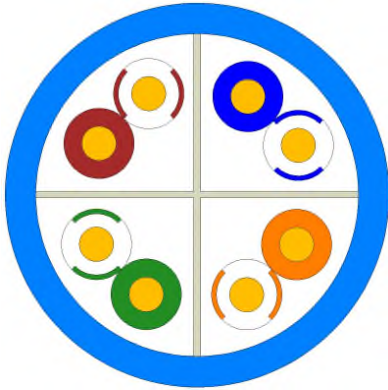


# M@X6®

## Unshielded Twisted Pair (UTP) Category 6

**EIA/TIA 568-C.2**  
**AS/NZS 11801.1**  
**ACMA - AS/CA S008**

### Cable Design



Drawing not to scale -

- **Multi-pair construction**
- **Conductor:** Annealed solid copper wire 0.51mm diameter (24 AWG)
- **Insulation:** Polyethylene compound in compliance with AS1049
- **Cabling element:** Twisted pair
- **Colour code:** See table 1
- **Stranding of pairs:** Bunched around cross web filler
- **Sheath:** Flame retardant PVC (75°C) in compliance with AS 1049

100Ω balanced UTP cable suitable for Local Area Network (LAN) cabling up to 250 MHz capable of supporting transmission rates of up to and including 10-Gigabit Ethernet. Cable is UL verified (see *Note 1*).

### Technical data

|                        |       |   |
|------------------------|-------|---|
| <b>Number of Pairs</b> |       | <b>4</b>  |
| Cable nominal diameter | mm    | 6.0   |
| Cable nominal weight   | kg/km | 40  |
| Max. pulling tension   | N     | 190   |
| Min. bending radius    | mm    | 50  |
| Temperature range      | °C    | Installation 0 -> +50      Operation -20 -> +60 |

*Note 1: Cable meets AS/NZS IEC 60332.1 "Test for vertical flame propagation for a single insulated wire or cable"*

### Identification

#### Sheath Colour:

The standard outer sheath colour is grey (RAL 7044). Alternative colour is blue (RAL 5019).

#### Sheath Marking:

The outer sheath is marked in 1 meter intervals as follows:

**PRYSMIAN M@X6 4PR CATEGORY 6 VERIFIED (UL) E179849G UTP 24AWG TYPE CMX XXXX MM/YY T/N ##### \*\*\*\*\*M**

Where: XXXX = L4P6 for cables with grey sheath, L4P6BU for blue sheath

| Transmission characteristics |                      |                           |               |                  |                    |                       |                                 |                                      |
|------------------------------|----------------------|---------------------------|---------------|------------------|--------------------|-----------------------|---------------------------------|--------------------------------------|
| Frequency [MHz]              | Return Loss [dB] Min | Attenuation [dB/100m] Max | NEXT [dB] Min | PS NEXT [dB] Min | ACRF [dB/100m] Min | PS ACRF [dB/100m] Min | Propagation Delay [ns/100m] Max | Propagation Delay Skew [ns/100m] Max |
| 1.0                          | 20+5log(f)           | 2.0                       | 74.3          | 72.3             | 67.8               | 64.8                  | 570                             | 45                                   |
| 4.0                          |                      | 3.8                       | 65.3          | 63.3             | 55.8               | 52.8                  | 552                             |                                      |
| 10.0                         | 25                   | 6.0                       | 59.3          | 57.3             | 47.8               | 44.8                  | 545                             |                                      |
| 16.0                         |                      | 7.6                       | 56.2          | 54.2             | 43.7               | 40.7                  | 543                             |                                      |
| 20.0                         | 25-7log(f/20)        | 8.5                       | 54.8          | 52.8             | 41.8               | 38.8                  | 542                             |                                      |
| 31.25                        |                      | 10.7                      | 51.9          | 49.9             | 37.9               | 34.9                  | 540                             |                                      |
| 62.5                         |                      | 15.4                      | 47.4          | 45.4             | 31.9               | 28.9                  | 539                             |                                      |
| 100                          |                      | 19.8                      | 44.3          | 42.3             | 27.8               | 24.8                  | 538                             |                                      |
| 200                          |                      | 29.0                      | 39.8          | 37.8             | 21.8               | 18.8                  | 537                             |                                      |
| 250                          |                      | 32.8                      | 38.3          | 36.3             | 19.8               | 16.8                  | 536                             |                                      |

| Electrical characteristics                                    |           |
|---|-----------|
| DC resistance [ $\Omega$ /100m]:                              | 9.38 Max. |
| Resistance unbalance [%]:                                     | 5 Max.    |
| Mutual capacitance @1kHz [pF/100m]:                           | 5.6 Max.  |
| Capacitance unbalance @1kHz, pair to ground [pF/100m]:        | 330 Max.  |
| <i>Note: All electrical characteristics are given at 20°C</i> |           |

**Table 1. Colour code / Pair identification**

| Pair number | Insulation colour |                          |   |        |                         |
|-------------|-------------------|--------------------------|---|--------|-------------------------|
|             | Wire a            | Wire b                   |   | Wire a | Wire b                  |
| 1           | Blue              | White blue stripes (2)   | 3 | Green  | White green stripes (2) |
| 2           | Orange            | White orange stripes (2) | 4 | Brown  | White brown stripes (2) |

## Logistic

### Packing:

Plastic reels and cardboard boxes – 270 x 300 x 310 mm (Red / White)

### Delivery Lengths:

Standard delivery length is 305 metres

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