Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

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



For more Information please call

1-800-Belden1



General Description:

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

Usage (Overall)

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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. (in.)	
0.183	
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:	15 lbs/1000 ft.
Max. Recommended Pulling Tension:	13 lbs.
Min. Bend Radius/Minor Axis:	1 in.
Min. Bend/Installation:	1.800 in.
Applicable Specifications and Agency Complia	ance (Overall)
Applicable Standards & Environmental Programs	
NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMR
EU Directive 2011/65/EU (ROHS II):	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	NEIMA WC-03.1 Category Se, OL Venned to Category Se
UL Flame Test:	UL1666 Vertical Riser
C(UL) Flame Test:	FT4
IEEE Flame Test:	1202
Suitability	1202
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/ft) 15	
Maximum Capacitance Unbalance (pF/100 m):	330
Nominal Velocity of Propagation:	330
VP (%) 70	
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 (%) 5	
Electrical Characteristics-Premise (Overall)	

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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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.

Revision Date: 08-06-2013

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Revision Number: 4

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