## M@X5E ${ }^{\text {® }}$

## Unshielded Twisted Pair (UTP) Enhanced Category 5

EIA/TIA 568-C. 2
AS/NZS 3080
Cable Design
ACMA - AS/CA S008


- Multi-pair construction
- Conductor: Annealed solid copper wire 0.51 mm diameter (24 AWG)
- Insulation: Polyethylene compound in compliance with AS 1049
- Cabling element: Twisted pair
- Colour code: See table 1
- Stranding of pairs: Bunched
- Sheath: Flame retardant PVC $\left(75^{\circ} \mathrm{C}\right)$ in compliance with AS 1049
- Drawing not to scale -
$100 \Omega$ balanced UTP cable suitable for Local Area Network (LAN) cabling up to 100 MHz capable of supporting transmission rates of up to and including Gigabit Ethernet. Cable is UL verified (see Note1).

Technical data

| Number of Pairs |  |  | 4 |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Cable nominal diameter | mm |  | 5.0 |  |  |
| Cable nominal weight | $\mathrm{kg} / \mathrm{km}$ |  | 31 |  |  |
| Max. pulling tension | N |  | 150 |  |  |
| Min. bending radius | mm |  |  | 40 |  |
| Temperature range | $\circ$ |  |  |  |  |

Note 1: Cable meets IEC 60332-1 "Test for vertical flame propagation for a single insulated wire or cable"

## Identification

## Sheath Colour:

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

## Sheath Marking:

The outer sheath is marked in 1 meter intervals as follows:
PRYSMIAN M@X5E 4PR CATEGORY 5 ENHANCED VERTFIED (UL) E179849G UIP 24AWG TYPE CMX XXXX MM/YY T/N \#\#\#\#
Where: XXXX = L4P5E for cables with blue sheath, L4P5EGR for grey sheath

| Transmission characteristics |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Frequency } \\ & \text { [MHz] } \end{aligned}$ | $\begin{gathered} \hline \text { Return Loss } \\ {[\mathrm{dB}]} \\ \text { Min } \end{gathered}$ | Attenuation [dB/100m] Max | $\begin{aligned} & \hline \text { NEXT } \\ & \text { [dB] } \\ & \text { Min } \end{aligned}$ | $\begin{gathered} \hline \text { PS NEXT } \\ \text { [dB] } \\ \text { Min } \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { ACRF } \\ {\left[\begin{array}{c} \text { MB } / 100 \mathrm{~m}] \\ \text { Min } \end{array}\right.} \\ \hline \end{array}$ | PS ACRF [dB/100m] Min | ```Propagation Delay [ns/100m] Max``` | Propagation Delay Skew [ns/100m] Max |
| 1.0 | $20+5 \log (\mathrm{f})$ | 2.0 | 65.3 | 62.3 | 63.8 | 60.8 | 570 | 45 |
| 4.0 |  | 4.1 | 56.3 | 53.3 | 51.8 | 48.8 | 552 |  |
| 8.0 |  | 5.8 | 51.8 | 48.8 | 45.7 | 42.7 | 547 |  |
| 10.0 | 25 | 6.5 | 50.3 | 47.3 | 43.8 | 40.8 | 545 |  |
| 16.0 |  | 8.2 | 47.2 | 44.2 | 39.7 | 36.7 | 543 |  |
| 20.0 | 25-7log(f/20) | 9.3 | 45.8 | 42.8 | 37.8 | 34.8 | 542 |  |
| 25.0 |  | 10.4 | 44.3 | 41.3 | 35.8 | 32.8 | 541 |  |
| 31.25 |  | 11.7 | 42.9 | 39.9 | 33.9 | 30.9 | 540 |  |
| 62.5 |  | 17.0 | 38.4 | 35.4 | 27.9 | 24.9 | 539 |  |
| 100 |  | 22.0 | 35.3 | 32.3 | 23.8 | 20.8 | 538 |  |


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

## Table 1. Colour code / Pair identification

| Pair <br> 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:

Fibreboard 'easy-pull' dispenser cartons (Reelex) $-350 \times 350 \times 215 \mathrm{~mm}$ (Green / White)

## Delivery Lengths:

Standard delivery length is 305 metres

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