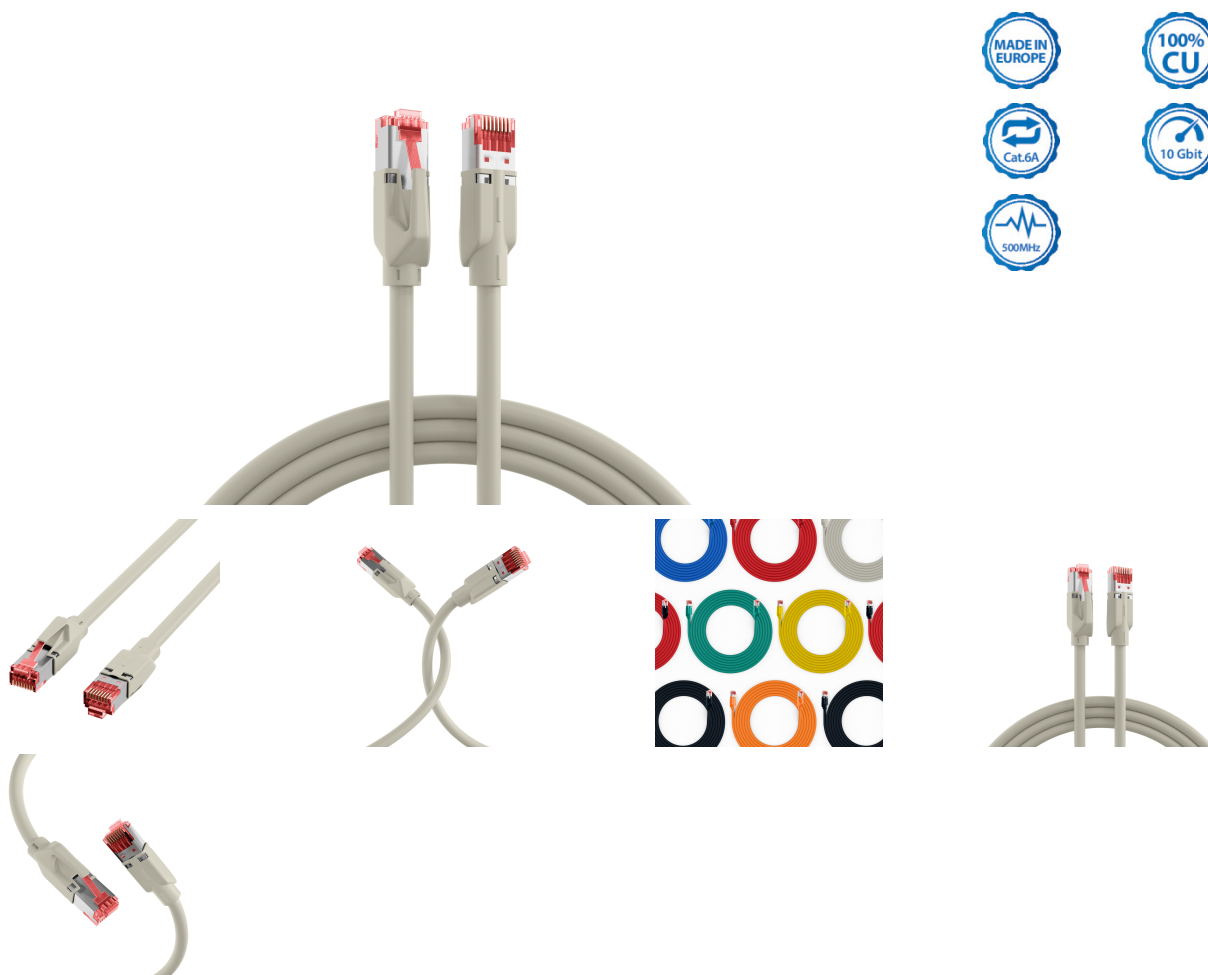


DATASHEET

RJ45 Patch Cord Cat.6A S/FTP FR HF Kerpen F6-90 TM21 grey 1m



General data

The Cat.6A (TIA) patch cable from EFB-Elektronik supports data transmissions up to 10Gbit. The S/FTP shielding reliably protects against interference and ensures good signal quality. Because it is a Cat.6A (TIA) LAN cable, it supports a frequency range of up to 500MHz, which provides high data transmission performance.

- Increase interference immunity in electromagnetically charged environments – double shielding (S/FTP) improves EMC reserve, reduces susceptibility to radiation and stabilizes transmission in parallel cable routing.
- Cover fire protection requirements in compliance with standards – flame-retardant cable behaviour according to IEC60332-1 reduces the spread of fire in the event of a fault and supports compliance with common installation specifications.
- Increased safety in the event of a fire – low smoke generation after IEC61034 helps to keep escape routes as low in smoke as possible in the event of a fire, and the halogen-free materials according to IEC60754-2 reduce the

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DATASHEET

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development of corrosive fire gases.

Product Description

The S/FTP LAN cable has a double shield that effectively reduces electromagnetic interference. It can be used in a temperature range of -20 – 60 °C. The wide range of possible applications is supported by the bending radius of >28.5 mm. The Ethernet cable is IP20 rated. The LSZH jacket is halogen-free and low-smoke. In the event of a fire, it minimizes smoke development and increases indoor safety.

Technical details

- Cat.6A (TIA)
- Connector: RJ45 8(8) to RJ45 8(8) with red TM21 connectors
- Shielding: S/FTP cable with 4x2 x AWG27/7
- Cable shape: round
- Pin assignment: 1:1 according to TIA/EIA 568B
- Equivalent to PoE class: PoE to IEEE802.3af, PoE+ to IEEE802.3at, and 4PPoE to IEEE802.3bt
- Gold-plated contacts
- Sheath: LSZH sheath material
- Outer diameter: 5.7 mm
- With an attached anti-kink grommet
- Fire protection: flame-retardant according to IEC60332-1, low-smoke according to IEC61034, halogen-free according to IEC60754-2
- Degree of protection: IP20
- With a 360° umbrella attachment
- With locking lever protection
- Mating cycles: ≥750
- Brand: EFB-Elektronik

Technical properties

AWG-size	27/7
Allocation	acc. TIA/EIA 568B
Anti-kink sleeve	put-on
Area of Application	Industrial Ethernet
Bandwidth	500MHz
Bending radius	28,5 mm
Cable construction	4x2
Cable shape	rund
Cable type	S/FTP
Cable type acc. to Manufacturer	Leoni-Kerpen F6-90 S/F
Cabling standard	EN50173
Category	6A (TIA)
Colour anti-kink sleeve	grey

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DATASHEET

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Colour outer sheath	grey
Conductive shield	360° shield contact
Conductor Material	Copper
Conductor resistance DC	170 Ω/km
Connector	IEC 60603-7-51
Connector type	TM21 red
Contacts	Gold plated
Current capacity	max. 1 A
Fire retardant version	acc. IEC60332-1
Halogen free	acc. IEC60754-2
Harmonised Standard	EN 50575
Impedance	100 ±5 Ω
Insulation Resistance	> 5000 MΩ
Length imprint	False
Locking lever	True
Loop resistance	< 340 Ω/km
Low smoke	acc. IEC61034
Material outer sheath	LSZH
Mating cycles	≥750
Model	shielded
NVP value	78 %
Oil resistant	no
Operating Temperature	-20 – 60 °C
Operating-/ tempering voltage	max. 50 V DC
Outer diameter of the cable	5.7 mm
Ozone resistance	No
Pin assignment	1:1
Printing	Cat.6 U/UTP AWG24/7 stranded x 4pairs LSZH cable www.efb-elektronik.de
Raw cable	Cat.7
Resistant to chemicals	False
Suitable for degree of protection (IP)	IP20
Temperature Range (Installation)	0 – 50 °C
Temperature Range (Operation)	-20 – 60 °C
Test voltage	1000 (V DC, 1min) core/core und core/screen
Transmission	10Gbit

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DATASHEET

RJ45 Patch Cord Cat.6A S/FTP FR HF Kerpen F6-90 TM21 grey 1m

Type of connector connection 1	RJ45 8(8)
Type of connector connection 2	RJ45 8(8)
UL approbated	False
UV resistant	Nein

Available variants

ArtNr.	Bezeichnung	Length POE class		Length tolerance
K8210GR.1	RJ45 Patch Cord Cat.6A S/FTP FR HF Kerpen F6-90 TM21 grey 1m	1.0 m	PoE acc. to IEEE802.3af;PoE acc. to IEEE802.3at;4PPoE acc. to IEEE802.3bt	±5 %
K8210GR.2	RJ45 Patch Cord Cat.6A S/FTP FR HF Kerpen F6-90 TM21 grey 2m	2.0 m	PoE acc. to IEEE802.3af;PoE acc. to IEEE802.3at;4PPoE acc. to IEEE802.3bt	±5 %
K8210GR.5	RJ45 Patch Cord Cat.6A S/FTP FR HF Kerpen F6-90 TM21 grey 5m	5.0 m	PoE acc. to IEEE802.3af;PoE acc. to IEEE802.3at;4PPoE acc. to IEEE802.3bt	±5 %

Note on Intended Use

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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