



Product Code : **6X2311**



Ethernet-Category 6, 23 AWG(CAT6) 4 Pair U/UTP, PVC(Riser) Cable

### Product Description

Category 6, 4 Pair, 23 AWG, Solid Bare Copper Conductor with Polyethylene insulation, U/UTP, PVC Jacket CMR Riser Cable (1-250MHz)

### TECHNICAL SPECIFICATION

**Suitable Application** Campus, Riser, Tertiary Cables, (horizontal & backbone) Building Cables,  
IEEE 802.3an; 10Base-TX, 100BaseTX, 1000Base-T, IEEE 802.5 16 MB; ISDN; TPDDI; ATM, IEEE 802.3af-2002: POE; 802.3at; POE+

#### Conductor

|                       |                          |
|-----------------------|--------------------------|
| Element               | Individual Pair          |
| No. of Elements       | 8                        |
| Total Number of Pairs | 4 Pairs twisted together |
| Size                  | 23 AWG                   |
| Stranding             | Solid                    |
| Material              | BC-Bare Copper           |

#### Insulation

|                             |                                |
|-----------------------------|--------------------------------|
| Material                    | PE Polyethylene                |
| Nominal Insulation Diameter | 1.01 mm                        |
| Color Code                  | White w/ Blue Strips & Blue    |
| Color Code                  | White w/Orange Strips & Orange |
| Color Code                  | White w/Green Strips & Green   |
| Color Code                  | White w/Brown Strips & Brown   |

#### Cable Core

**Separator** Center Member

#### Outer Jacket

|                             |                        |
|-----------------------------|------------------------|
| Material                    | PVC-Polyvinyl Chloride |
| Nominal Diameter            | 6.0 mm                 |
| Overall Cable Diameter(Nom) | 6.0 mm                 |

### ELECTRICAL CHARACTERISTICS

#### Electrical

|                               |             |
|-------------------------------|-------------|
| Max Conductor DCR             | 95 Ohm/km   |
| Nominal Capacitance Unbalance | 160 pF/100m |
| Max Nominal Capacitance       | 56 pF/m     |
| Nom Characteristic Impedance  | 100 Ohm     |
| Nom Velocity of Propagation   | 70%         |
| Voltage Rating                | 72 V DC     |
| Max Delay Skew                | 40 ns/100m  |

### MECHANICAL CHARACTERISTICS

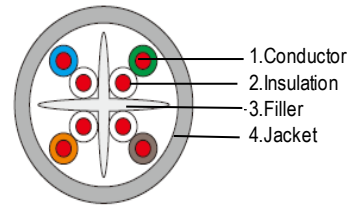
|                         |                  |
|-------------------------|------------------|
| Installation Temp Range | 0° C to +75° C   |
| Operational Temperature | -20° C to +80° C |
| Max Rec. Pull Tension   | 80 N (18 lbf)    |

#### High Frequency

| Frequency (MHz) | Attenuation (dB/100m) | NEXT (dB) | PSNEXT (dB) | ACRF (dB) | PSACRF (dB) | Return Loss (dB) | Delay (dB) |
|-----------------|-----------------------|-----------|-------------|-----------|-------------|------------------|------------|
| 1               | 2.1                   | 65        | 62          | 63.3      | 60.3        | 19               | 580        |
| 4               | 4                     | 63        | 60.5        | 51.2      | 48.2        | 19               | 562        |
| 8               | 5.7                   | 58.2      | 55.6        | 45.2      | 42.2        | 19               | 557        |
| 10              | 6.3                   | 56.6      | 54          | 43.3      | 40.3        | 19               | 555        |
| 16              | 8                     | 53.2      | 50.6        | 39.2      | 36.2        | 18               | 553        |
| 20              | 9                     | 51.6      | 49          | 37.2      | 34.2        | 17.5             | 552        |
| 25              | 10.1                  | 50        | 47.3        | 35.3      | 32.3        | 17               | 551        |
| 31.25           | 11.4                  | 48.4      | 45.7        | 33.4      | 30.4        | 16.5             | 550        |
| Frequency (MHz) | Attenuation (dB/100m) | NEXT (dB) | PSNEXT (dB) | ACRF (dB) | PSACRF (dB) | Return Loss (dB) | Delay (dB) |
| 62.5            | 16.5                  | 43.4      | 40.6        | 27.3      | 24.3        | 14               | 549        |
| 100             | 21.3                  | 39.9      | 37.1        | 23.3      | 20.3        | 12               | 548        |
| 200             | 31.5                  | 34.8      | 31.9        | 17.2      | 14.2        | 9                | 547        |
| 250             | 35.9                  | 33.1      | 30.2        | 15.3      | 12.3        | 8                | 546        |

Part Number / Variants

| Colour     | Length in Meters | Packaging   |
|------------|------------------|-------------|
| WH: White  | 100              | R: Reel     |
| BL: Blue   | 305              | P: Pull Box |
| GR: Grey   | 500              |             |
| BK: Black  |                  |             |
| RD: Red    |                  |             |
| YE: Yellow |                  |             |
| PU: Purple |                  |             |
| GN: Green  |                  |             |



## STANDARDS & COMPLIANCE

Environmental Sustainability: Indoor-Riser, Indoor

Flammability/Reaction to Fire: IEC 60332-1-2

UL Compliance: CMR-UL1666

UL Number: E535337

ISO/IEC 11801-1:2017 (Ed.1.0) / ISO/IEC 11801-2:2017 (Ed.1.0)

EN 50173-1:2018 / EN 50173-2:2018

IEC 61156-5:2012 (Ed. 2.1); EN 50288-6-1:2013

TIA-568.2-D:2018

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