METRIC 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

4

Yes

### **Usage (Overall)**

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:

#### 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:

### 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

Page 1 of 4 10-30-2013





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

Min. Bend Radius/Minor Axis:	25.400 mm						
Min. Bend/Installation:	45.720 mm						
pplicable Specifications and Agency Compliance (Overall)							
Applicable Standards & Environmental Programs							
NEC/(UL) Specification:	CMR						
CEC/C(UL) Specification:	CMR						
EU Directive 2011/65/EU (ROHS II):	Yes						
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): 330

**Nominal Velocity of Propagation:** 

**VP (%)** 

Maximum Delay:

**Delay (ns/100 m)** 538 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m) 45

Page 2 of 4 10-30-2013

**METRIC MEASUREMENT VERSION** 



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

**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)**

### 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
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	305 MT	6.804 KG	GRAY, DARK PEARL		CAT5E 2PR U/UTP CMR BOX
1588A F6H1000	305 MT	6.804 KG	GRAY, DARK PEARL	С	CAT5E 2PR U/UTP CMR REEL
1588A F6H1640	500 MT	11.158 KG	GRAY, DARK PEARL		CAT5E 2PR U/UTP CMR REEL
1588A 006U1000	305 MT	6.804 KG	BLUE, LIGHT		CAT5E 2PR U/UTP CMR BOX
1588A 0061000	305 MT	6.804 KG	BLUE, LIGHT	С	CAT5E 2PR U/UTP CMR REEL

Notes:

C = CRATE REEL PUT-UP.

Page 3 of 4 10-30-2013

#### METRIC MEASUREMENT VERSION



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

Revision Number: 4 Revision Date: 08-06-2013

© 2013 Belden, Inc All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale. Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.

Page 4 of 4