

Product Specification

STANDARD COMPLIANCES:

All Proposed Category 6 requirements as per ANSI/TIA, ISO/IEC, and CENELEC EN Standards.

ANSI/TIA-568-B.2-1 CAT.6

ISO/IEC 2nd Edition 11801 CLASS E

CENELEC EN 50173-1, CENELEC EN 50288-5-1, IEC 61156-5 for horizontal cable

Flame Retardancy is verified according to IEC 60332-1-2.

We implemented RoHS compliance for the requirement of European Union issued Directive 2002/95/EC

CONSTRUCTION & CHARACTERISTICS:

| | | | |
|------------------------------|---|---|--------------|
| Conductor | Material / Size | Bare Copper / 23 AWG | |
| Insulation | Material | Foam-Skin PE | |
| | Thickness | Nominal : 0.414mm | |
| | Diameter | Nominal : 1.387mm | |
| | Colors | Blue/White | Orange/White |
| | | Green/White | Brown/White |
| | Elongation | Min. 150 % | |
| Tensile Strength | Min. 0.51 Kg/mm ² | | |
| Inner-Shield | Aluminum-Mylar | An aluminum foil screen around each pair | |
| Braid | Material | Tinned Copper /In accordance with the norms of production | |
| Jacket | Material | PVC | |
| | Thickness | Nominal : 0.54 mm | |
| | Diameter | 7.2 ± 0.3 mm | |
| | Color | Assorted upon request | |
| | Elongation | Min. 100% | |
| | Tensile strength | Min. 1.407 Kg/mm ² | |
| Aging at 100°C for 168Hrs | Min. elongation retention: | 50% | |
| | Min. tensile strength retention: | 75% | |
| Marking | CAT.6 SSTP INSTALLATION CABLE 3P VERIFIED to ANSI/TIA-568-B.2-1 & ISO/IEC 11801 ED.2 & IEC 61156-5 & EN 50288-5-1 & EN 50173-1 & IEC 60332-1-2 23AWGx4P TYPE CM (UL) c(UL) xx°C E164469-xx [XXXXXM] | | |
| | or as customer request. | | |
| Flame Test | Burning five times, every time is less than 60 second and paper flag can't be burned. | | |



1275 Danner Drive Aurora, Ohio 44202
Tel: 1-800-626-7801 Fax: 330-562-1999
www.vpi.us sales@vpi.us

APPROVALS:

- UL/cUL Listed
- 3P Certified ANSI/TIA-568-B.2-1 Category 6 Testing Performance requirements.

APPLICATIONS:

- 1000BASE-Tx Gigabit Ethernet
- 10BASE-T, 100BASE-T Fast Ethernet (IEEE 802.3)
- 100 VG - AnyLAN(IEEE802.12), 155/622 Mbps ATM
- 550 MHz Broadband Video
- Voice, T1, ISDN

ELECTRICAL CHARACTERS:

| | | | | |
|--------------------------------------|--------------------|---|--------------------|-------------------------|
| Spark Test | | 1050 V ac | | |
| Dielectric Strength | | 2500 V dc / 3 seconds | | |
| Insulation Resistance Test | | Min. 150 MΩ/Km | | |
| Conductor Resistance | | Max.6.8 Ω/100m at 20°C | | |
| Resistance Unbalance | | Max. 2% | | |
| Capacitance Unbalance | | Max. 160 pF/100m | | |
| Mutual Capacitance | | Max. 5600 pF/100m | | |
| Impedance | 64kHz | 125Ω ± 20% | | |
| | 1~250MHz | 100Ω ± 15% | | |
| Attenuation & Near End Cross Talk | Frequency (MHz) | Attenuation (dB/100 meters at 20°C), Max. | NEXT (dB), Min. | Power Sum (dB), Min. |
| | 1MHz | 2.1* | 66.0* | 64.0* |
| | 4 MHz | 3.8* | 65.3* | 63.3* |
| | 10 MHz | 6.0* | 59.3* | 57.3* |
| | 16 MHz | 7.6* | 56.2* | 54.2* |
| | 20 MHz | 8.5* | 54.8* | 52.8* |
| | 31.25 MHz | 10.7* | 51.9* | 49.9* |
| | 62.5 MHz | 15.5* | 47.4* | 45.4* |
| | 100 MHz | 19.9* | 44.3* | 42.3* |
| | 150 MHz | 24.86* | 41.4* | 39.4* |
| | 200MHz | 29.2* | 39.8* | 37.8* |
| | 250MHz | 33.0* | 38.3* | 36.3* |

The asterisk (*) value are for information only. The minimum Next coupling loss for any pair combination at room temperature is to be greater than the value determined using the formula:

$$\text{NEXT}(f \text{ MHz}) \geq \text{NEXT}(0.772) - 15 \text{LOG}_{10}(f \text{ MHz}/0.772) \text{ dB}$$

