

# Cat 6 PE Cable

Eland Product Group **A8N**



## Application

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

## Standards

ISO/IEC11801,TIA/EIA 568B, EN 50173, YD/T1019-2001

## Technical Data

### Conductor

Class 1 solid plain copper

### Temperature Rating

70°C

### Insulation

HDPE (High Density Polyethylene)

### Minimum Bending Radius

Fixed: 4 x overall diameter  
Flexing: 8 x overall diameter

### Sheath

PE (Polyethylene)

### Core Identification

4 Pairs: Blue + White/Blue, Orange + White/Orange, Green + White/Green, Brown + White/Brown

### Sheath Colour

Black

## Dimensions

Eland Part Number	No. of Pairs	Nominal Overall Diameter of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/305m box
A8NFORCE6PE	4	1.02	6.7	16

## Performance Characteristics

Frequency MHz	Attenuation dB/100m	NEXT dB	PS-NEXT dB	RL dB	ELFEXT dB	PS-ELFEXT dB/100m	Delay ns
1.00	2.03	74.3	72.3	20.0	67.8	64.8	570.00
4.00	3.78	65.3	63.3	23.0	55.8	52.8	552.00
8.00	5.32	60.8	58.8	24.5	49.7	46.7	546.73
10.00	5.95	59.3	57.3	25.0	47.8	44.8	545.38
16.00	7.55	56.2	54.2	25.0	43.7	40.7	543.00
20.00	8.47	54.8	52.8	25.0	41.8	38.8	542.05
25.00	9.51	53.3	41.3	24.3	39.8	36.8	541.20
31.25	10.67	51.9	49.9	23.6	37.9	34.9	540.44
62.50	15.38	47.7	45.4	21.5	31.9	28.9	538.55
100.00	19.80	44.3	42.3	20.1	27.8	24.8	537.60
200.00	28.98	39.8	37.8	18.0	21.8	18.8	536.54
250.00	32.85	38.3	36.3	17.3	19.8	16.8	536.27

## Electrical Characteristics

Eland Part Number	Impedance ohms	Max Conductor Resistance ohms/Km	Maximum Resistance Unbalance % max
A8NFORCE6PE	100±15	95.0	5.0

The information contained within this datasheet is for guidance only. When selecting accessories such as cleats, glands, etc please note that actual cable dimensions may vary due to manufacturing tolerances.