DATASHEET

RJ45 Patch Cord Cat.6A U/UTP TPE 500Mhz superflex black 0.5m



General data

High-performance network connections with a flexible, halogen-free TPE jacket

The EFB-Elektronik Cat.6A (TIA) U/UTP patch cable enables data transmission speeds of up to **10 Gbps** and supports a frequency range of up to **500 MHz**. This makes it ideal for high-performance Ethernet connections in IT and home network applications.

The **halogen-free TPE jacket** combines low-smoke, halogen-free properties with **greater flexibility** compared to conventional jacket materials. The unshielded U/UTP design allows for simple, cost-effective networking in low-interference environments. Pure copper conductors, gold-plated contacts, and a 1:1 pin assignment (TIA/EIA 568B) ensure reliable signal transmission.

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Your benefits at a glance

10 Gbps at up to 500 MHz – high transmission performance for modern Ethernet networks up to Cat.6A (TIA).

Flexible TPE jacket – makes installation and handling easier while offering halogen-free and low-smoke material properties.

Up to 4PPoE (IEEE 802.3bt) – supports powering compatible network devices via the data cable, making it suitable for PoE applications.

Product Highlights

Cat.6A (TIA) for data transmission up to 10 Gbps

Frequency range up to 500 MHz

U/UTP design with 4x2 x AWG24/7

RJ45 8(8) to RJ45 8(8) with blue RJ45 connectors

1:1 pin assignment according to TIA/EIA 568B

PoE (IEEE 802.3af), PoE+ (IEEE 802.3at), and up to 4PPoE (IEEE 802.3bt)

Halogen-free, low-smoke TPE jacket

Flame-retardant (IEC 60332-1), low-smoke (IEC 61034), and halogen-free (IEC 60754-2)

Pure copper conductors and gold-plated contacts

Molded strain relief and latch protection

Outer diameter 6.0 mm, bending radius >30 mm

IP20 rating and ≥750 mating cycles

Ideal for

Ethernet connections in IT and home networks

10-Gigabit Ethernet applications

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Patch connections in low-interference network environments

PoE, PoE+, and 4PPoE applications

Applications requiring a flexible and halogen-free patch cable.

Technical properties	
AWG-size	24/7
Allocation	acc. TIA/EIA 568B
Anti-kink sleeve	moulded-on
Area of Application	Industrial Ethernet
Bandwidth	500MHz
Bending radius	>30 mm
Cable construction	4x2
Cable shape	rund
Cable type	U/UTP
Cabling standard	EN50173
Category	6A (TIA)
Colour anti-kink sleeve	black
Colour outer sheath	black
Conductive shield	No
Conductor Material	Copper
Connector	IEC 60603-7-41
Connector type	RJ45 standard blue
Contacts	Gold plated
Current capacity	max. 1 A
Fire retardant version	acc. IEC60332-1
Halogen free	acc. IEC60754-2
Impedance	100
Length imprint	True
Locking lever	True
Low smoke	acc. IEC61034
Material outer sheath	TPE/LSZH
Mating cycles	≥750
Model	unshielded
Oil resistant	no
Operating Temperature	-20 – 60 °C

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Operating-/ tempering voltage	max. 50 V DC
Outer diameter of the cable	6.0 mm
Ozone resistance	No
Pin assignment	1:1
Printing	Cat.6A U/UTP 4x2xAWG24/7 TPE ISO/IEC 11801 & EN50173-1 ANSI/TIA-568-C.2 *10Gigabit Ethernet* www.efb-elektronik.de
Resistant to chemicals	False
Suitable for degree of protection (IP)	IP20
Test voltage	1000 (V DC, 1min) core/core und core/screen
Transmission	10Gbit
Type of connector connection 1	RJ45 8(8)
Type of connector connection 2	RJ45 8(8)
UL approbated	True

Available variants

ArtNr.	Bezeichnung	Length	POE class	Length tolerance
K8119SW.0,25	RJ45 Patch Cord Cat.6A U/UTP TPE 500Mhz superflex black 0.25m	0.25 m	PoE acc. to IEEE802.3af;PoE+ acc. to IEEE802.3at;4PPoE acc. to IEEE802.3bt	±5 %
K8119SW.0,5	RJ45 Patch Cord Cat.6A U/UTP TPE 500Mhz superflex black 0.5m	0.5 m	PoE acc. to IEEE802.3af;PoE+ acc. to IEEE802.3at;4PPoE acc. to IEEE802.3bt	±5 %
K8119SW.1	RJ45 Patch Cord Cat.6A U/UTP TPE 500Mhz superflex black 1m	1.0 m	PoE acc. to IEEE802.3af;PoE+ acc. to IEEE802.3at;4PPoE acc. to IEEE802.3bt	±5 %
K8119SW.1,5	RJ45 Patch Cord Cat.6A U/UTP TPE 500Mhz superflex black 1.5m	1.5 m	PoE acc. to IEEE802.3af;PoE+ acc. to IEEE802.3at;4PPoE acc. to IEEE802.3bt	±5 %
K8119SW.10	RJ45 Patch Cord Cat.6A U/UTP TPE 500Mhz superflex black 10m	10.0 m	PoE acc. to IEEE802.3af;PoE+ acc. to IEEE802.3at;4PPoE acc. to IEEE802.3bt	±5 %
K8119SW.15	RJ45 Patch Cord Cat.6A U/UTP TPE 500Mhz superflex black 15m	15.0 m	PoE acc. to IEEE802.3af;PoE+ acc. to IEEE802.3at;4PPoE acc. to IEEE802.3bt	±5 %
K8119SW.2	RJ45 Patch Cord Cat.6A U/UTP TPE 500Mhz superflex black 2m	2.0 m	PoE acc. to IEEE802.3af;PoE+ acc. to IEEE802.3at;4PPoE acc. to IEEE802.3bt	±5 %
K8119SW.3	RJ45 Patch Cord Cat.6A U/UTP TPE 500Mhz superflex black 3m	3.0 m	PoE acc. to IEEE802.3af;PoE+ acc. to IEEE802.3at;4PPoE acc. to IEEE802.3bt	±5 %
K8119SW.5	RJ45 Patch Cord Cat.6A U/UTP TPE 500Mhz superflex black 5m	5.0 m	PoE acc. to IEEE802.3af;PoE+ acc. to IEEE802.3at;4PPoE acc. to IEEE802.3bt	±5 %
K8119SW.7,5	RJ45 Patch Cord Cat.6A U/UTP TPE 500Mhz superflex black 7.5m	7.5 m	PoE acc. to IEEE802.3af;PoE+ acc. to IEEE802.3at;4PPoE acc. to IEEE802.3bt	±5 %

Note on Intended Use

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This data sheet is intended solely to describe the technical characteristics of the product. It does not replace an assessment of the product's suitability for a specific application. The user is responsible for ensuring that the product is used in accordance with its technical specifications and applicable legal and regulatory requirements.

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