Product: 1213F

Category 5E+ Cable, 4 Pair, F/UTP, CMP

Product Description

Category 5E+ Premise Horizontal Cable (350MHz), 4 Pair, 24 AWG Solid Bare Copper Conductors, F/UTP - Foil Shielded, Plenum-CMP, Flamarrest® PVC-LS Jacket

Technical Specifications

Product Overview

Suitable Applications:	Premise Horizontal Cable, Ethernet 1000BASE-T, Ethernet 100BASE-TX, Ethernet 10BASE-T, PoE++, PoE+, PoE , Noisy Environments

Construction Details

Conductor

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

Insulation

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

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Polyester + Bi-Laminate (Alum+Poly)	100%	24 AWG (7x32) TC

Outer Jacket

Material	Material Trade Name	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	Flamarrest®	0.235 in (5.97 mm)	No

Overall Cable Diameter (Nominal):	0.235 in (5.97 mm)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
93.8 Ohm/km (28.6 Ohm/1000ft)	330 pF/100m

Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	537.6 ns/100m	45 ns/100m	70%

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]	Max./Min. Input Impedance (unFitted) [Ohm]	Max./Min. Fitted Impedance [Ohm]
1	2.0 dB/100m	70.3	69.3	68.3	67.3	67.8	65.8	20.0	100 ± 15	100 ± 15
4	4.0 dB/100m	61.3	60.3	57.3	56.3	55.8	53.8	23.0	100 ± 15	100 ± 15
8	5.7 dB/100m	56.8	55.8	51.1	50.1	49.7	47.7	24.5	100 ± 15	100 ± 15
10	6.4 dB/100m	55.3	54.3	48.9	47.9	47.8	45.8	25.0	100 ± 15	100 ± 15
16	8.1 dB/100m	52.2	51.2	44.1	43.1	43.7	41.7	25.0	100 ± 15	100 ± 15

20	9.1 dB/100m	50.8	49.8	41.7	40.7	41.8	39.8	25.0	100 ± 15	100 ± 15
25	10.2 dB/100m	49.3	48.3	39.1	38.1	39.8	37.8	24.3	100 ± 15	100 ± 15
31.25	11.4 dB/100m	47.9	46.9	36.4	35.4	37.9	35.9	23.6	100 ± 15	100 ± 15
62.5	16.4 dB/100m	43.4	42.4	27.0	26.0	31.9	29.9	21.5	100 ± 15	100 ± 15
100	21.0 dB/100m	40.3	39.3	19.3	18.3	27.8	25.8	20.1	100 ± 15	100 ± 15
155	26.6 dB/100m	37.4	36.4	10.9	9.9	24.0	22.0	18.8	100 ± 22	100 ± 15
200	30.5 dB/100m	35.8	34.8	5.3	4.3	21.8	19.8	18.0	100 ± 22	100 ± 15
250	34.4 dB/100m	34.3	33.3	-0.1	-1.1	19.8	17.8	17.3	100 ± 32	100 ± 15
300	38.0 dB/100m	33.1	32.1			18.3	16.3	14.4	100 ± 32	100 ± 15
350	41.4 dB/100m	32.1	31.1			16.9	14.9	13.8	100 ± 32	100 ± 15
400	44.6 dB/100m	31.3	30.3			15.8	13.8	13.3	100 ± 32	100 ± 15
450	47.7 dB/100m	30.5	29.5			14.7	12.7	12.8	100 ± 32	100 ± 15

Voltage

UL Voltage Rating
300 V (CMP)

Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.	Installation Min.
2.25 in (57.2 mm)	2.75 in (69.9 mm)

Max. Pull Tension:	25 lbs (11 kg)
Bulk Cable Weight:	32 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Plenum, Indoor
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
Flammability / Reaction to Fire:	NFPA 262, UL 910 (Plenum), FT6, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 800, CMP
CEC / C(UL) Compliance:	CMP
ICEA Compliance:	S-90-661
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3
NEMA Compliance:	NEMA WC-63.1
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 5e
Third Party Performance Verification:	Category 5e
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5
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)
Non-Plenum Number:	1212F

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 350 MHz are for Engineering Information Only. Shield is Bonded to Jacket Inner Wall for Electrical Stability. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0.

History

Update and Revision:	Revision Number: 0.626 Revision Date: 02-03-2025

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote

1213F 0101000	Black	Reel	1,000 ft	612825108863	C
1213F 010A1000	Black	Reel-in-Box	1,000 ft	612825108856	
1213F D15500	Blue	Reel	500 ft	612825108719	
1213F D15A500	Blue	Reel-in-Box	500 ft	612825108696	
1213F D151000	Blue	Reel	1,000 ft	612825108702	C
1213F D15A1000	Blue	Reel-in-Box	1,000 ft	612825108689	
1213F 0081000	Gray	Reel	1,000 ft	612825108818	C
1213F 008A1000	Gray	Reel-in-Box	1,000 ft	612825108801	
1213F 0051000	Green	Reel	1,000 ft	612825108795	C
1213F 005A1000	Green	Reel-in-Box	1,000 ft	612825108788	
1213F 0031000	Orange	Reel	1,000 ft	612825108757	C
1213F 003A1000	Orange	Reel-in-Box	1,000 ft	612825108740	
1213F 0021000	Red	Reel	1,000 ft	612825108733	C
1213F 002A1000	Red	Reel-in-Box	1,000 ft	612825108726	
1213F 009A500	White	Reel-in-Box	500 ft	612825108832	
1213F 0091000	White	Reel	1,000 ft	612825108849	C
1213F 009A1000	White	Reel-in-Box	1,000 ft	612825108825	
1213F 0041000	Yellow	Reel	1,000 ft	612825108771	C
1213F 004A1000	Yellow	Reel-in-Box	1,000 ft	612825108764	

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