

Applications

Twisted pair cable suitable for Local Area Networks and Video Applications

Operating Temperature

-20°C to +70°C

Sector - **BT Data-TEC™**

Category 6 Data Cables

Standard References

ISO 11801

ANSI/TIA/EIA-568-C2

IEC 60332-1

IEC 61034 (HFFR only)

IEC 60754-1 & 2 (HFFR only)

RoHS directives

Design

1. Conductor
4 Twisted Pairs,
23 AWG Solid
Plain Copper Wire

2. Insulation
Solid Polyethylene

Pair 1: WHITE-Blue/Blue
Pair 2: WHITE-Orange/Orange
Pair 3: WHITE-Green/Green
Pair 4: WHITE-Brown/Brown

3. Cruciform

4. Screen (FTP only)
Aluminium/Polyester
100% coverage

5. Drain Wire (FTP only)
24 AWG Tinned Copper

6. Ripcord

7. Sheath Material
Polyvinyl Chloride (PVC)
Halogen Free, Flame
Retardant (HFFR)
Polyethylene (PE)

Standard Put Up Length

305 metres

Cable Characteristics

BTCL Part Number	Type	Sheath Material	Nominal Cable Weight (kg/km)	Maximum Pulling Tension (Newton)	Min. Installed Bend Radius (mm)	Nom. Overall Diameter (mm)
C1037	UTP	PVC	42	80	51	6.2
C1038	FTP	PVC	56	111	60	7.4
C1237	UTP	HFFR	51	80	51	6.2
C1238	FTP	HFFR	54.1	111	60	7.4
C1437	UTP	PE	39	80	51	6.2

Electrical Characteristics

Conductor Resistance (Ohm/100m)	Mutual Capacitance (pF/m)	Impedance (Ohm)	Velocity of Propagation (%)	Maximum Delay Skew (ns/100m)	Max. Operating Voltage (Volts RMS)
9.38	50	100 ± 15	67	45	300

Frequency (MHz)	Return Loss (dB/100m)	Maximum Attenuation (dB/100m)	Minimum NEXT (dB)	Maximum Time Delay (ns/100m)	Minimum PSNEXT (dB)	Minimum ELFEXT (dB)	Minimum PSELFEXT (dB)
1	20.0	2.0	74.3	570.00	72.3	67.8	64.8
4	23.0	3.8	65.3	552.00	63.3	55.8	52.8
8	24.5	5.3	60.8	546.73	58.8	49.7	46.7
10	25.0	6.0	59.3	545.38	57.3	47.8	44.8
16	25.0	7.6	56.2	543.00	54.2	43.7	40.7
20	25.0	8.5	54.8	542.05	52.8	41.8	38.8
25	24.3	9.5	53.3	541.20	51.3	39.8	36.8
31.25	23.6	10.7	51.9	540.44	49.9	37.9	34.9
62.5	21.5	15.4	47.4	538.55	45.4	31.9	28.9
100	20.1	19.8	44.3	537.80	42.3	27.8	24.8
200	18.0	29.0	39.8	536.54	37.8	21.8	18.8
250	17.3	32.8	38.3	536.27	36.3	19.8	16.8