

# Cat 5E U/UTP SWA LSZH Cable



Eland Product Group: A8N

### **APPLICATION**

An armoured multi-pair high performance cable that consists of twisted pairs, used mainly for data transmission. Category 5E cables support a frequency range of up to 100MHz and designed for transmission speeds of up to 1 gigabit per second (Gigabit Ethernet). For installations where fire, smoke emissions and toxic fumes create a potential risk to life and equipment.

### **CHARACTERISTICS**

#### **Temperature Rating**

-20°C to +60°C

#### Minimum Bending Radius

Fixed: 8 x overall diameter

## CONSTRUCTION

### Conductor

Class 1 solid copper conductor

## Insulation

HDPE (High Density Polyethylene)

## Inner Sheath 1

LSZH (Low Smoke Zero Halogen)

### Inner Sheath 2

LSZH (Low Smoke Zero Halogen)

#### **Armour**

SWA (Steel Wire Armour)

#### Sheath

LSZH (Low Smoke Zero Halogen)

## **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

## **STANDARDS**

ISO/IEC 11801, TIA 568 C.2

Flame Retardant according to BS EN/IEC 60332-1-2



### 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	STRAND DIAMETER	NOMINAL OVERALL DIAMETER
A8NCAT5EUTPSWA	4	24	0.51	12.8

## PERFORMANCE CHARACTERISTICS

FREQUENCY MHz	ATTENUATION dB/100m	NEXT dB	PS-NEXT dB	RL dB	ELFEXT dB	PS-ELFEXT dB/100m	PHASE DELAY
1	2	65.3	62.3	20	63.8	60.8	570
4	4.1	56.3	53.3	23	51.8	48.8	552
8	5.8	51.8	48.8	24.5	45.7	42.7	546.73
10	6.5	50.3	47.3	25	43.8	40.8	545.38
16	8.2	47.2	44.4	25	39.7	36.7	543
20	9.3	45.8	42.8	25	37.8	34.8	542.05
25	10.4	44.3	41.3	24.3	35.8	32.8	541.2
31.25	11.7	42.9	39.9	23.6	33.9	30.9	540.44
62.5	17	38.4	35.4	21.5	27.9	24.9	538.55
100	22	35.3	32.3	20.1	23.8	20.8	537.6

## **ELECTRICAL CHARACTERISTICS**

IMPEDANCE (1-100MHz) ohms	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km	VELOCITY RATIO %
100±15	<96.5	65

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.