Detailed Specifications & Technical Data

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:

CEC/C(UL) Specification:

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EU Directive 2011/65/EU (ROHS II):

METRIC MEASUREMENT VERSION



1588A Multi-Conductor - Category 5e Nonbonded-Pair Cable



For more Information please call

1-800-Belden1



General Description:

Usage (Overall)

CAT5e (200MHz), 2-Pair, U/UTP-Unshielded, Riser-CMR, Premise Horizontal Cable, 24 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Ripcord, PVC Jacket

Suitable Applications:	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422
Physical Characteristics (Overall)	
Conductor AWG:	
# Pairs AWG Stranding Conductor Material	
2 24 Solid BC - Bare Copper	
Total Number of Conductors:	4
Insulation	
Insulation Material:	
Insulation Material PO - Polyolefin	
Outer Shield	
Outer Shield Material:	
Outer Shield Material Unshielded	
Outer Jacket Outer Jacket Material:	
Outer Jacket Material	
PVC - Polyvinyl Chloride	
Outer Jacket Diameter:	
Nom. Dia. (mm) 4.648	
Outer Jacket Ripcord:	Yes
Pair	
Pair Color Code Chart: Number Color	
1 White/Blue Stripe & Blue	
2 White/Orange Stripe & Orange	
Mechanical Characteristics (Overall)	
Storage Temperature Range:	-20°C To +75°C
Installation Temperature Range:	0°C To +60°C
Operating Temperature Range:	-20°C To +75°C
Bulk Cable Weight:	22.323 Kg/Km
Max. Recommended Pulling Tension:	57.827 N
Min. Bend Radius/Minor Axis:	25.400 mm
Min. Bend/Installation:	45.720 mm

CMR

CMR

Yes

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EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Telecommunications Standards:	Category 5e - TIA 568.C.2
Other Specification:	NEMA WC-63.1 Category 5e, UL verified to Category 5e
Flame Test	
UL Flame Test:	UL1666 Vertical Riser
C(UL) Flame Test:	FT4
IEEE Flame Test:	1202
Suitability	
Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Aerial:	No
Suitability - Burial:	No
Sunlight Resistance:	No
Plenum/Non-Plenum	
Plenum (Y/N):	No
Plenum Number:	1590A

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/m) 49.215

Maximum Capacitance Unbalance (pF/100 m):

Nominal Velocity of Propagation:

VP (%)

Maximum Delay:

Delay (ns/100 m) 538 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m) 45

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m) 9.38

Max. Operating Voltage - UL:

Voltage 300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)
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Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)	Min. SRL (dB)
1	2.0	65.3	62.3	63.0	60.3	20.0	23.0
4	4.1	56.3	53.3	51.0	49.2	23.0	23.0
8	5.8	51.8	48.8	46.0	43.0	24.5	24.5
10	6.5	50.3	47.3	43.0	40.8	25.0	25.0
16	8.2	47.3	44.3	39.0	36.0	25.0	25.0
20	9.3	45.8	42.8	36.5	33.5	25.0	25.0

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1588A Multi-Conductor - Category 5e Nonbonded-Pair Cable

25	10.4	44.3	41.3	33.9	30.9	24.3	24.3
31.25	11.7	42.9	39.9	31.0	28.2	23.6	23.6
62.5	17.0	38.4	35.4	22.0	19.0	21.5	21.5
100	22.0	35.3	32.3	14.0	10.3	20.1	20.1
155	28.1	32.5	29.5	4.4	1.4	15.8	
200	32.0	30.8	27.8	4.0	1.0	15.0	

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	63.8	60.8
4	100 ± 15	100 ± 15	51.7	48.7
8	100 ± 15	100 ± 15	45.7	42.7
10	100 ± 15	100 ± 15	43.8	40.8
16	100 ± 15	100 ± 15	39.7	36.7
20	100 ± 15	100 ± 15	37.7	34.7
25	100 ± 15	100 ± 15	35.8	32.8
31.25	100 ± 15	100 ± 15	33.9	30.9
62.5	100 ± 15	100 ± 15	27.8	24.9
100	100 ± 15	100 ± 15	23.8	20.8
155	100 ± 25	100 ± 15	19.9	16.9
200	100 ± 25	100 ± 15	17.7	14.7

Notes (Overall)

Notes: Jacket sequentially marked at 2 ft. intervals. Third party verified to ANSI/TIA-568-C.2, Category 5e.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1588A F6HU1000	1,000 FT	15.000 LB	GRAY, DARK PEARL		CAT5E 2PR U/UTP CMR BOX
1588A F6H1000	1,000 FT	15.000 LB	GRAY, DARK PEARL	С	CAT5E 2PR U/UTP CMR REEL
1588A F6H1640	1,640 FT	24.600 LB	GRAY, DARK PEARL		CAT5E 2PR U/UTP CMR REEL
1588A 006U1000	1,000 FT	15.000 LB	BLUE, LIGHT		CAT5E 2PR U/UTP CMR BOX
1588A 0061000	1,000 FT	15.000 LB	BLUE, LIGHT	С	CAT5E 2PR U/UTP CMR REEL

Notes:

C = CRATE REEL PUT-UP.

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