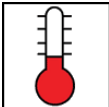
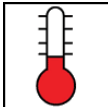
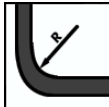
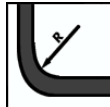



LANmark-7 Industry S/FTP 23 AWG PUR 500m REEL

Nexans ref.: N10i.002

- For installation in industrial premises
- High shielding performance for harsh environments
- Enhanced mechanical properties
- Designed to support industrial Ethernet based automation
- Optimised for use with LANmark connectors

				
Operating temperature, range -20 .. 70 °C	Ambient installation temperature, range -5 .. 70 °C	Min. static operating bending rad. 31.0 mm	Laying operation bending rad. 62.0 mm	Flame retardant IEC 60332-1

LANmark-7 Industry S/FTP 23 AWG PUR 500m REEL

Description

Specification

The LANmark-7 **Industry** is a 4pr S/FTP cable with individual pair foils and an overall braid. Its bandwidth and performances have been extended to 1000MHz. The LANmark-7 **Industry** cable meets the electrical and mechanical requirements of the draft ISO/IEC 24702 / MICE concept. When terminated to LANmark-7 GG45 connectors it meets the Class F requirements (ISO/IEC 11801:2002). It enables to reach the full bandwidth on the link and secures the future proofing of the installation. When used with LANmark-6 Cat. 6 connectivity, optimal headroom to 250MHz Class E performance is ensured.

Application

The LANmark-7 **Industry** cable is the appropriate cable for fixed LAN networks in industrial premises. It will support industrial Ethernet applications as well as high speed data applications.

- 10Base-T,
- 100 Base-T
- 1GBase-T
- 10GBase-T
- Industrial Ethernet

Screening

STP cable consists of individually screened pairs, bundled by an overall braid. It complies to the EMC requirements for screened cables and shows excellent transfer impedance values. It is designed for electrically "noisy" environments. (M2 I2 C3 E3)

<u>Transfer impedance</u> (Grade 1)	10mOhm/m at 1 MHz
	10mOhm/m at 10 MHz
	30mOhm/m at 30 MHz
	60mOhm/m at 100 MHz

Fire classification

- Fire test according to IEC 60332-1
- Fire load: 700MJ/km

Cable sheath

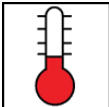
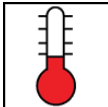
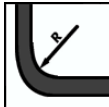
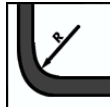

- Polyurethane compound for superior abrasion and tear resistance. The PUR compound also have very good resistance to ageing and UVs. It performs well in contact with oils and greases. It is optimal for industrial installations.
- Oil resistant IRM 902, 4h at 70°C, IEC 60811-2-1
- Lead Free - Silicon Free - Halogen Free



LANmark-7

Standards

International EN 50173;EN 50288-4-1;ISO/IEC 11801;ISO/IEC 61156-5

				
Operating temperature, range -20 .. 70 °C	Ambient installation temperature, range -5 .. 70 °C	Min. static operating bending rad. 31.0 mm	Laying operation bending rad. 62.0 mm	Flame retardant IEC 60332-1

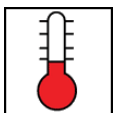
LANmark-7 Industry S/FTP 23 AWG PUR 500m REEL

Related Information

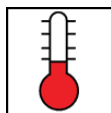
It is strongly recommended to use the LANmark-7 Industry cable in conjunction with LANmark-6 or LANmark-7 GG45 connectors. These connectors will respectively enable to reach the full class E 250MHz or class F 600MHz on the link. Please note that Nexans has a range of patchpanels and outlets for installations in industrial areas.

Contact

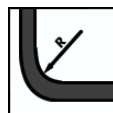
LAN Cabling Systems
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Road
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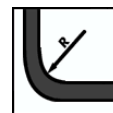
Operating temperature,
range
-20 .. 70 °C



Ambient installation temperature,
range
-5 .. 70 °C



Min. static operating bending
rad.
31.0 mm



Laying operation bending
rad.
62.0 mm



Flame retardant
IEC 60332-1

LANmark-7 Industry S/FTP 23 AWG PUR 500m REEL

Nexans ref.: N10i.002

Characteristics

Construction characteristics

Sheath colour	Black
Screen	Aluminium tape and copper braid
Type of cable	STP
Outer sheath	Polyurethan
Drain wire	No

Dimensional characteristics

Diameter over insulation	1.45 mm
Number of pairs	4
Nominal outer diameter	7.5 mm
Approximate weight	61 kg/km
Conductor cross-section (AWG)	23

Electrical characteristics

Max. transfer impedance at 30 MHz	5 Ohm/km
Mutual capacitance	56 nF/km
Max. DC-resistance of the conductor at 20° C	80 Ohm/km
Characteristic impedance	100 Ohm

Transmission characteristics

Velocity of propagation	80.0 %
Propagation delay, max. 100 MHz	536 ns/100m

Mechanical characteristics

Maximum pulling force by laying	0.21 kN
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Usage characteristics

Operating temperature, range	-20 .. 70 °C
Ambient installation temperature, range	-5 .. 70 °C
Minimum static operating bending radius	31.0 mm
Laying operation bending radius	62.0 mm
Length	500 m
Fire load	700 MJ/km
Category	Cat. 7
Flame retardant	IEC 60332-1
Packaging	Reel

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	
	Std	Typ	Std	Typ	Std	Typ	Std	Typ	Std	Typ	Std	Typ	Std	Typ
1	2.0	1.9	>80	100.0	78.0	98.1	>77	100.0	>80	92.0	>77	89.0	20.0	23.0
4	3.6	3.5	>80	100.0	76.4	96.5	>77	100.0	>80	91.0	>77	88.0	23.0	26.0
10	5.7	5.5	>80	100.0	74.3	94.5	>77	100.0	74.0	91.0	71.0	88.0	25.0	28.0
16	7.2	7.0	>80	100.0	72.8	93.0	>77	100.0	69.9	91.0	66.9	88.0	25.0	28.0
20	8.1	7.8	>80	100.0	71.9	92.2	>77	100.0	68.0	91.0	65.0	88.0	25.0	28.0

LANmark-7 Industry S/FTP 23 AWG PUR 500m REEL

31.25	10.1	9.9	>80	100.0	69.9	90.1	>77	100.0	64.1	91.0	61.1	88.0	23.6	26.6
62.5	14.5	14.1	75.5	100.0	61.0	85.9	72.5	98.0	58.1	79.0	55.1	76.0	21.5	24.5
100	18.5	18.0	72.4	95.0	53.9	77.0	69.4	93.0	54.0	71.0	51.0	68.0	20.1	23.1
155	23.4	22.7	69.6	90.0	46.2	67.3	66.6	88.0	50.2	63.0	47.2	60.0	18.8	23.1
200	26.8	26.0	67.9	86.0	41.1	60.0	64.9	84.0	48.0	60.0	45.0	57.0	18.0	23.1
250	30.2	29.4	66.5	83.0	36.3	53.6	63.5	81.0	46.0	57.0	43.0	54.0	17.3	23.1
300	33.3	32.5	65.3	80.0	32.0	47.5	62.3	78.0	44.5	55.0	41.5	52.0	17.3	22.0
600	48.9	47.6	60.8	69.0	11.9	21.4	57.8	67.0	38.4	45.0	35.4	42.0	17.3	20.3
1000	-	63.6	-	67.0	-	3.4	-	65.0	-	40.0	-	37.0	-	18.0

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