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# ETHERLINE®

Data communication systems  
for ETHERNET-Technology



**Accessories for INDUSTRIAL networking**

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New

**Components for building networking**

## LAN cables for structured building cabling

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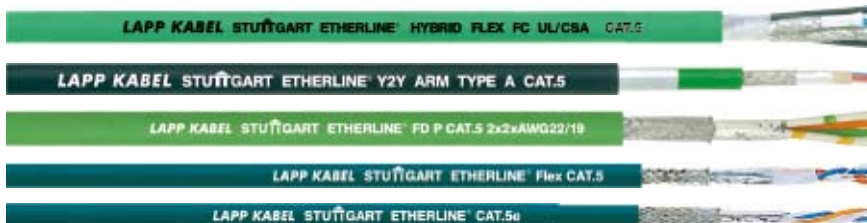
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## ETHERLINE® 2-pairs CAT.5/5e



### Info

- Industrial Ethernet Cable
- CAT.5/5e



### Benefits

- ETHERNET with the globally accepted TCP/IP protocol will most probably either provide a connection to the established "Fieldbus World" or the Sensor-Actuator level. Either via a gateway to the "Fieldbus World" or straight through downwards to the lowest communication level. The transmission rates are presently either 10 Mbit/s (ETHERNET) or at least 100 Mbit/s = LAN CAT.5 requirements (Fast Ethernet = Industrial Ethernet) respectively CAT.6a or CAT.7 requirements.
- With regard to transmission rates, the "ETHERNET world" is cut into:
- ETHERNET = 10 Mbit/s
- FAST ETHERNET = 100 Mbit/s
- GIGABIT ETHERNET = 1000 Mbit/s

### Product features

- In order to reach 100 m link length (like in the office area acc. to ISO 11801) for flexible and highly flexible cable types a cross section of AWG22 is necessary.
- All ETHERLINE® cables with a cross section of AWG22 are PROFINET® compliant.

### Approvals (Norm references)



### Design

- Cables with conductor cross-section
- AWG24/AWG26:
- Colour: water blue (RAL 5021)
- AWG22:
- Colour: yellow green (RAL 6018)

### Technical data

- Info**  
Further technical data:  
see Data Sheet
- Characteristic impedance**  
100 Ohm at 1 - 100 MHz

Part number	Article designation	Number of pairs and dimensions	Outer diameter in mm max.	Copper index kg/km	Weight kg/km approx.
<b>Conductor AWG24 (outer sheath colour marine blue RAL 5021)</b>					
2170280	ETHERLINE® H CAT.5e	2 x 2 x AWG24/1	5.8	22.0	45.0
2170281	ETHERLINE® P CAT.5e	2 x 2 x AWG24/1	5.8	22.0	53.0
<b>Conductor AWG22 = PROFINET-conform (outer sheath colour yellow-green RAL 6018)</b>					
<b>For fixed installation (solid conductor) = type A</b>					
2170891	ETHERLINE® Y UL/CSA CAT.5e	2 x 2 x AWG22/1	6.4	30.4	56.0
2170893	ETHERLINE® Y FC UL/CSA (CMG) CAT.5	2 x 2 x AWG22/1	6.5	30.4	70.0
2170494	ETHERLINE® YY UL/CSA (CMG) CAT.5e	2 x 2 x AWG22/1	7.8	30.4	62.0
<b>For fixed installation, outdoor installation/direct burial = type A</b>					
2170496	ETHERLINE® Y2Y ARM Type A CAT.5	2 x 2 x AWG22/1	9.3	30.4	124.0
<b>For flexible application (7 wire stranded conductor) = Type B</b>					
2170283	ETHERLINE® H Flex CAT.5e	2 x 2 x AWG26/7	5.4	19.0	43.0
2170284	ETHERLINE® P Flex CAT.5e	2 x 2 x AWG26/7	5.8	19.0	45.0
<b>For highly flexible application / 19 wires</b>					
<b>Only for patchcords (max. 60 m)</b>					
2170289	ETHERLINE® FD P CAT.5e	2 x 2 x AWG26/19	6.1	20.0	48.0
<b>Conductor AWG22 = PROFINET-conform</b>					
<b>For flexible application (7 wire stranded conductor) = Type B</b>					
2170886	ETHERLINE® Y FLEX FC UL/CSA (CMG) CAT.5	2 x 2 x AWG22/7	6.5	31.3	67.0
2170887	ETHERLINE® FRNC HYBRID FLEX CAT.5 UL (AWM)	2x2xAWG22/7 + 4x1.5	10.3	94.2	153.0
<b>For highly flexible application (7 wire stranded conductor) = Type C</b>					
2170894	ETHERLINE® FD P FC UL/CSA (CMX) CAT.5	2 x 2 x AWG22/7	6.5	31.3	63.0

Copper price basis: EUR 150 / 100 kg; For utilization and definition of 'Metal price basis' and 'Metal index' see Appendix T17

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: Coil ≤ 30 kg and ≤ 250 m, otherwise drum

Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)

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### Accessories

- Connector RJ45 CAT.5 Hirose TM11 see page 407
- Connector RJ45 CAT.5 Stewart SS37 see page 407
- Field-Terminable Connector RJ45 CAT.5e FM45 see page 407
- Multipurpose shears A and B see page 902
- DATA STRIP stripping tool see page 909

## ETHERLINE® TORSION UL (AWM) CAT. 5

LAPP KABEL STUTTGART ETHERLINE® TORSION UL (AWM) CAT.5

## Benefits

- This cable is an important supplement to the range of ETHERLINE® Industrial Ethernet cables.
- Cable suitable for torsion stress. Tested with more than 1 million bending cycles and a right / left movement of 180° on 1 meter.

## Application range

- Many applications with Industrial Ethernet, e. g. PROFINET, i.e. fixed installation, flexible and highly flexible use as well as TORSION.

## Product features

- Flame retardant according to IEC 60332-1-2
- Outer sheath high abrasion resistance

## Approvals (Norm references)



- UL AWM (Style 21161)

## Design

- Stranded conductor, tinned
- AWG 22 (19-wire)
- PE core insulation
- Star quad
- PUR outer sheath halogen-free



## Info

- Industrial Ethernet Cable, 2-pair, suitable for torsion stress

## Technical data

	<b>Peak working voltage</b> Max. 100 V (not for power applications)
	<b>Minimum bending radius</b> Installation: 5 x cable diameter
	<b>Test voltage</b> 700 V
	<b>Range of temperature</b> -40°C up to +80°C
	<b>Characteristic impedance</b> At 1 - 100 MHz: 100 +/- 15 Ohm

Part number	Article designation	Number of pairs and AWG size/number of wires per conductor	Outer diameter in mm max.	Copper index kg/km	Weight kg/km approx.
2170888	ETHERLINE® TORSION CAT.5	2 x 2 x AWG22/19	6.5	31.3	52.0

Copper price basis: EUR 150 / 100 kg; For utilization and definition of 'Metal price basis' and 'Metal index' see Appendix T17

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: Coil ≤ 30 kg and ≤ 250 m, otherwise drum

Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)

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## Accessories

- Multipurpose shears A and B see page 902
- SMARTSTRIP stripping tool see page 909

## ETHERLINE® 4-pairs solidwire CAT.5e

LAPP KABEL STUTTGART ETHERLINE® H-H CAT.5e

## ETHERLINE® 4-pairs flexible/high flexible CAT.5e

LAPP KABEL STUTTGART ETHERLINE® P Flex CAT.5e

## Benefits

- With regard to transmission rates, the "ETHERNET world" is cut into:
- ETHERNET = 10 Mbit/s
- FAST ETHERNET = 100 Mbit/s
- GIGABIT ETHERNET = 1000 Mbit/s (1Gbit/s)

## Application range

## ETHERLINE® 4-pairs solidwire CAT.5e

- Stationary application
- Connection with the "Fieldbus World" via gateway or straight through downwards to the Sensor-Actuator level

## ETHERLINE® 4-pairs flexible/high flexible CAT.5e

- Flexible and highly flexible applications
- Connection with the "Fieldbus World" via gateway or straight through downwards to the Sensor-Actuator level

## Approvals (Norm references)



## Design

- Technical data: see detailed Data Sheet (on request)

## Technical data

	<b>Characteristic impedance</b> 100 Ohm at 1 - 100 MHz
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Part number	Article designation	Number of pairs and dimensions	Outer diameter in mm max.	Copper index kg/km	Weight kg/km approx.
<b>Conductor AWG24 + AWG26 (outer sheath colour marine blue RAL 5021)</b>					
<b>For fixed installation (solid conductor)</b>					
2170296	ETHERLINE® H CAT.5e	4 x 2 x AWG24/1	6.3	32.0	54.0
2170297	ETHERLINE® P CAT.5e	4 x 2 x AWG24/1	6.3	32.0	62.0
2170298	ETHERLINE® H-H CAT.5e	4 x 2 x AWG24/1	6.0 / 7.5	32.0	80.0
<b>For flexible application (7-wire stranded conductor)</b>					
2170299	ETHERLINE® H Flex CAT.5e	4 x 2 x AWG26/7	6.1	25.0	48.0
2170300	ETHERLINE® P Flex CAT.5e	4 x 2 x AWG26/7	6.1	25.0	54.0
<b>For highly flexible application / 19 wires</b>					
<b>Only for patchcords (max. 60 m)</b>					
2170489	ETHERLINE® FD P CAT.5e	4 x 2 x AWG26/19	6.3	27.0	54.0

Copper price basis: EUR 150 / 100 kg; For utilization and definition of 'Metal price basis' and 'Metal index' see Appendix T17

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: Coil ≤ 30 kg and ≤ 250 m, otherwise drum

Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)

PROFINET® is a registered trademark of the PNO (PROFIBUS user organisation)

## ETHERLINE® 4-pairs high flexible CAT.5

The Ethernet cable for event technique



### Info

- Outdoor, direct burial
- Usable for road
- CAT.5-Performance

LAPP KABEL STUTTGART ETHERLINE® CAT.5 FD BK



### Benefits

- Due to usage of Etherline cables the cost of installation is very low
- Additional application due to outdoor use
- Good flexibility - easy installation with tight space requirements
- Screened against interference
- Easy to wind for mobile use

### Application range

- Suitable for the transfer of audio data (ETHERSOUND), light control data (DMX over Ethernet), or for computer networking

### Product features

- ETHERLINE® CAT.5 FD BK is a halogen-free CATEGORY 5 high speed data transmission cable suitable for application in road environments

- Complied standards EIA/TIA-568, TSB-36 und ISO/IEC IS 11801

### Approvals (Norm references)



### Design

- Bare copper wire, 26AWG (19x 0.10), (0.14 mm<sup>2</sup>)
- Insulation: foam-skin, core diameter max. 1.0 mm
- Twisting: 2 cores twisted pairs, stranding from 4 pairs
- Inner sheath: halogen-free compound of TPE
- Screening: braid of tinned copper wires, coverage 85% ± 5
- Sheath: PUR, halogen-free, black

### Technical data



**Minimum bending radius**  
95 mm



**Range of temperature**  
Flexible application:  
-5°C up to +50°C  
Fixed installation: -40°C up to +70°C

Part number	Number of pairs and dimensions	Outer diameter in mm max.	Copper index kg/km	Weight kg/km approx.
CE217489	4x2xAWG26/19	6.3	27.0	54.0

Copper price basis: EUR 150 / 100 kg; For utilization and definition of 'Metal price basis' and 'Metal index' see Appendix T17

Standard lengths: (100; 500; 1000) m

Packaging size: Coil ≤ 30 kg and ≤ 250 m, otherwise drum

Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)

### Comparable products

- ETHERLINE® FD P CAT.5

## ETHERLINE® 4-pairs CAT.6a + CAT.7



## ■ Benefits

- ETHERNET with the globally accepted TCP/IP protocol will most probably either provide a connection to the established "Fieldbus World" or the Sensor-Actuator level. Either via a gateway to the "Fieldbus World" or straight through downwards to the lowest communication level. The transmission rates are presently either 10 Mbit/s (ETHERNET) or at least 100 Mbit/s = LAN CAT.5 requirements (Fast Ethernet = Industrial Ethernet) respectively CAT.6a or CAT.7 requirements.

- CAT.6a = 500 MHz

- CAT.7 = 600 MHz

## ■ Product features

- All ETHERLINE® cables with a cross section of AWG22 are PROFINET® compliant.
- Colour: yellow green (RAL 6018)
- Characteristic impedance: 100 Ohm at 1-100 MHz

## ■ Approvals (Norm references)



## ■ Technical data



## Info

Further technical data:  
see Data Sheet



**Characteristic impedance**  
100 Ohm at 1 - 100 MHz

Part number	Article designation	Number of pairs and dimensions	Outer diameter in mm max.	Copper index kg/km	Weight kg/km approx.
Conductor AWG22 = PROFINET-conform (outer sheath colour yellow-green RAL 6018) for fixed installation (solid conductor) = Type A					
2170464	ETHERLINE® Y PIMF CAT.6a	4 x 2 x AWG22 / 1	8.7	53.0	98.0
2170465	ETHERLINE® P PIMF CAT.6a	4 x 2 x AWG22 / 1	8.7	53.0	91.0
2170466	ETHERLINE® H PIMF CAT.6a	4 x 2 x AWG22 / 1	8.7	53.0	99.0
2170474	ETHERLINE® Y PIMF CAT.7	4 x 2 x AWG22 / 1	8.7	53.0	98.0
2170475	ETHERLINE® P PIMF CAT.7	4 x 2 x AWG22 / 1	8.7	53.0	91.0
2170476	ETHERLINE® H PIMF CAT.7	4 x 2 x AWG22 / 1	8.7	53.0	99.0

Copper price basis: EUR 150 / 100 kg; For utilization and definition of 'Metal price basis' and 'Metal index' see Appendix T17

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: Coil ≤ 30 kg and ≤ 250 m, otherwise drum Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)

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## ■ Accessories

- DATA STRIP stripping tool see page 909

## New

## ETHERLINE® 4-pairs high flexible CAT.6



## Info

- CAT.6 for drag chain!

## ■ Benefits

- PUR outer sheath largely resistant against a multitude of oils, against abrasion and UV radiation
- Premium screening against electromagnetic radiation

## ■ Application range

- Use for drag chains and permanent moved machine parts in dry or damp rooms

## ■ Product features

- Flame retardant according to IEC 60332-1-2

## ■ Approvals (Norm references)



- UL/CSA type CMX (UL 444)

## ■ Design

- Stranded conductor, tinned
- AWG 26 (19-wire)
- PP core insulation
- PUR outer sheath halogen-free

- Field-Terminable Connector RJ45 CAT.5e FM45 407

## ■ Technical data



## Peak working voltage

Max. 100 V (not for power applications)



## Minimum bending radius

Static:  
4 x cable diameter  
Flexing: 7.5 x outer diameter



## Test voltage

700 V



## Range of temperature

Fixed installation: -40°C up to +80°C  
Flexing: -30°C up to +80°C



## Characteristic impedance

At 1 - 100 MHz: 100 +/- 15 Ohm

Part number	Article designation	Number of pairs and dimensions	Outer diameter in mm max.	Copper index kg/km	Weight kg/km approx.
2170488	ETHERLINE® FD P CAT.6	4 x 2 x AWG26/19	7.8	31.7	63.0

Copper price basis: EUR 150 / 100 kg; For utilization and definition of 'Metal price basis' and 'Metal index' see Appendix T17

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: Coil ≤ 30 kg and ≤ 250 m, otherwise drum

Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)



## UNITRONIC® LAN 200 MHz - CAT.5e



### Info

- EIA = Electronic Industries Association
- TIA = Telecommunication Industries Association
- TSB = Technical Systems Bulletin (Věstník technických systémů)



### Benefits

- LAN cables for structured cabling - EN 50173

### Application range

- Mainly used where the terminal density is very high, e.g. for wiring office, administration and development buildings in the tertiary area (floor wiring).

### Product features

- Cable length in tertiary area (horizontal area, floor) should not exceed a length of 100 m in accordance with the ISO/IEC 11801 and EN 50173 standards (90 m in cable duct + 10 m in working area)

- The impedance of these cables is 100 Ohm +/-15%
- FTP and S-FTP cables are specified up to 200 MHz
- Cables with auxiliary -H = halogen-free version

### Technical data

**Characteristic impedance**  
100 Ohm +/- 15%

### Approvals (Norm references)



- LAN CAT.5e cables from Lapp Kabel for "Structured cabling systems" meet the requirements in accordance with EIA/TIA-568 and TSB36 as well as ISO/IEC 11801 or EN 50173 (Class D).
- Class D in ISO/IEC 11801 standard corresponds to CAT.5

Part number	Article designation	Number of pairs and dimensions	Outer diameter in mm max.	Copper index kg/km	Weight kg/km approx.
<b>PVC version</b>					
2170125	UTP 200 MHz CAT.5e	4 x 2 x AWG24/1	5.5	17.0	32.0
2170126	FTP 200 MHz CAT.5e	4 x 2 x AWG24/1	6.1	18.0	42.0
2170127	FTP 200 MHz CAT.5e flexible (for patchcable)	4 x 2 x AWG26/7	5.4	13.0	30.0
2170128	S-FTP 200 MHz CAT.5e	4 x 2 x AWG24/1	6.5	32.0	60.0
2170129	S-FTP 200 MHz CAT.5e flexible (for patchcable)	4 x 2 x AWG26/7	5.8	22.0	41.0
2170130	S-FTP 200 MHz CAT.5e DUPLEX	2 x (4 x 2 x AWG24/1)	6.5 x 13.2	64.0	120.0
<b>Halogen-free versions</b>					
2170136	FTP-H 200 MHz CAT.5e	4 x 2 x AWG24/1	6.1	18.0	43.0
2170137	FTP-H 200 MHz CAT.5e flexible (for patchcable)	4 x 2 x AWG26/7	5.4	13.0	31.0
2170138	S-FTP-H 200 MHz CAT.5e	4 x 2 x AWG24/1	6.5	32.0	61.0
2170139	S-FTP-H 200 MHz CAT.5e flexible (for patchcable)	4 x 2 x AWG26/7	5.8	22.0	42.0
2170140	S-FTP-H 200 MHz CAT.5e DUPLEX	2 x (4 x 2 x AWG24/1)	6.5 x 13.2	64.0	122.0

Copper price basis: EUR 150 / 100 kg; For utilization and definition of 'Metal price basis' and 'Metal index' see Appendix T17

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: Coil 100 m; Drum (500; 1000) m

More detailed data sheet on request. Please specify the required type.

### Accessories

- Connector RJ45 CAT.5 Hirose TM11 see page 407
- Connector RJ45 CAT.5 Stewart SS37 see page 407
- Field-Terminable Connector RJ45 CAT.5e FM45 see page 407
- DATA STRIP stripping tool see page 909

## UNITRONIC® LAN 500 MHz - CAT.6a

## ■ Benefits

- LAN cable for "Structured Cabling" - Class E

## ■ Application range

- Mainly used where the terminal density is very high, e.g. for wiring office, administration and development buildings in the tertiary area (floor wiring).

## ■ Product features

- Cables with auxiliary -H = halogen-free version
- Cable length in tertiary area (horizontal area, floor) should not exceed a length of 100 m in accordance with the ISO/IEC 11801 and EN 50173 standards (90 m in cable duct + 10 m in working area)

- The impedance of these cables is 100 Ohm +/- 15%

## ■ Approvals (Norm references)



- LAN CAT.6a cables from Lapp Kabel for "Structured cabling systems" meet the requirements in accordance with EIA/TIA-568 and TSB36 as well as ISO/IEC 11801 or EN 50173 (Class D).
- Class E in draft standard corresponds to CAT.6a



## Info

- EIA = Electronic Industries Association
- TIA = Telecommunication Industries Association
- TSB = Technical Systems Bulletin (Věstník technických systémů)

## ■ Technical data

**Z<sub>∞</sub>** Characteristic impedance  
100 Ohm +/- 15%

Part number	Article designation	Number of pairs and dimensions	Outer diameter in mm max.	Copper index kg/km	Weight kg/km approx.
<b>PVC version</b>					
2170143	STP/S PiMF 500 MHz CAT.6a	4 x 2 x AWG23/1	7.1	27.0	53.0
2170144	STP/S PiMF 500 MHz CAT.6a (flexible for patchcable)	4 x 2 x AWG26/7	6.5	21.0	40.0
2170145	STP/S PiMF 500 MHz CAT.6a DUPLEX	2 x (4 x 2 x AWG23/1)	7.1 x 14.6	54.0	106.0
<b>Halogen-free versions</b>					
2170147	STP/S-H PiMF 500 MHz CAT.6a	4 x 2 x AWG23/1	7.1	27.0	53.0
2170148	STP/S-H PiMF 500 MHz CAT.6a (flexible for patchcable)	4 x 2 x AWG26/7	6.5	21.0	40.0
2170149	STP/S-H PiMF 500 MHz CAT.6a DUPLEX	2 x (4 x 2 x AWG23/1)	7.1 x 14.6	54.0	106.0

Copper price basis: EUR 150 / 100 kg; For utilization and definition of 'Metal price basis' and 'Metal index' see Appendix T17

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: Coil 100 m; Drum (500; 1000) m CAT.6a is at present a draft

More detailed data sheet on request. Please specify the required type.

## ■ Accessories

- Connector RJ45 CAT.6 Hirose TM21 see page 407
- DATA STRIP stripping tool see page 909

## UNITRONIC® LAN 600 MHz - CAT.7



## ■ Benefits

- LAN cables for structured cabling - Class F

## ■ Application range

- LAN CAT.7\* cable for high speed networks (e.g. Gigabit-ETHERNET). They exceed the requirements according to EIA/TIA-568 and TSB36 as well as ISO/IEC 11801 or EN 50173 (Class D).

## ■ Product features

- Cable length in tertiary area (horizontal area, floor) should not exceed a length of 100 m in accordance with the ISO/IEC 11801 and EN 50173 standards (90 m in cable duct + 10 m in working area)

- All STP/STP PiMF cables: characteristic impedance 100 Ohm ± 15 %.
- LAN CAT-7\* cables are specified up to 600 MHz

## ■ Approvals (Norm references)



- Class F in standard corresponds to CAT.7

## ■ Design

- Shielded Twisted Pair / Screened PiMF
- 4 individually screened pairs (aluminium foil) with overall screening (copper braid)
- Solid conductor

## ■ Technical data

**Z<sub>∞</sub>** Characteristic impedance  
100 Ohm +/- 15%

Part number	Article designation	Number of pairs and dimensions	Outer diameter in mm max.	Copper index kg/km	Weight kg/km approx.
<b>Halogen-free versions</b>					
2170614	STP/S-H PiMF 600 MHz CAT.7*	4 x 2 x AWG23/1	7.9	27.0	78.0
2170634	STP/S-H PiMF 600 MHz CAT.7* DUPLEX	2 x (4 x 2 x AWG23/1)	7.9 x 16.8	54.0	156.0

Copper price basis: EUR 150 / 100 kg; For utilization and definition of 'Metal price basis' and 'Metal index' see Appendix T17

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: Coil 100 m; Drum (500; 1000) m

More detailed data sheet on request. Please specify the required type.

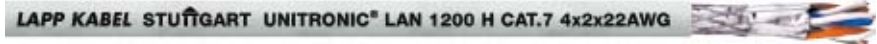


## UNITRONIC® LAN 1200 MHz - CAT.7



### Info

- **NEU:**  
revised outer diameter 7,7 mm  
and outer sheath with grey colour



### Application range

- LAN cables for structured cabling

### Product features

- Cable length in tertiary area (horizontal area, floor) should not exceed a length of 100 m in accordance with the ISO/IEC 11801 and EN 50173 standards (90 m in cable duct + 10 m in working area)

- The cable is specified up to 1.2 GHz

### Approvals (Norm references)



- Meets requirements according to draft of Standard prEN 50288-4-1 (August 2000)
- Exceeds the requirements of Standard EN 50173 and ISO/IEC 11801

### Design

- Solid bare copper wire AWG22
- Cell polyolefin core insulation, diameter max. 1.6 mm
- Pair screen made of aluminium-lined plastic foil, overall screening of tinned copper braiding
- Outer sheath: halogen-free, flame retardant compound
- Colour: grey (RAL 7035)

Part number	Article designation	Number of pairs and dimensions	Outer diameter in mm max.	Copper index kg/km	Weight kg/km approx.
2170615	UNITRONIC® LAN 1200 H CAT.7	4 x 2 x AWG22/1	7.7	36.0	80.0

Copper price basis: EUR 150 / 100 kg; For utilization and definition of 'Metal price basis' and 'Metal index' see Appendix T17

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: Drum

More detailed data sheet on request. Please specify the required type.

### Accessories

- Multipurpose shears A and B see page 902
- DATA STRIP stripping tool see page 909

## UNITRONIC® LAN IBM



### ■ Product features

- IBM LAN cable

- LAN data transmission cables from LAPP KABEL based on IBM standards meet the requirements set out in the international Standard IEEE 802.5.

### ■ Approvals (Norm references)



### ■ Design

- LAN cables from Lapp Kabel in accordance with IBM standards are designed to the manufacturer's standards and, where available, display the reference number.
- This ensures system compliant operation.

Part number	Reference number	Number of pairs and dimensions	Outer diameter in mm max.	Characteristic impedance Ohm	Copper index kg/km	Weight kg/km approx.
<b>LAN type 1 A 600 Mhz 2x2x0.64mm</b>						
2170040	IBM 33G2772	x	8.0 x 11.0	150 Ω	36.0	85.0
<b>Twinax 2x20AWG</b>						
2170050	IBM 7362211	x	8.3	105 Ω	47.0	68.0

Copper price basis: EUR 150 / 100 kg; For utilization and definition of 'Metal price basis' and 'Metal index' see Appendix T17

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: Drum

Part no. 2170040 for indoor use only

### ■ Accessories

- SMARTSTRIP stripping tool see page 909

## UNITRONIC® LAN PATCH COLOR

## Benefits

- Pre-assembled coloured patch cable for local networks

## Application range

- Use in working area (tertiary area) for connecting various terminating equipment in the scope of "Structured Cabling"

## Product features

- Meets the requirements according to CAT.5e, ISO/IEC 11801 and EN 50173, Class D

## Approvals (Norm references)



## Design

- Stranded copper conductor, 7-wire, 4x2xAWG26/7
- Four pairs with overall screening of Aluminium-laminated plastic foil or Aluminium-laminated plastic foil plus copper braiding.
- Screened RJ45 plug made by HIROSE
- Standard colour: grey(GY). Colours red, green, blue and yellow also available on request
- Length: 0,5m; 1 m; 2.5 m; 5 m and 10 m

## Technical data



Characteristic impedance  
100 Ohm +- 15%



Part number	Article designation	Length in m	Colour
21700810	PATCH COLOR GY	1.0	grey
21700825	PATCH COLOR GY	2.5	grey
21700850	PATCH COLOR GY	5.0	grey
21700860	PATCH COLOR GY	10.0	grey

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

10 pieces per packing unit at 0,5m, 1 m and 2,5 m; 5 pieces per packing unit at 5 m; 1 piece per packing unit at 10 m

## Patchcable RJ45 CAT.5e



## Product features

- FTP Patchcable CAT.5e
- Foil screening, 150 MHz, grey, halogen-free, with Hirose TM 11 connector, also available in different colours, allocation in acc. to TIA/EIA 568B

- S-FTP Patchcable CAT.5e
- Foil and braid screening, 150 MHz, grey, halogen-free, with Hirose TM 11 connector, also available in different colours, allocation in acc. to TIA/EIA 568B

## Approvals (Norm references)



Part number	Article designation	Colour	Length in m	PU
<b>FTP Patchcable CAT.5e</b>				
CE6547	Patchcable RJ45 CAT.5e FTP 0.5m	grey	0.5	5 pieces
CE6548	Patchcable RJ45 CAT.5e FTP 1.0m	grey	1.0	5 pieces
CE6549	Patchcable RJ45 CAT.5e FTP 1.5m	grey	1.5	5 pieces
CE6550	Patchcable RJ45 CAT.5e FTP 2.0m	grey	2.0	5 pieces
CE6551	Patchcable RJ45 CAT.5e FTP 3.0m	grey	3.0	5 pieces
CE6552	Patchcable RJ45 CAT.5e FTP 5.0m	grey	5.0	5 pieces
CE6553	Patchcable RJ45 CAT.5e FTP 7.5m	grey	7.5	5 pieces
CE6554	Patchcable RJ45 CAT.5e FTP 10.0m	grey	10.0	5 pieces
CE6555	Patchcable RJ45 CAT.5e FTP 15.0m	grey	15.0	1 piece
CE6556	Patchcable RJ45 CAT.5e FTP 20.0m	grey	20.0	1 piece
<b>S-FTP Patchcable CAT.5e</b>				
CE6647	Patchcable RJ45 CAT.5e S-FTP 0.5m	grey	0.5	5 pieces
CE6648	Patchcable RJ45 CAT.5e S-FTP 1.0m	grey	1.0	5 pieces
CE6649	Patchcable RJ45 CAT.5e S-FTP 1.5m	grey	1.5	5 pieces
CE6650	Patchcable RJ45 CAT.5e S-FTP 2.0m	grey	2.0	5 pieces
CE6651	Patchcable RJ45 CAT.5e S-FTP 3.0m	grey	3.0	5 pieces
CE6652	Patchcable RJ45 CAT.5e S-FTP 5.0m	grey	5.0	5 pieces
CE6653	Patchcable RJ45 CAT.5e S-FTP 7.5m	grey	7.5	5 pieces
CE6654	Patchcable RJ45 CAT.5e S-FTP 10.0m	grey	10.0	5 pieces
CE6655	Patchcable RJ45 CAT.5e S-FTP 15.0m	grey	15.0	1 piece
CE6656	Patchcable RJ45 CAT.5e S-FTP 20.0m	grey	20.0	1 piece

Also further different-coloured versions available.

## Patchcable RJ45 CAT.6 S-STP



## ■ Product features

- PiMF 500 MHz, with Hirose TM21 connector
- Halogen-free
- Configuration accordance to TIA/EIA 568B
- Colour: grey (als aviable in ohter colours)

## ■ Approvals (Norm references)



Part number	Article designation	Colour	Length in m	PU
<b>S-STP Patchcable CAT.6</b>				
CE6847	Patchcable RJ45 CAT.6 S-STP 0.5m	grey	0.5	5 pieces
CE6848	Patchcable RJ45 CAT.6 S-STP 1.0m	grey	1.0	5 pieces
CE6849	Patchcable RJ45 CAT.6 S-STP 1.5m	grey	1.5	5 pieces
CE6850	Patchcable RJ45 CAT.6 S-STP 2.0m	grey	2.0	5 pieces
CE6851	Patchcable RJ45 CAT.6 S-STP 3.0m	grey	3.0	5 pieces
CE6852	Patchcable RJ45 CAT.6 S-STP 5.0m	grey	5.0	5 pieces
CE6853	Patchcable RJ45 CAT.6 S-STP 7.5m	grey	7.5	5 pieces
CE6854	Patchcable RJ45 CAT.6 S-STP 10.0m	grey	10.0	5 pieces
CE6855	Patchcable RJ45 CAT.6 S-STP 15.0m	grey	15.0	1 piece
CE6856	Patchcable RJ45 CAT.6 S-STP 20.0m	grey	20.0	1 piece

Also further different-coloured versions available.

## LANmark-6 RJ45 Patchcord



## ■ Product features

- The Patchcord fully corresponding to category 6 maximises the channel performance and exceeds the requirements of ISO/IEC 11801:2002 as part of a LANmark-6 wiring of Class E. This offers an improved data transmission rates and enables the inclusion of consolidation points for maximum system

flexibility.

- Halogen-free, flame-retardant sheath with less release of smoke gases than standard
- Shielded version

## ■ Approvals (Norm references)



Part number	Article designation	Colour	Length in m	PU
<b>LANmark-6 RJ45 Patchcord</b>				
CE6147	LANmark-6 RJ45 Patchcord 0.5m	orange	0.5	1 piece
CE6148	LANmark-6 RJ45 Patchcord 1.0m	orange	1.0	1 piece
CE6149	LANmark-6 RJ45 Patchcord 1.5m	orange	1.5	1 piece
CE6150	LANmark-6 RJ45 Patchcord 2.0m	orange	2.0	1 piece
CE6151	LANmark-6 RJ45 Patchcord 3.0m	orange	3.0	1 piece
CE6152	LANmark-6 RJ45 Patchcord 5.0m	orange	5.0	1 piece
CE6154	LANmark-6 RJ45 Patchcord 10.0m	orange	10.0	1 piece
CE6155	LANmark-6 RJ45 Patchcord 15.0m	orange	15.0	1 piece

## LANmark-7 GG45 Patchcord



## ■ Product features

- The LANmark-7 Patchcable with two four-paired, non-switched CAT.7 connectors makes it possible to operate one GG45 Permanent Link in 600 MHz mode.
- Shielded version

- 2 x GG45 4-pair, not downward compatible plug
- Halogen-free, low smoke zero halogen (LSZH)

## ■ Approvals (Norm references)



Part number	Article designation	Colour	Length in m	PU
<b>LANmark-7 RJ45 Patchcord GG45</b>				
60641	LANmark-7 GG45 Patchcord 1.0m	orange	1.0	1 piece
60642	LANmark-7 GG45 Patchcord 2.0m	orange	2.0	1 piece
60643	LANmark-7 GG45 Patchcord 3.0m	orange	3.0	1 piece
60644	LANmark-7 GG45 Patchcord 5.0m	orange	5.0	1 piece
60645	LANmark-7 GG45 Patchcord 10.0m	orange	10.0	1 piece

## S-FTP Patchcable Crossover RJ45 CAT.5e



## ■ Product features

- For interconnecting two computers without the use of a central active component (hub, switch...).

- Foil and braid screening, 150 MHz
- Halogen-free
- Hirose TM 11 connector
- Sheath and anti-kink sleeve colour: red.

## ■ Approvals (Norm references)



Part number	Article designation	Colour	Length in m	PU
<b>Crossover Patchcable</b>				
CE6660	Crossover Patchcable RJ45 CAT.5e S-FTP 2.0m	red	2.0	5 pieces
CE6661	Crossover Patchcable RJ45 CAT.5e S-FTP 3.0m	red	3.0	5 pieces
CE6662	Crossover Patchcable RJ45 CAT.5e S-FTP 5.0m	red	5.0	5 pieces
CE6664	Crossover Patchcable RJ45 CAT.5e S-FTP 10.0m	red	10.0	5 pieces

## Connector RJ45 CAT.5 Hirose TM11

### Product features

- Shielded version
- Suitable for solid and stranded/flexible conductors
- Including bend protection and guide plate
- Bend protection: beige

- Max. outer sheath diameter: 5,8 mm

### Approvals (Norm references)



Part number	Article designation	PU
CE6321	Connector RJ45 CAT.5 Hirose TM11	50 pieces

Hirose is a registered trademark of the HIROSE ELECTRIC Group  
Also further different-coloured versions available.

### Accessories

- Crimping tool RJ45 Hirose see page 408

## Connector RJ45 CAT.5 Stewart SS37

### Product features

- Shielded version
- Including bend protection and guide plate
- Bend protection: light grey
- Max. outer sheath diameter: 5.72 mm

### Approvals (Norm references)



Part number	Article designation	PU
CE6323	Connector RJ45 CAT.5 Stewart SS37	50 pieces

Stewart is a registered trademark of Bel Fuse Inc.  
Also further different-coloured versions available.

### Accessories

- Crimping tool RJ45 Stewart see page 408

## Field-Terminable Connector RJ45 CAT.5e FM45

### Product features

- Shielded version
- FM45 is a tool-free switchable, field-terminable RJ45 Connector with IDC contacting and CAT.5e performance. The eight pin connection can be re-switched, tension-resistant, and vibration-resistant. The connecting block can accommodate both screened as well as unscreened cable up to 8 mm diameter.
- Suitable for AWG23 - 26, AWG22 possible with restrictions

- IDC/piercing terminal in acc. with 60352-4
- Suitable for solid and stranded/flexible conductors
- Suitable for use in industrial applications
- Protection type: IP20

### Approvals (Norm references)



Part number	Article designation	PU
21700540	Field-Terminable Connector RJ45 CAT.5e FM45	1 piece

## Connector RJ45 CAT.6 Hirose TM21

### Product features

- Channel Class E up to 250 MHz (CAT.6)
- Fully shielded
- Conductor: Ø 0.5 mm solid wire, AWG 24 & 26 stranded cable, guide plate accept 1.1 mm diameter wire, Seath outer diameter: 6.6 mm
- Easy operation

- Including bend protection and guide plate
- Bend protection: beige
- Suitable for solid and stranded/flexible conductors

### Approvals (Norm references)



Part number	Article designation	PU
CE6324	Connector RJ45 CAT.6 Hirose TM21	50 pieces

Hirose is a registered trademark of the HIROSE ELECTRIC Group  
Also further different-coloured versions available.

### Accessories

- Crimping tool RJ45 Hirose see page 408

## Crimping tool RJ45 Hirose



### ■ Product features

- Crimping tool for connector RJ45 CAT.5 Hirose TM11
- Crimping tool for connector RJ45 CAT.6 Hirose TM21

### ■ Approvals (Norm references)



Part number	Article designation	PU
CE5091	Crimping tool RJ45 CAT.5 Hirose TM11 8-pole	1 piece
CE5090	Crimping tool RJ45 CAT.6 Hirose TM21 8-pole	1 piece

Hirose is a registered trademark of the HIROSE ELECTRIC Group

### ■ Accessories

- Connector RJ45 CAT.5 Hirose TM11 see page 407
- Connector RJ45 CAT.6 Hirose TM21 see page 407

## Crimping tool RJ45 Stewart



### ■ Product features

- Crimping tool for connector RJ45 CAT.5 Stewart SS37
- Crimping tool for RJ plug 4-, 6-, 6-DEC- and 8-pole

### ■ Approvals (Norm references)



Part number	Article designation	PU
CE5093	Crimping tool RJ45 Stewart SS37 8-pole	1 piece
CE5092	Crimping tool RJ 4-, 6-, 6-DEC- and 8-pole	1 piece

Stewart is a registered trademark of Bel Fuse Inc.

### ■ Accessories

- Connector RJ45 CAT.5 Stewart SS37 see page 407



## LANmark-5 EVO SnapIn Connector

### Product features

- CAT.5e socket screened including EMC cover
- Suitable for AWG22, 23 and 24
- Colour coding in acc. with EIA/TIA 568A and B
- Fast and optimised termination of all 8 cores
- Suitable for modular components
- All services of CAT.5 / Class D to EN 50173:2002 and ISO/IEC 11801:2002 are supported:

- 10BaseT
- Fast Ethernet
- Gigabit Ethernet
- 155 ATM, 622 ATM, 1.2 ATM

### Approvals (Norm references)



Part number	Article designation	PU
61103	LANmark-5 EVO SnapIn Connector	24 pieces

### Comparable products

- LANmark-5 EVO SnapIn Connector AWG26 see page 409
- LANmark-7 GG45 SnapIn Connector see page 410

### Accessories

- Comfort Tool see page 410
- Easy Termination Tool see page 411

## LANmark-5 EVO SnapIn Connector AWG26

### Product features

- CAT.5e socket screened including EMC cover
- Especially suited for stranded-wire conductors (Consolidation Point) AWG26 and 27
- Colour coding in acc. with EIA/TIA 568A and B
- Fast and optimised termination of all 8 cores
- Suitable for modular components
- All services of CAT.5 / Class D to EN 50173:2002 and ISO/IEC 11801:2002 are supported:

- 10BaseT
- Fast Ethernet
- Gigabit Ethernet
- 155 ATM, 622 ATM, 1.2 ATM

### Approvals (Norm references)



Part number	Article designation	PU
61102	LANmark-5 EVO SnapIn Connector AWG26	24 pieces

## LANmark-6 EVO SnapIn Connector

### Product features

- CAT.6 socket de-embedded screened incl. EMC cover
- Suitable for AWG22, 23 and 24
- Colour coding in acc. with EIA/TIA 568A and B
- Fast and optimised termination of all 8 cores
- Suitable for modular components
- All services of CAT.6 / Class E to EN 50173:2002 and ISO/IEC 11801:2002 are supported:

- 10BaseT
- Fast Ethernet
- Gigabit Ethernet
- 155 ATM, 622 ATM, 1.2 ATM

### Approvals (Norm references)



Part number	Article designation	PU
62104	LANmark-6 EVO SnapIn Connector	24 pieces

## LANmark-6 EVO SnapIn Connector AWG26



### Product features

- CAT.6 socket de-embedded screened incl. EMC cover
- Especially suited for stranded-wire conductors (Consolidation Point) AWG26 and 27
- Colour coding in acc. with EIA/TIA 568A and B
- Fast and optimised termination of all 8 cores
- Suitable for modular components

- All services of CAT.6 / Class E to EN 50173:2002 and ISO/IEC 11801:2002 are supported:
- 10BaseT
- Fast Ethernet
- Gigabit Ethernet
- 155 ATM, 622 ATM, 1.2 ATM

### Approvals (Norm references)



Part number	Article designation	PU
62105	LANmark-6 EVO SnapIn Connector AWG26	24 pieces

## LANmark-6 EVO SnapIn Connector 10G



### Product features

- CAT.6 socket de-embedded screened incl. EMC cover
- Suitable for AWG22, 23 and 24
- Colour coding in acc. with EIA/TIA 568A and B
- Fast and optimised termination of all 8 cores
- Suitable for modular components
- All services of CAT.6 / Class E to EN 50173:2002 and ISO/IEC 11801:2002 as well as for 10 Gigabit Ethernet to IEEE 802.3an draft 1.11 are supported:

- 10BaseT
- Fast Ethernet
- Gigabit Ethernet
- 10Gigabit Ethernet
- 155 ATM, 622 ATM, 1.2 ATM

### Approvals (Norm references)



Part number	Article designation	PU
62106	LANmark-6 EVO SnapIn Connector 10G	24 pieces

## LANmark-7 GG45 SnapIn Connector



### Product features

- CAT.7 GG45 socket screened incl. EMC cover
- Suitable for AWG22, 23 and 24
- Colour coding in acc. with EIA/TIA 568A and B
- Fast and optimised termination of all 8 cores
- Suitable for modular components
- All applications defined for CAT.5 / 6 and 7 are supported:

- 10BaseT
- Fast Ethernet
- Gigabit Ethernet
- 10Gigabit Ethernet
- 155 ATM, 622 ATM, 1.2 ATM

### Approvals (Norm references)



Part number	Article designation	PU
63103	LANmark-7 GG45 SnapIn Connector	24 pieces

## Comfort Tool



### Product features

- For quick, easy and reliable installation of SnapIn Connectors, we recommend the use of this tool. All 8 cores are terminated in one work step.

- Marking on the pliers defines the correct stripping dimension.

### Approvals (Norm references)



Part number	Article designation	PU
60501	Comfort Tool	1 piece

#### Product features

- Extremely exact and fast removal of pair screening in PiMF cables.
- All foils are removed at exactly the same length. The distances of the four foil screens are brought together at the space of the GG45.

- The integrated holder for the wire manager simplifies insertion of the cores. Simplest handling for quick and reproducible stripping results.
- An application sheet is included. The piercing terminals are adjusted and replaceable.

#### Approvals (Norm references)



## Easy Termination Tool



Part number	Article designation	PU
60503	Easy Termination Tool	1 piece

Caution! The Easy Termination Tools are specified for GG45 installation.

#### Product features

- 19" Patchpanel Modular for fix mounting
- 24 connections with integrated dust protection caps
- Compatible with all SnapIn Connectors
- Stable metal structure
- Printed number system

- Dimensions: 19" - 1RU - 85 mm
- Colour: grey white (RAL 9002)

#### Approvals (Norm references)



Part number	Article designation	PU
60024	Patchpanel Modular fix mounting	1 piece

Delivery without SnapIn Connectors!

#### Product features

- 19" Patchpanel Modular extendable
- Front screen can be pulled out and swivelled out by 45° allowing simple and fast installation as well as simple maintenance (sliding mechanism)
- 24 connections with integrated dust protection caps
- Compatible with all SnapIn Connectors

- Stable metal structure
- Flexible label for the numbering system
- Dimensions: 19" - 1RU - 125 mm
- Colour: grey white (RAL 9002)

#### Approvals (Norm references)



Part number	Article designation	PU
60124	Patchpanel Modular extendable	1 piece

Delivery without SnapIn Connectors!

#### Product features

- 12 connections with integrated dust protection cap
- Compatible with all SnapIn Connectors
- Feed-through possibilities from the front and bottom: two pre-manufactured openings on the back and one pre-manufactured opening in the lower panel permit more flexible feed-through of the cable
- Holes for cable ties for securing the cable

- For use with desktop equipment, in false floors or in cable ducts
- Printed number system
- Dimensions (WxD): 200 x 40 x 230 mm
- Colour: grey white (RAL 9002)

#### Approvals (Norm references)



Part number	Article designation	PU
62112	Patchpanel Modular Mini Surface-Mounted	1 piece

Delivery without SnapIn Connectors!

## Patchpanel Modular rail mounting



### Product features

- 6 connections with integrated dust protection caps
- Compatible with all SnapIn Connectors
- Robust powder coated metal housing for DIN rail and wall fastening
- Strain relief of the cables by strain relief rail, 1x M20, 1x PG16 or 1x PG11 gland

- Dimensions (WxHxD): 50 x 150 x 104 mm
- Protection type: IP20
- Colour: black

### Approvals (Norm references)



Part number	Article designation	PU
60055	Patchpanel Modular rail mounting	1 piece

Delivery without SnapIn Connectors!

## Flush-Mounted Outlet Modular



### Product features

- 2 connections with integrated dust protection flaps
- Compatible with all SnapIn Connectors
- Angled outlet
- Colour: pure white (RAL 9010)

### Approvals (Norm references)



Part number	Article designation	PU
60622	Flush-Mounted Outlet 45 Modular	1 piece
60722	Flush-Mounted Outlet 50 Modular	1 piece

Delivery without SnapIn Connectors!

## Flush-Mounted Outlet Modular long



### Product features

- 2 connections with integrated dust protection flaps
- Compatible with all SnapIn Connectors
- Angled outlet of 45°
- For installation in floor tank or parapet conduits

- Integrated strain relief
- Colour: pure white (RAL 9010)

### Approvals (Norm references)



Part number	Article designation	PU
60522	Flush-Mounted Outlet 50 Modular long	1 piece

Delivery without SnapIn Connectors!

## Surface-Mounted Case (84x84 mm)



### Product features

- Surface-Mounted Case and Masking Frame
- Can be used wherever concealed installation is not possible or undesirable
- Suitable for Flush-Mounted Outlet LSA+ CAT.6 (Case 50)
- Dimensions: 84 x 84 mm
- Height: 40 mm (incl. frame)

- Colour: pure white (RAL 9010)

### Approvals (Norm references)



### Suitable inserts

- Flush-Mounted Outlet LSA+ page 414

Part number	Article designation	PU
<b>Surface-Mounted Case</b>		
60632	Surface-Mounted Case 45	1 piece
60732	Surface-Mounted Case 50	1 piece
<b>Masking Frame</b>		
60652	Surface-Mounted Masking Frame 45	1 piece
60852	Surface-Mounted Masking Frame 50	1 piece

## Keystone Clips for EVO SnapIn Connectors

### Product features

- Red keystone clips for LANmark EVO SnapIn with keystone format (wall thickness 1.5 - 1.75 mm)
- Suitable for EVO SnapIn Connectors. Various clips to turn LANmark Snap-In connectors into Keystone format.

- Not suitable for GG45 connectors

### Approvals (Norm references)



Part number	Article designation	PU
61203	Keystone Clips for EVO SnapIn Connectors	24 pieces

## Keystone Clips for SnapIn Connectors

### Product features

- Keystone clips for LANmark SnapIn with keystone format
- Suitable for GG45 Connectors
- Not suitable for EVO snap-in connectors

### Approvals (Norm references)



Part number	Article designation	PU
61201	Keystone Clips for SnapIn Connectors	24 pieces

## SnapIn rail mount Adapter

### Product features

- Plastic housing including CAT.6 SnapIn Connector
- Suitable for use in industrial applications
- Angled outlet of 45°
- Several adapters can be connected in series

- Colour: pure white (RAL 9010)

### Approvals (Norm references)



Part number	Article designation	PU
60795	SnapIn rail mount Adapter	12 pieces



## Patchpanel LSA+ CAT.6 extensible



### Product features

- 19" Patchpanel LSA+ CAT.6 (1RU)
- 24 Ports
- Can be pulled out and swivelled out
- Cable and screen strain relief without screws, clamps or cable ties.
- Clip plates reduce installation time drastically

- Subsequent installations with no problems using sliding mechanism

### Approvals (Norm references)



Part number	Article designation	PU
62124	Patchpanel LSA+ CAT.6 extensible	1 piece

## Flush-Mounted Outlet LSA+



- Surface-Mounted Case (84x84 mm) page 412

### Product features

- Flush-Mounted Outlet 80x80 LSA+ CAT.6
- 2x RJ45 angled outlet

- Colour coding in acc. with EIA/TIA 568A and B
- Suitable for cable types (AWG22, 23 and 24)
- Colour: pure white (RAL 9010)

### Approvals (Norm references)



Part number	Article designation	PU
62722	Flush-Mounted Outlet 80x80 LSA+ CAT.6	1 piece

## Data Binder LSA+



### Product features

- A data connector allows installation cables to be extended or damaged cables to be re-connected without having to re-install the entire cable segment.
- Cable inlet 7.5 mm

- Screwable strain relief
- Adhesive strips for fastening

### Approvals (Norm references)



Part number	Article designation	PU
CE6381	Data Binder LSA+ CAT.5	10 pieces
CE6382	Data Binder LSA+ CAT.6	1 piece

## Punch down tool LSA+



### Product features

- LSA+ punch down tool for setting the individual cores on the data outlets or patchpanel.
- Cores are set properly in the insulation displacement rail and cut off at the same time.

### Approvals (Norm references)



Part number	Article designation	PU
CE5076	Punch down tool LSA+	1 piece