



Product: [10GXS32](#)



10GXS Category 6A Enhanced Cable, 4 Bonded-Pairs, U/UTP, CMR

Product Description

10GXS Category 6A Enhanced Premise Horizontal Cable (625MHz), 4 Bonded-Pairs, 23 AWG Solid Bare Copper Conductors, U/UTP, Riser-CMR, PVC Jacket

Technical Specifications

Product Overview

Suitable Applications:	Premise Horizontal Cable, Ethernet up to 10GBASE-T, Wi-Fi 6, Wi-Fi 5, PoE++, PoE+, PoE, Noisy Environments, Data Center EoR and MoR, Network Backbone, HDBaseT, HDBaseT 4K UHD
Patent:	This product has one or more applicable patents. More information on patents can be found at <a href="https://www.belden.com/patents">https://www.belden.com/patents</a> .

Construction Details

Conductor

Size	Stranding	Material	No. of Pairs
23 AWG	Solid	BC - Bare Copper	4

Insulation

Material	Color Code
PO - Polyolefin	White & Blue, White & Orange, White & Green, White & Brown

Bonded-Pair:	Yes
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Outer Jacket

Separator	Material	Nom. Diameter	Ripcord
Center Member (Patented EquiSpline®), EquiBlock™ Barrier Technology	PVC - Polyvinyl Chloride	0.278 in (7.06 mm)	Yes

Overall Cable Diameter (Nominal):	0.278 in (7.06 mm)
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Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
79 Ohm/km (24 Ohm/1000ft)	90 pF/100m

Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	537.6 ns/100m	45 ns/100m	65%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. PSNEXT [dB]	Min. PSACR [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Max./Min. Input Impedance (unFitted) [Ohm]	Max./Min. Fitted Impedance [Ohm]	Min. PSANEXT [dB]	Min. PSAACRF [dB]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2.1 dB/100m	75.3	73.2	79.8	20.0	100 ± 15	105 ± 10	75.0	77.0	40.0	43.0
4	3.8 dB/100m	66.3	62.5	67.8	23.0	100 ± 15	100 ± 15	75.0	76.2	40.0	41.0
8	5.3 dB/100m	61.8	56.5	61.7	24.5	100 ± 15	100 ± 15	75.0	70.1	40.0	24.9
10	5.9 dB/100m	60.3	54.4	59.8	25.0	100 ± 15	100 ± 15	75.0	68.2	40.0	23.0
16	7.4 dB/100m	57.2	49.8	55.7	25.0	100 ± 15	100 ± 15	75.0	64.1	38.0	18.9
20	8.3 dB/100m	55.8	47.4	53.8	25.0	100 ± 15	100 ± 15	75.0	62.2	37.0	17.0

25	9.3 dB/100m	54.3	45.0	51.8	24.3	100 ± 15	100 ± 15	75.0	60.2	36.0	15.0
31.25	10.4 dB/100m	52.9	42.5	49.9	23.6	100 ± 15	100 ± 10	75.0	58.3	35.1	13.1
62.5	14.8 dB/100m	48.4	33.6	43.9	21.5	100 ± 15	100 ± 10	73.6	52.3	32.0	
100	18.9 dB/100m	45.3	26.4	39.8	20.1	100 ± 15	100 ± 10	70.5	48.2	30.0	
200	27.0 dB/100m	40.8	13.8	33.8	18.9	100 ± 22	100 ± 10	66.0	42.2	27.0	
250	30.4 dB/100m	39.3	9.0	31.8	17.3	100 ± 32	100 ± 10	64.5	40.2	26.0	
300	33.5 dB/100m	38.1	4.6	30.3	16.8	100 ± 32	100 ± 10	63.3	38.7	25.2	
350	36.3 dB/100m	37.1	0.8	28.9	16.3	100 ± 32	100 ± 10	62.3	37.3	24.6	
400	39.0 dB/100m	36.3		27.8	15.9	100 ± 32	100 ± 10	61.5	36.2	24.0	
450	41.5 dB/100m	35.5		26.7	15.5	100 ± 32	100 ± 10	60.7	35.1	23.5	
500	43.9 dB/100m	34.8		25.8	15.2	100 ± 32	100 ± 10	60.0	34.2	23.0	
550	46.2 dB/100m	33.2		25.0	14.9	100 ± 32	100 ± 10	59.4	33.4		
600	48.4 dB/100m	32.6		24.2	14.7	100 ± 32	100 ± 10	58.8	32.6		
625	49.5 dB/100m	32.4		23.9	14.5	100 ± 32	100 ± 10	58.6	32.3		
750	54.7 dB/100m	32.2		22.3	14.0	100 ± 32	100 ± 10	57.4	30.7		
860	58.9 dB/100m	31.3		21.1	13.6	100 ± 32	100 ± 10	56.5	29.5		

Voltage

UL Voltage Rating
300 V (CMR), 300 V (CL3R)

Mechanical Characteristics

Temperature

UL Temperature	Operating	Installation	Storage
90°C	-20°C To +75°C	0°C To +50°C	-20°C To +75°C

Bend Radius

Stationary Min.	Installation Min.
1.1 in (28 mm)	2.5 in (64 mm)

Max. Pull Tension:	40 lbs (18 kg)
Bulk Cable Weight:	33 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Riser, Indoor
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
Flammability / Reaction to Fire:	UL 1666 Riser, FT4, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 800, CMR, CMR-LP (0.6A), CL3R-LP (0.6A)
CEC / C(UL) Compliance:	CMR
ICEA Compliance:	S-116-732
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
NEMA Compliance:	ANSI/NEMA WC-66
Data Category:	Category 6A
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 6A
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5
CENELEC Compliance:	Segregation class according EN50174-2 = a
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:	10GXS13 (Nonbonded)/10GXS33

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 625 MHz are for Engineering Information Only. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0.
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History

Update and Revision:	Revision Number: 0.418 Revision Date: 04-29-2024
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Variants

Item #	Color	UPC
10GXS32 0101000	Black	612825101949
10GXS32010A1000	Black	612825102038
10GXS32 0061000	Blue	612825101901
10GXS32006A1000	Blue	612825101994
10GXS32 0081000	Gray	612825101925
10GXS32008A1000	Gray	612825102014
10GXS32 0051000	Green	612825101895
10GXS32005A1000	Green	612825101987
10GXS32 0031000	Orange	612825101871
10GXS32003A1000	Orange	612825101963
10GXS32 0021000	Red	612825101864
10GXS32002A1000	Red	612825101956
10GXS32 0071000	Violet	612825101918
10GXS32007A1000	Violet	612825102007
10GXS32 0091000	White	612825101932
10GXS32009A1000	White	612825102021
10GXS32 0041000	Yellow	612825101888
10GXS32004A1000	Yellow	612825101970

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