

Product: [7989P](#) 



Low Skew, Category 6, 4-24 AWG pairs, CMP

Product Description

Category 6, 23 AWG bonded pairs solid bare copper conductors, plenum, FEP Teflon® insulation, skew 10.0ns/100m nominal, rip cord, Flamarrest® jacket.

Technical Specifications

Product Overview

|                        |                                                   |
|------------------------|---------------------------------------------------|
| Suitable Applications: | Category 6, UTP Based Video Applications, and KVM |
|------------------------|---------------------------------------------------|

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material         | No. of Pairs |
|-----|-----------|------------------|--------------|
| 23  | Solid     | BC - Bare Copper | 4            |

|                        |   |
|------------------------|---|
| Conductor Count:       | 8 |
| Total Number of Pairs: | 4 |

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 Shield

| Material  |
|-----------|
| No Shield |

Outer Jacket

| Material                 | Material Trade Name | Nominal Diameter | Ripcord |
|--------------------------|---------------------|------------------|---------|
| PVC - Polyvinyl Chloride | Flamarrest®         | 0.367 in         | Yes     |

Electrical Characteristics

Conductor DCR

| Max. Conductor DCR | Max. DCR Unbalance |
|--------------------|--------------------|
| 90 Ohm/km          | 3 %                |

Capacitance

| Max. Capacitance Unbalance | Nom.Mutual Capacitance |
|----------------------------|------------------------|
| 49.2                       | 15 pF/ft               |

Delay

| Nominal Velocity of Propagation (VP) [%] | Typical Delay Skew |
|------------------------------------------|--------------------|
| 72%                                      | 0.03 ns/100m       |

High Frequency

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Min. NEXT [dB] | Min. PSNEXT [dB] | Min. PSACR [dB] | Min. ACRF (ELFEXT) [dB] | Min. PSACRF (PSELFEXT) [dB] | Min. RL (Return Loss) [dB] | Max./Min. Input Impedance (unFitted) |
|-----------------|-----------------------------------|----------------|------------------|-----------------|-------------------------|-----------------------------|----------------------------|--------------------------------------|
| 1 MHz           | 2 dB/100m                         | 74.3 dB        | 72.3 dB          | 70.3 dB         | 67.8 dB                 | 64.8 dB                     | 20 dB                      | 100 ± 15                             |
| 4 MHz           | 3.8 dB/100m                       | 65.3 dB        | 63.3 dB          | 59.5 dB         | 55.7 dB                 | 52.7 dB                     | 23 dB                      | 100 ± 15                             |
| 8 MHz           | 5.3 dB/100m                       | 60.8 dB        | 58.8 dB          | 53.4 dB         | 49.7 dB                 | 46.7 dB                     | 24.5 dB                    | 100 ± 15                             |
| 10 MHz          | 6 dB/100m                         | 59.3 dB        | 57.3 dB          | 51.3 dB         | 47.8 dB                 | 44.8 dB                     | 25 dB                      | 100 ± 15                             |
| 16 MHz          | 7.6 dB/100m                       | 56.3 dB        | 54.3 dB          | 46.7 dB         | 43.7 dB                 | 40.7 dB                     | 25 dB                      | 100 ± 15                             |
| 20 MHz          | 8.5 dB/100m                       | 54.8 dB        | 52.8 dB          | 44.3 dB         | 41.7 dB                 | 38.7 dB                     | 25 dB                      | 100 ± 15                             |
| 25 MHz          | 9.5 dB/100m                       | 53.4 dB        | 51.4 dB          | 41.8 dB         | 39.8 dB                 | 36.8 dB                     | 24.3 dB                    | 100 ± 15                             |
| 31.25 MHz       | 10.7 dB/100m                      | 51.9 dB        | 49.9 dB          | 39.2 dB         | 37.9 dB                 | 34.9 dB                     | 23.6 dB                    | 100 ± 15                             |
| 62.5 MHz        | 15.4 dB/100m                      | 47.4 dB        | 45.4 dB          | 30 dB           | 31.8 dB                 | 28.8 dB                     | 21.5 dB                    | 100 ± 15                             |
| 100 MHz         | 19.8 dB/100m                      | 44.3 dB        | 42.3 dB          | 22.5 dB         | 27.8 dB                 | 24.8 dB                     | 20.1 dB                    | 100 ± 15                             |
| 155 MHz         | 25.2 dB/100m                      | 41.5 dB        | 39.5 dB          | 14.3 dB         | 23.9 dB                 | 20.9 dB                     | 18.8 dB                    | 100 ± 22                             |
| 200 MHz         | 29 dB/100m                        | 39.8 dB        | 37.8 dB          | 8.8 dB          | 21.8 dB                 | 18.7 dB                     | 18 dB                      | 100 ± 22                             |
| 250 MHz         | 32.8 dB/100m                      | 38.3 dB        | 36.3 dB          | 3.5 dB          | 19.8 dB                 | 16.8 dB                     | 17.3 dB                    | 100 ± 32                             |

Voltage

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

Temperature Range

|                       |                |
|-----------------------|----------------|
| Operating Temp Range: | -20°C To +75°C |
|-----------------------|----------------|

Mechanical Characteristics

|                              |               |
|------------------------------|---------------|
| Bulk Cable Weight:           | 33 lbs/1000ft |
| Max. Pull Tension:           | 45 lbs        |
| Min. Bend Radius/Minor Axis: | 3.5 in        |

Standards

|                       |     |
|-----------------------|-----|
| NEC/(UL) Compliance:  | CMP |
| CEC/C(UL) Compliance: | CMP |

Applicable Environmental and Other Programs

|                                              |                               |
|----------------------------------------------|-------------------------------|
| Environmental Space:                         | Indoor - Plenum               |
| EU Directive 2000/53/EC (ELV):               | Yes                           |
| EU Directive 2003/11/EC (BFR):               | Yes                           |
| EU Directive 2011/65/EU (RoHS 2):            | Yes                           |
| EU Directive 2012/19/EU (WEEE):              | Yes                           |
| EU Directive 2015/863/EU (RoHS 2 amendment): | Yes                           |
| EU Directive Compliance:                     | EU Directive 2003/11/EC (BFR) |
| EU CE Mark:                                  | No                            |
| EU RoHS Compliance Date (yyyy-mm-dd):        | 2006-07-01                    |
| MII Order #39 (China RoHS):                  | Yes                           |

Flammability, LSOH, Toxicity Testing

|                    |           |
|--------------------|-----------|
| UL Flammability:   | NFPA 262  |
| CSA Flammability:  | FT6       |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

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

Part Number

|                    |       |
|--------------------|-------|
| Non-Plenum Number: | 7989R |
|--------------------|-------|

Variants

| Item # | Color | Put-Up Type | Length | UPC |
|--------|-------|-------------|--------|-----|
|--------|-------|-------------|--------|-----|

|               |            |      |          |              |
|---------------|------------|------|----------|--------------|
| 7989P 0131000 | Blue, Dark | Reel | 1,000 ft | 612825192565 |
|---------------|------------|------|----------|--------------|

|           |                        |
|-----------|------------------------|
| Footnote: | C - CRATE REEL PUT-UP. |
|-----------|------------------------|

### Product Notes

|        |                                                     |
|--------|-----------------------------------------------------|
| Notes: | Electricals are preliminary, final data is pending. |
|--------|-----------------------------------------------------|

### History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.320 Revision Date: 09-08-2021 |
|----------------------|--------------------------------------------------|

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