2	22	19	18	58	32.2	17	
250	31.1 dB/100m	39.3	36.3	8.3	5.3	20	17	17.3	56.5	30.2	16	
300	34.3 dB/100m	38.1	35.1	3.9	0.9	18.5	15.5	17.3	55.3	28.7		
500	45.3 dB/100m	34.8	31.8	-10.4	-13.4	14	11	17.3	52	24.2		
625	51.2 dB/100m	33.4	30.4	-17.8	-20.8	12.1	9.1	17.3	50.6	22.3		

Table Notes:	Limits below 4 MHz and at 625 MHz are for information only. Reference standard: IEC 61156-5

Transfer Impedance

Frequency	Max. Transfer Impedance
1 Mhz	Max. 50 mOhm/m
10 Mhz	Max. 100 mOhm/m
30 Mhz	Max. 200 mOhm/m
100 Mhz	Max. 1000 mOhm/m

Transfer Impedance Class:	Grade 2
Screening Class:	Type Ib
Table Notes:	Coupling Attenuation

Voltage

Voltage Rating
72 V DC

Mechanical Characteristics

Temperature

Operating	Installation
-30°C to +60°C	0°C To +60°C

Bend Radius

Stationary Min.	Installation Min.
29 mm (1.1 in)	58 mm

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

Standards and Compliance

Environmental Suitability:	Indoor - Euroclass Dca
Flammability / Reaction to Fire:	IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Dca-s2,d1,a1; CPR UKCA Class: Dca-s2,d1,a1
IEEE Compliance:	PoE: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Data Category:	Category 6A
TIA/EIA Compliance:	ANSI/TIA 568.2-D
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61034-2 - Smoke Density Min Transmittance = 60%
CENELEC Compliance:	EN 50173-1, Segregation class according EN50174-2 = d
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: 0.236 Revision Date: 10-25-2024

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
10GXE02D.06500	Blue	Reel	500 m	8719605140111
10GXE02D.08100	Gray	Reel	100 m	8719605142634
10GXE02D.08500	Gray	Reel	500 m	8719605142535

© 2025 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

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.