



Part Number: 1585A

CAT5e Horizontal, 4pr, UTP, LS-PVC Jkt, CMP

Product Description

CAT5e (200MHz), 4-Pair, U/UTP-unshielded, Plenum-CMP, Premise Horizontal cable, 24 AWG solid bare copper conductors, dual FRPO/FEP insulation, ripcord, Flamarrest® jacket.

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Environmental Space: | Plenum |
| Suitable Applications: | Horizontal, 1000BaseT, Gigabit Ethernet, 100BaseTX, Fast Ethernet, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Video, RS-422 |

Physical Characteristics (Overall)

Conductor

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

| | |
|------------------------|--------|
| Conductor Count: | 8 |
| Total Number of Pairs: | 4 |
| Conductor Size: | 24 AWG |

Insulation

| Material |
|--------------------------------------|
| FEP - Fluorinated Ethylene Propylene |

| | |
|--------------|-----|
| Bonded-Pair: | N/A |
|--------------|-----|

Color Chart

| Number | Color |
|--------|------------------------------|
| 1 | White/Blue Stripe & Blue |
| 2 | White/Orange Stripe & Orange |
| 3 | White/Green Stripe & Green |
| 4 | White/Brown Stripe & Brown |

Outer Jacket Material

| Material | Nominal Diameter | Ripcord |
|---------------------------------------|------------------|---------|
| LS PVC - Low Smoke Polyvinyl Chloride | 0.190 in | Yes |

Electrical Characteristics

Conductor DCR

| Max. Conductor DCR | Max. DCR Unbalance |
|--------------------|--------------------|
| 93.8 Ohm/km | 5 % |

Capacitance

| Max. Capacitance Unbalance | Nom. Mutual Capacitance |
|----------------------------|-------------------------|
| 330 pF/100m | 15 pF/ft |

Delay

| Frequency [MHz] | Max. Delay | Max. Delay Skew | Nominal Velocity of Propagation (VP) [%] |
|-----------------|---------------|-----------------|--|
| 100 MHz | 537.6 ns/100m | 45 ns/100m | 72 % |

High Freq

| 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) | Max./Min. Fitted Impedance |
|-----------------|-----------------------------------|----------------|------------------|---------------|-----------------|-------------------------|-----------------------------|----------------------------|--------------------------------------|----------------------------|
| 1 MHz | 2.0 dB/100m | 65.3 dB | 62.3 dB | 63.3 dB | 60.3 dB | 63.8 dB | 60.8 dB | 20.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 4 MHz | 4.1 dB/100m | 56.3 dB | 53.3 dB | 52.2 dB | 49.2 dB | 51.8 dB | 48.8 dB | 23.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 8 MHz | 5.8 dB/100m | 51.8 dB | 48.8 dB | 46.0 dB | 43.0 dB | 45.7 dB | 42.7 dB | 24.5 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 10 MHz | 6.5 dB/100m | 50.3 dB | 47.3 dB | 43.8 dB | 40.8 dB | 43.8 dB | 40.8 dB | 25.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 16 MHz | 8.2 dB/100m | 47.2 dB | 44.2 dB | 39.0 dB | 36.0 dB | 39.7 dB | 36.7 dB | 25.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 20 MHz | 9.3 dB/100m | 45.8 dB | 42.8 dB | 36.5 dB | 33.5 dB | 37.8 dB | 34.8 dB | 25.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 25 MHz | 10.4 dB/100m | 44.3 dB | 41.3 dB | 33.9 dB | 30.9 dB | 35.8 dB | 32.8 dB | 24.3 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 31.25 MHz | 11.7 dB/100m | 42.9 dB | 39.9 dB | 31.2 dB | 28.2 dB | 33.9 dB | 30.9 dB | 23.6 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 62.5 MHz | 17.0 dB/100m | 38.4 dB | 35.4 dB | 21.4 dB | 18.4 dB | 27.9 dB | 24.9 dB | 21.5 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 100 MHz | 22.0 dB/100m | 35.3 dB | 32.3 dB | 13.3 dB | 10.3 dB | 23.8 dB | 20.8 dB | 20.1 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 155 MHz | 28.1 dB/100m | 32.4 dB | 29.4 dB | 4.4 dB | 1.4 dB | 20.0 dB | 17.0 dB | 18.8 dB | | |
| 200 MHz | 32.4 dB/100m | 30.8 dB | 27.8 dB | 4.0 dB | 1.0 dB | 17.8 dB | 14.8 dB | 18.0 dB | | |

Voltage

| UL Voltage Rating |
|-------------------|
| 300 V RMS |

Temperature Range

| | |
|--------------------------|----------------|
| Installation Temp Range: | 0°C To +50°C |
| UL Temp Rating: | 75°C |
| Storage Temp Range: | -20°C To +75°C |
| Operating Temp Range: | -20°C To +75°C |

Mechanical Characteristics

| | |
|--------------------------------------|---------------|
| Bulk Cable Weight: | 21 lbs/1000ft |
| Max Recommended Pulling Tension: | 25 lbs |
| Min Bend Radius During Installation: | 2.0 in |
| Min Bend Radius/Minor Axis: | 1.0 in |

Standards

| | |
|---------------------------------------|--|
| NEC Articles: | 800 |
| NEC/(UL) Specification: | CMP |
| CEC/C(UL) Specification: | CMP |
| ISO/IEC Compliance: | 11801 ed 2.2 (2011) Class D |
| CPR Euroclass: | Eca |
| Data Category: | Category 5e |
| ANSI Compliance: | S-90-661-2012 Category 5e, ANSI/NEMA WC-63.1 Category 5e |
| Telecommunications Standards: | ANSI/TIA-568-C.2 Category 5e |
| IEEE Specification: | IEEE 802.3bt Type 1, Type 2, Type 3 |
| Third Party Performance Verification: | Category 5e |

Applicable Environmental and Other Programs

| | |
|--|------------|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2002/96/EC (WEEE): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| EU Directive 2003/96/EC (BFR): | Yes |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU: | Yes |
| EU Directive Compliance: | Yes |
| EU CE Mark: | Yes |
| EU REACH SVHC Compliance (yyyy-mm-dd): | 2017-07-10 |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2004-01-01 |

| | |
|-----------------------------------|-----|
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |

Suitability

| | |
|------------------------------------|-----|
| Suitability - Aerial: | No |
| Suitability - Burial: | No |
| Suitability - Hazardous Locations: | No |
| Suitability - Indoor: | Yes |
| Suitability - Non-Halogenated: | No |
| Suitability - Oil Resistance: | No |
| Suitability - Outdoor: | No |
| Suitability - Sunlight Resistance: | No |

Flammability, LSOH, Toxicity Testing

| | |
|-----------------------|--------------------------|
| C(UL) Flammability: | FT6 |
| UL Flammability: | NFPA 262 Plenum (UL 910) |
| CSA Flammability: | FT6 |
| ISO/IEC Flammability: | IEC 60332-1-2 |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

| | |
|---------------|-----|
| Plenum (Y/N): | Yes |
|---------------|-----|

Part Number

| | |
|--------------------|-------|
| Non-Plenum Number: | 1583A |
|--------------------|-------|

Variants

| Item # | Color | UPC | Length | Footnote |
|----------------|---------|--------------|----------|----------|
| 1585A 0101000 | Black | 612825118398 | 1,000 ft | C |
| 1585A 010500 | Black | 612825118404 | 500 ft | |
| 1585A 010U1000 | Black | 612825118381 | 1,000 ft | |
| 1585A D151000 | Blue | 612825118244 | 1,000 ft | C |
| 1585A D153000 | Blue | 612825118251 | 3,000 ft | C |
| 1585A D15U1000 | Blue | 612825118237 | 1,000 ft | |
| 1585A 0081000 | Gray | 612825118350 | 1,000 ft | C |
| 1585A 008U1000 | Gray | 612825118343 | 1,000 ft | |
| 1585A 0051000 | Green | 612825118336 | 1,000 ft | C |
| 1585A 005U1000 | Green | 612825118329 | 1,000 ft | |
| 1585A 8771000 | Natural | 612825118442 | 1,000 ft | C |
| 1585A 877U1000 | Natural | 612825118435 | 1,000 ft | |
| 1585A 0031000 | Orange | 612825118299 | 1,000 ft | C |
| 1585A 003U1000 | Orange | 612825118282 | 1,000 ft | |
| 1585A 0121000 | Pink | 612825118428 | 1,000 ft | C |
| 1585A 012U1000 | Pink | 612825118411 | 1,000 ft | |
| 1585A 0021000 | Red | 612825118275 | 1,000 ft | C |
| 1585A 002U1000 | Red | 612825118268 | 1,000 ft | |
| 1585A 0091000 | White | 612825118374 | 1,000 ft | C |
| 1585A 009U1000 | White | 612825118367 | 1,000 ft | |
| 1585A 0041000 | Yellow | 612825118312 | 1,000 ft | C |
| 1585A 004U1000 | Yellow | 612825118305 | 1,000 ft | |

| | |
|-----------|---|
| Footnote: | C - CRATE REEL PUT-UP. |
| Patent: | https://www.belden.com/resources/patents |

Product Notes

| | |
|--------|---|
| Notes: | Values above 100 MHz are for Engineering Information Only. Print Includes Descending Footage Markings from Max. Put-Up Length to 0. |
|--------|---|

© 2019 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 here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" 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 all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information 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. The 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.