

## LANmark-6A Cable

LANmark-6A F1/UTP Cat 6A 500MHz LSZH 500m reel

Nexans ref.: [N100.624G](#)

Netcomp Ref: NE100.624G

- Ideal Cable for 10GBase-T application
- Complies fully with new standards for Category 6A and Class EA
- Small diameter
- Guaranteed performance up to 500MHz
- Fully screened for alien crosstalk immunity
- Foil with aluminium layer outside offers instant and large surface screening contact with EVO connectors
- Easier and much faster to install than individually screened 10G cables

### Description

#### Application

LANmark-6A cable is the ideal solution for a 10 Gigabit Ethernet network. The range consists of cables which have been designed specifically to support the higher frequencies required for 10 Gigabit Ethernet, while maintain to be fully backwards compatible with today's needs. All LANmark-6A products are screened cables to ensure immunity from Alien Crosstalk and other external interference and are specified up to frequencies of 500MHz.

- 10Base-T Ethernet
- 100Base-TX Fast Ethernet
- 1000Base-TX Gigabit Ethernet
- 10GBase-T 10 Gigabit Ethernet IEEE 802.3
- 155 Mbit ATM
- 1.2 Gbit ATM
- future Cat 6A and Class EA applications

#### Performance

With guaranteed performance to 500MHz, Nexans LANmark-6A cables provide guaranteed headroom and bandwidth over and above the Category 6A requirements of international, european and american cable standards, including of IEC 61156-5, EN 50173, EN 50288, TIA/EIA 568-B.2-1 Ad.10. When used in combination with Nexans LANmark-6A Evo connectors and LANmark-6A Ultim patch cords, the system supports the 10GBase-T applications as defined in IEEE 802.3an, and the full 100m four-connector links and channels meet Category 6A and Class EA requirements as defined in TIA/EIA568B.2 Addendum 10 and ISO/IEC11801 2002/A1:2008.



**LANmark-6A**

#### Standards

**International** EN 50288-4-1; IEC 61156-5; IEEE 802.3an; ISO/IEC TR24750; ISO11801:2002/A1:2008

**National** TIA/EIA TSB-155; TIA/EIA-568-B.2-10



Operating temp. range  
-20 .. 60 °C



static bending rad.  
40.0 mm



operation bending rad.  
80.0 mm



Ambient install temp. range  
0 .. 50 °C



Flame retardant  
IEC 60332-1

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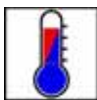
### Installation

The LANmark-6A cables have the advantage of offering equal dimensions and flexibility as the equivalent LANmark-6 screened cables with the same ease of installation and termination.

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### Guarantees

Nexans LANmark-6A 10G cable is covered by a parts and labour warranty as described in the Nexans Certified System Warranty. When installed in combination with other LANmark-6A 10G components, a 25 year channel warranty can be obtained.



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-20 .. 60 °C



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40.0 mm



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### Characteristics

Construction characteristics	
Type of cable	F/UTP
Outer sheath	LSZH
Colour	Orange
Dimensional characteristics	
Diameter over insulation	1.1 mm
Nominal outer diameter	7.3 mm
Approximate weight	52 kg/km
Conductor cross-section (AWG)	23
Electrical characteristics	
Mutual capacitance	45 nF/km
Characteristic impedance	100 Ohm
Max. DC-resistance of the conductor at 20° C	190 Ohm/km
Transfer impedance	100
Transmission characteristics	
Attenuation Crosstalk Ratio, 250MHz	12.2 dB/100m
Skew	45 ns/100m
Velocity of propagation	67.0 %
Coupling attenuation at 30 MHz	80 dB
Propagation delay, max. 100 MHz	536 ns/100m
Usage characteristics	
Packaging	Reel
Length	500 m
Operating temperature, range	-20 .. 60 °C
Minimum static operating bending radius	40.0 mm
Laying operation bending radius	80.0 mm
Ambient installation temperature, range	0 .. 50 °C
Flame retardant	IEC 60332-1
Category	Cat. 6A
Range	LANmark-6A

## LANmark-6A Cable

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Electrical Performance LANmark-6A 10G F1UTP cable

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Freq in MHz	Attn in dB		NEXT in dB		PSNEXT in dB		ACR-F in dB		PS ACR-F in dB		PS ANEXT in dB		PS AACR-F in dB		RL in dB	
	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
1	2.1	2.1	74.3	79.3	72.3	77.3	67.8	92.8	64.8	>60	67.0	90.0	67.0	87.9	20.0	26.0
4	3.8	3.8	65.3	70.3	63.3	68.3	55.8	80.8	52.8	57.2	67.0	90.0	66.2	75.9	23.0	29.0
10	5.9	5.9	59.3	64.3	57.3	62.3	47.8	72.8	44.8	49.3	67.0	87.0	58.2	67.9	25.0	31.0
16	7.5	7.5	56.2	61.2	54.2	59.2	43.7	68.7	40.7	45.2	67.0	85.0	54.1	63.8	25.0	31.0
20	8.4	8.4	54.8	59.8	52.8	57.8	41.8	66.8	38.8	43.2	67.0	84.0	52.2	61.9	25.0	31.0
31.25	10.5	10.5	51.9	56.9	49.9	54.9	37.9	62.9	34.9	39.4	67.0	82.1	48.3	58.0	23.6	29.6
62.5	15.0	15.0	47.4	52.4	45.4	50.4	31.9	56.9	28.9	33.3	65.6	79.0	42.3	52.0	21.5	27.5
100	19.1	19.1	44.3	49.3	42.3	47.3	27.8	52.8	24.8	29.3	62.5	77.0	38.2	47.9	20.1	26.1
155	24.1	24.1	41.4	46.4	39.4	44.4	24.0	49.0	21.0	25.5	59.6	74.1	34.4	44.1	18.8	24.8
200	27.6	27.6	39.8	44.8	37.8	42.8	21.8	46.8	18.8	23.2	58.0	72.5	32.2	41.9	18.0	24.0
250	31.1	31.1	38.3	43.3	36.3	41.3	19.8	44.8	16.8	21.3	56.5	71.0	30.2	39.9	17.3	23.3
300	34.3	34.3	37.1	42.1	35.1	40.1	18.3	43.3	15.3	19.7	55.3	69.8	28.7	38.4	16.8	22.8
500	45.3	45.3	33.8	38.8	31.8	36.8	13.8	38.8	10.8	15.3	52.0	66.5	24.2	33.9	15.2	21.2

all values are specified at 20°C