



Product: <u>10GXE92</u> ☑

10GX Category 6A Enhanced Cable, 4 Pair, S/FTP, LSZH Indoor CPR Eca IEC60332-3-24

# **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 IEC60332-3-24

# **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, 10 Base-T, FDDI, ATM
Patent:	This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/patents.

## **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)	1.34 mm (0.0528 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:	Alum	inum facing outside	

## **Outer Shield**

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

# Outer Jacket

Materia		Nom. Diameter	Ripcord
LSZH - Low Smoke Zero Halo	LSZH - Low Smoke Zero Halogen (Flame Retardant		Yes
Overall Cable Diameter (Nominal):	7.8 mm (0.31 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		

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

# Transfer Impedance

Table Notes:

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 +50°C

# Bend Radius

Stationary Min.	Installation Min.
32 mm (1.3 in)	64 mm

Max. Pull Tension: 110 N (25 lbf)

Bulk Cable Weight: 62 kg/km

# **Standards and Compliance**

Environmental Suitability:	Indoor - Euroclass Eca			
Elammability / Reaction to Fire: IEC 60332-1-2, IEC 60332-3-24, LUL 1-085				
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca			
IEEE Compliance:	E 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 = 80%			
CENELEC Compliance:	empliance: 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: 0.380 Revision Date: 02-14-2025

## **Part Numbers**

#### Variants

Item #	Color	Putup Type	Length	EAN
10GXE92.06500	Blue	Reel	500 m	8719605000552
10GXE92.08500	Gray	Reel	500 m	8719605000576
10GXE92.081000	Gray	Reel	1,000 m	8719605147981
10GXE92.07500	Purple	Reel	500 m	8719605000569

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