

LANmark-6A Snap-In Connector

LANmark-6A Evo Snap-In Connector Category 6A 500MHz Screened for stranded wire

Nexans Ref.: N420.67A

- High bandwidth RJ45 connector supporting 10 Gigabit Ethernet
- Fully compliant with TIA and ISO Category 6A cabling and connector standards
- Supports very short Category 6A channel configurations, often required in Data Centres
- 360° shielding offering full Alien Crosstalk immunity
- Fast and easy termination without punch down tool
- Wiring according to colour code T568B or T568A
- Stranded version for CP to TO links
- Accepts stranded wire from 26 to 24 AWG
- Accepts AWG26 solid wire (for AWG24 solid wire please refer to N420.66A)
- Reterminable
- Supports PoE++ Type 4 applications delivering up to 90W/71W (IEEE 802.3bt)
- An adapter can be added to fit the keystone format
- UL listed

DESCRIPTION

Application

Nexans LANmark-6A Evo Snap-In Connectors are manufactured and tested to the latest Category 6A specifications defined in the International and American cabling standards and are designed to meet or exceed the stringent quality and performance criteria needed to support all applications up to 500 MHz, including 10 Gigabit Ethernet.

A fully closed metal rear cover providing 360 degrees shielding offers excellent coupling attenuation and ensures immunity from Alien Crosstalk and other external interferences.

Channels built with LANmark-6A cables and jacks do not need on site testing for Alien Crosstalk, as this parameter is met by design. This significantly reduces the installation cost for 10G network cabling.

- 10 BASE-T Ethernet
- 100 BASE-T Fast Ethernet
- 1000 BASE-T Gigabit Ethernet
- 10G BASE-T Gigabit Ethernet IEEE 802.3
- 155 Mbit ATM
- 1.2 Gbit ATM
- POE Plus
- Future Cat 6A and Class EA applications

Design

Nexans LANmark-6A Evo Snap-In connectors are designed to match with LANmark-6A cable and patch cords and to complement all LANmark modular components, such as:

- Snap-In patch panels (fixed, sliding and angled) and Zone Distribution Boxes
- Snap-In outlet modules (UK, US, European and German style)

Performance



LANmark-6A

STANDARDS

International EN 50173-1;
IEC 60603-7-51;
IEEE 802.3af (PoE);
IEEE 802.3bt (PoE++);
IEEE 802.3at (PoE+); ISO/
IEC 11801:2002/Amd 1:2008/
Cor 1:2008; ISO/IEC 24764; ISO/
IEC 11801:2002/Amd 2:2010/
Cor 1:2010

National ANSI/TIA-568-C.2

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Nexans LANmark-6A Evo connectors meet or exceed the requirements for Category 6A connecting hardware as described in ISO/IEC 11801, IEC 60603-7-51 and EIA/TIA 568-C.2.

In conjunction with LANmark-6A cable they support all 2, 3 and 4 connector models as specified in these standards, as well as very short link and channel configurations which are increasingly required in Data Centre environments.

Installation

The wire organiser guarantees fast and easy termination of the LANmark-6A Evo Snap-In connector without the need for a punchdown tool. An optional comfort tool (N420.567) can be used to increase the ease of installation.

Nexans LANmark-6A connector for stranded wire is specifically designed for CP to TO links where flexible patch cable (typically AWG26) is used.

Guarantees

The LANmark-6A Evo Snap-In performance is guaranteed to meet or exceed the requirements of the above mentioned standards.

Traceability codes on both connector and packaging ensure quality validation.

Installations with LANmark-6A cable and connectivity are qualified for a 25 year full system warranty, which includes Parts, Installation, Channel Performance and Application Support, as described in the Nexans Certified System Warranty.

CHARACTERISTICS

Construction characteristics

| | |
|----------------|------------------------|
| Connector type | RJ45 and Tool-less IDC |
| Screen | Yes |

Dimensional characteristics

| | |
|--------|---------|
| Height | 23.2 mm |
| Depth | 36.4 mm |
| Width | 16.8 mm |

Usage characteristics

| | |
|--------------------|------------|
| Category | Cat. 6A |
| Component function | Connector |
| Range | LANmark-6A |

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ELECTRICAL PERFORMANCE LANMARK-6A 4 CONNECTOR CHANNEL

| NEXT in dB | | PSNEXT in dB | | | ACR-F in dB | |
|---------------|------|-----------------|------|------|----------------|------|
| Min | Typ | Std | Min | Typ | Std | Typ |
| 67,0 | 85,0 | 62,0 | 64,0 | 74,8 | 63,3 | 69,9 |
| 65,0 | 72,9 | 60,5 | 62,5 | 65,0 | 51,2 | 57,9 |
| 58,6 | 65,0 | 54,0 | 56,0 | 58,5 | 43,3 | 49,9 |
| 55,2 | 60,9 | 50,6 | 52,6 | 55,1 | 39,2 | 45,9 |
| 53,6 | 59,0 | 49,0 | 51,0 | 53,5 | 37,2 | 43,9 |
| 50,4 | 55,1 | 45,7 | 47,7 | 50,2 | 33,4 | 40,0 |
| 45,4 | 49,1 | 40,6 | 42,6 | 45,1 | 27,3 | 34,0 |
| 41,9 | 45,0 | 37,1 | 39,1 | 41,6 | 23,3 | 29,9 |
| 38,7 | 41,2 | 33,8 | 35,8 | 38,3 | 19,5 | 26,1 |
| 36,8 | 39,0 | 31,9 | 33,9 | 36,4 | 17,2 | 23,9 |
| 35,1 | 37,0 | 30,2 | 32,2 | 34,7 | 15,3 | 22,0 |
| 33,7 | 35,4 | 28,8 | 30,8 | 33,3 | 13,7 | 20,4 |
| 29,9 | 31,0 | 24,8 | 26,8 | 24,9 | 9,3 | 16,0 |

| Freq in MHz | PS ACR-F in dB | | PS ANEXT in dB | | | PS ACR-F in dB | | | RL in dB | | |
|----------------|-------------------|------|-------------------|------|------|-------------------|------|------|-------------|------|------|
| | Std | Typ | Std | Min | Typ | Std | Min | Typ | Std | Min | Typ |
| 1 | 60,3 | 66,9 | 80,0 | 90,0 | 92,0 | 77,0 | 92,0 | 94,0 | 19,0 | 21,0 | 21,0 |
| 4 | 48,2 | 54,9 | 74,0 | 89,0 | 91,0 | 65,0 | 80,0 | 82,0 | 19,0 | 21,0 | 32,0 |
| 10 | 40,3 | 46,9 | 70,0 | 85,0 | 87,0 | 57,0 | 72,0 | 74,0 | 19,0 | 21,0 | 28,0 |
| 16 | 36,2 | 42,9 | 68,0 | 83,0 | 85,0 | 52,9 | 67,9 | 69,9 | 18,0 | 20,0 | 26,0 |
| 20 | 34,2 | 40,9 | 67,0 | 82,0 | 84,0 | 51,0 | 66,0 | 68,0 | 17,5 | 19,5 | 25,0 |
| 31,25 | 30,4 | 37,0 | 65,1 | 80,1 | 82,1 | 47,1 | 62,1 | 64,1 | 16,5 | 18,5 | 23,1 |
| 62,5 | 24,3 | 31,0 | 62,0 | 77,0 | 79,0 | 41,1 | 56,1 | 58,1 | 14,0 | 16,0 | 20,0 |
| 100 | 20,3 | 26,9 | 60,0 | 75,0 | 77,0 | 37,0 | 52,0 | 54,0 | 12,0 | 14,0 | 18,0 |
| 155 | 16,5 | 23,1 | 57,1 | 72,1 | 74,1 | 33,2 | 48,2 | 50,2 | 10,1 | 12,1 | 16,1 |
| 200 | 14,2 | 20,9 | 55,5 | 70,5 | 72,5 | 31,0 | 46,0 | 48,0 | 9,0 | 11,0 | 15,0 |
| 250 | 12,3 | 19,0 | 54,0 | 69,0 | 71,0 | 29,0 | 44,0 | 46,0 | 8,0 | 10,0 | 14,0 |
| 300 | 10,7 | 17,4 | 52,8 | 67,8 | 69,8 | 27,5 | 42,5 | 44,5 | 7,2 | 9,2 | 13,2 |
| 500 | 6,3 | 13,0 | 49,5 | 64,5 | 66,5 | 23,0 | 38,0 | 40,0 | 6,0 | 8,0 | 11,0 |

All values are based on Worst Case 4 Connector Channel configurations according to ISO11801.
 Minimum and maximum values represent guaranteed Channel performance.
 Standard values based on ISO11801 Class EA