



## Cat 6 U/UTP PE Cable



Eland Product Group: A8N

### APPLICATION

A multi-pair 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).

### CHARACTERISTICS

**Temperature Rating**  
-20°C to +60°C

**Minimum Bending Radius**  
Fixed: 4 x overall diameter  
Flexed: 8 x overall diameter

### CONSTRUCTION

**Conductor**  
Class 1 solid copper conductor

**Insulation**  
HDPE (High Density Polyethylene)

**Sheath**  
PE (Polyethylene)

**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

**Note**  
Direct-burial version also available

### STANDARDS

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



### ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.



### REGULATORY COMPLIANCE

This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.





## DIMENSIONS

ELAND PART NO.	NO. OF PAIRS	AWG	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/305m box
A8NFORCE6PE	4	23	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	PHASE DELAY ns
1	2.03	74.3	72.3	20	67.8	64.8	570
4	3.78	65.3	63.3	23	55.8	52.8	552
8	5.32	60.8	58.8	24.5	49.7	46.7	546.73
10	5.95	59.3	57.3	25	47.8	44.8	545.38
16	7.55	56.2	54.2	25	43.7	40.7	543
20	8.47	54.8	52.8	25	41.8	38.8	542.05
25	9.51	53.3	51.3	24.3	39.8	36.8	541.2
31.25	10.67	51.9	49.9	23.6	37.9	34.9	540.44
62.5	15.38	47.7	45.4	21.5	31.9	28.9	538.55
100	19.80	44.3	42.3	20.1	27.8	24.8	537.6
200	28.98	39.8	37.8	18	21.8	18.8	536.54
250	32.85	38.3	36.3	17.3	19.8	16.8	536.27

## ELECTRICAL CHARACTERISTICS

VELOCITY RATIO %	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km	MAXIMUM RESISTANCE UNBALANCE %
68	95	5

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.