Belden



Product: 10GXE02

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

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%), PE jacket

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%

Inner Shield 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)	6.9 mm (0.27 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 (29 Ohm/1000ft)	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) [dB/100m]	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	75.3	72.3	73.2	70.2	68	65	20	67	67	40	35
4	3.8	66.3	63.3	62.5	59.5	56	53	23	67	66.2	34	23
10	5.9	60.3	57.3	54.4	51.4	48	45	25	67	58.2	30	15
16	7.5	57.2	54.2	49.8	46.8	43.9	40.9	25	67	54.1	28	10.9
31.2	10.5	52.9	49.9	42.4	39.4	38.1	35.1	23.6	67	48.3	25.1	5.1
62.5	15	48.4	45.4	33.4	30.4	32.1	29.1	21.5	65.6	42.3	22	
100	19.1	45.3	42.3	26.2	23.2	28	25	20.1	62.5	38.2	20	
125	21.5	43.8	40.8	22.3	19.3	26.1	23.1	19.4	61	36.3	19	
200	27.6	40.8	37.8	13.2	10.2	22	19	18	58	32.2	17	
250	31.1	39.3	36.3	8.3	5.3	20	17	17.3	56.5	30.2	16	
300	34.3	38.1	35.1	3.9	0.9	18.5	15.5	17.3	55.3	28.7		
500	45.3	34.8	31.8	-10.4	-13.4	14	11	17.3	52	24.2		
625	51.2	33.4	30.4	-17.8	-20.8	12.1	9.1	17.3	50.6	22.3		

High Frequency 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
Screening 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 (2.3 in)

Max. Pull Tension:	110 N (25 lbf)
Bulk Cable Weight:	46 kg/km (31 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	Indoor - Euroclass Eca
Flammability / Reaction to Fire:	IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
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
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, IEC 61034-2 - Smoke Density Min. Transmittance = 60%
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: 0.426 Revision Date: 08-19-2026

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
10GXE02.10500	Black	Reel	500 m	8719605222268
10GXE02 006305M	Blue	Reel	305 m	
10GXE02.06500	Blue	Reel	500 m	8719605000385
10GXE02.K6500	Blue	Reel	500 m	8719605000422
10GXE02 006500M	Blue	Reel	500 m	
10GXE02.S6500	Blue	Reel	500 m	8719605229670
10GXE02.08100	Gray	Reel	100 m	8719605000408
10GXE02.K8100	Gray	Reel	100 m	8719605147868
10GXE02 008305M	Gray	Reel	305 m	
10GXE02.08500	Gray	Reel	500 m	8719605000415
10GXE02.K8500	Gray	Reel	500 m	8719605000446
10GXE02 008500M	Gray	Reel	500 m	
10GXE02.05500	Green	Reel	500 m	8719605222077
10GXE02.03500	Orange	Reel	500 m	8719605130068
10GXE02.07305	Purple	Reel	305 m	
10GXE02 007305M	Purple	Reel	305 m	
10GXE02.07500	Purple	Reel	500 m	8719605000392
10GXE02.K7500	Purple	Reel	500 m	8719605000439
10GXE02 007500M	Purple	Reel	500 m	
10GXE02.02500	Red	Reel	500 m	8719605195012
10GXE02 009305M	White	Reel	305 m	
10GXE02.09500	White	Reel	500 m	8719605222251
10GXE02 009500M	White	Reel	500 m	
10GXE02 004305M	Yellow	Reel	305 m	
10GXE02.04500	Yellow	Reel	500 m	8719605195029
10GXE02 004500M	Yellow	Reel	500 m	

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