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).

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)

CABLE STANDARDS

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

The electrical and dimensional properties of this product are measured by the Technical and Quality Assurance department at the Eland Cables laboratory. Cable performance in respect of conductor resistance, const ruction quality (workmanship), dimensional consistency, and other parameters are verified to published standards and approved product drawings. Conformance to RoHS (Restriction of the use of Hazardous Substances) is determined and confirmed.

CHARACTERISTICS

Minimum Bending Radius
8 x overall diameter

Core Identification
Pair 1: Blue White/Blue
Pair 2: Orange White/Orange
Pair 3: Green White/Green
Pair 4: Brown White/Brown

Outer Sheath Colour
Violet
Other colours available upon request

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	NOMINAL WEIGHT kg/305m box
		+0.005 UP	-0.005 DOWN				
A8NFORCE6FTPLS	4	0.565		1.12	0.55	7.4	14

Physical Properties of Sheath

BEFORE AGEING		AGEING PERIOD C°×hrs	AFTER AGEING PERIOD	
TENSILE STRENGHT (Mpa)	ELONGATION (%)		TENSILE STRENGHT (Mpa)	ELONGATION (%)
≥10.0	≥125	100°C×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

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