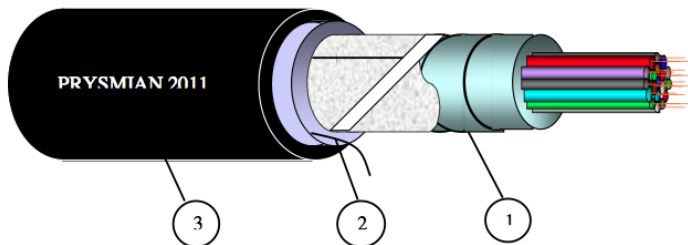


## Multi twisted pair 26 AWG cable

Aluminium shielded, for outdoor VDSL systems (OSP), TE 24x2x0.4 GH /H5E

### Cable design



SCHEMATIC DRAWING – 24 PAIRS CABLE (without braid)

- 1 Screened 24 pair bundles
- 2 Non metallic rip cord
- 3 Outer HDPE sheath with Polyam moisture barrier under it

### Cable construction

|                                |  |
|--------------------------------|--|
| <b>Conductor</b>               | Annealed solid copper wire<br>Diameter $0.40 \pm 0.01$ (26AWG)   |
| <b>Insulation</b>              | Polyethylene compound<br>Minimum thickness 0.13 mm, nominal diameter 0.70 mm   |
| <b>Cabling element</b>         | Pairs with lay length $\leq 40$ mm   |
| <b>Colour code</b>             | According to IEC Publication 189/2, Appendix A and IEC Publication 304   |
| <b>Cable core</b>              | The cable core is formed by 3 subunits of 8 pairs  |
| <b>Identification subunits</b> | Coloured tapes (blue-orange-green)   |
| <b>Wrapping tape</b>           | PET tape 0.036 mm thickness helically applied  |
| <b>Screen (electrostatic)</b>  | Grounding wire (tinned copper wire with diameter 0.4mm) and AL/PET tape with thickness 50/25 $\mu$ m, longitudinally applied   |
| <b>Non metallic rip cord</b>   | Aluminium covered with copolymer on both sides   |
| <b>Moisure barrier</b>         | High density polyethylene (HDPE) black   |
| <b>Outer sheath</b>            | Minimum thickness 1.4mm  |
| <b>Nominal diameter</b>        | $12\text{mm} \pm 0.5\text{mm}$   |
| <b>Sheath marking:</b>         | PRYSMIAN (S) - aaaa<br>aaaa = production year (es. 2011)<br>Interval 300 mm, color white<br><b>Note:</b> Different printing legend available upon customer requirement |

### Mechanical and environmental properties

|                               |  |
|-------------------------------|--|
| <b>Minimum bending radius</b> | $\geq 10 \times$ overall cable diameter (static)<br>$\geq 15 \times$ overall cable diameter (dynamic)  |
| <b>Temperature range</b>      | Installation: $-5^{\circ}\text{C} / +50^{\circ}\text{C}$<br>Operation (fixed installation): $-20^{\circ}\text{C} / +70^{\circ}\text{C}$<br>Storage and transportation: $-30^{\circ}\text{C} / +50^{\circ}\text{C}$ |

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### Electrical properties at 20° C

|   |         |   |
|---|---------|---|
| Loop resistance                           | Ohm/km  | ≤ 150   |
| Insulation resistance                     | Mohm×km | ≥ 5000  |
| Test voltage                              |         | 1000 V <sub>AC</sub> or 1500 V <sub>DC</sub> 1 minute |
| Maximum mutual capacitance                | nF/km   | ≤ 55  |
| Capacitance unbalance at 800 Hz           |         |   |
| - Pair to pair                            | pF/500m | 250   |
| - Pair to ground                          | pF/500m | 750   |
| Characteristic impedance from 1 to 30 MHz | Ohm     | 100 ± 15  |

#### Attenuation

|        |         |      |
|--------|---------|------|
| 1 MHz  | dB/100m | 3.0  |
| 4 MHz  | dB/100m | 5.5  |
| 10 MHz | dB/100m | 9.0  |
| 16 MHz | dB/100m | 11.5 |
| 20 MHz | dB/100m | 12.5 |
| 30 MHz | dB/100m | 15.5 |

#### Near end crosstalk

|        |    |      |
|--------|----|------|
| 1 MHz  | dB | 60   |
| 4 MHz  | dB | 51   |
| 10 MHz | dB | 45   |
| 16 MHz | dB | 42   |
| 20 MHz | dB | 40.5 |
| 30 MHz | dB | 37   |

#### Far end crosstalk

|        |         |      |
|--------|---------|------|
| 1 MHz  | dB/100m | 60   |
| 4 MHz  | dB/100m | 51   |
| 10 MHz | dB/100m | 45   |
| 16 MHz | dB/100m | 42   |
| 20 MHz | dB/100m | 40.5 |
| 30 MHz | dB/100m | 37   |