Contact
LAN Systems (Nexans Cabling Solutions)
Phone: +44 (0) 1256 486640
ncs.uk@nexans.com

LANmark-6 Cable

LANmark-6 F²/UTP LSZH 500m reel

Nexans ref.: N100.662

- Complies to all Category 6 cable standards
- Supports Class E applications
- Central cross member maintains geometry and performance
- Tested up to 350MHz

Description

Application

LANmark-6 cable is the ultimate solution for a future proof network. It is specifically designed to support the exacting requirements for tomorrow's protocols, yet is fully backwards compatible with today's needs. It is the recommended cable for all forthcoming installations.

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

LANmark-6 is independently verified to exceed the requirements of the ISO/IEC 11801:2002 Category 6 requirements.

LANmark-6

Performance

Tested to 350 MHz and 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.

Standards
International EN 50288;IEC 61156-5;ISO/IEC 11801
National TIA/EIA-568-B.2-1

Installation

LANmark-6 is installed in exactly the same way as Category 5 cables. The C³ 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.

Operating temp. range	Ambient install temp, range	static bending rad.	operation bending rad.	Flame retardant	Fire retardant
-10 .. 40 °C	-10 .. 50 °C	29.0 mm	57.0 mm	IEC 60332-1	No

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Characteristics

Construction characteristics	
Type of cable	F²TP
Outer sheath	LSZH
Colour	Orange
Screen	Aluminium foil
Dimensional characteristics	
Minimum outer diameter	7.1 mm
Maximum outer diameter	7.5 mm
Diameter over insulation	1.13 mm
Conductor cross-section (AWG)	24
Nominal outer diameter	6.4 mm
Approximate weight	52 kg/km
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 Crosstalk Ratio, 250MHz	5.5 dB/100m
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	500 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
Fire retardant	No
Range	LANmark-6
Field of application	Fix installations

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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
300	36.4	37.1	1.5	35.2	20.5	17.5	16.8
350	39.8	36.1	-	34.2	19.1	16.1	14.1

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