

KEYSTONES AND ADAPTORS

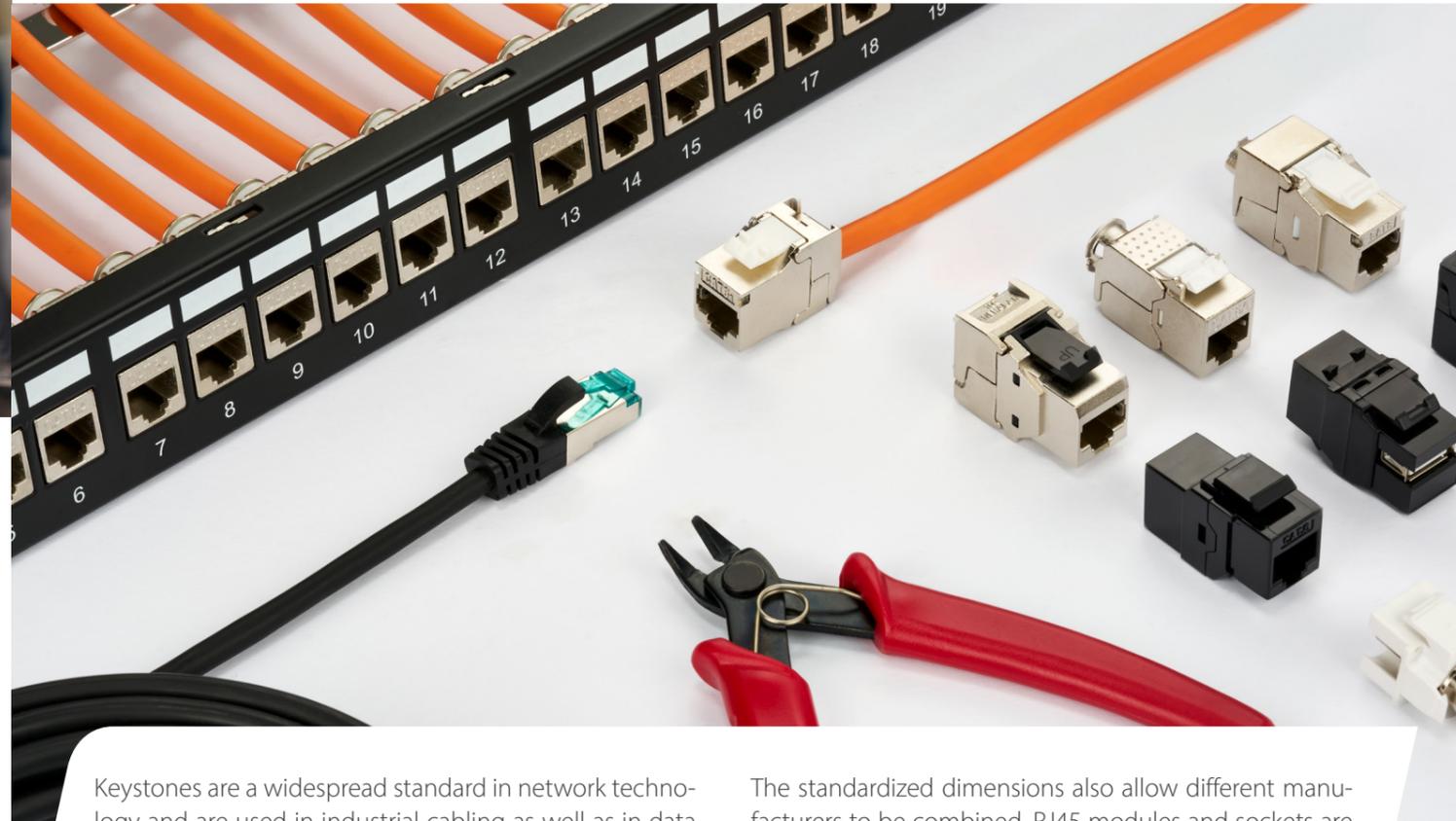
FOR A WIDE RANGE OF APPLICATIONS





KEYSTONE MODULES AND ADAPTORS

FOR A WIDE RANGE OF APPLICATIONS FROM EFB-ELEKTRONIK



YOUR DATA NETWORK PROFESSIONAL WITH PERSONALITY

Let us write success stories together: With suitable products and systems, we bring your projects to life - from IT building cabling to data centres and industrial system solutions. We have been at your side for over 35 years.

As a trading company, we are one of the leading network specialists for structured IT infrastructure. In addition, we are able to manufacture individual products with our own copper cabling and fiber optic production facilities.

We are proud to count 330 employees at nine locations throughout Europe among the EFB team. In addition to numerous sales locations in Germany, we have subsidiaries in Istanbul, Copenhagen and Vienna as well as production sites in Germany and Slovakia.

Our customers benefit from an international network in which we operate as a member of the powerful TKH Group.

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Keystone modules and adapters for a wide range of applications from EFB-Elektronik	3
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Keystones are a widespread standard in network technology and are used in industrial cabling as well as in data centers and home networks. Power over Ethernet and FTtx can also be implemented with Keystones. This is due in particular to the modularity and high performance of the system.

The standardized dimensions also allow different manufacturers to be combined. RJ45 modules and sockets are common, but fiber optic cables and multimedia plugs can also be connected to Keystone patch panels, frames and frame sets using the appropriate installation adapters.

KEYSTONE MODULES
FOR CAT.6, CAT.6A & CAT.8

KEYSTONE MODULES
WITH PORTS FOR HDMI,
USB, RCA & F CONNECTIONS

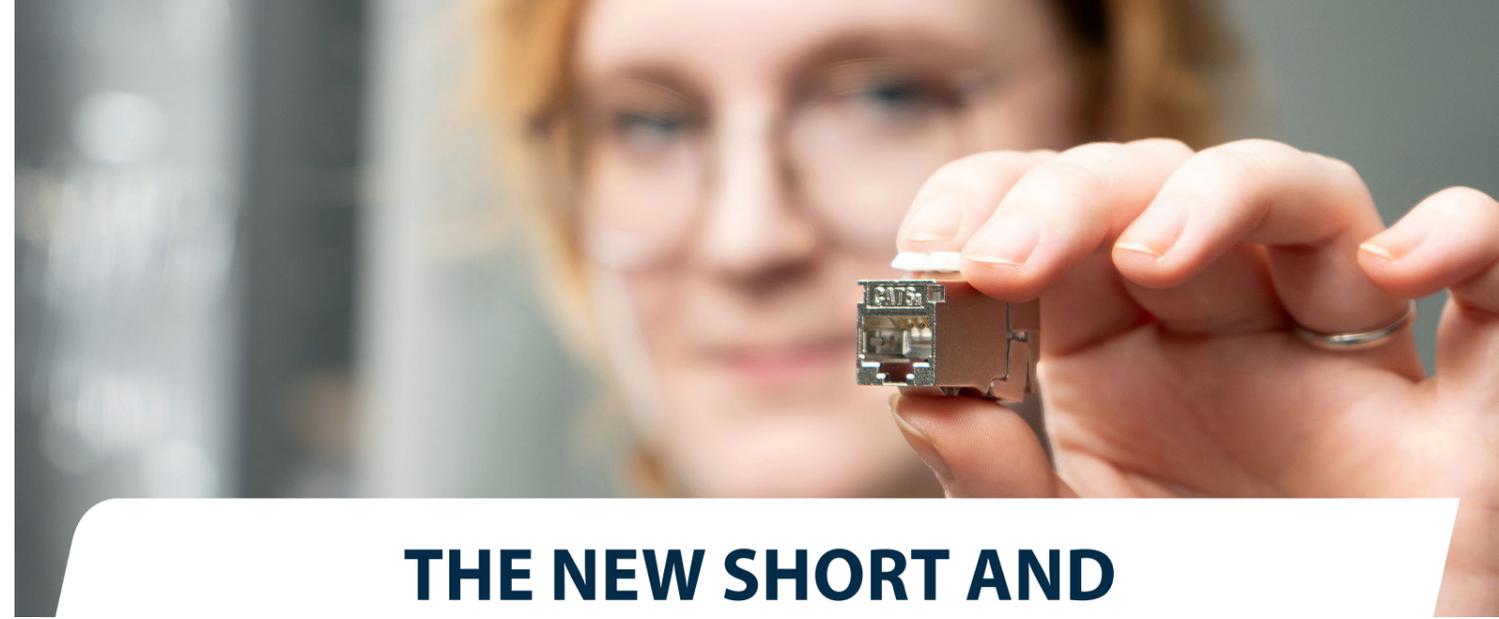
KEYSTONE FRAME
FOR FIBER OPTIC
COUPLINGS

RJ45 KEYSTONES
UTP & STP

RJ45 KEYSTONES
WITH COMPONENT
CERTIFICATION



Article-No.	E-20094	E-20093	E-20092	E-20091	E-20070	E-200100	E-20072	E-20080
Category	6A (IEC)	6A (IEC)	Cat.8 Class 1	6A (IEC)	6A (IEC)	6A (IEC)	6	6
Connection type	IDC	IDC	IDC	IDC	IDC	IDC	IDC	IDC
Shielded	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
AWG-range for stranded wire	26/7 - 27/7	-	-	-	26/7 - 24/7	26/7 - 24/7	-	-
AWG-range for solid wire	24/1 - 22/1	26/1 - 22/1	24/1 - 22/1	24/1 - 22/1	26/1 - 22/1	26/1 - 22/1	24/1 - 22/1	24/1 - 22/1
Special tool necessary	No	No	No	No	No	No	No	No
Housing material	Zinc die cast integrated/**	Zinc die cast Ja, integriert	Zinc die cast Unverlierbar/**	Zinc die cast Unverlierbar/**	Zinc die cast Yes	Zinc die cast No	Zinc die cast Yes	Plastik
Dust cover	Yes	No	No	No	Yes	No	Yes	Yes
For UAE suitable/Slim-line	Yes	No	No	No	No	Yes	No	No
Max. cable diameter	8.5mm	8.5 mm	8.5 mm	8.5 mm	8,0 mm	8.5 mm	8,0 mm	8.5 mm
Separate earthing flag	Yes	No	Yes	Yes	No	No	No	No
Sliding shield contact for different cable diameters	Yes	No	Yes	Yes	Yes	No	Yes	No
360° shield contact	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Shielding and strain relief separated	No	No	Yes	Yes	No	No	No	No
Installation dimension	14,8 x 19,25-20 mm	14,8 x 19,25-20 mm	14,8 x 19,25-20 mm	14,8 x 19,25-20 mm	14,8 x 19,25-20 mm	14,8 x 19,5 mm	148x19,25-20mm	148x19,25-20mm
Length	29,2 mm	30,5 mm	40,95 mm	40,00 mm	37,50 mm	37,66 mm	37,50 mm	37,50 mm
Mating cycles	≥ 750	≥ 750	≥ 750	≥ 750	≥ 750	≥ 750	≥ 750	≥ 750
Temperature range	-40 - 66°C	-10 - 60 °C	-40 - 66°C	-40 - 66 °C	-40 - 66 °C	-10 - 60 °C	-40 - 66 °C	-40 - 66 °C
Test voltage	1000V AC 60Hz	1000 V AC 60 Hz	1000 V AC 60 Hz	1000 V AC 60 Hz	1000 V AC 60 Hz	1000V AC 60Hz	1000V AC 60Hz	1000V AC 60Hz
Dielektrikum	1,5A	1,5A	1,5A	1,5A	1,5A	1,5A	1,5A	1,5A
Current rating	≥ 500MΩ	≥ 500MΩ	≥ 500MΩ	≥ 500MΩ	≥ 500MΩ	≥ 500MΩ	≥ 500MΩ	≥ 500MΩ
Insulation withstanding	≤ 20mΩ	≤ 20mΩ	≤ 20mΩ	≤ 20mΩ	≤ 20mΩ	≤ 20mΩ	≤ 20mΩ	≤ 20mΩ
Contact withstanding	V-0	V-0	V-0	V-0	V-0	V-0	V-0	V-0
According to fire protection class UL94	No	No	No	No	No	No	No	No
UL certified	PoE, PoE+, 4PPOE	PoE, PoE+	PoE, PoE+, 4PPOE	PoE, PoE+, 4PPOE	PoE, PoE+, 4PPOE	PoE, PoE+	PoE, PoE+, 4PPOE	PoE, PoE+, 4PPOE
POE	Type Approval GHMT	Type Approval PL GHMT	Channel Class I Force Technology	Type Approval GHMT	Type Approval GHMT	Type Approval PL GHMT	-	-
Certification	1	1	1	1	1	1	1	1
VPE								



THE NEW SHORT AND SLIM BODY KEYSTONE FOR CONFINED SPACES



COMPACT HOUSING

Combines the features of a Shortbody and Slimline Keystone in one housing



ROBUST DESIGN

Zinc die-cast housing with high-quality 360° shield connection



CERTIFIED TRANSMISSION PROPERTIES

Cat.6A component certified according to ISO/IEC 11801



SCOPE OF DELIVERY

- 1 x RJ45 module
- 1 x cable pre-sorter for installation cables AWG24/1 - 22/1 (white)
- 1 x cable pre-sorter for patch cables AWG27/7..26/7 (grey)
- 1 x dust protection cap
- 1 x quick guide



DIMENSIONS

- Case depth: 29.2 mm
- Housing width 14.64 mm wide
- Short design facilitates installation in data outlets and underfloor systems
- „Slimline“ design enables installation in UAE frames
- Sliding shield contact for cable diameters up to 8.5 mm

KEYSTONE MODULES



RJ45 Keystone Slimline/ Shortbody Cat.6A, components certified

The E-20094 Cat.6A Keystone module combines very high system reserves with a slimline/shortbody housing. The housing allows installation in UAE frames and, thanks to the short design, easier installation in underfloor systems and flat data sockets. The high quality standard of the Cat.6A Keystone module ensures very good transmission properties for 10 Gigabit applications, even over a long period of time. Tool-free assembly is very quick and easy; no special tools are required.

Art.-No.	Description
E-20094	RJ45 Keystone Slimline/ Shortbody Cat.6A, components certified



RJ45 Keystone STP, Cat.6A, 500MHz, components certified

Cat.6A components certified according to ANSI/TIA-568-C.2, ISO/IEC 11801 and IEC 60603-7-51
Compact cable presorter for AWG 26/1 .. AWG 22/1 and AWG26/7 .. AWG24/7
Pair management according to TIA 568A /B colour codes
Appropriate for distribution panels and frames with keystone slots

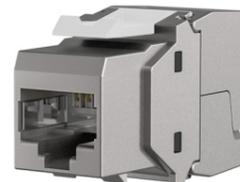
Art.-No.	Description
E-20070	RJ45 Keystone STP, Cat.6A, 500MHz, components certified



RJ45 Keystone STP, Cat.6A, 500MHz, components certified, earthing

Cat.6A component certified acc. to ISO/IEC 11801 and IEC 60603-7-51
Compact cable presorter for AWG 24/1 .. 22/1
Pair management according to TIA 568A /B colour codes
Appropriate for distribution panels and frames with keystone slots
Flexibel strain relief for different cable diameter

Art.-No.	Description
E-20091	RJ45 Keystone STP, Cat.6A, 500MHz, components certified, earthing



RJ45 Keystone STP, Cat.6, 250MHz

Compact cable presorter for AWG 24/1 .. AWG 22/1
Pair management according to TIA 568A /B colour codes
Appropriate for all distribution panels and frames with keystone slots

Art.-No.	Description
E-20072	RJ45 Keystone STP, Cat.6, 250MHz

KEYSTONE ADAPTORS



Keystone Snap-In Adapter RJ45 STP, Cat.5e, Stainless Steel

Snap-In mounting (Keystone)
Cat.5e
Connecting adapter for patch cables
2x RJ45 connectors shielded
Allocation: 1:1
Stainless steel housing
Snap-in spring: metal
RJ 45 contacts with 3µ gold plating

Art.-No.	Description
37508.1V3	Keystone Snap-In Adapter RJ45 STP, Cat.5e, Stainless Steel



Keystone Snap-In Adapter RJ45 STP, Cat.6A

Snap-In mounting (Keystone)
Cat.6A/Class EA
Connecting adapter for patch cables
Both sides with shielded RJ45 jack assembled for connecting of RJ45 Patch cable
Allocation: 1:1
Metal housing
Snap-in spring: plastic

Art.-No.	Description
37521.1V2	Keystone Snap-In Adapter RJ45 STP, Cat.6A

THE SYSTEM CONCEPT - THIS FITS!

Art.-No.
ET-25091K

Art.-No.
E-20094

Art.-No.
ET-25186.V3

Art.-No.
K525FXX.X

Art.-No.
37578.1V2



01

**INSTALLATION
CABLE**
PAGE 8

02

**KEYSTONE HOLDER
FOR APPLICATION
PURPOSE**

DISTRIBUTION PANELS / INDUSTRIAL
HOLDER / FLOOR TANK
PAGE 8-10

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KEYSTONES
PAGE 6

04

PATCH CABLE
PAGE 10-11

05

ADAPTORS
PAGE 11

i ENSURE THAT
THE KEYSTONE FRAME
AND THE KEYSTONE ARE
COMPATIBLE
(SEE DESCRIPTION)

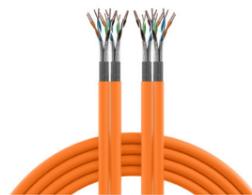
INSTALLATION CABLE



INFRALAN® Cat.7 Installation Cable S/FTP 1000 MHz, CPR Cca

The INFRALAN® installation cable 99981.x-CPR is constructed for transmissions up to 1000 MHz and exceeds the requirements of the category 7 with the electrical transmission properties. With this cable transmission rates up to 10 GBit according to IEEE 802.3 are possible. Additional this Cable is certified by GHMT PVP program in simplex version.

Art.-No.	Description
99981.1-CPR	INFRALAN® Cat.7 Installation Cable S/FTP 1000 MHz, CPR Cca



INFRALAN® Cat.7 Installation Cable S/FTP 1000 MHz, CPR Cca

The INFRALAN® installation cable 99981.x-CPR is constructed for transmissions up to 1000 MHz and exceeds the requirements of the category 7 with the electrical transmission properties. With this cable transmission rates up to 10 GBit according to IEEE 802.3 are possible. Additional this Cable is certified by GHMT PVP program in simplex version.

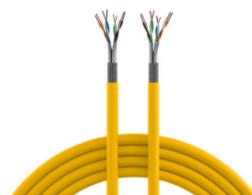
Art.-No.	Description
99981DX.500-CPR	INFRALAN® Cat.7 Installation Cable S/FTP 1000 MHz, CPR Cca



Cat.7 LAN Installation Cable 1000MHz AWG23 MHz CPR Cca

The data cable MK7101.x is constructed for transmissions up to 1000 MHz and exceeds with the electrical transmission properties and requirements of the category 7. With this cable transmission rates up to 10 Gigabit Ethernet are possible without difficulty.

Art.-No.	Description
MK7101.1-CPR	Cat.7 LAN Installation Cable 1000MHz AWG23 CPR Cca



INFRALAN® Cat.7A Installation Cable S/FTP 1500 MHz CPR Cca

The INFRALAN® installation cable 99983.x-CPR is constructed for transmissions up to 1500 MHz and exceeds with the electrical transmission properties and requirements of the category 7A. Suitable for structured cabling of Class E, EA, F and FA according to ISO/IEC 11801 (AMD 2:2009) resp. EN 50173-1 (2009). The individual stranded pairs are protected with a screen foil (PIMF) and a total braided shield against radiation into the cable, as well as this excellent protection prevents the radiation of signals from the cable out. This shielding guarantees compliance with the interference emission according to Class B EN 55022, as well as immunity to interference according to EN 55024. The stranding of the individual pairs is optimized in such a way that the delay skew between the pairs (skew) with the greatest possible decoupling (crosstalk) is minimal. With this cable transmission rates up to 10 GBit according to IEEE 802.3 are possible.

Art.-No.	Description
999830.1-CPR	INFRALAN® Cat.7A Installation Cable S/FTP 1500 MHz CPR Cca

KEYSTONE HOLDER FOR APPLICATION PURPOSE



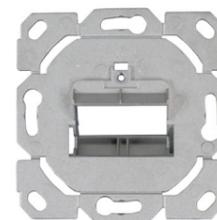
Keystone holder 1-Port, for DIN Rail in subdistribution

Art.-No.	Description
ET-25186.V3	Keystone holder 1-Port, for DIN Rail in subdistribution



Floor Tank Holder 6 or 9 Keystones

Art.-No.	Description
ET-25179V2	Floor tank holder 3 x for 9 Keystones
ET-25178V2	Floor tank holder 2 x for 6 Keystones



UAE mounting frame for 2x Keystone Module

Art.-No.	Description
ET-25090K	UAE mounting frame for 2x Keystone Module



Frame Set for 2 x Slimline Keystone

Art.-No.	Description
ET-25090	Frame Set for 2 x Slimline Keystone



Distribution Panel 19" 0,5U 24-Port

Art.-No.	Description
37586.1	Distribution Panel 19" 0,5U, 24-Port, grey, RAL7035
37586.1SW	Distribution Panel 19" 0,5U, 24-Port, black, RAL9005

For holding of EFB keystone module E-20094



2-Port Frame Set for Keystone, straight outlet DIN49075, RAL9003 signal white

Art.-Nr.	Bezeichnung
ET-25091	2-Port Frame Set for Keystone, straight outlet DIN49075, RAL9003 signal white



Keystone distribution box surface mounting, Dust protection self-closing

Art.-No.	Description
ET-25166	Keystone Distribution box surface mounting, 1-Port, dust protection self-closing
ET-25168	Keystone Distribution box surface mounting, 2-Port, dust protection self-closing



Keystone holder for DIN-Rail, Stainless Steel

Art.-No.	Description
ET-25184.V2	Keystone holder for DIN-Rail, Stainless Steel



Distribution Panel 19" 1HE 24-Port short

Art.-No.	Description
37578.1V2	Distribution Panel 19" 1HE 24-Port, grey RAL7035, short
37580.1V2	Distribution Panel 19" 1HE 24-Port, black RAL9005, short
37576.1V2	Distribution Panel 19" 1HE 24-Port, metal, short



MODULES NOT INCLUDED

Multifunctional frame set with 1- + 2-port adapter

Art.-Nr.	Bezeichnung
ET-25092	Multifunctional frame set with 1- + 2-port adapter



Frame Set 2-Port, for Keystones, design capable TAE

Art.-No.	Description
ET-25111	Frame Set 2-Port, for Keystones, design capable TAE



Keystone Frame revolving 2-Port, for Keystones, design capable TAE

Art.-No.	Description
ET-25111K	Keystone Frame revolving 2-Port, for Keystones, design capable TAE

PATCH CABLE



RJ45 Patch Cord Cat.6A S/FTP TPE Cat.7 raw cable superflex

Very flexible TPE/LSZH outer sheath superflex
 Cross section 4 x 2 x AWG26 / 7
 Moulded grommet, slim design
 Length imprint on the boot

Art.-No.	Description
K5525FXX.x	RJ45 Patch Cord Cat.6A S/FTP TPE Cat.7 raw cable superflex



RJ45 Patch Cord Cat.6A S/FTP LSZH Draka UC900 TM31

Cross section 4 x 2 x AWG27/7
 Mounted anti-kink grommet

Art.-No.	Description
K8560.x	RJ45 Patch Cord Cat.6A S/FTP LSZH Draka UC900 TM31



RJ45 Patch Cord Cat.6A S/FTP LSZH 1x90°

Cross section 4 x 2 x AWG27/7
 Length imprint on boot

Art.-No.	Description
MK6001W.x	RJ45 Patch Cord Cat.6A S/FTP LSZH 1x90°

FIELD INSTALLABLE CONNECTORS

RJ45 Connector STP, Cat.6, Field-Plug

Shielded zinc diecast body with separate dust cap and anti-kink sleeve
 Class E performance according to ISO/IEC11801 and IEC60603-7-5
 Compact cable manager for AWG 22/1 .. AWG 26/1 or AWG22/7 .. AWG27/7
 Pair management according to TIA 568A /B colour codes and industrial Profinet 1-2-3-6
 Re-termination capability up to 5 times with the same width, for AWG27/7 up to 2 times
 Suitable for cable dia from 6.0 mm .. 9.0 mm
 Strain relief with cable tie



Art.-No.	Description
88035.1	RJ45 Connector STP, Cat.6, Field-Plug

RJ45 Premium plug STP, Cat.6A/ClassEA, Field-plug

The Cat. 6A Premium RJ45 is a highlight in the chain of further development of RJ45 connectors for field assembly. An extraordinarily robust full metal housing made of zinc die-casting paired with the unique variable cable feed opens up a wide range of application possibilities. Installation can be done in 9 different positions: 8 different angled positions and a 180° straight cable entry. The conical metal cable gland allows cable diameters from 6.0mm to 9.0mm. The connector meets the requirements of transmission class Cat. 6A/Class EA and supports the Ethernet protocol up to 10 Gigabit per second.



Art.-No.	Description
88035P8.1	RJ45 Premium plug STP, Cat.6A/ClassEA, Field-plug

ADAPTORS

Modular-Adapter RJ45 STP, Cat.6

Cat.6
 Connecting adapter for patch cables
 2x RJ45 connectors shielded
 Allocation: 1:1
 Metal housing



Art.-No.	Description
37489.1	Modular-Adapter RJ45 STP, Cat.6

Modular-Adapter RJ45 STP, Cat.6A, with flange for wall mounting

Cat.6A
 Connecting adapter for patch cables
 2x RJ45 connectors shielded
 Allocation: 1:1
 Metal housing



Art.-No.	Description
37527.1	Modular-Adapter RJ45 STP, Cat.6A, with flange for wall mounting

Modular-Adapter RJ45 STP, Cat.6A

Cat.6A
 Connecting adapter for patch cables
 2x RJ45 connectors shielded
 Allocation: 1:1
 Metal housing



Art.-No.	Description
37489.2	Modular-Adapter RJ45 STP, Cat.6A

YOU CAN FIND US HERE!



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