

# LANmark-6 F1TP LSZH 1000m reel

Nexans ref.: N100.622

- Complies to Category 6 standards
- Guaranteed performance to 250MHz
- Supports Class E applications
- Central cross member maintains geometry and performance

#### Description

## **Application**

LANmark-6 F1TP is designed to provide compliance to the requirements of the ISO/IEC 11801:2002 Category 6.It supports all Class E applications including but not limited to:

- 10baseT Ethernet
- 100baseTX Fast Ethernet
- 1000baseTX Gigabit Ethernet
- 155 MBit ATM
- 622 MBit ATM
- 1.2 Gbit ATM
- future class E applications

## **Performance**

With guaranteed performance to 250 MHz, Nexans LANmark-6 cables provide guaranteed headroom and bandwidth over and above the requirements of all international, european and american cable standards, including ISO/IEC 11801:2002, IEC 61156-5, EN 50173, EN 50288, TIA/EIA 568-B.2-1.

## Installation

LANmark-6 F1TP is a screened cable offering a foil which has metallic side facing outwards. This eases installation by providing direct contact with the metal rear cover and clip-on in connectors and patch panels. The C<sup>3</sup> central cross member reduces the risk of crushing and kinking.

#### Guarantees

Nexans LANmark-6 cable is covered by the guarantee that it is Category 6 and by a parts and labour warranty as described in the Nexans Certified System Warranty. When used together with LANmark-6 products, a full 20 years LANmark E channel warranty can be obtained.



### LANmark-6

### **Standards**

International EN 50288;IEC 61156-5;ISO/IEC 11801

National TIA/EIA-568-B.2-1



Operating temperature, range

-10 .. 40 °C



Ambient installation temperature, range

-10 .. 50 °C



Minimum static operating bending radius

29.0 mm



Laying operation bending radius

57.0 mm



Flame retardan

IEC 60332-1



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#### Characteristics

Construction characteristics	
Type of cable	FTP
Outer sheath	LSZH
Colour	Orange
Dimensional characteristics	
Diameter over insulation	1.13 mm
Nominal outer diameter	7.1 mm
Approximate weight	52 kg/km
Conductor cross-section (AWG)	24
Electrical characteristics	
Mutual capacitance	56 nF/km
Max. DC-resistance of the conductor at 20° C	70 Ohm/km
Characteristic impedance	100 Ohm
Transfer impedance	45
Transmission characteristics	
Attenuation, max. 250 MHz	32.8 dB/100m
Near End Crosstalk @ 250 MHz	38.3 dB
Attenuation Crosstalk Ratio, 250MHz	5.5 dB/100m
Powersum Near End Crosstalk, 250MHz	36.3 dB
Powersum Equal Level Far End Crosstalk, 250MHz	19 dB
Return loss, 250MHz	17.3 dB
Skew	30 ns/100m
Velocity of propagation	68.0 %
Coupling attenuation at 30 MHz	80 dB
Propagation delay, max. 100 MHz	536 ns/100m
Usage characteristics	
Packaging	Reel
Length	1000 m
Operating temperature, range	-10 40 °C
Ambient installation temperature, range	-10 50 °C
Minimum static operating bending radius	29.0 mm
Laying operation bending radius	57.0 mm
Category	Cat. 6
Flame retardant	IEC 60332-1
Component function	Cable



## **Electrical Performance**

All values are specified at 20°C

Frequency	Attenuation dB/100m	NEXT dB	ACR dB/100m	PSNEXT(*) dB	ELFEXT dB/100m	PSELFEXT dB/100m	RL dB
1	2.0	74.3	72.3	72.3	70.0	67.0	20.0
4	3.8	65.3	61.5	63.3	58.0	55.0	23.0
10	6.0	59.3	53.3	57.3	50.0	47.0	25.0
16	7.6	56.2	48.6	54.3	45.9	42.9	25.0
20	8.5	54.8	46.3	52.8	44.0	41.0	25.0
31.25	10.7	51.9	41.2	49.9	40.5	37.5	23.6
62.5	15.4	47.4	32.0	45.4	34.1	31.1	21.5
100	19.8	44.3	24.5	42.3	30.0	27.0	20.1
155	25.2	41.4	16.2	39.5	26.2	23.2	18.8
200	29.0	39.8	10.8	37.8	24.0	21.0	18.0
250	32.8	38.3	5.5	36.3	22.0	19.0	17.3

<sup>(\*)</sup> Dual cable versions additionally comply to the additional PSNEXT requirements for multi-unit cables as specified in the relevant TIA and IEC cable standards.