

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) or Halogen Free,
Flame Retardant (HFFR)

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

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