



RoHS
Compliant

Application

A 4 pair high performance cable that consists of twisted pair conductors, used mainly for data transmission. Category 6 supports a frequency range of up to 250MHz and is designed for transmission speeds of up to 1 gigabit per second (Gigabit Ethernet).

Characteristics

Temperature Rating	: Fixed: -20°C to +50°C
Minimum Bending Radius	: Fixed: 4 × overall diameter Flexed: 8 × overall diameter
Core Identification	: Pair 1: Blue, White/Blue Pair 2: Orange, White/Orange Pair 3: Green, White/Green Pair 4: Brown, white/Brown
Sheath Colour	: Black

Cable Standards

ISO/IEC 11801, TIA 568C - 2, YD/T1019

Construction

Conductor

Class 1 solid copper conductor

Insulation

HDPE (High Density Polyethylene)

Drain Wire

Tinned copper

Screen

Aluminium foil

Sheath

LDPE (Low Density Polyethylene)

This product range is available on reels of 100m or per metre

Dimensions

No. of Pairs (23 AWG)	Nominal Diameter Over Insulation mm	Nominal Overall Diameter mm
4	1.09	7.4

Performance Characteristics

Frequency MHz	Attenuation dB/100m	NEXT dB	PS-NEXT dB	RL dB	ELFEXT dB	PS-ELFEXT dB/100m	Phase Delay ns
1	2.1	74.3	72.3	20	67.8	64.8	570
4	3.8	65.3	63.3	23	55.8	52.8	552
8	5.3	60.8	48.8	24.5	49.7	46.7	546.7
10	5.9	59.3	57.3	25	47.8	44.8	545.4
16	7.5	56.2	54.2	25	43.7	40.7	543
20	8.4	54.8	52.8	25	41.8	38.8	542.1
25	9.4	53.3	41.3	24.3	39.8	36.8	541.2
31.25	10.5	51.9	49.9	23.6	37.9	34.9	540.4
62.5	15	47.4	45.4	21.5	31.9	28.9	538.6
100	19.1	44.3	42.3	20.1	27.8	24.8	537.6
200	27.6	39.8	37.8	18	21.8	18.8	536.5
250	31.1	38.3	36.3	17.3	19.8	16.8	536.3

Electrical Characteristics

Velocity of Propagation %	Maximum DC Resistance of Conductor at 20°C Ω/km	DC Resistance of Conductor Unbalance % max
68	93.8	5

Part Number Table

Description	Cable Length	Part Number
Screened Network Cable, Cat 6, F/UTP, PE, 4 Pair, 23AWG, Black	100m or per metre	PP002142

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