

- Complies to all Category 5e cable standards
- Supports Class D applications
- Guaranteed performance to 155MHz
- Supports Gigabit Ethernet

## Description

### Application

Nexans LANmark-5 cables are manufactured and tested to the latest Category 5e specifications defined in the International and American cable standards and are designed to meet the quality and performance criteria needed to support all applications up to 100 MHz.

- 10baseT Ethernet
- 100baseTX Fast Ethernet
- 1000baseTX Gigabit Ethernet
- 155 MBit ATM

### Design

LANmark-5 cables have AWG 24 solid copper wires and comply with IEC 60228. The cables are available with a Dark Grey PVC or an Orange LSZH sheath. Both versions have flame retardant properties compliant with IEC 60332-1.

### Performance

With a guaranteed performance to 155 MHz, Nexans LANmark-5 cables exceed the requirements of the International, European and American cable standards, including ISO/IEC 11801, IEC 61156-5, EN 50173, EN 50288 and TIA/EIA 568-C.2.

### Installation

To support the correct set-up of hand held analysers for installation testing, the actual cable NVP value is given in the cable's print legend.

### Guarantees

LANmark-5 cable performance is guaranteed to meet or exceed the requirements of the above mentioned standards.

Traceability codes on both cable and packaging ensure quality validation of the installed cable.

Installations with LANmark-5 cable and connectivity are qualified for a 25 year full system warranty, which includes Parts, Channel Performance, Application Support and Labour, as described in the Nexans Certified System Warranty.

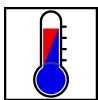


## LANmark-5

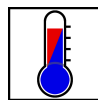
### Standards

**International** ISO/IEC 11801; ISO/IEC 61156-5

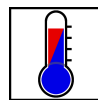
**National** ANSI/TIA-568-C.2



Ambient installation T°C  
range  
0 .. 50 °C



Operating temp. range  
-20 .. 60 °C



Storage temperature, range  
-20 .. 70 °C



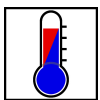
Flame retardant  
IEC 60332-1



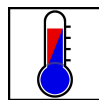
RoHS conform  
Yes

**Characteristics**

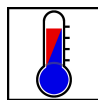
<b>Construction characteristics</b>	
Type of cable	F/UTP
Outer sheath	LSZH
Colour	Orange
<b>Dimensional characteristics</b>	
Diameter over insulation	1.04 mm
Nominal outer diameter	6.2 mm
Approximate weight	45 kg/km
Conductor cross-section (AWG)	24
<b>Electrical characteristics</b>	
Characteristic impedance	100 Ohm
Transfer impedance	20
<b>Transmission characteristics</b>	
Skew	45 ns/100m
Nominal Velocity of Propagation (NVP)	73 %
Propagation delay, max. 100 MHz	536 ns/100m
Coupling attenuation at 30 MHz	80 dB
<b>Mechanical characteristics</b>	
Maximum operating pulling force	100 N
<b>Usage characteristics</b>	
Category	Cat. 5e
Range	LANmark-5
Minimum Bend Radius - During Installation (under Tension)	50.0 mm
Minimum Bend Radius - Installed	25.0 mm
Ambient installation temperature, range	0 .. 50 °C
Operating temperature, range	-20 .. 60 °C
Storage temperature, range	-20 .. 70 °C
Fire load	510 MJ/km
Flame retardant	IEC 60332-1
Length	305 m
Packaging	Box
RoHS conform	Yes



Ambient installation T°C  
range  
0 .. 50 °C



Operating temp. range  
-20 .. 60 °C



Storage temperature, range  
-20 .. 70 °C



Flame retardant  
IEC 60332-1



RoHS conform  
Yes

### 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	2.1	68.3	66.2	65.3	63.8	61.0	20.0
4	4.0	59.3	55.3	56.3	51.7	49.0	23.0
10	6.3	53.3	47.0	50.3	43.8	41.0	25.0
16	8.0	50.3	42.3	47.3	39.7	36.9	25.0
20	9.0	48.8	39.8	45.8	37.7	35.0	25.0
31.25	11.4	45.9	34.5	42.9	33.9	31.1	23.6
62.5	16.5	41.4	24.9	38.4	27.9	25.1	21.5
100	21.3	38.3	17.0	35.3	23.8	21.0	20.1
155	27.2	35.5	8.3	32.5	19.9	17.2	18.7

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

### Selling information

Installation: Nexans LANmark-5 cables are designed to be installer friendly. The additional performance headroom provides confidence for difficult installations.

 Ambient installation T°C range 0 .. 50 °C	 Operating temp. range -20 .. 60 °C	 Storage temperature, range -20 .. 70 °C	 Flame retardant IEC 60332-1	 RoHS conform Yes
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