Cat 5E FTP PVC Cable

Eland Product Group: **A8N**

APPLICATION

A 4 pair high performance cable that consists of twisted pair conductors, used mainly for data transmission. Category 5E supports a frequency range of up to 100MHz and is designed for transmission speeds of up to 1 gigabit per second (Gigabit Ethernet).

CONSTRUCTION

Conductor
Class 1 solid copper conductor

Insulation
HDPE (High Density Polyethylene)

Drain Wire
Tinned copper

Screen
Aluminium foil

Sheath
PVC (Polyvinyl Chloride)

CABLE STANDARDS

ISO/IEC 11801, TIA 568C.2

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, construction 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

Temperature Rating
Fixed: -30°C to +50°C

Minimum Bending Radius
Fixed: 4 x overall diameter
Flexed: 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

Sheath Colour
Grey

DIMENSIONS

ELAND PART NO.	NO. OF PAIRS (24 AWG)	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/305m box
A8NFORCE5EFTP	4	1	6.2	14

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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	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

ELAND PART NO.	IMPEDANCE (1 - 100MHz) ohms	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km	MAXIMUM RESISTANCE UNBALANCE % max
A8NFORCE5EFTP	100±15	95	5

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