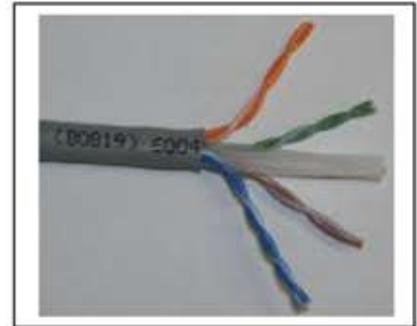


**Compliant to ISO 11801, TIA/EIA-568-C.2 and EN50173  
EC Verified**

### **Material, Construction & Packaging**

|                    |                           |          |
|--------------------|---------------------------|----------|
| Conductor          | 23 AWG solid bare copper  | (0.57mm) |
| Insulation         | Polyethylene              |          |
| Pairs Colours      | 1. Blue/White-Blue        | (1.00mm) |
|                    | 2. Green/White-Green      | (1.00mm) |
|                    | 3. Orange/White-Orange    | (0.96mm) |
|                    | 4. Brown/White-Brown      | (0.96mm) |
| Sheath             | PVC Nominal OD 6.1 mm     |          |
| Cross Divider      | Polyethylene              |          |
| Weight & Packaging | 22 Kg/500m reel           |          |
| Fire Safety Rating | IEC 60332-1               |          |
| Temperature Range  | Installation 0° to 50°    |          |
|                    | Operational -20° to +70°. |          |



### **Transmission Characteristics**

| Frequency M/Hz | Attenuation dB/100m | Next dB | PSNext dB | ACR  | PSACR | ELFEXT | PSELEFXT dB | Return Loss |
|----------------|---------------------|---------|-----------|------|-------|--------|-------------|-------------|
| 1              | 2                   | 74.3    | 72.3      | 72.3 | 70.3  | 67.8   | 64.8        | 20.0        |
| 4              | 3.8                 | 65.3    | 63.3      | 61.5 | 59.5  | 55.7   | 52.7        | 23.0        |
| 8              | 5.4                 | 60.8    | 58.8      | 55.4 | 53.4  | 49.7   | 46.7        | 25.0        |
| 10             | 6                   | 59.3    | 57.3      | 53.3 | 51.3  | 47.8   | 44.8        | 25.0        |
| 16             | 7.6                 | 56.2    | 54.2      | 48.6 | 46.6  | 43.7   | 40.7        | 25.0        |
| 20             | 8.5                 | 54.8    | 52.8      | 46.3 | 44.3  | 41.7   | 38.0        | 25.0        |
| 25             | 9.6                 | 53.3    | 51.3      | 43.8 | 41.8  | 39.8   | 36.8        | 25.0        |
| 31.25          | 10.7                | 51.9    | 49.9      | 41.1 | 39.1  | 37.9   | 34.9        | 23.6        |
| 62.5           | 15.5                | 47.4    | 45.4      | 31.9 | 29.9  | 31.8   | 28.8        | 21.5        |
| 100            | 19.9                | 44.3    | 42.3      | 24.4 | 22.4  | 27.8   | 24.8        | 20.1        |
| 125            | 22.5                | 42.8    | 40.8      | 20.4 | 18.4  | 25.8   | 22.8        | 19.4        |
| 200            | 29.2                | 39.8    | 37.8      | 10.6 | 8.6   | 21.7   | 18.7        | 18.0        |
| 250            | 33                  | 38.3    | 36.3      | 5.3  | 3.3   | 19.8   | 16.8        | 17.3        |

### **Electrical Characteristics at 20°C**

|                                      |                                    |
|--------------------------------------|------------------------------------|
| DC Resistance                        | 80 Ohms/Km Maximum                 |
| Resistance Unbalance                 | 2% Maximum                         |
| Mutual Capacitance                   | 42 nF/Km Max                       |
| Capacitance Unbalance                | 1000 pF/Km Max                     |
| Skew                                 | 400 ns/Km Max                      |
| Velocity of Propagation              | 68% (0.68 x 3x10 <sup>8</sup> m/s) |
| Characteristic Impedance 1 – 100MHz  | 100 + 15 Ohms                      |
| Characteristic Impedance 100– 250MHz | 100 + (15 + 0.05 (f-100) Ohms)     |