



Product: [2138A](#) 

Category 5e Indoor/Outdoor CMR/CMX F/UTP Cable

Product Description

CAT5e (100MHz), 4-Pair, F/UTP-Foil shielded, Riser-CMR-CMX Outdoor, Premise Horizontal Cable, 24 AWG solid bare copper conductors, polyolefin insulation, overall Beldfoil® shield, PVC jacket, RJ-45 compatible

Technical Specifications

Product Overview

Suitable Applications:	OSP-Outdoor, Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, Noisy Environments, 100MHz Category 5e
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Construction Details

Conductor

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

Insulation

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

Outer Shield

Shield Type	Material	Coverage
Tape	Bi-Laminate (Alum+Poly)	100%

Outer Jacket

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.265 in	No

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) [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]	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance
1	2.0	65.3	62.3	63.3	60.3	63.8	60.8	20.0	100 ± 15 Ohm	100 ± 15 Ohm
4	4.1	56.3	53.3	52.2	49.2	51.8	48.8	23.0	100 ± 15 Ohm	100 ± 15 Ohm
8	5.8	51.8	48.8	46.0	43.0	45.7	42.7	24.5	100 ± 15 Ohm	100 ± 15 Ohm
10	6.5	50.3	47.3	43.8	40.8	43.8	40.8	25.0	100 ± 15 Ohm	100 ± 15 Ohm
16	8.2	47.2	44.2	39.0	36.0	39.7	36.7	25.0	100 ± 15 Ohm	100 ± 15 Ohm
20	9.3	45.8	42.8	36.5	33.5	37.8	34.8	25.0	100 ± 15 Ohm	100 ± 15 Ohm
25	10.4	44.3	41.3	33.9	30.9	35.8	32.8	24.3	100 ± 15 Ohm	100 ± 15 Ohm

31.25	11.7	42.9	39.9	31.2	28.2	33.9	30.9	23.6	100 ± 15 Ohm	100 ± 15 Ohm
62.5	17.0	38.4	35.4	21.4	18.4	27.9	24.9	21.5	100 ± 15 Ohm	100 ± 15 Ohm
100	22.0	35.3	32.3	13.3	10.3	23.8	20.8	20.1	100 ± 15 Ohm	100 ± 15 Ohm
155	28.1	32.4	29.4	4.4	1.4	20.0	17.0	18.8		
200	32.4	30.8	27.8	-1.6	-4.6	17.8	14.8	18.0		

Voltage

UL Voltage Rating
300 V RMS

Mechanical Characteristics

Temperature

UL Temperature	Operating	Installation	Storage
75°C	-40°C To +75°C	-20°C To +75°C	-40°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: 31 lbs/1000ft (46 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, Aerial - When supported by messenger wire
Flammability / Reaction to Fire:	UL 1666 Riser, IEEE 1202 Vertical Tray Flame Test, IEC 60332-1-2
NEC / UL Compliance:	CMG, CMR, CMX-Outdoor
CEC / C(UL) Compliance:	CMR-CMX OUTDOOR OR CMG
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA-568-C.2 Category 5e
Third Party Performance Verification:	Category 5e
ISO/IEC Compliance:	11801 ed 2.2 (2011) Class D
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2017-07-10
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Plenum Number:	1533P
Non-Plenum Number:	1533R

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 100 MHz are for Engineering Information Only. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0. Shield is Bonded to Jacket Inner Wall for Electrical Stability.
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History

Update and Revision:	Revision Number: 0.465 Revision Date: 09-07-2025
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Part Numbers

Variants

Item #	Color	UPC
2138A 0101000	Black	612825377320

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