# CAT6-FTP PVC

# High performance Networking / Data Cables

### **Description & Applications**

**CAT6-FTP PVC** - Category 6 High performance multi-pair cable consisting of 4 twisted pairs and a common outer Aluminium Foil shielding (FTP) with solid Copper conductors of 0.51 mm (24AWG) per core, used primarily in high speed networking applications, supporting Gigabit Ethernet at frequencies up to 250Mhz.

When compared to CAT5e, each core pair has a higher 'twist per cm' ratio and an integral 'Spline' for pair separation, improving signal integrity and effectively eliminating potential cross talk. The Foil screening can minimise unwanted high frequency signals from other local cables or other sources of noise from entering the cable.

This cable has been designed to exceed the performance requirements of the ANSI/TIA-568-C.2 for Category 6 cables and is suited for use in many types of high speed Networking application, HD TV & Video, HD & IP CCTV, POE, VOIP to name but a few.

## **Specification**

Product Ref: CAT6-FTP-PVC

#### Construction:

Conductor: Solid 'Bare Copper,' 0.51mm (24AWG) Cable: 8 wires formed into 4 insulated twisted pairs Core Insulation: HDPE - High Density Polyethylene

Core Identification:

4 colour coded twisted Pairs: Blue + White/Blue, Orange + White/Orange,

Green + White / Green, Brown + White / Brown

Spline: Plastic 'Spline' separating each twisted pair to eliminate cross talk Screening / Shielding: FTP – Common outer shielding (Foil screen) around the

twisted pair cables, with drain wire. **Stripping Cord:** Nylon stripping cord.

Outer Sheath: PVC, Polyvinyl Chloride Jacket in light Grey colour.

Overall Diameter: 6.4mm (+/- 0.2mm)

Cable Markings: Product Ref code, / Metre marked / Applicable Standards.

#### **Electrical Properties:**

DC Resistance: < 9.5 ohms/100m Resistance unbalance: <2% Frequency Range: Up to 250 Mhz

Characteristic Impedance: 100 Ohms +/- 15%

Capacitance: < 5.6 nf/100m

**NVP**: 69%

Min. Bending Radius: 7 x Overall diameter Operating temperature: -20°c to +60°c Technical Performance @20°c:

Attenuation: 100mhz: 19.8 Db / 250Mhz: 32.8dB NEXT: 100mhz: 44.3 dB / 250Mhz: 38.3dB Packaging: 305m (1000ft) 'Easy Pull' Box

Weight: 12Kg (including Box)

### **Standards and Conformances:**

Designed to exceed the performance requirements of :

- ANSI/TIA/ EIA-568-C.2 for Category 6 Cables
- EN50173
- ISO11801

Suitable for use in systems conforming to: IEEE 802.3 / 10BASE-T / 100BASE-T / 1000BASE-T RoHS Compliant







