

## Cat 6A U/FTP LSZH Cable



Eland Product Group: A8N

### APPLICATION

A very high performance data cable designed for transmission speeds of up to 10GB per second. These cables allow the use of protocols supported by class EA for the implementation of 10G Base-T. Cat 6A cables support frequency ranges up to 500MHz compatible with PoE & PoE+. For installations where fire, smoke emissions and toxic fumes create a potential risk to life and equipment.

### CHARACTERISTICS

#### Temperature Rating

Fixed: -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)

#### Screen

Al/PET (Aluminium/Polyester tape)

#### Drain Wire

Tinned copper wire of 26AWG

#### 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

● Blue

### STANDARDS

TiA/EIA 568-B.10, IEC 61158-5

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



### THE CABLE LAB<sup>®</sup>

AN ISO/IEC 17025 AND IECCE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.



### SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: [www.elandcables.com/company/about-us/esg-sustainability](http://www.elandcables.com/company/about-us/esg-sustainability)



SCIENCE  
BASED  
TARGETS

BUSINESS  
AMBITION FOR 1.5°C



### REGULATORY COMPLIANCE

This cable is compliant with European Regulation EN 50575, the Construction Products Regulation.



This cable meets the requirements of the Low Voltage Directive 2014/35/EU, the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab<sup>®</sup>.





## DIMENSIONS

ELAND PART NO.	NO. OF PAIRS	AWG	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A8NFORCE6ALS	4	23	1.33	7.3	48

## 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	68	65	570
4	3.8	65.3	63.3	23	56	53	552
8	5.3	60.8	58.8	24.5	49.9	46.9	546.7
10	5.9	59.3	57.3	25	48	45	545.4
16	7.5	56.2	54.2	25	43.9	40.9	543
20	8.4	54.8	52.8	25	42	39	542.1
25	9.4	53.3	51.3	24.3	40	37	541.2
31.25	10.5	51.9	49.9	23.6	38.1	35.1	540.4
62.5	15	47.4	45.4	21.5	32.1	29.1	538.6
100	19.1	44.3	42.3	20.1	28	25	537.6
200	27.6	39.8	37.8	18	22	19	536.5
250	31.1	38.3	36.3	17.3	20	17	536.3
300	34.3	37.1	35.1	16.8	18.5	15.5	536.1
500	45.3	33.8	31.8	15.2	14	11	535.6

## ELECTRICAL CHARACTERISTICS

DELAY SHEW ns/100m	VELOCITY OF PROPAGATION %	MAXIMUM UNBALANCED- TO-GROUND CAPACITANCE pf/100m	MAXIMUM DC RESISTANCE ohms/100m	MAXIMUM DC CONDUCTOR RESISTANCE UNBALANCE %
≤ 45	68	330	9.38	2

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.