

# 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



#### 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.





ISO 14001 Environmental Management ISO 45001 Occupational Health and Safety Management

8578

069 EMS 672067

OHS 67206

## REGULATORY COMPLIANCE

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



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 (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 C⁵×hrs	AFTER AGING PERIOD		
TENSILE STRENGHT (Mpa)	ELONGATION (%)	56	TENSILE STRENGHT (Mpa)	ELONGATION (%)	
≥10.0	≥125	100°×24h×7d	≥8.0	≥100	

# PERFORMANCE CHARACTERISTICS

FREQUENCY MHz	RL dB	ATTENUATION dB	NEXT dB	<b>DELAY</b> 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) $\Omega$	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.