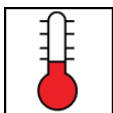


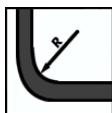
## LANmark-6 10G F1/UTP Dual LSZH 500m reel

Nexans ref.: N100.623G

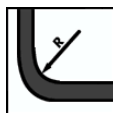
- Complies to 10GBase-T application standards
- Complies with Category 6A and Class EA channel requirements
- Small diameter
- Guaranteed performance to 500MHz
- Fully screened for alien crosstalk immunity
- Foil with alu outside offers ease of installation



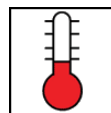
Operating temp. range  
-20 .. 60 °C



Min. static operating bending  
rad.  
35.5 mm



Laying operation bending  
rad.  
71.0 mm



Ambient install temp, range (°  
C)  
0 .. 50 °C



Flame retardant  
IEC 60332-1

## LANmark-6 10G F1/UTP Dual LSZH 500m reel

### Description

#### Application

LANmark-6 10G cable is the ultimate solution for a future proof network. The range consists of screened cables specified to frequencies up to 500MHz. They have been designed specifically to support the higher frequencies required for 10 Gigabit Ethernet, yet is fully backwards compatible with today's needs. In addition to the requirements of the EIA/TIA 568-B.2-1 and ISO/IEC 11801:2002 Category 6, the LANmark-6 10G products are additionally specified to 500MHz and are screened to ensure immunity from Alien Crosstalk and other external interference.

- 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 class E 10G applications

#### Performance

With guaranteed performance to 500MHz, Nexans LANmark-6 10G cables provide guaranteed headroom and bandwidth over and above the Category 6 requirements of international, european and american cable standards, including ISO/IEC 11801:2002, IEC 61156-5, EN 50173, EN 50288, TIA/EIA 568-B.2-1. When used in combination with Nexans LANmark-6 10G Evo connectors and LANmark-6 10G Ultim patch cords, and installed according to the guidelines, the system supports the 10GBase-T applications as defined in IEEE 802.3an, ISO/IEC TR 24750 and TIA/EIA TSB-155. Respecting the Nexans LANmark-6 10G design guidelines, the full 100m four-connector channel moreover meets Category 6A and Class EA requirements as defined in TIA/EIA568B.2 Addendum 10 draft 6.0 and ISO/IEC draft amendment 1.1 (as in draft 25N1324) respectively.

#### Installation

The LANmark-6 10G 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.

#### Guarantees

Nexans LANmark-6 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-6 10G components, a 25 years channel warranty can be obtained, covering 10GBase-T support in accordance with IEEE 802.3an. Also if following the design guidelines for LANmark-6 10G systems, a 25 year warranty can be obtained according to Category 6A or Class EA requirements.

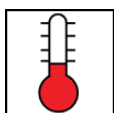


## LANmark-6

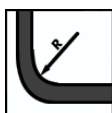
#### Standards

**International** IEEE 802.3an; ISO/IEC 11801 Am 1.1; ISO/IEC TR24750

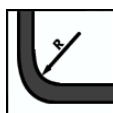
**National** TIA/EIA TSB-155; TIA/EIA-568-B.2-10



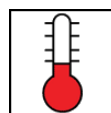
Operating temp. range  
-20 .. 60 °C



Min. static operating bending  
rad.  
35.5 mm



Laying operation bending  
rad.  
71.0 mm



Ambient install temp. range (°C)  
0 .. 50 °C

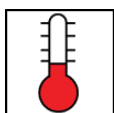


Flame retardant  
IEC 60332-1

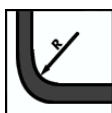
## LANmark-6 10G F1/UTP Dual LSZH 500m reel

### Contact

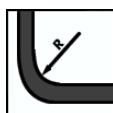
Cabling Solutions  
Alsebergsesteenweg 2, b3  
B-1501 Buizingen  
Belgium  
Phone: +32 2 363 38 00  
info.ncs@nexans.com



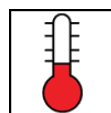
Operating temp. range  
-20 .. 60 °C



Min. static operating bending  
rad.  
35.5 mm



Laying operation bending  
rad.  
71.0 mm



Ambient install temp, range (°  
C)  
0 .. 50 °C



Flame retardant  
IEC 60332-1

## LANmark-6 10G F1/UTP Dual LSZH 500m reel

Nexans ref.: N100.623G

### Characteristics

#### Construction characteristics

Type of cable	F/UTP Shotgun
Outer sheath	LSZH
Colour	Orange

#### Dimensional characteristics

Diameter over insulation	1.1 mm
Nominal outer diameter (mm)	14.2 mm
Approximate weight (kg/km)	104 kg/km
Conductor cross-section (AWG)	23

#### Electrical characteristics

Mutual capacitance (nF/km)	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	6.3 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 (m)	500 m
Operating temperature, range	-20 .. 60 °C
Minimum static operating bending radius	35.5 mm
Laying operation bending radius	71.0 mm
Ambient installation temperature, range (°C)	0 .. 50 °C
Flame retardant	IEC 60332-1
Category	Cat. 6a
Range	LANmark-6 10G

### Electrical Performance LANmark-6 10G 100m 4 connector channel

all values are specified at 20°C

Freq	Attn dB		NEXT dB		PSNEXT dB		ELFEXT dB		PS ELFEXT dB		PS ANEXT dB		PS AELFEXT dB		RL dB	
	Std	Guar	Std	Guar	Std	Guar	Std	Guar	Std	Guar	Std	Guar	Std	Guar	Std	Guar
1	<4	<4	72.7	>75	70.3	74.3	63.3	>60	60.3	>60	82.0	>90	77.9	87.9	19.0	21.0
4	4.2	4.1	63.0	66.0	60.5	64.5	51.2	57.2	48.2	57.2	76.0	>90	65.9	75.9	19.0	21.0
10	6.6	6.5	56.6	59.6	54.0	58.0	43.3	49.3	40.3	49.3	72.0	87.0	57.9	67.9	19.0	21.0
16	8.3	8.2	53.2	56.2	50.6	54.6	39.2	45.2	36.2	45.2	70.0	85.0	53.8	63.8	18.0	20.0
20	9.3	9.2	51.6	54.6	49.0	53.0	37.2	43.2	34.2	43.2	69.0	84.0	51.9	61.9	17.5	19.5
31.25	11.7	11.6	48.4	51.4	45.7	49.7	33.4	39.4	30.4	39.4	67.1	82.1	48.0	58.0	16.5	18.5
62.5	16.9	16.6	43.4	46.4	40.6	44.6	27.3	33.3	24.3	33.3	64.0	79.0	42.0	52.0	14.0	16.0

## LANmark-6 10G F1/UTP Dual LSZH 500m reel

<b>100</b>	21.7	21.4	39.9	42.9	37.1	41.1	23.3	29.3	20.3	29.3	62.0	77.0	37.9	47.9	12.0	14.0
<b>155</b>	27.6	27.1	36.7	39.7	33.8	37.8	19.5	25.5	16.5	25.5	59.1	74.1	34.1	44.1	10.1	12.1
<b>200</b>	31.7	31.2	34.8	37.8	31.9	35.9	17.2	23.2	14.2	23.2	57.5	72.5	31.9	41.9	9.0	11.0
<b>250</b>	35.9	35.4	33.1	36.1	30.2	34.2	15.3	21.3	12.3	21.3	56.0	71.0	29.9	39.9	8.0	10.0
<b>300</b>	39.8	39.2	31.7	34.7	28.8	32.8	13.7	19.7	10.7	19.7	54.8	69.8	28.4	38.4	7.2	9.2
<b>500</b>	53.4	52.6	22.0	25.0	20.4	24.4	9.3	15.3	6.3	15.3	51.5	66.5	23.9	33.9	6.0	8.0

Guaranteed channel values apply under the condition that General Installation Guidelines from NCS and the Design and Installation Guidelines for LANmark-6 10G are respected and implemented.