

Applications

Twisted pair cable suitable for Local Area Networks and Video Applications

Operating Temperature

-20°C to +70°C

Sector - BT Data-TEC™

Category 5e Data Cables

Standard References

ISO 11801
ANSI/TIA/EIA-568-C2
RoHS directives

Design

1. **Conductor**
4 Twisted Pairs,
24 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. Ripcord

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

5. Drain Wire (FTP only)

24 AWG Tinned Copper

6. 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)
C1035	UTP	PVC	30	160	40	5.0
C1036	FTP	PVC	42	200	51	6.3
C1235	UTP	HFFR	29	160	40	5.0
C1236	FTP	HFFR	42	200	51	6.3

Electrical Characteristics

Conductor Resistance (Ohm/100m)	Mutual Capacitance (pF/m)	Input Impedance (Ohm)	Velocity of Propagation (%)	Maximum Delay Skew (ns/100m)	Max. Operating Voltage (Volts RMS)
9.38	48	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	65.3	570.00	62.3	64.0	61.0
4	23.0	4.1	56.3	552.00	53.3	52.0	49.0
8	24.5	5.8	51.8	546.73	48.8	45.9	42.9
10	25.0	6.5	50.3	545.38	47.3	44.0	41.0
16	25.0	8.2	47.2	543.00	44.4	39.9	36.9
20	25.0	9.3	45.8	542.05	42.8	38.0	35.0
25	24.3	10.4	44.3	541.20	41.3	35.8	33.0
31.25	23.6	11.7	42.9	540.44	39.9	34.1	31.1
62.5	21.5	17.0	38.4	538.55	35.4	28.1	25.1
100	20.1	22.0	35.3	537.60	32.3	24.0	21.0