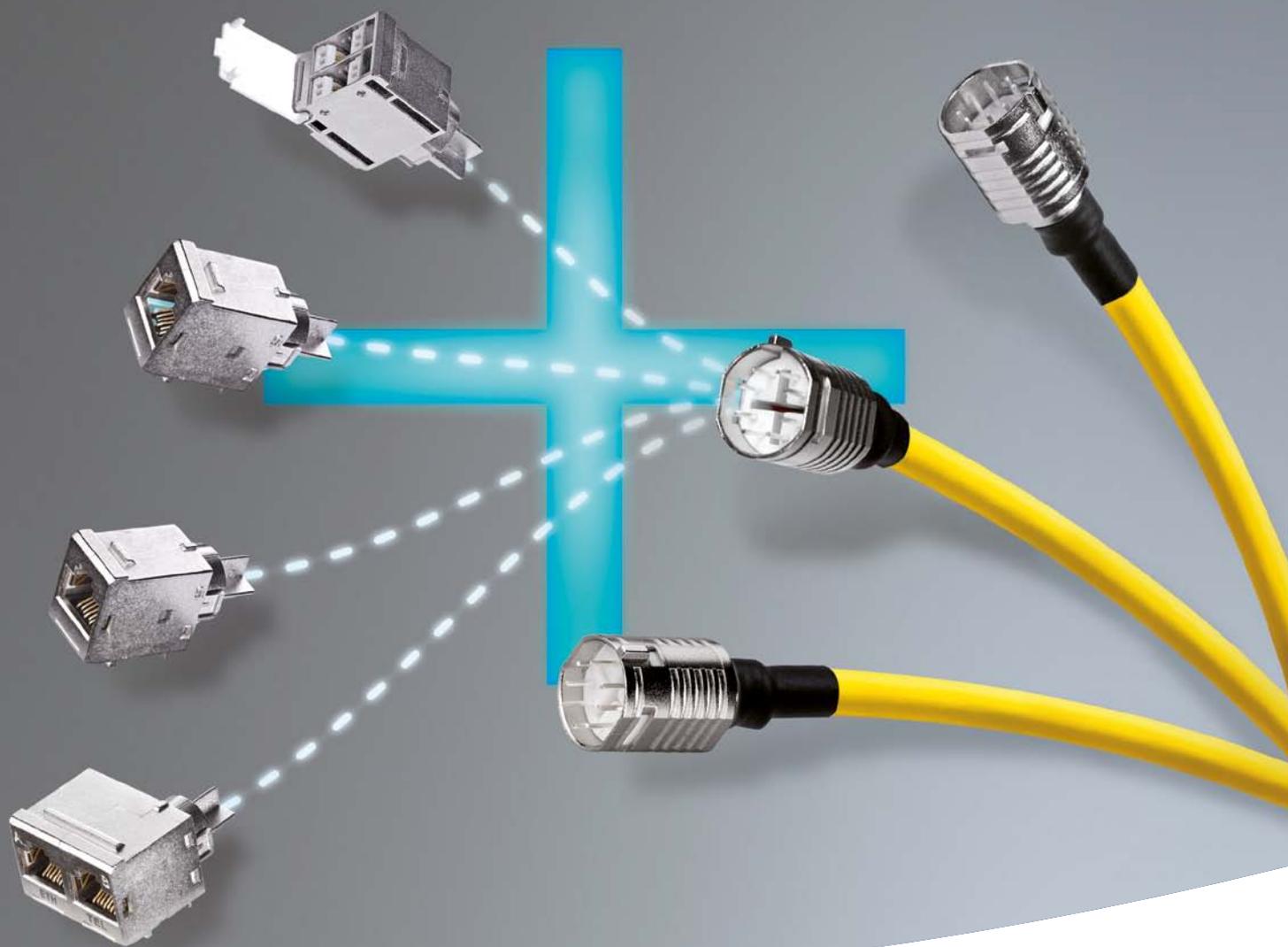


VarioKeystone®

Connect it All – the innovative connection concept



The Quality Connection

LEONI

VarioKeystone® – Benefits that speak for.

+ High performance level

- for all classes (D to F_A) and categories (5 to 7_A) incl. multimedia +40 GbE
- for permanent link <1 m with class E_A
- high EMC, alien crosstalk by design
- PoE and PoE plus
- extremely sturdy thanks to solid metal design
- excellent strain relief

+ Flexibility

- thanks to interchangeable jack modules
- thanks to the unlocking tool
- thanks to the extension option with the VarioKeystone® link extender
- thanks to modular and detachable patch fields
- thanks to pre-assembled links

+ Cost-efficiency

- thanks to unique, multi-use cable connection (maintains value)
- thanks to interchangeable jack modules with different performance levels and connector interfaces
- thanks to modular and detachable patch fields
- thanks to low maintenance and service costs
- thanks to short upgrade times using the unlocking tool
- thanks to short assembly times
- thanks to pre-assembled links (minimal downtime)

+ Future-proofing

- thanks to a variety of interchangeable jack modules
- thanks to different performance levels and connector interfaces (acc. to standard or customer-specific)
- thanks to upward and downward compatibility
- thanks to conformity with standards
- thanks to independent certification



Want to find out more?

www.variokeystone.com

Further information can be found online, e.g.

- video on the VarioKeystone system
- installation instructions video
- certificates
- technical articles
- and more

*VarioKeystone® modular panel –
easy to install and flexible*

One click takes you to the next generation.

Long downtimes and high installation costs are constant challenges for those in charge of IT when the existing cabling infrastructure is changed. The problem will worsen in future as a result of the constantly increasing demands made on data communication.

This is the context in which a cabling system allows upgrades and migrations to be performed in an extremely short time without costly re-installation. VarioKeystone® is a cabling system whose modular design allows migration from Category 6 to Category 7 at any time without the necessity of re-installing the existing cabling infrastructure.

The basic configuration consisting of a Category 7 data cable and a cable connector is completed by simply snapping on the desired jack module.

The user can choose between the jack modules RJ45 (single and dual) according to Cat.6 (IEC 60603-7-5) and Cat.6_A (IEC60603-7-51) and 4K7 (interface acc. to IEC 61076-3-104) according to Category 7.

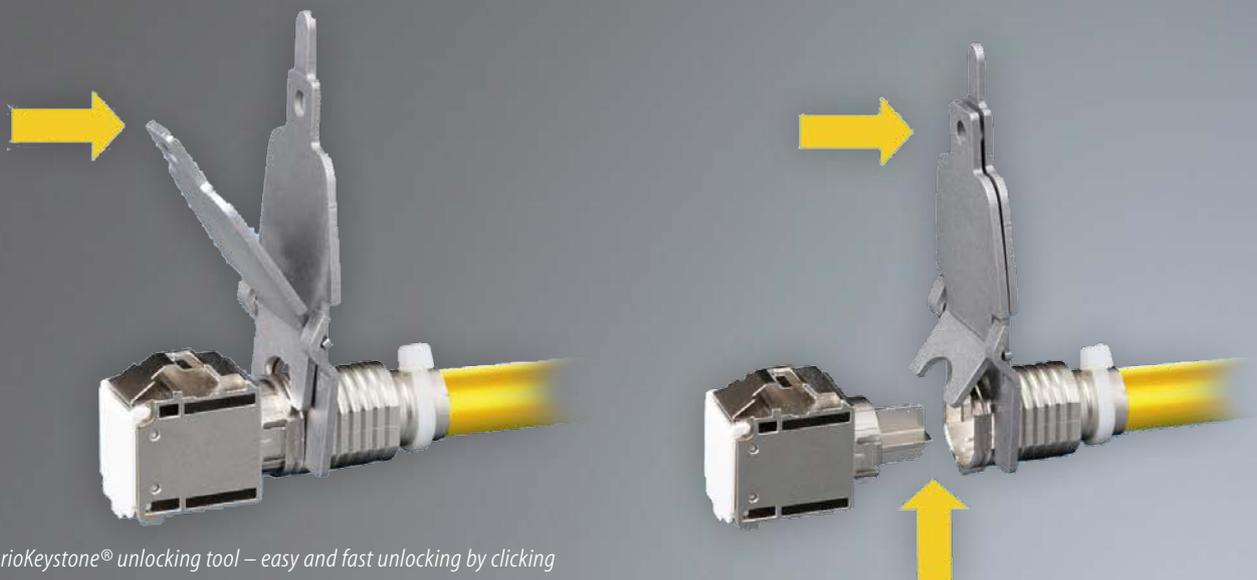
For migration, the new unlocking tool allows the cable plug and jack module to be separated safely, rapidly and effortlessly using lever action.

In this way, the existing cabling system can be adapted to fit the new requirements in a few minutes "at a click". Easy installation is particularly useful in data centres where system migrations must be achieved with zero downtime. Pre-assembled trunks help to keep the necessary assembly times to a minimum.

The cable links in the computer centre are often below the 15 m mark. The standards speak of a "short link" here, and this is where the men are separated from the boys in terms of product technology. The VarioKeystone® system allows extremely short link lengths of one metre to be realized. The permanent link of Class E_A is reached with considerable reserves of typically 6 dB in near-end crosstalk (NEXT).

Modular patch panels, wall outlets, floorbox solutions and consolidation point housings complete the product range.

VarioKeystone® combines a secure future with flexibility while ensuring maximum performance and ease of assembly.



VarioKeystone® unlocking tool – easy and fast unlocking by clicking

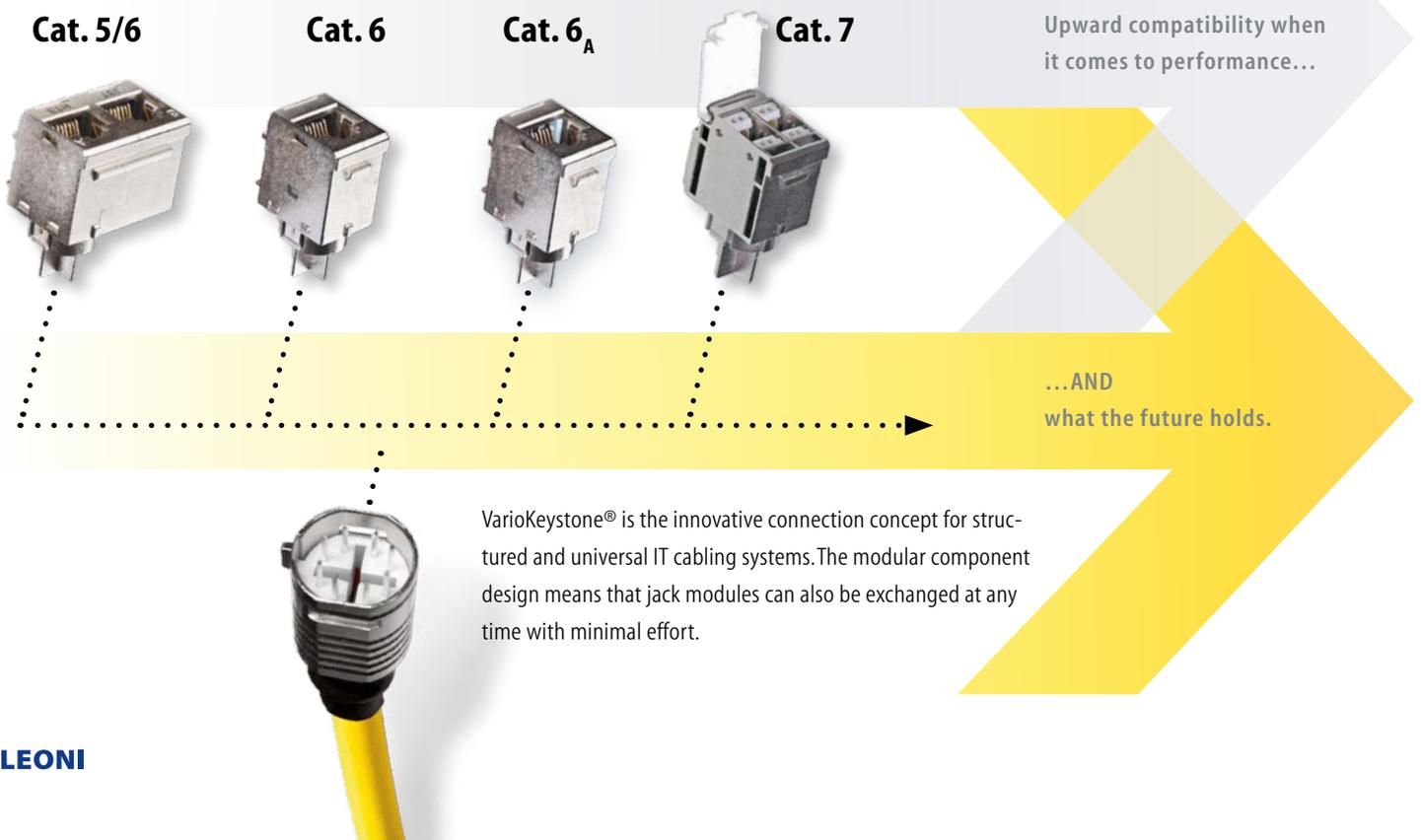
VarioKeystone® – Everywhere you go.



From offices to exhibition centres and from industrial facilities to data centres – VarioKeystone® can be used in a whole host of areas:

- Office and administrative buildings
- Banks and insurance companies
- Schools and universities
- Airports and train stations
- Carriers and providers
- Production plants and facilities, e.g. in the car industry, at manufacturers of prefab homes, etc.
- Electricity, water and gas distribution companies
- Stadiums and exhibition centres
- Ships and offshore platforms
- Logistics companies
- Department stores and DIY stores
- Hotels and restaurants
- Harbours and shipyards
- Public authorities
- ...

VarioKeystone® – No limits.



Product range



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Trunk cable	<ul style="list-style-type: none"> • Trunk Cat. 7, oil-resistant • Trunk Crossconnect Cat. 7, oil-resistant 	10
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Test report	For every trunk cable	11
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VarioKeystone®

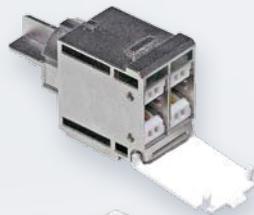
System components at a glance.

VarioKeystone® is the innovative connection concept for building wiring systems. The modular design of the components enables both current and future requirements to be met.

The modular design of the available jack modules RJ45 Cat.6_A (IEC 60603-7-51), RJ45 Cat.6 (IEC 60603-7-5) and 4K7 (IEC 61076-3-104) allows them to be replaced with relatively little effort. This makes it easy to decide on the right plug face.

The link extender is an easy means of extending cable links without any significant reduction in performance.

VarioKeystone® maintains the value of your investments – in the long term.



4K7 jack module
Cat. 7 (1000 MHz)



RJ45 jack module
Cat. 6_A



RJ45 jack module
Cat. 6



RJ45 dual module



Link extender
Class E_A



Cable plug
Cat. 7



Cable plug
Cat. 6_A



Crossconnect cable plug
Cat. 7

Jack module

Cable plug

	Cable plug		Jack module					
	Cat. 7	Cat. 6 _A	Cat. 7 (Tera)	Cat. 6 _A (RJ45)	Cat. 6 (RJ45)	Cat. 5 / Cat. 3 (dual module RJ45)		
	see page 8	see page 8	see page 14	see page 14	see page 14	(ETH/ETH) see page 15	(ETH/ISDN*) see page 15	(ISDN/ISDN) see page 15
The following performance classes are reached with the cable plug/jack module combination								
Class F _A (channel)	✓		✓					
Class F	✓		✓					
Class E _A (PL)	✓	✓	✓	✓				
Class E _A (channel)	✓	✓	✓	✓	✓			
Class E	✓	✓	✓	✓	✓			
Class D	✓	✓	✓	✓	✓	✓	✓	
Class C	✓	✓	✓	✓	✓	✓	✓	✓



Cable



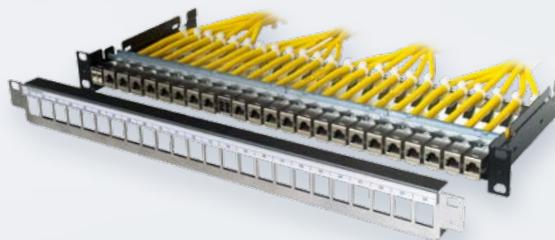
Outlets



VarioLine® UF
underfloor systems



Mini patch 6 ports



Modular panel
19" / 1 RU

Housing

Cable plug

category 7 / 6_A



Cable plug Cat. 7
contact block white

Cable plug Cat. 6_A
contact block aqua



Crossconnect cable plug Cat. 7
contact block red

VarioKeystone® Cable plug

Description

Interface to the individually interchangeable VarioKeystone® jack module. The cable plug enables generic transmission links far exceeding the requirements for Class F to be achieved. The mating face can also be identified later without any additional installation effort.

- Various mating faces available
- Easy and quick assembly

Structure

Material	full metal; zinc die-cast, nickel-plated
Wiring	4 pairs via punchdown method
Strain relief	via cable clips
Shielding	large-surface 360° shield connection contact block: white / aqua
Electrical values	category 7 / 6 _A

Standards

- ISO/IEC 11801
- EN 50173-1

Article	Cat.	Article no.	
		9,0 mm hole for AWG 23	10,0 mm hole for AWG 22
VarioKeystone® Cable plug – white	Cat. 7	LKD 9A46 0054 0000	LKD 9A46 0057 0000
VarioKeystone® Cable plug – aqua	Cat. 6 _A	LKD 9A46 0129 0000	LKD 9A46 0130 0000

VarioKeystone® Crossconnect cable plug

Description

Interface to the individually interchangeable VarioKeystone® jack module. The cable plug enables generic transmission links far exceeding the requirements for Class F to be achieved. The mating face can also be identified later without any additional installation effort.

- Various mating faces available
- Easy and quick assembly
- Required for extending links in combination with the link extender

Structure

Material	full metal; zinc die-cast, nickel-plated
Wiring	4 pairs via punchdown method
Strain relief	via cable clips
Shielding	large-surface 360° shield connection contact block: red
Electrical values	category 7

Standards

- ISO/IEC 11801
- EN 50173-1

Article	Category	Article no.
VarioKeystone® Crossconnect cable plug (9,0 mm hole for AWG 23)	Cat. 7	LKD 9A46 0055 0000
VarioKeystone® Crossconnect cable plug (10,0 mm hole for AWG 22)	Cat. 7	LKD 9A46 0058 0000

Trunk cable

category 7, pre-assembled

Documented acceptance measurement on CD on request (page 11).



Trunk
contact block white / white

VarioKeystone® Trunk

Description

Interface between cable and jack module.

The data cable is fitted with the cable plug at both ends. It is especially suitable for clean rooms and/or rapid handling on location. During assembly, the cable plug is extrusion-coated with a strengthening compound which simultaneously acts as a protection against bending. The ready-made cable is delivered in ring form.

Structure

Material	full metal; zinc die-cast, nickel-plated
Cable	MegaLine®F10-115 S/F AWG 23/1 (Article no.: LKD 7KS7 0008 0000)
Assignment	1:1
Shielding	large-surface 360° shield connection contact block: white / white
Electrical values	category 7

Standards

- ISO/IEC 11801
- EN 50173-1

Article	Length	Article no.
VarioKeystone® Trunk	10.0 m	LKD 9A06 0095 0000
	15.0 m	LKD 9A06 0096 0000
	20.0 m	LKD 9A06 0097 0000
	30.0 m	LKD 9A06 0099 0000
	40.0 m	LKD 9A06 0101 0000
	50.0 m	LKD 9A06 0103 0000

Standard lengths, other lengths (also assembled at one end) available on request

Documented acceptance measurement on CD on request (page 11).



Trunk Crossconnect
contact block white / red

VarioKeystone® Trunk Crossconnect

Description

Interface between cable and jack module.

The data cable is fitted with the cable plug at both ends. It is especially suitable for clean rooms and/or rapid handling on location. During assembly, the cable plug is extrusion-coated with a strengthening compound which simultaneously acts as a protection against bending. The ready-made cable is delivered in ring form.

Structure

Material	full metal; zinc die-cast, nickel-plated
Cable	MegaLine®F10-115 S/F AWG 23/1 (Article no.: LKD 7KS7 0008 0000)
Assignment	Crossconnect
Shielding	large-surface 360° shield connection contact block: white / red
Electrical values	category 7

Standards

- ISO/IEC 11801
- EN 50173-1

Article	Length	Article no.
VarioKeystone® Trunk Crossconnect	10.0 m	LKD 9A06 0129 0000
	15.0 m	LKD 9A06 0130 0000
	20.0 m	LKD 9A06 0131 0000
	30.0 m	LKD 9A06 0133 0000
	40.0 m	LKD 9A06 0135 0000
	50.0 m	LKD 9A06 0137 0000

Standard lengths, other lengths and cable types (also assembled at one end) available on request

Trunk cable

category 7, pre-assembled

Documented acceptance measurement on CD on request (page 11).



Trunk
contact block white / white

VarioKeystone® Trunk cable

Description

Interface between cable and jack module.

The data cable is fitted with the cable plug at both ends. It is especially suitable for clean rooms and/or rapid handling on location. During assembly, the cable plug is extrusion-coated with a strengthening compound which simultaneously acts as a protection against bending. The ready-made cable is delivered in ring form.

- oil-resistant acc. to ICEA S-82-552 (+60 °C)

Structure

Material	full metal; zinc die-cast, nickel-plated
Cable	MegaLine®F10-130 Vö AWG 22/1 (Article no.: LKD 7KS7 0089 0000)
Assignment	1:1
Shielding	large-surface 360° shield connection contact block: white / white
Electrical values	category 7

Standards

- ISO/IEC 11801
- EN 50173-1

Article	Length*	Article no.
VarioKeystone® Trunk cable	15.0 m	LKD 9A06 0201 0000
	20.0 m	LKD 9A06 0202 0000
	30.0 m	LKD 9A06 0204 0000
	40.0 m	LKD 9A06 0206 0000
	50.0 m	LKD 9A06 0208 0000

* Standard lengths; other lengths available on request

Documented acceptance measurement on CD on request (page 11).



Trunk Crossconnect
contact block white / red

VarioKeystone® Trunk cable crossconnect

Description

Interface between cable and jack module.

The data cable is fitted with the cable plug at both ends. It is especially suitable for clean rooms and/or rapid handling on location. During assembly, the cable plug is extrusion-coated with a strengthening compound which simultaneously acts as a protection against bending. The ready-made cable is delivered in ring form.

- oil-resistant acc. to ICEA S-82-552 (+60 °C)

Structure

Material	full metal; zinc die-cast, nickel-plated
Cable	MegaLine®F10-130 Vö AWG 22/1 (Article no.: LKD 7KS7 0089 0000)
Assignment	Crossconnect
Shielding	large-surface 360° shield connection contact block: white / red
Electrical values	category 7

Standards

- ISO/IEC 11801
- EN 50173-1

Article	Length*	Article no.
VarioKeystone® Trunk cable crossconnect	15.0 m	LKD 9A06 0231 0000
	20.0 m	LKD 9A06 0232 0000
	30.0 m	LKD 9A06 0234 0000
	40.0 m	LKD 9A06 0236 0000
	50.0 m	LKD 9A06 0238 0000

* Standard lengths; other lengths available on request

Trunk cable 4-fold / 8-fold

category 7, pre-assembled



Documented acceptance measurement on CD on request (page 11).

VarioKeystone® Trunk cable 4-fold
VarioKeystone® Trunk cable 8-fold

Description

Interface between cable and jack module.

The data cable is fitted with the cable plug at both ends. It is especially suitable for clean rooms and/or rapid handling on location. During assembly, the cable plug is extrusion-coated with a strengthening compound which simultaneously acts as a protection against bending. The ready-made cable is delivered in ring form.

Cable

Type	MegaLine®F10-115 S/F 4x4P AWG23/1 (Article no.: LKD 7KS7 0161 0000) MegaLine®F10-120 S/F flex 8x4P AWG 26/7 (Article no.: LKD 7KS7 0142 0000)
Peitschenlänge	0.4 m

Structure

Material	full metal; zinc die-cast, nickel-plated
Assignment	1:1
Shielding	large-surface 360° shield connection contact block: white
Electrical values	category 7

Standards

■ ISO/IEC 11801 / ■ EN 50173-1

Article	Length*	Article no.
VarioKeystone® Trunk cable 4-fold	10.0 m	LKD 9A06 1019 0000
	15.0 m	LKD 9A06 1020 0000
VarioKeystone® Trunk cable 8-fold	5.0 m	LKD 9A06 0192 0000
	7.5 m	LKD 9A06 0193 0000
	10.0 m	LKD 9A06 0194 0000
	15.0 m	LKD 9A06 0195 0000

* Standard lengths; other lengths available on request

For every trunk cable:
Test report



Also order

The measurement carried out prior to delivery is documented on CD as a test report and supplied on request.

Overview

measurements	→ Channel Class F _A
	→ Permanent Link Class F
	→ Permanent Link Class E _A
	→ Channel Class E _A (with Cat. 6 _A module)
	→ Channel Class E _A (with Cat. 6 module)

Acceptance tests	Article no.:
Channel Class F _A	LKD 9A46 0132 0000
Permanent Link Class F	LKD 9A46 0123 0000
Permanent Link Class E _A	LKD 9A46 0125 0000
Channel Class E _A (with Cat. 6 _A module)	LKD 9A46 0131 0000
Channel Class E _A (with Cat. 6 module)	LKD 9A46 0126 0000

MegaLine® F10-115 S/F

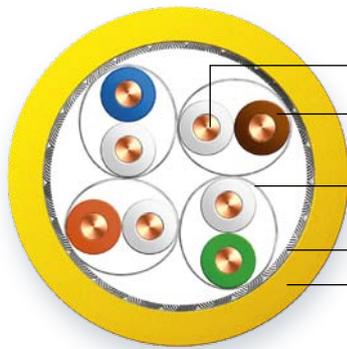
Category 7_A

Type KS-02YSCH 4x2xAWG 23/1 PIMF
KS-02YSCH 2/4/6x(4x2xAWG 23/1 PIMF)



S₃ P₄ A₄ C₄ E₅

Construction for 4 P



Conductor	bare copper wire, AWG 23/1
Insulation twisting element	cellular-PE, core-Ø: nominal value 1.4 mm Pair
Individual screen	aluminium-bonded polyester tape, metal side outside (PIMF)
Twisting	4 pairs
Overall screen	tinned copper wire braid
Outer sheath	halogen free, flame retardant compound

Fire behavior

Flame retardance	acc. to IEC 60332-3-24
Halogen acid gas emission	acc. to IEC 60754-1/2
Smoke density	acc. to IEC 61034-1/2
Calorific value (approx.)	0.60 MJ/m (Sx), 1.2 MJ/m (Dx), 4.24 MJ/m (4-fold), 6.29 MJ/m (6-fold)

Performance

better than category 7_A acc. EN 50288 and IEC 61156
excellent NEXT, lowest attenuation,
excellent screening characteristics (individual and overall screen),
low SKEW, Bandwidth 1150 MHz

Applications

Installation cable for generic cabling systems acc. ISO/IEC 11801 und EN 50173 (2. edition).
Ideal for all applications of classes D up to F_A Multimedia (Video, Data, Voice)
>10 GbE acc. IEEE 802.3 an, Cable sharing, VoIP, PoE

Mechanical characteristics

Bending radius during installation	8 x overall diameter (min.)
after installation	4 x overall diameter (min.)
Tensile strength (max.)	110 N (Sx), 220 N (Dx), 440 N (4-fold), 650 N (6-fold)
Crush	1000 N/100 mm
Impact (number of shocks)	10

Electromagnetic behaviour (nominal values)

Transfer impedance at 10 MHz	5 mΩ/m
Screening attenuation up to 1000 MHz	70 dB
Coupling attenuation up to 1000 MHz	85 dB

Security (fire behaviour)

S	1	2	3	4	5
	IEC 60332-2-2	IEC-60332-1-2	IEC-60332-3-24	EFP Grade 1	EFP Grade 2

Performance (cabling class, bandwidth)

P	1	2	3	4	5
	> Class E	> Class E _A	> Class F	> Class F _A	> Class "G"
	> 250 MHz	> 500 MHz	> 600 MHz	> 1000 MHz	> 1200 MHz

Application (Ethernet, TV)

A	1	2	3	4	5
	> 100 MbE	> 1 GbE	up to 10 GbE	> 10 GbE	> 10 GbE TV

Construction (conductor size, tensile strength)

C	1	2	3	4	5
	AWG 27	AWG 26/25	AWG 24	AWG 23	AWG 22

EMC (coupling attenuation)

E	1	2	3	4	5
	> 40 dB	> 50 dB	> 60 dB	> 70 dB	> 80 dB

Electrical characteristics (HF) at 20 °C

Frequency MHz	Attenuation dB/100m		NEXT dB		PS-NEXT dB		ACR dB at 100m		PS-ACR dB at 100m		ACR-F dB at 100m		PSACR-F dB at 100m		RL dB	
	typ.	Cat. 7 _A max.*	typ.	Cat. 7 _A min.*	typ.	Cat. 7 _A min.*	typ.	Cat. 7 _A min.*	typ.	Cat. 7 _A min.*	typ.	Cat. 7 _A min.*	typ.	Cat. 7 _A min.*	typ.	Cat. 7 _A min.*
1	1.9	2.1	105	78	102	75	104	75.9	101	72.9	98	78	95	75	26.6	20
10	4.8	5.8	105	78	102	75	101	72.2	98	69.2	103	75.3	100	72.3	35.3	25
100	16.3	18.5	105	75.4	102	72.4	89	56.9	86	53.9	89	55.3	86	52.3	39.6	20.1
200	24.3	26.5	105	70.9	102	67.9	81	44.4	78	41.4	82	49.3	79	46.3	36	18
250	27.5	29.7	105	69.4	102	66.4	78	39.7	75	36.7	79	47.3	76	44.3	34	17.3
500	37.9	42.8	100	64.9	97	61.9	62	22.2	59	19.2	67	41.3	64	38.3	29	17.3
600	42.4	47.1	95	63.7	92	60.7	53	16.6	50	13.6	60	39.7	57	36.7	25.4	17.3
700	47.2	51.1	95	62.7	92	59.7	48	11.6	45	8.6	57	38.4	54	35.4	24.6	16.6
800	50.3	54.9	93	61.9	90	58.9	43	6.9	40	3.9	53	37.2	50	34.2	23.5	16.1
900	54.6	58.5	90	61.1	87	58.1	35	2.6	32	-0.4	49	36.2	46	33.2	22.6	15.5
1000	58	61.9	88	60.4	85	57.4	30	-1.5	27	-4.5	44	35.3	41	32.3	21.5	15.1
1150	61.9	-	86	-	83	-	25	-	22	-	39	-	36	-	20.6	-

* EN 50288-4-1 (2004) / IEC 61156-5 (2002)

Configuring multiple single elements can result in attenuation values that are up to 3% higher and frequency-selective reflections in the case of multi-types.

Electrical characteristics (NF) at 20 °C

DC resistance	max.	75 Ω/km
Insulation resistance	min.	5 GΩ x km
Mutual capacitance	approx.	42 pF/m
Transfer capacitance (e)	approx.	1500 pF/km
Signal velocity (c)	approx.	0,80
Propagation delay	approx.	420 ns/100 m
Skew at 100 MHz	approx.	5 ns/100 m
Characteristic impedance	at 100 MHz	100 ± 5 Ω
Test voltage U _{eff}		1000 V
Operating voltage	max.	125 V

Thermal characteristics

for fixed installation	-20 °C up to +60 °C
for mobile operation	0 °C up to +50 °C

Chemical characteristics

Free of hazardous substances acc. to RoHS 2002/95/EG

Printing outer sheath for 4 P

LEONI MegaLine F10-115 S/F 4P H SPACE Code 34445
"VDE approval mark" "Production lot code" "Meter marking"

Colour code

wh/bu, wh/or, wh/gn, wh/bn

Certificates and approvals

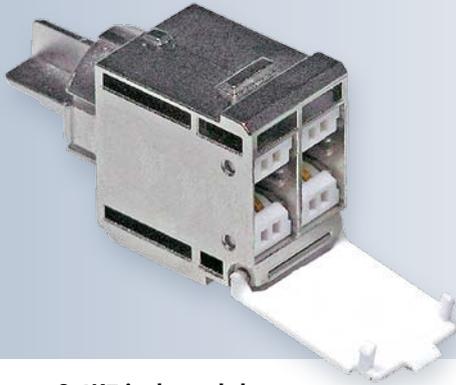
Quality mark with production control: <VDE>
Link-Performance: LEONI MegaLineNet® systems and further commercial cabling systems
Inspection certificate: acc. to DIN 55350-18-4.2.1 respectively EN 10204; in agreement to LVD (73/23/EEC): 

size	overall-Ø approx.	weight approx.	copper content	colour outer sheath	Article no.
	mm	kg/km	kg/km		
4P	7.5	67	37	● rape yellow RAL 1021	LKD 7KS7 0008 0000
2 x 4P	7.5 x 15.2	136	74	● rape yellow RAL 1021	LKD 7KS7 0009 0000
4 x 4P	19.9	365	148	● rape yellow RAL 1021	LKD 7KS7 0161 0000
6 x 4P	23.6	514	222	● rape yellow RAL 1021	LKD 7KS7 0186 0000

Package: drum 1000 m

Jack module

category 7 / 6_A / 6



VarioKeystone® 4K7 jack module



Jack module Cat. 6
black

Jack module Cat. 6_A
aqua

VarioKeystone® RJ45 jack module **Cat. 6_A**
VarioKeystone® RJ45 jack module **Cat. 6**

Description

To transmit analog and digital speech, image and data signals. The performance features correspond with Class F up to 600 MHz according to EN 50173-1.

Structure

Material	full metal; zinc die-cast, nickel-plated
Dimension	according to the assembly dimension of the RJ45 jack module and thus interchangeable
Wiring	4 pairs via cable plug jack
Connection	jack 4K7

Standards

- ISO/IEC 11801
- EN 50173-1
- EN 61076-3-104

Installation & accessories

Installed by pushing onto the cable plug.
Easy replacement using the unlocking tool.

Description

To transmit analog and digital speech, image and data signals. The performance features correspond with category 6_A respectively Cat.6 de-embedded up to 500 MHz.

Structure

Material	full metal; zinc die-cast, nickel-plated
Wiring	4 pairs via cable plug
Connection	jack RJ45

Standards

- ISO/IEC 11801
- EN 50173-1
- IEC 60603-7-51/IEC 60603-7-5

Installation & accessories

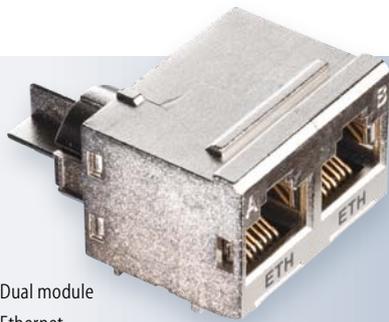
Installed by pushing onto the cable plug.
Easy replacement using the unlocking tool.

Article	Category	Article no.
VarioKeystone® 4K7 jack module	Cat. 7	LKD 9A46 0061 0000

Article	Category	Article no.
VarioKeystone® RJ45 jack module – aqua	Cat. 6 _A	LKD 9A46 0128 0000
VarioKeystone® RJ45 jack module – black	Cat. 6 de-embedded	LKD 9A46 0059 0000

Dual module RJ45

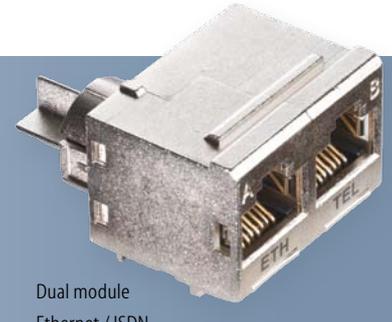
Category 6 / 3



Dual module
Ethernet



Dual module
ISDN



Dual module
Ethernet / ISDN

VarioKeystone® **Dual module Ethernet**

VarioKeystone® **Dual module ISDN**

VarioKeystone® **Dual module Ethernet / ISDN**

Description

Via the splitting of the four pairs over two RJ45 jacks, the RJ45 dual module allows reversible cable sharing.

The transmission data correspond with Cat. 6 / 3. Later retrofitting to Cat. 7 is possible at any time if the cable is fitted with Category 7 cable plugs. The zinc die-cast housing offers maximum shielding and excellent stability.

- fits all VarioKeystone® patch panels
- can be used in the VarioKeystone® triple data outlet in combination with the dummy cover

Structure

Material	full metal; zinc die-cast, nickel-plated
Wiring	2x2 pairs via cable plug
Assignment	see table
Electrical values	see table

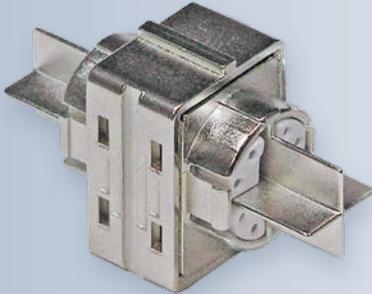
Standards

- ISO/IEC 11801
- EN 50173-1
- IEC 60603-7-5, IEC 60603-7-3

fig.	Article	Assignment	Category	Article no.
1	VarioKeystone® Dual module Ethernet	RJ45 jack A 1,2 – 3,6 RJ45 jack B 1,2 – 3,6	Cat. 6	LKD 9A46 0093 0000
2	VarioKeystone® Dual module ISDN	RJ45 jack A 3,6 – 4,5 RJ45 jack B 3,6 – 4,5	Cat. 3	LKD 9A46 0124 0000
3	VarioKeystone® Dual module Ethernet / ISDN	RJ45 jack A 1,2 – 3,6 RJ45 jack B 3,6 – 4,5	jack A Cat. 6 jack B Cat. 3	LKD 9A46 0096 0000

Link extender

Class E_A



VarioKeystone® Link extender

Description

The link extender allows an existing cable infrastructure to be extended to up to 90 m without transmission losses on the basis of the VarioKeystone® system.

Its small size allows it to be installed in the cable duct at any time afterwards too. It is necessary to connect a standard cable plug on one side and the Crossconnect plug on the other. This plug differs from the cable plug in that it has a red LSA insert. Depending on the link used, the link performance to be achieved is suitable for Class Class E_A.

The extender is made of die-cast zinc. Each pair is continued with separate shielding, so the cable transmission data are only affected minimally. For this reason it is possible to go on transferring 10 Gigabit Ethernet via an extended link.

Structure

Material	full metal; zinc die-cast, nickel-plated
Shielding	large-surface 360° shield connection
Electrical values	Class E _A

Standards

- ISO/IEC 11801
- EN 50173-1

Article	Class	Article no.
VarioKeystone® Link extender (1 piece)	Class E _A	LKD 9A46 0062 0000

Patch field telephony

1 RU, 25 ports



VarioKeystone® Patch field telephony

Description

Patch field for transmitting analogue and digital telephone signals. With integrated cable management for easy and safe installation.

Structure

Housing	sheet steel
Colour	light grey, RAL 7035
Marking	1–25
Holder	25 x 8 IDC contacts for max. 100 DA (AWG24 – AWG23)
Strain relief	via cable clips
Cable entry	over the entire width of the cable management rail
Structure	25 ports (TERA 4P)
Panel	44 mm x 485 mm x 100 mm (h x w x d)

Dimensions

19" / 1 RU
100 mm mounting depth

Article	Article no.
VarioKeystone® Patch field telephony (1 piece)	LKD 9A62 0002 0000

Patch field 19"

fixed / telescopic



VarioKeystone® Patch field 19" fixed 6x4

Description

The patch field can be equipped with up to 24 jack modules. For holding different module types simultaneously (RJ45, 4K7, dual module).

As a result of its simple structure, this patch field provides a reasonably priced alternative to telescopic patch fields.

Structure

Housing	full metal housing
Colour	light grey, RAL 7035
Holder	for 24 jack modules max.: 4K7 / RJ45 4 jack modules can be mounted per window (or two dual modules)
Strain relief	via cable clips
Earthing	via a screw attachment on the back of the panel
Cable entry	over the entire width of the cable management rail

Dimensions

19" / 1 RU
100 mm mounting depth

Article	Article no.
VarioKeystone® Patch field fixed 6x4 (1 piece)	LKD 9A67 0006 0000



VarioKeystone® Patch field 19" telescopic 6x4

Description

The patch field can be equipped with up to 24 jack modules. For holding different module types simultaneously (RJ45, 4K7, dual module).

In the extended state, the drawer can be inclined downwards, thus making the various jack modules easy to change. Easy opening and closing of the drawer is ensured by an unlosable screw connection accessible on the front.

Structure

Housing	full metal housing
Colour	light grey, RAL 7035
Holder	for 24 jack modules max.: 4K7 / RJ45 4 jack modules can be mounted per window (or two dual modules)
Strain relief	via cable clips
Earthing	via a riveted cable shoe on the left-hand and right-hand side of the drawer
Cable entry	over the entire width of the cable management rail

Dimensions

19" / 1 RU
100 mm mounting depth

Article	Article no.
VarioKeystone® Patch field telescopic 6x4 (1 piece)	LKD 9A67 0000 0000

Modular patch panels 19" / 1 RU

for VarioKeystone® single or dual modules

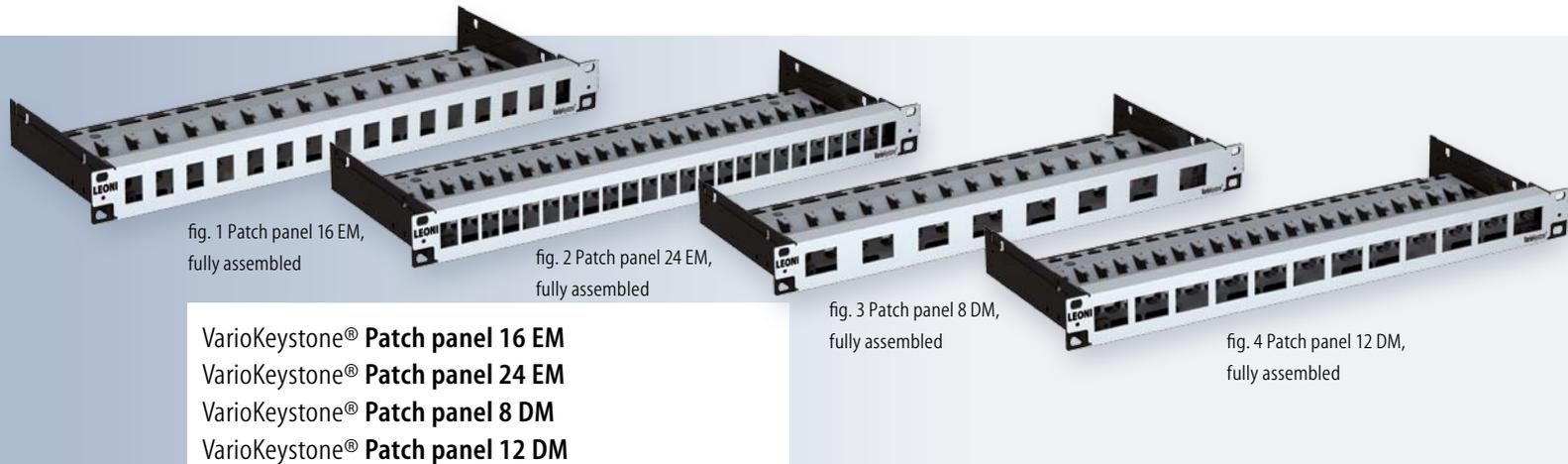


fig. 1 Patch panel 16 EM,
fully assembled

fig. 2 Patch panel 24 EM,
fully assembled

fig. 3 Patch panel 8 DM,
fully assembled

fig. 4 Patch panel 12 DM,
fully assembled

VarioKeystone® Patch panel 16 EM
VarioKeystone® Patch panel 24 EM
VarioKeystone® Patch panel 8 DM
VarioKeystone® Patch panel 12 DM

Description

Modular three-part universal patch panel for 16 or 24 VarioKeystone® ports for installing single modules (SM) or dual modules (DM). Modules can be hot-swapped.

- allows the integration of an electronic cable management system
- can be replaced with single/dual modules by changing the stainless steel front panel

Patch panel set

consisting of base carrier, cable socket carrier, stainless steel front panel

Base carrier

- for holding a cable socket carrier
- is pre-installed in the cabinet or rack

Cable socket carrier

- unit for cable plugs
- installed outside the cabinet or base carrier
- is inserted into the back of the base carrier following installation
- secured using slide latch
- potential equalisation by means of two threaded bolts
M5 and/or two earth lugs

Stainless steel front cover (depending on design)

Patch panel 16 EM	Cut-outs for 16 single modules
Patch panel 24 EM	Cut-outs for 24 single modules
Patch panel 8 DM	Cut-outs for 8 dual modules
Patch panel 12 DM	Cut-outs for 12 dual modules

Structure

Strain relief	via cable clips
Cable entry	over the entire width of the cable management rail
Dimensions	44 mm x 483 mm x 163 mm (h x w x d)

Accessories (must be ordered separately)

Single modules: RJ45 Cat. 6 / Cat. 6A, 4K7 (TERA)
dual modules: ethernet/ethernet, ethernet/telephony, telephony/telephony

fig.	Article	Holder	Ports	Article no.
1	VarioKeystone® Patch panel 16 EM	for installing 16 single modules: RJ45 Cat. 6 / Cat. 6A / 4K7 (TERA)	for 16 VarioKeystone® ports	LKD 9A67 0019 0000
2	VarioKeystone® Patch panel 24 EM	for installing 24 single modules: RJ45 Cat. 6 / Cat. 6A / 4K7 (TERA)	for 24 VarioKeystone® ports	LKD 9A67 0011 0000
3	VarioKeystone® Patch panel 8 DM	for installing 8 dual modules: ethernet/ethernet, ethernet/telephony, telephony/telephony	for 16 VarioKeystone® ports	LKD 9A67 0022 0000
4	VarioKeystone® Patch panel 12 DM	for installing 12 dual modules: ethernet/ethernet, ethernet/telephony, telephony/telephony	for 24 VarioKeystone® ports	LKD 9A67 0020 0000

Modular patch panels 19" / 1 RU

for VarioKeystone® link extender

Patch panel 24 EX,
fully assembled

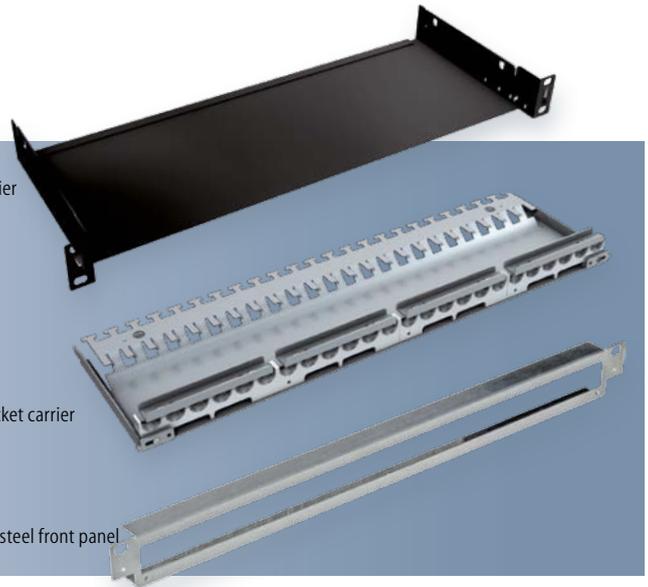


VarioKeystone® Patch panel 16 EX
VarioKeystone® Patch panel 24 EX

Base carrier

Cable socket carrier

Stainless steel front panel



Description

Modular three-part universal patch panel for 16 or 24 VarioKeystone® ports for holding the VarioKeystone® link extender (EX).

- allows the integration of an electronic cable management system
- can be replaced with single/dual modules by changing the stainless steel front panel

Patch panel set

consisting of base carrier, cable socket carrier, stainless steel front panel

Base carrier

- for holding a cable socket carrier
- is pre-installed in the cabinet or rack

Cable socket carrier

- unit for holding the cable plugs
- installed outside the cabinet or base carrier
- is inserted into the back of the base carrier following complete assembly
- secured using slide latch
- potential equalisation by means of two threaded bolts M5 and/or two earth lugs

Stainless steel front panel

Patch panel 16 EX	Cut-outs for 16 link extenders
Patch panel 24 EX	Cut-outs for 24 link extenders

Structure

Strain relief	via cable clips
Cable entry	over the entire width of the cable management rail
Dimensions	44 mm x 483 mm x 163 mm (h x w x d)

Accessories (see page 16)

VarioKeystone® Link extender (must be ordered separately)

Article	Holder	Ports	Article no.
VarioKeystone® Patch panel 16 EX	for installing extension modules: VarioKeystone® Link extender	for 16 VarioKeystone® ports	LKD 9A67 0023 0000
VarioKeystone® Patch panel 24 EX	for installing extension modules: VarioKeystone® Link extender	for 24 VarioKeystone® ports	LKD 9A67 0021 0000

6-port module housing



VarioKeystone® 6-port module housing

Description

Suitable for use as a consolidation point and a mounting set also allows it to be used on top hat rails in electrical distribution.

Module carrier

Structure	sheet steel, galvanized
Cover	sheet steel, powder-coated Light grey, RAL 7035
Holder	for up to 6 jack modules (RJ45, 4K7 and dual modules)
Earthing	earthing bolt M4
Strain relief	6 eyes for strain relief via cable clips
Fixing	2 x push-down nut M4 in the bottom

Cover

Structure	sheet steel, powder-coated
Colour	light grey, RAL 7035,
Marking	connections numbered 1–6

Assembly set for top hat rail

consisting of 2 DIN rail springs and 2 M4 screws

Article	Article no.
VarioKeystone® 6-port module housing (1 piece)	LKD 9A67 0007 0000
VarioKeystone® Cover (1 piece)	LKD 9A67 0008 0000
VarioKeystone® Assembly set for top hat rail	LKD 9A67 0009 0000

DIN rail housing

2-fold, with double DIN rail housing clip



VarioKeystone® DIN rail housing 2-fold

Description

With double DIN rail housing clip – suitable for up to 2 VarioKeystone® jack modules.

It is mounted by snapping it onto existing DIN rail housing.

The metal housing is particularly suitable for industrial environments (IP20).

Structure

Material	sheet steel, powder-coated
Colour	light grey, RAL 7035
Holder	for up to 2 x VarioKeystone® jack modules

Dimensions

85 mm x 35 mm x 95 mm (h x w x d)

Article	Article no.
VarioKeystone® DIN rail housing 2-fold (1 piece)	LKD 9A46 0097 0000

Industrial outlet IP44

for wall mounting



VarioKeystone® Industrial outlet IP44

Description

Suitable for up to 2 VarioKeystone® jack modules.

The robust plastic housing is suitable for use in harsh individual environments (IP44). The wall housing is lockable and prevents unauthorised use of the data network.

Structure

Structure	plastic
Colour	light grey, RAL 7035
Housing	lockable, unequipped
Fixing	with 4 screws

Dimensions

120 mm x 120 mm x 90 mm (h x w x d)

Article	Article no.
VarioKeystone® Industrial outlet IP44 (1 piece)	LKD 9A46 0111 0000

Industrial outlet IP65/67

Han® 3 A, equipped with VarioKeystone® RJ45



VarioKeystone® Industrial outlet IP65/67

Description

Extremely robust housing, which means it can also be used near welding robots.

Cat. 6 performance (according to "de-embedded" test method, upwardly compatible to Cat. "6_A", Cat. 7 und Cat. "7_A").

Structure

Interface	Han® 3 A interface, lockable
Housing	sheet steel, powder-coated
Colour	light grey, RAL 7035
Protection class	IP65/IP67

Connections

- Includes 2 VarioKeystone® Cat. 7 cable plugs and RJ45 Cat. 6 jack modules
- Rapid connection method for the horizontal cable via VarioKeystone® modules
- Office patch cable can be inserted (for test purposes etc.)

Article	Article no.
VarioKeystone® Industrial outlet IP65/67	LKD 9ZE9 7004 0000

Outlets

for VarioKeystone® jack modules



fig. 1
outlet 50 x 50 / single



fig. 2
outlet 50 x 50 / dual



fig. 3
outlet 50 x 50 / triple

VarioLine® outlet 50 x 50

Description

Connection sockets for installation in commercially available 50 x 50 mm cover frames for equipping with VarioKeystone® jack modules.

Housing

Housing material	full metal; zinc die-cast, nickel-plated
Colours	pure white, RAL 9010 or oyster white, RAL 1013
Marking	via marking field

Assembly dimension

50 mm x 50 mm (h x w), downward inclination of 30°

Accessories (optional)

VarioKeystone® cover frame, single and dual
40 mm surface-mounted housing incl. 1-fold flush-mounted cover frame
Spacer frame for 1-fold surface-mounted housing, 10 mm

fig.	Article	Colour	Article no.:	Colour	Article no.:
1	VarioKeystone® outlet 50 x 50 / single (1 piece)	● oyster white, RAL 1013	LKD 9A46 0104 0000	○ pure white, RAL 9010	LKD 9A46 0107 0000
2	VarioKeystone® outlet 50 x 50 / dual (1 piece)		LKD 9A46 0105 0000		LKD 9A46 0108 0000
3	VarioKeystone® outlet 50 x 50 / triple (1 piece)		LKD 9A46 0106 0000		LKD 9A46 0109 0000
–	1-fold flush-mounted cover frame (1 piece)	● oyster white, RAL 1013	LKD 9A41 0002 0000	○ pure white, RAL 9010	LKD 9A41 0003 0000
–	2-fold flush-mounted cover frame (1 piece)		LKD 9A41 0004 0000		LKD 9A41 0005 0000
–	40 mm surface-mounted housing incl. 1-fold flush-mounted cover frame (1 piece)		LKD 9A46 0087 0000		LKD 9A46 0086 0000
–	Spacer frame for 1-fold 10 mm surface-mounted housing (1 piece)		LKD 9A46 0089 0000		LKD 9A46 0088 0000

Copper patch cord TERA™

shielded, with grey moulded bending protection sleeve



MegaLine® Patch TERA

Description

The patch and work area cords are equipped with TERA™ or RJ45 plugs. The RJ45 plug has a moulded bending protection sleeve.

All cable types used in the patch cord have been adapted to the relevant applications. The used cable type F10-120 S/F flex is designed for a bandwidth of up to 1000 MHz in the case of 4-pair assignment.

Applications	10BASE-T / 100BASE-T2	Token-Ring	ISDN	Telephone connection
Patch cord				
Wiring	TERA™ 2 pairs on RJ45	TERA™ 2 pairs on RJ45	TERA™ 2 pairs on RJ45	TERA™ 1 pair on RJ45

Length	Article	Article no.			Article	Article no.
m		10BASE-T / 100BASE-T2	Token-Ring	ISDN		Telephone connection
1.0	MegaLine® Patch TERA™	LKD 9A04 0000 0000	LKD 9A04 0006 0000	LKD 9A04 0012 0000	MegaLine® Patch TERA™	LKD 9A04 0022 0000
2.0		LKD 9A04 0001 0000	LKD 9A04 0007 0000	LKD 9A04 0013 0000		LKD 9A04 0023 0000
3.0	2 pairs on RJ45* (F10-120 S/F flex)	LKD 9A04 0002 0000	LKD 9A04 0008 0000	LKD 9A04 0014 0000	1 pair on RJ45* (326 flex)	LKD 9A04 0024 0000
5.0		LKD 9A04 0003 0000	LKD 9A04 0009 0000	LKD 9A04 0015 0000		LKD 9A04 0055 0000

TERA™ is a registered trademark of the Siemon company

Copper patch cord TERA™

shielded, with grey moulded bending protection sleeve



MegaLine® Patch TERA

Description

The patch and work area cords are equipped with TERA™ or RJ45 plugs. The RJ45 plug has a moulded bending protection sleeve.

All cable types used in the patch cord have been adapted to the relevant applications. The used cable type F10-120 S/F flex is designed for a bandwidth of up to 1000 MHz in the case of 4-pair assignment.

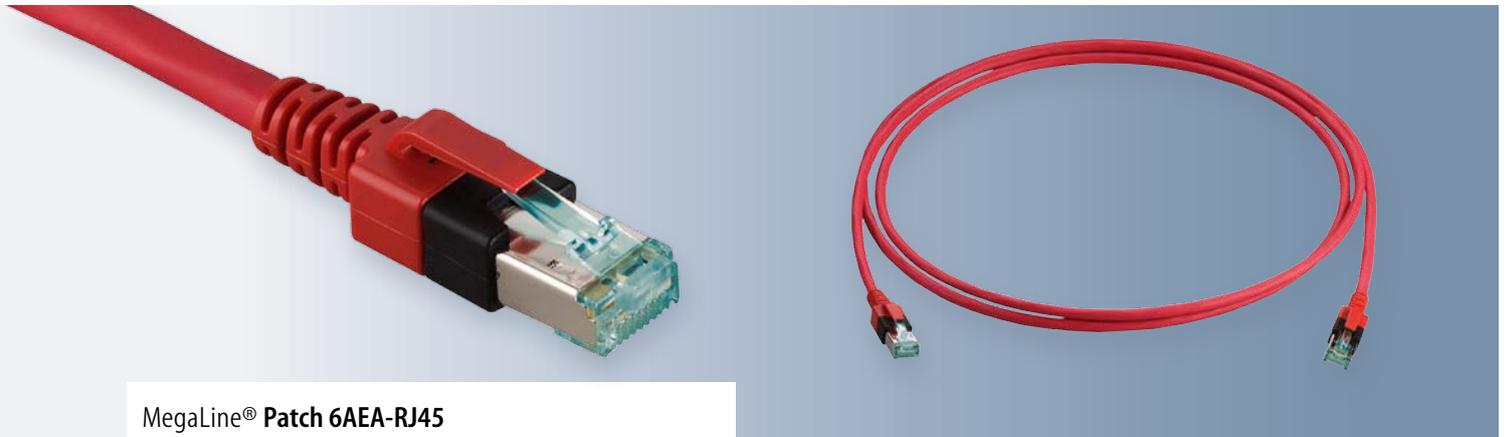
Applications	Telephone connection cable	Any application	Connecting cable 2 pairs	Connecting cable 4 pairs
Patch cord				
Wiring	TERA™ 1 pair on RJ11	TERA™ 4 pairs on RJ45	TERA™ on TERA™	TERA™ on TERA™

Length	Article	Article no.	Article	Article	Article no.	Article no.	
m		Telephone connection cable		Any application		Connecting cable 2 pairs	Connecting cable 4 pairs
1.0	MegaLine® Patch TERA™	LKD 9A04 0017 0000	MegaLine® Patch TERA™	LKD 9A04 0039 0000	MegaLine® Patch TERA™ on TERA™ (F10-120 S/F flex)	LKD 9A04 0026 0000	LKD 9A04 0032 0000
2.0		LKD 9A04 0018 0000		LKD 9A04 0040 0000		LKD 9A04 0027 0000	LKD 9A04 0033 0000
3.0	1 pair on RJ11* (326 flex)	LKD 9A04 0019 0000	4 pairs on RJ45* (F10-120 S/F flex)	LKD 9A04 0041 0000		LKD 9A04 0028 0000	LKD 9A04 0034 0000
5.0		LKD 9A04 0045 0000		LKD 9A04 0042 0000		LKD 9A04 0029 0000	LKD 9A04 0035 0000

TERA™ is a registered trademark of the Siemon company

Copper patch cord RJ45 / RJ45 Cat. 6_A / 500 MHz

shielded, Cat. 6_A, class E_A, with coloured moulded bending protection sleeve



MegaLine® Patch 6AEA-RJ45

Description

The cable type used is suitable for transmission rates of up to 500 MHz. The pair shielding and the high-coverage copper braid as overall shield ensure excellent NEXT and impedance values.

The patch and work area cords are equipped with a shielded RJ45 plug and bending protection at both ends.

Applications

IEEE 802.3, 10Base-T, 100Base-T, 1000Base-T, 10GBase-T suitable,
IEEE 802.5 16MB, ISDN, FDDI, ATM

Characteristics / Structure

EMC	combined shield (PiMf + braid)
RJ45 plug	EN 60603-7
Electrical values	Cat. 6 _A , class E _A
Assignment	1:1
Standards	ISO/IEC 11801/ EN50173

Fire behaviour

Smoke density	IEC 61034
Halogen acid gas emission	IEC 60754-2
Flame retardance	IEC 60332-1-2

Accessories

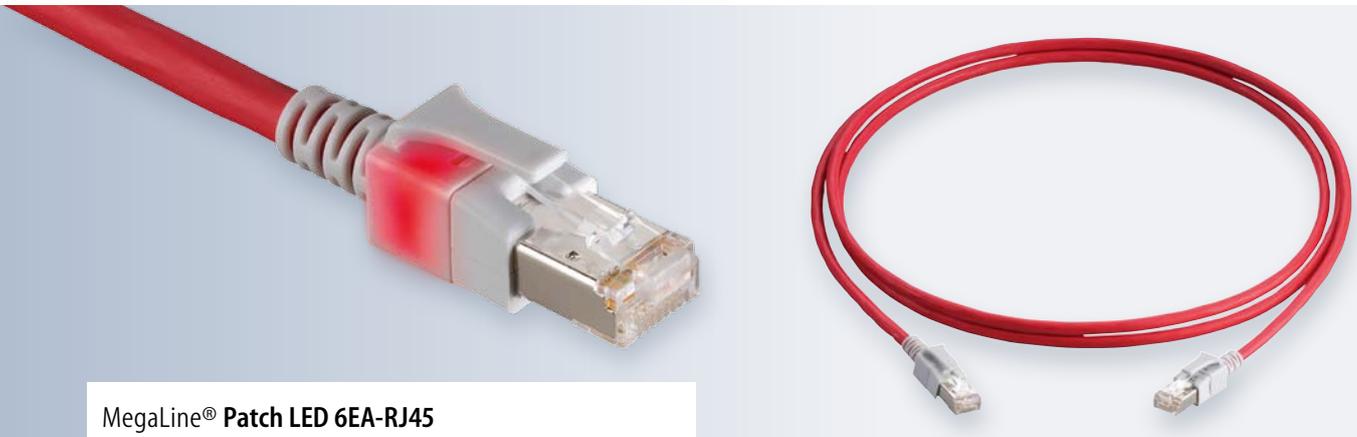
Description see page 27

MegaLine® Patch RJ45 Marking ring
in different colours for visual coding of the patch cords

Length	Article	Article no.				
		grey (LSOH)	blue (LSOH)	green (LSOH)	yellow (LSOH)	red (LSOH)
m						
0.5	MegaLine® Patch 6AEA-RJ45	LKD 9A02 3020 0000	LKD 9A02 3030 0000	LKD 9A02 3040 0000	LKD 9A02 3050 0000	LKD 9A02 3060 0000
1.0		LKD 9A02 3021 0000	LKD 9A02 3031 0000	LKD 9A02 3041 0000	LKD 9A02 3051 0000	LKD 9A02 3061 0000
1.5		LKD 9A02 3022 0000	LKD 9A02 3032 0000	LKD 9A02 3042 0000	LKD 9A02 3052 0000	LKD 9A02 3062 0000
2.0		LKD 9A02 3023 0000	LKD 9A02 3033 0000	LKD 9A02 3043 0000	LKD 9A02 3053 0000	LKD 9A02 3063 0000
2.5		LKD 9A02 3024 0000	LKD 9A02 3034 0000	LKD 9A02 3044 0000	LKD 9A02 3054 0000	LKD 9A02 3064 0000
3.0		LKD 9A02 3025 0000	LKD 9A02 3035 0000	LKD 9A02 3045 0000	LKD 9A02 3055 0000	LKD 9A02 3065 0000
4.0		LKD 9A02 3026 0000	LKD 9A02 3036 0000	LKD 9A02 3046 0000	LKD 9A02 3056 0000	LKD 9A02 3066 0000
5.0		LKD 9A02 3027 0000	LKD 9A02 3037 0000	LKD 9A02 3047 0000	LKD 9A02 3057 0000	LKD 9A02 3067 0000
7.5		LKD 9A02 3028 0000	LKD 9A02 3038 0000	LKD 9A02 3048 0000	LKD 9A02 3058 0000	LKD 9A02 3068 0000
10.0		LKD 9A02 3029 0000	LKD 9A02 3039 0000	LKD 9A02 3049 0000	LKD 9A02 3059 0000	LKD 9A02 3069 0000

LED copper patch cord RJ45 / RJ45 Cat. 6/500 MHz

shielded, Cat. 6, Class E_A, with LED light signal in the connector



MegaLine® Patch LED 6EA-RJ45

Description

Specially for use in offices, industrial plants and data centres. The connector contains one red LED. The light signal is activated using a detector that is placed on a contact pair on the back of the connector.

Three different signal types can be selected by repeatedly pressing the detector button:

→ **continuous light / slow flashing / fast flashing**

Das andere Ende des LED-Patchkabels reagiert dann mit dem identischen Lichtsignal und lässt sich so eindeutig identifizieren.

Applications

For use in structured building cabling systems as per ISO/IEC 11801 and EN 50173-x. Excellently suited to all applications up to Class E_A (video, data, telephony) >10 GbE as per IEEE 802.3, cable sharing, VoIP, PoE

Structure

Cable type	LEONI MegaLine® F6-90 S/FTP
Outer sheath	halogen free, flame retardant compound
Plug	RJ45 shielded, IEC 60603-7, grey
Strain relief	moulded connector, with separate grommet

Leistungsmerkmale

Bandwidth	500 MHz max. (class E _A)
Electrical values	Cat. 6 acc. to ISO/IEC 11801, EN 50173-x, IEC 60603-7-5

Fire behaviour

Smoke density	IEC 61034
Halogen acid gas emission	IEC 60754-2
Flame retardance	IEC 60332-1-2
Calorific value	0.33 MJ/m (approx.)

Length m	Article	Article no.					
		grey (PVC)	blue (PVC)	green (PVC)	yellow (PVC)	red (PVC)	red (PVC) crossover
0.5	MegaLine® Patch LED 6EA-RJ45	LKD 9A09 0100 0000	LKD 9A09 0110 0000	LKD 9A09 0140 0000	LKD 9A09 0130 0000	LKD 9A09 0120 0000	LKD 9A09 0160 0000
1.0		LKD 9A09 0101 0000	LKD 9A09 0111 0000	LKD 9A09 0141 0000	LKD 9A09 0131 0000	LKD 9A09 0121 0000	LKD 9A09 0161 0000
1.5		LKD 9A09 0102 0000	LKD 9A09 0112 0000	LKD 9A09 0142 0000	LKD 9A09 0132 0000	LKD 9A09 0122 0000	LKD 9A09 0162 0000
2.0		LKD 9A09 0103 0000	LKD 9A09 0113 0000	LKD 9A09 0143 0000	LKD 9A09 0133 0000	LKD 9A09 0123 0000	LKD 9A09 0163 0000
2.5		LKD 9A09 0104 0000	LKD 9A09 0114 0000	LKD 9A09 0144 0000	LKD 9A09 0134 0000	LKD 9A09 0124 0000	LKD 9A09 0164 0000
3.0		LKD 9A09 0105 0000	LKD 9A09 0115 0000	LKD 9A09 0145 0000	LKD 9A09 0135 0000	LKD 9A09 0125 0000	LKD 9A09 0165 0000
4.0		LKD 9A09 0106 0000	LKD 9A09 0116 0000	LKD 9A09 0146 0000	LKD 9A09 0136 0000	LKD 9A09 0126 0000	LKD 9A09 0166 0000
5.0		LKD 9A09 0107 0000	LKD 9A09 0117 0000	LKD 9A09 0147 0000	LKD 9A09 0137 0000	LKD 9A09 0127 0000	LKD 9A09 0167 0000
7.5		LKD 9A09 0108 0000	LKD 9A09 0118 0000	LKD 9A09 0148 0000	LKD 9A09 0138 0000	LKD 9A09 0128 0000	LKD 9A09 0168 0000
10.0		LKD 9A09 0109 0000	LKD 9A09 0119 0000	LKD 9A09 0149 0000	LKD 9A09 0139 0000	LKD 9A09 0129 0000	LKD 9A09 0169 0000

further lengths on request available

Accessories

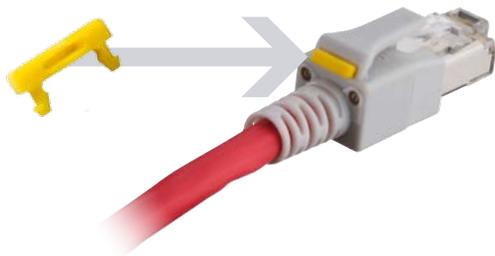
for LED copper patch cords



MegaLine® Patch LED marking clip
MegaLine® Patch LED detector

Accessories

Marking clip:
for visual coding of the LED patch cords.
Can be installed by simply snapping into the RJ45 connectors.



Detector:
For feeding the light signal for identifying the patch cord.

Batteries incl.:
4 x LR41

Article	Colour	Article no.
MegaLine® Patch LED marking clip (100 pieces)	● rape yellow RAL 1021	LKD 9A09 0180 0000
	● flame red RAL 3000	LKD 9A09 0181 0000
	● sky blue RAL 5015	LKD 9A09 0182 0000
	● turquoise green RAL 6016	LKD 9A09 0183 0000
MegaLine® Patch LED detector (1 piece)		LKD 9A09 0190 0000

Accessories

for RJ45 copper patch cords



MegaLine® Patch RJ45 marking ring

Accessories

Marking ring for visual coding of the patch cords.
Can be installed by simply pushing on.

Compatibility

MegaLine® Patch 5D-RJ45
MegaLine® Patch 6E-RJ45U
MegaLine® Patch 6EA-RJ45
MegaLine® Patch 6AEA-RJ45
MegaLine® Patch Industry 6EA-RJ45

Article	Colour	Article no.
MegaLine® Patch RJ45 marking ring (100 pieces)	● light grey RAL 7035	LKD 9AW1 6031 0000
	● turquoise green RAL 6016	LKD 9AW1 6032 0000
	● sky blue RAL 5015	LKD 9AW1 6033 0000
	● flame red RAL 3000	LKD 9AW1 6034 0000
	● pastel orange RAL 2003	LKD 9AW1 6035 0000
	● rape yellow RAL 1021	LKD 9AW1 6036 0000
	● jet black RAL 9005	LKD 9AW1 6037 0000

VarioKeystone® accessories



VarioKeystone®
Dust protection cover

Description

- for module/link extender or
- for cable plugs

Article	Version	Article no.:
VarioKeystone® Dust protection cover	for module/link extender (50 pieces)	LKD 9A46 0119 0000
	for cable plugs (1 piece)	LKD 9A46 0036 0000

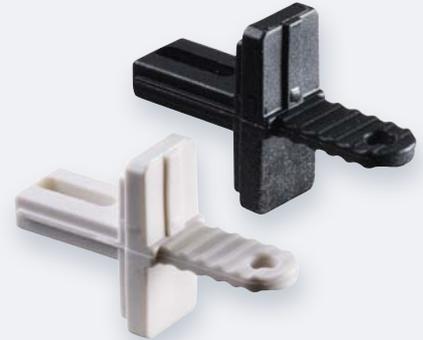


VarioKeystone® **Blind cover**

Description

- for wall outlets
- white or black

Article	Article no.:
VarioKeystone® Blind cover pure white, RAL 9010 (50 pieces)	LKD 9A46 0034 0000
VarioKeystone® Blind cover jet black, RAL 9005 (50 pieces)	LKD 9A46 0083 0000



VarioKeystone® **Dust protection plug**

Description

- for 4K7 modules
- white or black

Article	Article no.:
VarioKeystone® Dust protection plug pure white, RAL 9010 (50 pieces)	LKD 9A46 0073 0000
VarioKeystone® Dust protection plug jet black, RAL 9005 (50 pieces)	LKD 9A46 0084 0000

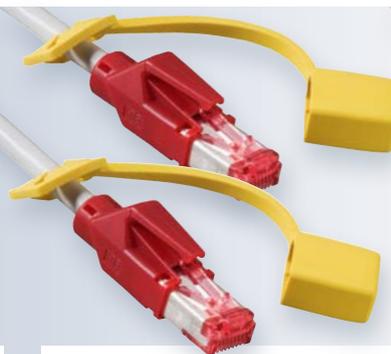


VarioKeystone® **Measuring cable set
TERA – TERA**

Description

- TERA –TERA
- length 2 x 3 m

Article	Article no.:
VarioKeystone® Measuring cable set TERA – TERA (2 pieces)	LKD 9A04 0166 0000



VarioKeystone® **Measuring cable set
RJ45 – RJ45**

Description

- RJ45
- length 2 x 3 m

Article	Article no.:
VarioKeystone® Measuring cable set RJ45 – RJ45 (2 pieces)	LKD 9AW3 0020 0000



VarioKeystone® **Measuring cable set
TERA – Crossconnect**

Description

- TERA – crossconnect
- length 2 x 3 m

Article	Article no.:
VarioKeystone® Measuring cable set TERA – TERA (1 piece) TERA – crossconnect (1 piece)	LKD 9AW3 0023 0000

VarioKeystone® Sample case

Quantity	Content
1	VarioKeystone® Trunk F10-115 0.19 m
1	VarioKeystone® Cable plug Cat. 7 (9 mm)
1	VarioKeystone® Cable plug Cat. 7 (10 mm)
1	Contact block/separator for cable plug Cat. 7
1	Contact block/separator for cable plug Cat. 6 _A
1	VarioKeystone® RJ45 module Cat. 6 _A
1	VarioKeystone® RJ45 module Cat. 6
1	VarioKeystone® Dual module Ethernet/Ethernet
1	VarioKeystone® 4K7 module
1	Link extender
1	Dust protection cover
1	Unlocking tool
1	Patch cord TERA 1P (open end)

Article	Article no.
VarioKeystone® Sample case (1 piece)	LKD 9AW3 0017 0000



Tool bag

Quantity	Inhalt
1	Cable shears
1	Edge free cutter
1	Universal cutter
1	Stripper AWG22
1	Stripper AWG23
1	VarioKeystone® Parallel press tongs
1	VarioKeystone® Unlocking tool
1	ELine™ Assembly tool
1	IDC assembly tool
1	ELine 500® plus parallel press tongs
1	Foil stripping tool
1	Insulating tape

Article	Article no.
Tool bag (1 piece)	LKD 9AW1 6021 0000



Tools



VarioKeystone®
Parallel press tongs

Article	Article no.:
VarioKeystone® Parallel press tongs (1 piece)	LKD 9AW1 6007 0000



VarioKeystone®
UTP/FTP/foil stripping tool

Article	Article no.:
VarioKeystone® UTP/FTP/foil stripping tool (1 piece)	LKD 9AW1 6008 0000



VarioKeystone®
Unlocking tool, 2-parts

Article	Article no.:
VarioKeystone® Unlocking tool, 2-parts (1 piece)	LKD 9AW1 6039 0000



VarioKeystone® **Assembly set 1**

Description

- With 100 of each:
shrink-fit tube, silver wire, copper foil

Article	Article no.:
VarioKeystone® Assembly set 1 (1 piece)	LKD 9AW1 6020 0000



VarioKeystone® **Assembly set 2**

Description

- With 100 of each:
shrink-fit tube, silver wire

Article	Article no.:
VarioKeystone® Assembly set 2 (1 piece)	LKD 9AW1 6023 0000



VarioKeystone® **Copper tape**

Description

- Length 33 m

Article	Article no.:
VarioKeystone® Copper tape (Length 33 m)	LKD 9AW1 6011 0000

Quality and environmental management

LEONI – The Quality Connection

VarioKeystone®

Performance and quality of the components and links certified by the renowned test laboratory GHMT.

LEONI quality management

One of the most important factors in the success of LEONI was and remains the uniformly high quality of its products over the decades. We pay particularly close attention to this through precise planning, testing and documentation. Quality management for the wire and cable types produced by LEONI is certified worldwide in accordance with ISO 9001:2000.



LEONI environmental management

New environmental directives have been in force in the European Union (EU) since 2006. EU directive 2002/96/EG WEEE (Waste Electrical and Electronic Equipment) regulates the disposal of electrical and electronic equipment and components.

EU directive 2002/95/EG RoHS (Restriction of the Use of certain Hazardous Substances in electrical and electronic Equipment) restricts the use of certain hazardous substances in electrical and electronic equipment and components.



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