# Multicore 32 pairs 0.4 mm cable <br> Aluminium shielded 

## Cable design

Reference:

| ALCATEL LUCENT code | 1AC 023020001 |
| :--- | :--- |
| TYCO part numbers | $1820149-1$ |
| PRYSMIAN code | 5003166 |



1) Copper conductor
2) Polyethylene insulation
3) Cabling element (4 groups of 8 pairs)
4) Wrapping tape
5) Drain wire
6) Screening foil
7) Rip cord
8) Outer sheath

Cable construction TE $32 \times 20.4 \mathrm{GH} / \mathrm{R}$

| Conductor: | Annealed solid copper wire Diameter 0.40 mm (AWG 26) |
| :---: | :---: |
| Insulation: | Polyethylene compound <br> Nominal thickness: 0.15 mm |
| Cabling element: | Pairs with lay length $\leq 45 \mathrm{~mm}$ |
| Colour code: | Table 1 |
| Stranding of pairs: | 4 groups of 8 pairs |
| Group identification tape: white, blue, yellow, brown |  |
| Wrapping tape: | One or more synthetic tapes |
| Drain wire: | Tinned copper wire of 0.5 mm |
| Screen (electrostatic): | ALU/PET/ALU tape with a total aluminium thickness $\geq 24 \mu \mathrm{~m}$ The tape is applied longitudinally or with a slow-turn spiral |
| Rip cord: | Rip cord |
| Outer sheath: | PVC (Grey RAL7001) <br> Nominal thickness 1.0 mm |
| Outer cable diameter: | Nominal 11 mm ; maximum 12.4 mm |
| Net cable weigth: | $150 \mathrm{~kg} / \mathrm{km}$ |
| Minimum bending radius: 110 mm |  |
| Temperature range: | $0 \div 50^{\circ} \mathrm{C}$ installations $-20 \div 70^{\circ} \mathrm{C}$ working |

## Environmental

a) Fire Performance: Flammability (single cable) according IEC 60332-1 and NFC 32-070 category C2
b) The cable will be compliant to the RoHs directive 2002/95/EC

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## Sheath marking

metric ALCATEL LUCENT MULTICODE 32X2X0.4 - ww/aa - xxxxxxxxx-PRYSMIAN (f)
$\mathrm{ww} / \mathrm{aa}=$ product week and year (es. $15 / 06$ )
xxxxxxxxxx = cable code (1AC 02302 0001)
$\mathrm{f}=$ factory code
Printing interval: 1m, color: blue or black

## Table 1 - Colour scheme and position of the pairs



Electrical data at $20^{\circ} \mathrm{C}$
D.C. electrical resistance of each conductor Max. $\leq 150$ Ohm / Km

## Voltage test for 1 minute

1000 V a.c. or 1500 V d.c.
Insulation resistance
Min. $\geq 1000$ Mohm*km

## Impedance

$100 \pm 20$ ohm @ 700 kHz

## Attenuation:

$\leq 27 \mathrm{~dB} / \mathrm{km}$ @ 700 kHz

## Near-end and Far-end crosstalk

$\geq 50 \mathrm{~dB}$ @ 700 kHz
$\geq 35 \mathrm{~dB}$ @ 7 MHz

| Pair number | Insulation colour |  | Group |
| :---: | :---: | :---: | :---: |
|  | Wire a | Wire b |  |
| 1 | Light blue | White | A (white) |
| 2 | Light blue | Dark blue |  |
| 3 | Light blue | Yellow |  |
| 4 | Light blue | Brown |  |
| 5 | Light blue | Black |  |
| 6 | Light blue | Red |  |
| 7 | Light blue | Green |  |
| 8 | Grey | White |  |
| 9 | Grey | Dark blue | $\begin{gathered} B \\ \text { (blue) } \end{gathered}$ |
| 10 | Grey | Yellow |  |
| 11 | Grey | Brown |  |
| 12 | Grey | Black |  |
| 13 | Grey | Red |  |
| 14 | Grey | Green |  |
| 15 | Orange | White |  |
| 16 | Orange | Dark blue |  |
| 17 | Orange | Yellow | C (yellow) |
| 18 | Orange | Brown |  |
| 19 | Orange | Black |  |
| 20 | Orange | Red |  |
| 21 | Orange | Green |  |
| 22 | Violet | White |  |
| 23 | Violet | Dark blue |  |
| 24 | Violet | Yellow |  |
| 25 | Violet | Brown | D (brown) |
| 26 | Violet | Black |  |
| 27 | Violet | Red |  |
| 28 | Violet | Green |  |
| 29 | White | Light blue |  |
| 30 | White | Grey |  |
| 31 | White | Orange |  |
| 32 | White | Violet |  |

