



# Cat 6 F/UTP LSZH Cable



Eland Product Group: A8N

## APPLICATION

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

### Minimum Bending Radius

8 x overall diameter

## CONSTRUCTION

### Conductor

Solid bare copper conductor

### Insulation

HDPE (High Density Polyethylene)

### Screen

Mylar + Aluminium foil/Mylar

### Drain Wire

Tinned copper

### 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

- Violet
- Other colours available upon request

## STANDARDS

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



## THE CABLE LAB<sup>®</sup>

AN ISO/IEC 17025 AND IECEE 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)



## 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 (23 AWG)	NOMINAL DIAMETER OF CONDUCTOR mm		NOMINAL DIAMETER OVER INSULATION mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm
		+0.005 UP	-0.005 DOWN			
A8NFORCE6FTPLS	4	0.565		1.12	0.55	7.4

## Physical Properties of Sheath

BEFORE AGING		AGING PERIOD C°xhrs	AFTER AGING PERIOD	
TENSILE STRENGTH (Mpa)	ELONGATION (%)		TENSILE STRENGTH (Mpa)	ELONGATION (%)
≥10.0	≥125	100°×24h×7d	≥8.0	≥100

## PERFORMANCE CHARACTERISTICS

FREQUENCY MHz	RL dB	ATTENUATION dB	NEXT dB	DELAY ns	PS-NEXT dB	ELFEXT dB	PSELFEXT dB
1	20.0	-	74.3	570.00	72.3	68.0	65.0
4.0	23.0	3.78	65.3	552.00	63.3	56.0	53.0
8.0	24.5	5.32	60.8	546.73	58.7	49.9	46.9
10.0	25.0	5.95	59.3	545.38	57.3	48.0	45.0
16.0	25.0	7.55	56.2	543.00	54.2	43.9	40.9
20.0	25.0	8.47	54.8	542.05	52.8	42.0	39.0
25.0	24.3	9.51	53.3	541.20	51.3	40.0	37.0
31.25	23.6	10.67	52.0	540.44	49.9	38.1	35.1
62.5	21.5	15.38	47.4	538.55	45.4	32.1	29.1
100	20.1	19.80	44.3	537.60	42.3	28.0	25.0
200	18.0	28.98	39.8	536.54	37.8	22.0	19.0
250	17.3	32.85	38.3	536.27	36.3	20.0	17.0

## ELECTRICAL CHARACTERISTICS AT 20°C

IMPEDANCE (1-250MHz) Ω	DELAY SHEW (1-250MHz) Ω	MAXIMUM CAPACITANCE (UNBALANCED TO GROUND) ns/100m	MAXIMUM DC RESISTANCE AT 20°C Ω/100m	MAXIMUM DC CONDUCTOR RESISTANCE UNBALANCE %
100±15	≤45	330	9.5	5.0

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.