Product: 10GXS13

10GXS Category 6A Enhanced Cable, 4 Pair, U/UTP, CMP

Product Description

10GXS Category 6A Enhanced Premise Horizontal Cable (625MHz), 4 Pair, 23 AWG Solid Bare Copper Conductors, U/UTP, Plenum-CMP, Flamarrest® PVC-LS 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 https://www.belden.com/resources/patents.

Construction Details

Conductor

AWG	Stranding	Material	Number of Pairs
23	Solid	BC - Bare Copper	4

Insulation

Material	Color Code
FEP - Fluorinated Ethylene Propylene	White & Blue, White & Orange, White & Green, White & Brown

Bonded-Pair:	No

Outer Jacket Material

Separator Material	Material	Material Trade Name	Nom. Diameter	Ripcord
Center Member (Patented EquiSpline®), EquiBlock™ Barrier Technology	PVC - Polyvinyl Chloride	Flamarrest®	0.265 in	Yes

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. DCR Unbalance	Max. DCR Unbalanced Between Pairs [%]	Max. Capacitance Unbalance	Nom. Mutual Capacitance
82 Ohm/km	3%	5%	45 pF/100m	17 pF/ft

Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew	Nom. Velocity of Propagation (VP) [%]	Typical Delay Skew
100 MHz	537.6 ns/100m	45 ns/100m	69%	30 ns/100m

High Freq

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)	Max./Min. Fitted Impedance	Min. PSANEXT	Min. PSAACRF	Min. TCL [dB]	Min. ELTCTL [dB]
1 MHz	2.1 dB/100m	75.3 dB	73.2 dB	74.8 dB	20.0 dB	100 ± 15 Ohm	105 ± 10 Ohm	75.0 dB	77.0 dB	40.0 dB	35.0 dB
4 MHz	3.8 dB/100m	66.3 dB	62.5 dB	62.8 dB	23.0 dB	100 ± 15 Ohm	100 ± 15 Ohm	75.0 dB	76.2 dB	40.0 dB	23.0 dB
8 MHz	5.3 dB/100m	61.8 dB	56.5 dB	56.7 dB	24.5 dB	100 ± 15 Ohm	100 ± 15 Ohm	75.0 dB	70.1 dB	40.0 dB	16.9 dB
10 MHz	5.9 dB/100m	60.3 dB	54.4 dB	54.8 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm	75.0 dB	68.2 dB	40.0 dB	15.0 dB
16 MHz	7.4 dB/100m	57.2 dB	49.8 dB	50.7 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm	75.0 dB	64.1 dB	38.0 dB	10.9 dB
20 MHz	8.3 dB/100m	55.8 dB	47.5 dB	48.8 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm	75.0 dB	62.2 dB	37.0 dB	9.0 dB
25 MHz	9.3 dB/100m	54.3 dB	45.0 dB	46.8 dB	24.3 dB	100 ± 15 Ohm	100 ± 15 Ohm	75.0 dB	60.2 dB	36.0 dB	7.0 dB
31.25 MHz	10.4 dB/100m	52.9 dB	42.5 dB	44.9 dB	23.6 dB	100 ± 15 Ohm	100 ± 10 Ohm	75.0 dB	58.3 dB	35.1 dB	5.1 dB

62.5 MHz	14.8 dB/100m	48.4 dB	33.6 dB	38.9 dB	21.5 dB	100 ± 15 Ohm	100 ± 10 Ohm	73.6 dB	52.3 dB	32.0 dB	
100 MHz	18.9 dB/100m	45.3 dB	26.4 dB	34.8 dB	20.1 dB	100 ± 15 Ohm	100 ± 10 Ohm	70.5 dB	48.2 dB	30.0 dB	
200 MHz	27.0 dB/100m	40.8 dB	13.8 dB	28.8 dB	18.0 dB	100 ± 22 Ohm	100 ± 10 Ohm	66.0 dB	42.2 dB	27.0 dB	
250 MHz	30.4 dB/100m	39.3 dB	9.0 dB	26.8 dB	17.3 dB	100 ± 32 Ohm	100 ± 10 Ohm	64.5 dB	40.2 dB	26.0 dB	
300 MHz	33.5 dB/100m	38.1 dB	4.6 dB	25.3 dB	16.8 dB	100 ± 32 Ohm	100 ± 10 Ohm	63.3 dB	38.7 dB	25.2 dB	
350 MHz	36.3 dB/100m	37.1 dB	0.8 dB	23.9 dB	16.3 dB	100 ± 32 Ohm	100 ± 10 Ohm	62.3 dB	37.3 dB	24.6 dB	
400 MHz	39.0 dB/100m	36.3 dB		22.8 dB	15.9 dB	100 ± 32 Ohm	100 ± 10 Ohm	61.5 dB	36.2 dB	24.0 dB	
450 MHz	41.5 dB/100m	35.5 dB		21.7 dB	15.5 dB	100 ± 32 Ohm	100 ± 10 Ohm	60.7 dB	35.1 dB	23.5 dB	
500 MHz	43.9 dB/100m	34.8 dB		20.8 dB	15.2 dB	100 ± 32 Ohm	100 ± 10 Ohm	60.0 dB	34.2 dB	23.0 dB	
550 MHz	46.2 dB/100m	33.2 dB		20.0 dB	14.9 dB	100 ± 32 Ohm	100 ± 10 Ohm	59.4 dB	33.4 dB		
600 MHz	48.4 dB/100m	32.6 dB		19.2 dB	14.7 dB	100 ± 32 Ohm	100 ± 10 Ohm	58.8 dB	32.6 dB		
625 MHz	49.5 dB/100m	32.4 dB		18.9 dB	14.5 dB	100 ± 32 Ohm	100 ± 10 Ohm	58.6 dB	32.3 dB		
750 MHz	54.7 dB/100m	32.2 dB		17.3 dB	14.0 dB			57.4 dB	30.7 dB		
860 MHz	58.9 dB/100m	31.3 dB		16.1 dB	13.6 dB			56.5 dB	29.5 dB		

Voltage

UL Voltage Rating
300 V (CMP), 300 V (CL3P)

Mechanical Characteristics

Temperature

UL Rating.	Operating	Installation	Storage
105°C	-20°C To +75°C	0°C To +50°C	-20°C To +75°C

Bend Radius

Stationary Min.	Installation Min.
1.25 in	2.75 in

Max. Pull Tension:	25 lbs
Bulk Cable Weight:	37 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Plenum, Indoor
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
Flammability / Fire Resistance:	NFPA 262, UL 910 (Plenum), FT6, FT6, IEC 60332-1-2
NEC / UL Compliance:	800, CMP;CMP-LP (0.7A);CL3P-LP (0.7A)
CEC / C(UL) Compliance:	CMP
ICEA Compliance:	S-116-732-2013
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
Cenelec Compliance:	Segregation class according EN50174-2=a
CPR Euroclass:	Eca
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Other Standard Compliance(s):	Verified Channel/Category 6A

Part Number

Non-Plenum Number:	10GXS12

Variants

Item #	Color	Putup Type	Length	UPC
10GXS13 0101000	Black	Reel	1,000 ft	612825004035
10GXS13010A1000	Black	Reel-in-Box	1,000 ft	612825004134
10GXS13 D151000	Blue	Reel	1,000 ft	612825004042
10GXS13D15A1000	Blue	Reel-in-Box	1,000 ft	612825004059
10GXS13 0081000	Gray	Reel	1,000 ft	612825004011

10GXS13008A1000	Gray	Reel-in-Box	1,000 ft	612825004110
10GXS13 0051000	Green	Reel	1,000 ft	612825003991
10GXS13005A1000	Green	Reel-in-Box	1,000 ft	612825004097
10GXS13 0031000	Orange	Reel	1,000 ft	612825003977
10GXS13003A1000	Orange	Reel-in-Box	1,000 ft	612825004073
10GXS13 0071000	Purple	Reel	1,000 ft	612825004004
10GXS13007A1000	Purple	Reel-in-Box	1,000 ft	612825004103
10GXS13 0021000	Red	Reel	1,000 ft	612825003960
10GXS13002A1000	Red	Reel-in-Box	1,000 ft	612825004066
10GXS13 0091000	White	Reel	1,000 ft	612825004028
10GXS13009A1000	White	Reel-in-Box	1,000 ft	612825004127
10GXS13 0041000	Yellow	Reel	1,000 ft	612825003984
10GXS13004A1000	Yellow	Reel-in-Box	1,000 ft	612825004080

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.

History

Update and Revision:	Revision Number: 0.196 Revision Date: 09-30-2020