Specifications

Category 6 cable shall meet ANSI/TIA-568-C.2 Category 6 and ISO 11801 Class E channel standards. The conductors shall be 23 AWG construction with FEP/polyolefin (CMP) or polyolefin (CMR) insulation. The copper conductors shall be twisted in pairs and covered by a low smoke, flame-retardant (CMP) PVC jacket or a flame-retardant (CMR) PVC jacket.

Technical Information

Electrical performance:
Certified channel performance in a 4-connector configuration up to 100 meters and meets ANSI/TIA-568-C.2 Category 6 and ISO 11801 Class E standards at swept frequencies up to 250 MHz

Conductors/Insulators:
Plenum – 23 AWG solid copper covered by FEP/polyolefin insulation
Riser – 23 AWG solid copper covered by polyolefin insulation

Flame rating:
Plenum – NFPA 262
Riser – UL1666

PoE compliance:
Meets IEEE 802.3af and IEEE 802.3at for PoE applications

Installation tension:
25 lbf (110N) maximum

Temperature rating:
32°F to 122°F (0°C to 50°C) during installation
-4°F to 167°F (-20°C to 75°C) during operation (Riser)
-4°F to 140°F (-20°C to 60°C) during operation (Plenum)

Cable jacket:
Plenum – low smoke, flame-retardant PVC
Riser – flame-retardant PVC

Cable diameter:
Plenum – 0.224 in. (5.7mm) nominal
Riser – 0.210 in. (5.3mm) nominal

Cable weight:
Plenum – 29 lbs./1000 ft. (13 kg/305m)
Riser – 22 lbs./1000 ft. (10 kg/305m)

Packaging:
1000 ft. (305m) in an easy payout carton
Package tested to ISTA Procedure1A

Key Features and Benefits

Third party tested
Cable has been tested as part of the Category 6 UTP Copper Cabling System by an independent laboratory and complies with the electrical channel requirements of the following standard: ANSI/TIA-568-C.2 Category 6

Descending length cable markings
Easy identification of remaining cable reduces installation time and cable scrap

Tested beyond the standards
Cable has been characterized to 350 MHz, 100 MHz above the standard

Easy payout carton
Ensures proper performance and provides quick installation

Applications

Interoperable and backward compatible, the Panduit Category 6 Cabling System provides design flexibility to protect network investments well into the future. With certified performance to the ANSI/TIA-568-C.2 Category 6 and ISO 11801 Class E standards, this system will support the following applications:

- Ethernet 10BASE-T, 100BASE-T (Fast Ethernet), 1000BASE-T (Gigabit Ethernet over limited distances as specified in the industry 10GBASE-T standards)
- 155 Mb/s ATM, 622 Mb/s ATM, 1.2 Gb/s ATM
- Token Ring 4/16

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### Additional Specifications

<table>
<thead>
<tr>
<th>Mechanical Test</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Ultimate Breaking Strength</strong></td>
<td>&gt; 90 lbf (400N)</td>
</tr>
<tr>
<td><strong>Minimum Bend Radius</strong></td>
<td>4 x cable diameter</td>
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<tr>
<td><strong>Electrical Test</strong></td>
<td></td>
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<tr>
<td><strong>Nominal Velocity of Propagation (NVP)</strong></td>
<td>CMP – 72%, CMR – 69%</td>
</tr>
</tbody>
</table>

### Cable Construction

![Cable Construction Diagram](image)

- **Jacket**
- **Conductor Wire**
- **Conductor Insulator**
- **Rip Cord**