

NETCON High-Speed Performance and Construction

Manufactured with AWG23 solid copper conductors and individually foil-shielded twisted pairs with an overall foil screen (F/FTP), the cable provides excellent NEXT, AXT (alien crosstalk), and return loss performance over extended distances. The dual-layer shielding design ensures superior protection against electromagnetic interference (EMI), delivering stable, high-speed, and interference-free connectivity for VoIP, Video conferencing, Cloud applications, and high-bandwidth data streaming.

APPLICATION

Netcon's CAT 6A F/FTP LSZH Ethernet Cable is a high-performance, fully shielded data cable designed for 10 Gigabit Ethernet (10GBASE-T) applications in data centers, commercial buildings, and enterprise networks. Featuring individually foil-shielded twisted pairs with an overall foil screen (F/FTP), it provides excellent protection against electromagnetic interference (EMI) and alien cross talk, ensuring superior signal integrity.

STANDARDS CONFORMANCE

Application Support:

Horizontal and backbone cabling for 10GBASE-T 10 Gigabit Ethernet.

Performance Standards:

Complies with ANSI/TIA-568.2-D Category 6A and ISO/IEC 11801 Class EA.

Construction Standards:

IEC 61156-5 (Category 6A cables) and EN 50288-4-1 / EN 50288-11-1 (shielded F/FTP cables)

Fire & Safety (LSZH / CPR):

EN13501-6:2014 (CPR Classification-Cca, Dca,etc.) - IEC 60332-1-2 (Flame propagation) - EN 61034-2 (Smoke density) - EN 60754-1 & 60754-2 (Halogen free/low toxicity)

PoE Capability:

Supports IEEE 802.3bt Type 3 & Type 4 (PoE++ / 4PPoE)

Environmental Compliance:

Fully compliant with RoHS and REACH directives



CAT.6A F/FTP CABLE



CORE IDENTIFICATION

Pair 1: ■ Orange ■ Grey Pair 2: ■ Blue ■ Green

APPLICATIONS AND INSTALLATION

This cable complies with international standards such as ISO/IEC 11801, EN 50173, and IEC 60332-1, and can be supplied with CPR-rated classifications (Cca, Dca, or higher) upon request.

Designed for horizontal cabling and patch panel terminations, the Cat6A F/FTP LSZH cable is ideal for fixed installations in structured cabling systems where shielding performance is critical. It performs optimally in data centers, IT rooms, backbone infrastructure, server racks, and network distribution panels.

The cable supports 10 Gbps data transmission up to 100 meters, ensuring enhanced signal integrity, reduced interference, and long-term reliability for next-generation network infrastructure.

TECHNICAL CHARACTERISTICS
Cat 6A F/FTP LSZH Ethernet Cable

Ordering table	305 m package
Category	6A
Bandwidth	500 MHz
Construction	F/FTP
Number of twisted pairs	4
Material of conductors	Pure copper
Type of conductors	Solid
Diameter of conductors	23 AWG (0.56 ± 0.01 mm)
Conductors insulation material	PE foam
Insulation thickness of conductors	0.38 ± 0.02 mm
Diameter of conductor insulation	1.33 ± 0.05 mm
Outer jacket material / CPR Class	LSZH / Dca-s2,d2,a1
Usage	For indoor laying
Outer jacket thickness	0.55 ± 0.05 mm
Outer jacket diameter	7.3 ± 0.3 mm
Outer jacket standard color	Ice Blue / Orange / White
Screen design	Individual Al/PES foil, with 100% coverage under
Protective film	-
Rip cord	-
Mass density per unit length	50.0 ± 0.5 kg/km
Bending radius without load	≥ 4x OD
Bending radius with load	≥ 8x OD
Tensile strength	Max 100 N
Characteristic impedance	100 ± 15 Ω
Speed of signal propagation (NVP)	0.74 ± 0.1
Max. conductor resistance (DC)	≤ 93.8 Ω/km
Compliance to standards	Exceeds the requirements of the standards: ISO/IEC 11801. EN 50173 & TIA/EIA-568-C.2
Supported applications	10BASE-T, 100BASE-TX, 100BASE-T4. 1000BASE-T, 10GBASE-T, ATM-25. ATM-51. ATM-155. 100VG-AnyLan, TR-4. TR-16 Active, TR-16 Passive
Temperature ranges	Storage from -20 to +60 °C. Installation from 0 to +50 °C. Operation from -20 to +60 °C
Warranty Component	5 years. System – 15 years as part of a certified NIKOMAX SCS

ORDERING INFORMATION

NTC6AFF23L	Netcon, Category 6A, F/FTP, 500MHz installation cable, Solid Copper, 23 AWG, 305 Metre, Box, LSZH jacket, White.
NTC6AFF23P	Netcon, Category 6A, F/FTP, 500MHz installation cable, Solid Copper, 23 AWG, 305 Metre, Box, PVC jacket, White.