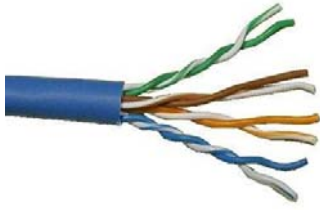


# Technical Data Sheet- Category 6 Network Plenum

# WEST PENN WIRE



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|                     |  |
|---------------------|--|
| <b>PART NUMBER:</b> | <b>254246</b>  |
| <b>DESCRIPTION:</b> | 23 AWG.- 4 PAIR Solid bare copper conductors, unshielded with an overall plenum jacket.  |
| <b>NEC RATING:</b>  | CMP  |
| <b>APPROVALS:</b>   | (UL) C(UL) Listed or c(ETL)us Listed   |
| <b>APPLICATION:</b> | Indoor Plenum - Category 5E Applications- Ethernet, IP Cameras, Digital Integration<br>Meets or exceeds TIA/EIA 568B.2.1 Category 6 Specifications |

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## Construction Parameters:

|                          |                             |
|--------------------------|-----------------------------|
| Conductor                | 23 AWG Bare Copper (.6 mm)  |
| Stranding                | Solid                       |
| Number of Conductors     | 8 (4 Pair)                  |
| Insulation               | Thermoplastic Plenum- .008" |
| Shield                   | None                        |
| Drain                    | None                        |
| Core Separator           | Yes                         |
| Jacket Material          | Plenum PVC                  |
| Overall Cable Diameter   | 0.208" Nom.                 |
| Approximate Cable Weight | 28 Lbs/1M' Nom.             |
| Flame Rating             | NFPA 262                    |

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## Electrical & Environmental Properties:

|                                       |   |
|---------------------------------------|---|
| Operating Temperature Rating          | -20°C To +60°C  |
| Operating Voltage Rating              | 300 V RMS   |
| DC Resistance per Conductor @ 20deg C | 7.8 Ohms/100m Nom.<br>23.8 Ohms/1000ft Nom.   |
| Mutual Capacitance                    | 14pf/ft Nominal   |
| Nominal Impedance                     | 100 Ohms+/-15% (1-100Mhz)   |
| Velocity of Propagation               | 72% Nominal   |
| Delay Skew                            | 45ns/100m MAX   |
| Standards                             | TIA/EIA568-B.2 1  |
| Insulation Colors                     | 1.Blue/White-Blue, 2. Orange/White-Orange<br>3. Green/White-Green, 4. Brown/White-Brown |
| Jacket Color                          | Gray, White, Blue   |
| RoHS Compliant                        | Yes   |

## Electrical Specifications:

|                         |      |      |      |      |      |      |
|-------------------------|------|------|------|------|------|------|
| Frequency: MHz          | 1    | 10   | 25   | 100  | 250  | 400  |
| Insertion Loss: dB/100m | 1.8  | 5.7  | 9.1  | 19.0 | 31.5 | 41.3 |
| NEXT: dB/100m           | 74.3 | 59.3 | 53.3 | 44.3 | 38.3 | 35.3 |
| ACR: dB/100m            | 72.3 | 53.3 | 46.3 | 24.5 | 5.5  | --   |
| PS-NEXT: dB/100m        | 72.3 | 57.3 | 51.3 | 42.3 | 36.3 | 33.3 |
| PS-ACR: dB/100m         | 70.3 | 51.3 | 41.8 | 22.5 | 3.5  | --   |
| ELFEXT: dB/100m         | 67.8 | 47.8 | 39.8 | 27.8 | 19.8 | 15.8 |
| PS-ELFEXT: dB/100m      | 64.8 | 44.8 | 36.8 | 24.8 | 16.8 | 12.8 |
| RL: dB                  | 20   | 25   | 24.3 | 20.1 | 17.3 | 15.9 |

|                   |                |
|-------------------|----------------|
| Operating Temp    | -20 C to +60 C |
| Storage Temp      | -20 C to +75 C |
| Installation Temp | 0 C to + 60 C  |
| Delay Skew        | 45ns/100m Max  |

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## Mechanical Properties:

|                               |         |
|-------------------------------|---------|
| Max. Recommended Pull Tension | 25 lbs. |
| Min. Bend Radius (Install)    | 1.00"   |

## Accessories:

### Connectors: Jacks

|          |        |
|----------|--------|
| AX101318 | Gray   |
| AX101319 | Almond |
| AX101320 | White  |
| AX101321 | Black  |
| AX101322 | Orange |
| AX101323 | Red    |
| AX101324 | Yellow |
| AX101325 | Green  |
| AX101326 | Blue   |
| AX101327 | Purple |

### Connectors: Plugs

|           |       |
|-----------|-------|
| 32-6198UL | Cat 6 |
|-----------|-------|

### Tools:

|        |                     |
|--------|---------------------|
| TL-135 | 110 Punch down tool |
| TL-114 | Crimp Tool          |

### Cable Assemblies:

|              |                                   |
|--------------|-----------------------------------|
| WP-4236xx-3  | 3 ft. Replace xx with GY, BL, RD  |
| WP-4236xx-7  | 7 ft. Replace xx with GY, BL, RD  |
| WP-4236xx-10 | 10 ft. Replace xx with GY, BL, RD |
| WP-4236xx-15 | 15 ft. Replace xx with GY, BL, RD |
| WP-4236xx-25 | 25 ft. Replace xx with GY, BL, RD |

Specification Issue Date: 4/09

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Standard Lengths are 1000ft.  
The Jacket is sequentially footmarked.  
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