

3613 Multi-Conductor - Enhanced Category 6 Nonbonded-Pair Cable



For more Information
please call

1-800-Belden1



Description:

23 AWG Solid Bare Copper Conductors, Dual FRPO/FEP Insulation, X-Spline Center Member, Rip Cord, Flamarrest® PVC jacket.

Usage (Overall)

Suitable Applications: Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, Noisy Environments

Physical Characteristics (Overall)

Conductor

AWG:

| # Pairs | AWG | Stranding | Conductor Material |
|---------|-----|-----------|--------------------|
| 4 | 23 | Solid | BC - Bare Copper |

Total Number of Conductors: 8

Insulation

Insulation Material:

| Insulation Material |
|--|
| FRPO/FEP - Flame Retardant Polyolefin/Fluorinated Ethylene Propylene |

Outer Shield

Outer Shield Material:

| Outer Shield Material |
|-----------------------|
| Unshielded |

Outer Jacket

Outer Jacket Material:

| Outer Jacket Trade Name | Outer Jacket Material | Nom. Wall Thickness (in.) |
|-------------------------|---------------------------------------|---------------------------|
| Flamarrest(R) | LS PVC - Low Smoke Polyvinyl Chloride | 0.017 |

Outer Jacket Diameter:

| Nom. Dia. (in.) |
|-----------------|
| 0.237 |

Outer Jacket Ripcord: Yes

Overall Cable

Overall Cabling Separator Material: X-Spline Center Member

Overall Nominal Diameter: 0.237 in.

Pair

Pair Color Code Chart:

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

Mechanical Characteristics (Overall)

Storage Temperature Range: -20°C To +75°C

3613 Multi-Conductor - Enhanced Category 6 Nonbonded-Pair Cable

| | |
|-----------------------------------|-----------------|
| Installation Temperature Range: | +5°C To +50°C |
| Operating Temperature Range: | 0°C To +75°C |
| UL Temperature Rating: | 75°C |
| Bulk Cable Weight: | 32 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 45 lbs. |
| Min. Bend Radius/Minor Axis: | 1 in. |
| Min. Bend/Installation: | 2.400 in. |

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| | |
|---------------------------------------|-------------------------------------|
| NEC/(UL) Specification: | CMP |
| CEC/C(UL) Specification: | CMP |
| Other Standards: | ISO/IEC 11801 ed 2.1 (2008) Class E |
| 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): | 04/03/2009 |
| 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 6 - TIA 568.C.2 |
| Other Specification: | UL Verified to Category 6 |

Applicable Patents:

| Country | Patent |
|---------|---------|
| US | 5563377 |
| US | 6074503 |
| US | 7663061 |
| US | 7977575 |

Flame Test

| | |
|-------------------|----------|
| UL Flame Test: | NFPA 262 |
| C(UL) Flame Test: | FT6 |

Suitability

| | |
|------------------------|-----|
| Suitability - Indoor: | Yes |
| Suitability - Outdoor: | No |
| Suitability - Aerial: | No |
| Suitability - Burial: | No |
| Sunlight Resistance: | No |

Plenum/Non-Plenum

| | |
|--------------------|------|
| Plenum (Y/N): | Yes |
| Non-Plenum Number: | 3612 |

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

| Capacitance (pF/ft) |
|---------------------|
| 15.5 |

3613 Multi-Conductor - Enhanced Category 6 Nonbonded-Pair Cable

Maximum Capacitance Unbalance (pF/100 m): 330

Nominal Velocity of Propagation:

VP (%)

70.000

Maximum Delay:

Freq. (MHz) Delay (ns/100 m)

| | |
|---------|---------|
| 100.000 | 537.600 |
|---------|---------|

Typical Delay Skew:

Delay Skew (ns/ft)

35.000

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)

7.700

Max. Operating Voltage - UL:

Voltage

300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)

5.000

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) |
|-------------|-----------------------------|----------------|------------------|---------------|-----------------|-------------|---------------|
| 0.772 | 1.800 | 81.00 | 79.00 | 79.2 | 77.2 | | |
| 1 | 2.000 | 79.31 | 77.31 | 77.3 | 75.3 | 20.000 | 27.0 |
| 4 | 3.700 | 70.28 | 68.28 | 66.6 | 64.6 | 23.000 | 27.0 |
| 8 | 5.200 | 65.77 | 63.77 | 60.6 | 58.6 | 24.500 | 27.0 |
| 10 | 5.800 | 64.31 | 62.31 | 58.5 | 56.5 | 25.000 | 27.0 |
| 16 | 7.400 | 61.25 | 59.25 | 53.9 | 51.9 | 25.000 | 27.0 |
| 20 | 8.300 | 59.80 | 57.80 | 51.5 | 49.5 | 25.000 | 27.0 |
| 25 | 9.300 | 58.35 | 56.35 | 49.1 | 47.1 | 24.300 | 26.0 |
| 31.25 | 10.400 | 56.89 | 54.89 | 46.5 | 44.5 | 23.600 | 25.1 |
| 62.5 | 15.000 | 52.38 | 50.38 | 37.4 | 35.4 | 21.500 | 22.1 |
| 100 | 19.300 | 49.31 | 47.31 | 30.0 | 28.0 | 20.800 | 20.0 |
| 155 | 24.600 | 46.46 | 44.46 | 21.9 | 19.9 | 19.500 | 18.1 |
| 200 | 28.300 | 44.80 | 42.80 | 16.5 | 14.5 | 18.700 | 17.0 |
| 250 | 32.100 | 43.35 | 41.35 | 11.2 | 9.2 | 18.000 | 16.0 |
| 300 | 35.600 | 42.16 | 40.16 | 6.5 | 4.5 | 17.500 | 15.2 |
| 350 | 38.900 | 41.15 | 39.15 | 2.3 | 0.3 | 17.000 | 14.6 |
| 400 | 42.000 | 40.28 | 38.28 | | | 16.600 | 14.0 |
| 450 | 45.000 | 39.52 | 37.52 | | | 16.200 | 13.5 |
| 500 | 47.900 | 38.83 | 36.83 | | | 15.900 | 13.0 |
| 550 | 50.600 | 38.21 | 36.21 | | | 15.600 | 12.6 |
| 600 | 53.300 | 37.64 | 35.64 | | | 15.400 | 12.2 |
| 650 | 55.900 | 37.12 | 35.12 | | | 15.100 | 11.9 |

Premise Cable Electrical Table 2:

| Freq. (MHz) | Input (Unfitted) Imp. (Ohms) | Min. ACRF (dB) | Min. PSACRF (dB) |
|-------------|------------------------------|----------------|------------------|
| .772 | | 75.0 | 72.0 |
| 1 | 100 ± 15 | 72.8 | 69.8 |
| 4 | 100 ± 15 | 60.8 | 57.8 |
| 8 | 100 ± 15 | 54.7 | 51.7 |
| 10 | 100 ± 15 | 52.8 | 49.8 |
| 16 | 100 ± 15 | 48.7 | 45.7 |
| 20 | 100 ± 15 | 46.8 | 43.8 |
| 25 | 100 ± 15 | 44.8 | 41.8 |
| 31.25 | 100 ± 15 | 42.9 | 39.9 |

3613 Multi-Conductor - Enhanced Category 6 Nonbonded-Pair Cable

| | | | |
|------|----------|------|------|
| 62.5 | 100 ± 15 | 36.9 | 33.9 |
| 100 | 100 ± 15 | 32.8 | 29.8 |
| 155 | 100 ± 22 | 28.9 | 25.9 |
| 200 | 100 ± 22 | 26.8 | 23.8 |
| 250 | 100 ± 32 | 24.8 | 21.8 |
| 300 | 100 ± 32 | 23.3 | 20.3 |
| 350 | 100 ± 32 | 21.9 | 18.9 |
| 400 | 100 ± 32 | 20.8 | 17.8 |
| 450 | 100 ± 32 | 19.7 | 16.7 |
| 500 | 100 ± 32 | 18.8 | 15.8 |
| 550 | 100 ± 32 | 18.0 | 15.0 |
| 600 | 100 ± 32 | 17.2 | 14.2 |
| 650 | 100 ± 32 | 16.5 | 13.5 |

Premise Cable Electrical Table 4:

| Frequency (MHz) | Min. TCL (dB) | Min. ELTCTL (dB) |
|-----------------|---------------|------------------|
| 0.772 | 40.000 | 37.200 |
| 1.000 | 40.000 | 35.000 |
| 4.000 | 40.000 | 23.000 |
| 8.000 | 40.000 | 16.900 |
| 10.000 | 40.000 | 15.000 |
| 16.000 | 38.000 | 10.900 |
| 20.000 | 37.000 | 9.000 |
| 25.000 | 36.000 | 7.000 |
| 31.250 | 35.100 | |
| 62.500 | 32.000 | |
| 100.000 | 30.000 | |
| 155.000 | 28.100 | |
| 200.000 | 27.000 | |
| 250.000 | 26.000 | |

Notes (Overall)

Notes: Jacket sequentially marked at 2 ft./1m intervals. Third party verified to ANSI/TIA-568-C.2 Category 6. Values above 350MHz are for engineering information only.

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|----------|-------------|-------------|-------|--------------------------|
| 3613 D15A1000 | 1,000 FT | 33.000 LB | BLUE | | CAT6E 4PR U/UTP CMP RIB |
| 3613 D15U1000 | 1,000 FT | 30.000 LB | BLUE | | CAT6E 4PR U/UTP CMP BOX |
| 3613 D151000 | 1,000 FT | 31.000 LB | BLUE | | CAT6E 4PR U/UTP CMP REEL |
| 3613 D152500 | 2,500 FT | 72.500 LB | BLUE | | CAT6E 4PR U/UTP CMP REEL |
| 3613 002A1000 | 1,000 FT | 33.000 LB | RED | | CAT6E 4PR U/UTP CMP RIB |
| 3613 003A1000 | 1,000 FT | 33.000 LB | ORANGE | | CAT6E 4PR U/UTP CMP RIB |
| 3613 0031000 | 1,000 FT | 31.000 LB | ORANGE | | CAT6E 4PR U/UTP CMP REEL |
| 3613 004A1000 | 1,000 FT | 33.000 LB | YELLOW | | CAT6E 4PR U/UTP CMP RIB |
| 3613 004U1000 | 1,000 FT | 30.000 LB | YELLOW | | CAT6E 4PR U/UTP CMP BOX |
| 3613 0041000 | 1,000 FT | 31.000 LB | YELLOW | | CAT6E 4PR U/UTP CMP REEL |
| 3613 0042500 | 2,500 FT | 72.500 LB | YELLOW | | CAT6E 4PR U/UTP CMP REEL |
| 3613 005A1000 | 1,000 FT | 33.000 LB | GREEN, DARK | | CAT6E 4PR U/UTP CMP RIB |
| 3613 0051000 | 1,000 FT | 31.000 LB | GREEN, DARK | | CAT6E 4PR U/UTP CMP REEL |
| 3613 0052500 | 2,500 FT | 72.500 LB | GREEN, DARK | | CAT6E 4PR U/UTP CMP REEL |
| 3613 007A1000 | 1,000 FT | 33.000 LB | VIOLET | | CAT6E 4PR U/UTP CMP RIB |
| 3613 008A1000 | 1,000 FT | 33.000 LB | GRAY | | CAT6E 4PR U/UTP CMP RIB |
| 3613 008U1000 | 1,000 FT | 30.000 LB | GRAY | | CAT6E 4PR U/UTP CMP BOX |
| 3613 0081000 | 1,000 FT | 31.000 LB | GRAY | | CAT6E 4PR U/UTP CMP REEL |
| 3613 009A1000 | 1,000 FT | 33.000 LB | WHITE | | CAT6E 4PR U/UTP CMP RIB |
| 3613 009U1000 | 1,000 FT | 30.000 LB | WHITE | | CAT6E 4PR U/UTP CMP BOX |
| 3613 0091000 | 1,000 FT | 31.000 LB | WHITE | | CAT6E 4PR U/UTP CMP REEL |
| 3613 0092500 | 2,500 FT | 72.500 LB | WHITE | | CAT6E 4PR U/UTP CMP REEL |
| 3613 010A1000 | 1,000 FT | 33.000 LB | BLACK | | CAT6E 4PR U/UTP CMP RIB |

3613 Multi-Conductor - Enhanced Category 6 Nonbonded-Pair Cable

| | | | | | |
|---------------|----------|-----------|-------|--|--------------------------|
| 3613 0101000 | 1,000 FT | 31.000 LB | BLACK | | CAT6E 4PR U/UTP CMP REEL |
| 3613 0102500 | 2,500 FT | 72.500 LB | BLACK | | CAT6E 4PR U/UTP CMP REEL |
| 3613 012A1000 | 1,000 FT | 33.000 LB | PINK | | CAT6E 4PR U/UTP CMP RIB |

Revision Number: 5 Revision Date: 07-10-2012

© 2012 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 ensure product availability.

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.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.