

### Applications

suitable for Local Area Networks and Analogue & Digital video applications

### Sector - BT Data-TEC™

Category Data Cables

### Standard References

EIA/TIA 568B.2-1  
ISO/IEC 11801  
IEC 60332-1  
RoHS directives

### Design

#### 1. Conductor

4 Twisted Pairs,  
Solid Bare Copper Wire

#### 2. Insulation

Polyethylene

**Pair 1:** WHITE-Blue/Blue

**Pair 2:** WHITE-Orange/Orange

**Pair 3:** WHITE-Green/Green

**Pair 4:** WHITE-Brown/Brown

#### 3. Spine

Cross member of PE

#### 4. Sheath Material

Low Smoke, Flame-Retardant, Halogen-Free.  
Standard colour: purple

#### Standard Put Up Length

305 -500 or 1000 Metres

### Cable Characteristics

No Pairs	Cu Gauge (AWG)	Operating Temperature Range	Maximum Pulling Tension (Newton)	Min. Installed Bend Radius (mm)	Nom. Overall Diameter (mm)	Nominal Weight (kg/km)
4	23	-20°C to +60°C	80	83	8.3	6.12

### Electrical Characteristics

Conductor Resistance (Ohm/100m)	Input Impedance (Ohm)	Velocity of Propagation (%)	Maximum Delay Skew (ns/100m)	Max. Operating Voltage (Volts RMS)
7.3	100 ± 15	65	45	300

Freq. (MHz)	Return Loss (dB/100m)	Insertion Loss (dB/100m)	NEXT (dB/100m)	PSNEXT (dB/100m)	ELFEXT (dB/100m)	PSELFEXT (dB/100m)	ACR (dB/100m)	PSACR (dB/100m)
1	20.0	3.7	74.3	72.3	55.9	52.9	61.5	59.56
4	23.0	4.0	65.3	63.3	55.8	52.8	31.4	59.43
10	25.0	5.8	59.3	57.3	47.8	44.8	53.4	51.33
16	25.0	7.4	56.2	54.2	43.7	40.7	48.6	46.58
20	25.0	8.3	54.8	52.8	42.3	39.8	46.3	44.13
25	24.3	9.3	53.3	51.3	39.8	36.8	43.0	38.83
31.25	23.6	10.4	51.9	49.9	37.9	34.9	42.3	39.38
100	20.1	19.0	44.3	42.3	27.8	24.8	25.2	23.13
200	18.0	27.5	39.8	37.8	21.8	18.8	12.2	10.32
250	17.3	31.0	38.3	36.3	19.8	16.8	7.25	4.50
300	17.3	34.2	37.1	35.1	18.1	15.7	2.92	1.00
400	17.3	40.0	35.3	33.4	15.9	12.9	-4.94	-6.90
500	17.3	45.2	33.8	31.8	14.0	11.0	-11.44	-13.44