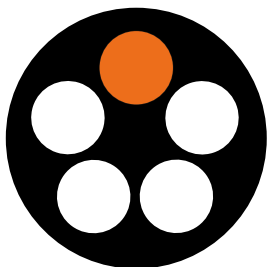


LAPP

Innovations 2026



LAPP

Legend

Product characteristics



Suitable for outdoor use



Good chemical resistance



Flame-retardant



Wide clamping range



Halogen-free



Heat-resistant



Cold-resistant



Corrosion-resistant



Maximum vibration protection



Mechanical resistance



Assembly time



Low weight



Oil-resistant



Optimum strain relief



Space requirement



Cable chain



Cleanroom



Robust



Acid-resistant



Reliability



Integrated SKINTOP® cable gland



Voltage



Connector with standard housing unit



Interference signals



Temperature-resistant



Torsion-resistant



Torsion load



UV-resistant



Waterproof



Variety of approval certifications



Product Carbon Footprint

Please note

The purpose of the icons is to provide you with a quick overview and a rough indication of the product features to which the corresponding information relates. You can find details of product characteristics in the “technical data” sections on the product pages.

Content

Products

Cables

Our product brands ÖLFLEX®, UNITRONIC®, ETHERLINE® and HITRONIC®. In all variations for every requirement.

8

Cable assemblies

Ready-to-connect cables fitted with a connector at one or both ends – ready for use immediately.

14

Network and distribution components

Network and distribution components for sensor-actuator applications.

17

Connectors

For reliable plug-in connections - even after several mating cycles.

19

Cable Glands

Sealing and strain-relieving cable entry.

28

Tools and accessories

Everything you need to work with and install cables.

33

Our brands at a glance





ÖLFLEX®



ÖLFLEX® has become synonymous with power and control cables. Our flexible and oil-resistant cables satisfy the highest demands and can withstand even the very toughest conditions.

UNITRONIC®



Our high-quality UNITRONIC® data network cables and field bus components provide a forward-looking solution.

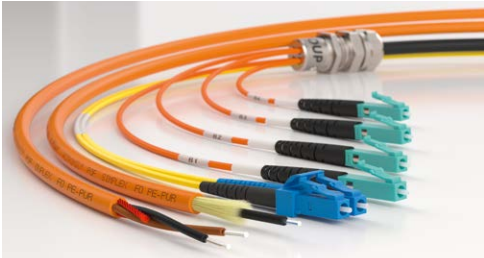



ETHERLINE®



Our ETHERLINE® branded products open up a secure, fast and reliable path to the future of Ethernet applications, e.g. PROFINET®.

HITRONIC®



HITRONIC® fibre optic cables make transmitting large data volumes easy: fault-free, bug-proof and at almost the speed of light.



EPIC®



EPIC® industrial connectors can be found everywhere in industrial machinery and plant engineering, for measuring, control and drives.

SKINTOP®



Simply feed in the cable and twist – that's it. Our SKINTOP® cable glands provide secure connections in no time.



SILVYN®



The universal range of SILVYN® protection and guidance systems protects cables effectively against dust and moisture.

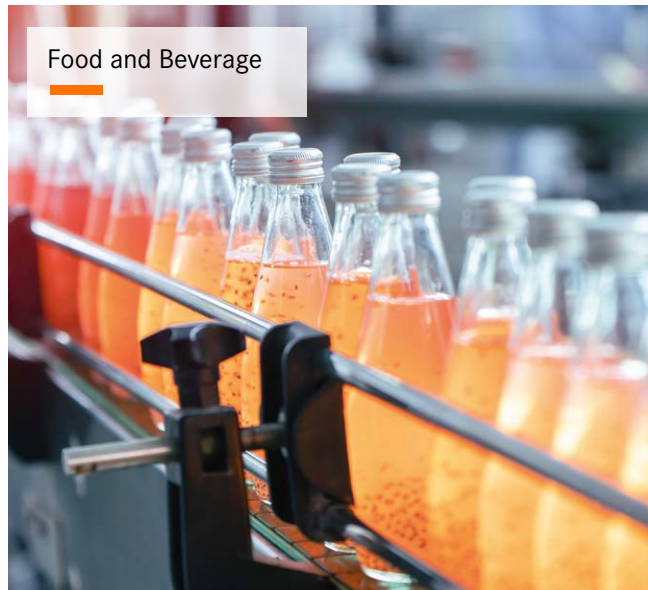
FLEXIMARK®



The requirement: permanent marking. The solution: FLEXIMARK®. These sophisticated systems mean that a clear overview inside a control cabinet is no longer just a pipe dream.



Industry solutions



Digital services

LAPP Online Shop



Your solution is just a click away. Our online shop offers you a user-friendly platform where you can quickly order over 20,000 of our standard items.

OCI Open Catalogue Interface



By using OCI, you can seamlessly transfer your orders from the LAPP Online Shop directly into your procurement system, ensuring data consistency and avoiding double entries for more efficient order processing.

LAPP eKanban



LAPP offers additional added value that goes far beyond high-quality products. Our eKanban system is the innovative all-round solution for digital cable inventory management.

We're here for you, no matter where you are. We offer you sophisticated e-service solutions. Place quick and convenient orders with our digital services. This gives you more time for your core business. It's entirely up to you to decide how to process your orders digitally.



Engineering systems and exchange formats



EPLAN, Zuken, Siemens, Cadenas, AmpereSoft, AUCOTEC, WSCADUniverse, BMEcat, ETIM. All at a detailed level.

EDI Electronic Data Interchange



Fast ordering processes and no more time-consuming manual check of order confirmations, delivery notes or invoices. With EDI, LAPP offers a standardised interface for the secure exchange of business documents between ERP systems.

E-Procurement



LAPP supports your goals in the digitalisation of your procurement processes and is happy to collaborate as a supplier in the e-Procurement platform of your choice – whether via WebEDI or full integration.

Product finders and configurators



Product configuration can be so simple. With finders and configurators from LAPP, you can compile a valid configuration for your personal application online at any time and order the products from our online shop.

MyLAPP



With MyLAPP, everything is designed for self-service: from tracking your orders to downloading documents, accessing service information and discovering special offers – all available 24/7, at any time and anywhere in the world.

LAPP Partner-Portal



Lapp Partner Portal PP50: it's all about efficiency! Manage the whole order and inventory process digitally and enhance your partner engagement with LAPP. Benefit from real-time stock and price information and digital approval workflows.

ÖLFLEX® SERVO FD 797 CP

Servo and motor



Shielded servo cable without filler cords, easily detachable inner sheath, up to 50 % faster and cleaner cable preparation, optimised service life in drag chain applications.

Benefits

- Cable construction without filler cords and with a special, easily detachable inner sheath saves up to 50 % of the time needed to prepare the cable for assembly. There is no need to remove many individual filling cords.
- Less soiling at the workplace, as there are no more filling cords to deal with during assembly.
- Optimised service life in drag chain applications, even with long travel distances and high accelerations, as the requirements of the LAPP Extended Line performance class are exceeded.
- Extremely weather-resistant with a wide temperature range.
- Particularly resistant to oil and drilling fluids and therefore ideal for harsh environments.
- Low-capacitance core insulation for long transmission paths.

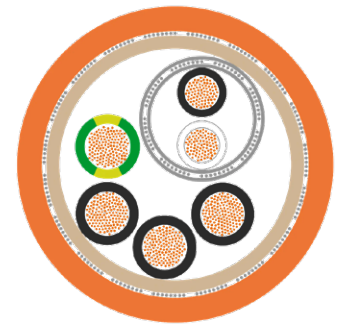
Application ranges

- For connecting frequency converters and servo motors.
- Cable design allows highly flexible, continuously moving use in moving machine parts and in cable chains.
- Can be used in dry and damp conditions, and especially in harsh and oily environments.
- The PUR outer sheath withstands high mechanical loads.
- The PUR outer sheath is resistant to mineral oil-based lubricants and highly resistant to chemicals.
- Suitable for outdoor use.
- Flexible use at temperatures down to -40°C.



Technical data

Nominal voltage	0,6 / 1 kV	Minimum bending radius, fixed installation	4 x outer diameter
Rated voltage	1000 V AC rms according to cRU AWM / 1000 V AC rms according to UL AWM	Minimum bending radius, occasionally moved	7.5 x outer diameter
Conductor material	Bare copper	Temperature, fixed installation	-50 °C to 90 °C max. conductor temperature
Conductor design	IEC 60228 class 6: extra-fine wire	Temperature, dynamic continuously flexing	-40 °C to 90 °C max. conductor temperature:
Core insulation base material	Polypropylene (PP)	Flame retardance according to	IEC 60332-1-2 / UL VW-1 / CSA FT1
Base material of outer sheath	Polyurethane (PUR)	UV-resistant according to	DIN EN ISO 4892-2 method A / EN 50620 / EN 50618
Cable sheath colour	orange (RAL 2003)	Application area	Cable chain / Flexible



Nominal voltage	Material of outer sheath	Shielded	Approval 1	Approval 2
0.6 / 1 kV	PUR	yes	UL AWM	cUL AWM

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ÖLFLEX® ROBOT 909

Robots and torsion



Flexible PVC control cable (LAPP Basic Line performance class) for dynamic 3D movements, balanced bending and torsion properties, UL-certified.

Benefits

- Balanced bending and torsional properties for dynamic 3D applications (LAPP performance class „Basic Line“).
- Proven cable successfully tested for over 2 million bending cycles in cable chains and 2 million torsion cycles.
- Special core stranding allows simultaneous bending and twisting (torsion angle up to $\pm 180^\circ/m$).
- With robust, flexible and resistant PVC outer sheath.
- UL certification according to technical data enables the product to be used on the North American market.
- Product with multiple certifications enables universal use and reduces the variety of parts, thus guaranteeing logistics savings.

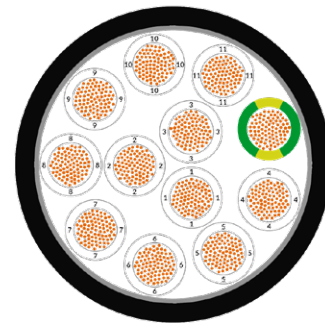
Application ranges

- Control cable for applications in automation, production lines and cable chains as well as for robots.
- The cable design enables flexible, continuously moving use in moving machine parts and cable chains, with horizontal travel distances of up to 5 m.
- Cable design allows flexible, permanently moving use with torsional stress in robots and handling devices.
- Can be used in dry, damp and wet spaces.
- The PVC outer sheath is resistant to acids and alkalis and has limited oil resistance.
- Suitable for outdoor use, subject to the temperature range.



Technical data

Nominal voltage	U ₀ /U: 300/500 V AC rms according to IEC	Minimum bending radius, fixed installation	4 x outer diameter
Rated voltage	600 V AC rms according to cRU AWM / 600 V AC rms according to UL AWM	Minimum bending radius, occasionally moved	15 x outer diameter
Conductor material	Bare copper	Torsion	for +/- 180 °/m up to 2000000 Torsion cycles
Conductor design	extra-fine wire	Temperature, fixed installation	-40 °C to 70 °C max. conductor temperature: according to EN / -40 °C to 80 °C max. conductor temperature: according to UL AWM
Core insulation base material	Polypropylene (PP)	Temperature, occasionally moved	-5 °C to 70 °C max. conductor temperature: according to EN / -5 °C to 80 °C max. conductor temperature: according to UL AWM
Base material of outer sheath	Polyvinylchloride (PVC)	Temperature, dynamic continuously flexing	-5 °C to 70 °C max. conductor temperature: according to EN / -5 °C to 80 °C max. conductor temperature: according to UL AWM
Cable sheath colour	black (RAL 9005)		
Core identification	Numbers		
Application area	Torsion / Flexible / Cable chain		



Number of cores	Conductor cross-section	Nominal voltage	Core identification	Approval 1	Approval 2
2 - 34	0.5 - 35 mm ²	300/500 V	Identification by numbers only / numbered	UL AWM	cUL AWM

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ÖLFLEX® ROBOT 909 D

Robots and torsion



Flexible, shielded PVC control cable (LAPP Basic Line performance class) for dynamic 3D movements, balanced bending and torsion properties, UL-certified.

Benefits

- Balanced bending and torsional properties for dynamic 3D applications (LAPP performance class „Basic Line“).
- Ideal protection against electromagnetic interference thanks to robust wrapping with braided tin-plated copper wires.
- Proven cable successfully tested for over 2 million bending cycles in cable chains and 2 million torsion cycles.
- Special core stranding allows simultaneous bending and twisting (torsion angle up to $\pm 180^\circ/m$).
- UL certification according to technical data enables the product to be used on the North American market.
- Product with multiple certifications enables universal use and reduces the variety of parts, thus guaranteeing logistics savings.

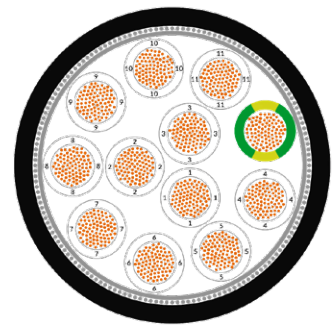
Application ranges

- Control cable for applications in automation, production lines and cable chains as well as for robots.
- Especially for environments where electromagnetic compatibility (EMC) is required.
- The cable design enables flexible, continuously moving use in moving machine parts and cable chains, with horizontal travel distances of up to 5 m.
- Cable design allows flexible, permanently moving use with torsional stress in robots and handling devices.
- Can be used in dry, damp and wet spaces.
- The PVC outer sheath is resistant to acids and alkalis and has limited oil resistance.
- Suitable for outdoor use, subject to the temperature range.



Technical data

Nominal voltage	U ₀ /U: 300/500 V AC rms according to IEC	Minimum bending radius, fixed installation	4 x outer diameter
Rated voltage	600 V AC rms according to cRU AWM / 600 V AC rms according to UL AWM	Minimum bending radius, occasionally moved	15 x outer diameter
Conductor material	Bare copper	Torsion	for $\pm 180^\circ/m$ up to 2000000 Torsion cycles
Conductor design	extra-fine wire	Temperature, fixed installation	-40 °C to 70 °C max. conductor temperature: according to EN / -40 °C to 80 °C max. conductor temperature: according to UL AWM
Core insulation base material	Polypropylene (PP)	Temperature, occasionally moved	-5 °C to 70 °C max. conductor temperature: according to EN / -5 °C to 80 °C max. conductor temperature: according to UL AWM
Base material of outer sheath	Polyvinylchloride (PVC)	Temperature, dynamic continuously flexing	-5 °C to 70 °C max. conductor temperature: according to EN / -5 °C to 80 °C max. conductor temperature: according to UL AWM
Cable sheath colour	black (RAL 9005)		
Core identification	Numbers		
Application area	Torsion / Flexible / Cable chain		



Number of cores	Conductor cross-section	Nominal voltage	Core identification	Shielded	Approval 1	Approval 2
2 - 34	0.5 - 2.5 mm ²	300/500 V	Identification by numbers only / numbered	yes	UL AWM	cUL AWM

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ÖLFLEX® ROBOT 928

Robots and torsion



Flexible PVC data cable (LAPP Basic Line performance class) for dynamic 3D movements, balanced bending and torsion properties, UL-certified.

Benefits

- Balanced bending and torsional properties for dynamic 3D applications (LAPP performance class „Basic Line“).
- Proven cable successfully tested for over 2 million bending cycles in cable chains and 2 million torsion cycles.
- Special core stranding allows simultaneous bending and twisting (torsion angle up to $\pm 180^\circ/m$).
- With robust, flexible and resistant PVC outer sheath.
- UL certification according to technical data enables the product to be used on the North American market.
- Product with multiple certifications enables universal use and reduces the variety of parts, thus guaranteeing logistics savings.

Application ranges

- Data cable for applications in automation, production lines and cable chains as well as for robots.
- The cable design enables flexible, continuously moving use in moving machine parts and cable chains, with horizontal travel distances of up to 5 m.
- Cable design allows flexible, permanently moving use with torsional stress in robots and handling devices.
- Can be used in dry, damp and wet spaces.
- The PVC outer sheath is resistant to acids and alkalis and has limited oil resistance.
- Suitable for outdoor use, subject to the temperature range.



Technical data	
Nominal voltage	48 V AC rms according to IEC
Rated voltage	300 V AC rms according to cRU AWM / 300 V AC rms according to UL AWM
Conductor material	Tin-plated copper
Conductor design	extra-fine wire
Core insulation base material	Polypropylene (PP)
Base material of outer sheath	Polyvinylchloride (PVC)
Cable sheath colour	black (RAL 9005)
Core identification	Colours
Core colour code	DIN 47100
Application area	Torsion / Flexible / Cable chain
Minimum bending radius, fixed installation	4 x outer diameter
Minimum bending radius, occasionally moved	15 x outer diameter
Torsion	for +/- 180 °/m up to 2000000 Torsion cycles
Temperature, fixed installation	-40 °C to 70 °C max. conductor temperature: according to EN / -40 °C to 80 °C max. conductor temperature: according to UL AWM
Temperature, occasionally moved	-5 °C to 70 °C max. conductor temperature: according to EN / -5 °C to 80 °C max. conductor temperature: according to UL AWM



Number of cores	Conductor cross-section	Nominal voltage	Core identification	Approval 1	Approval 2
2 - 25	0.14 - 0.34 mm ²	48 V	colour-coded	UL AWM	cUL AWM

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ÖLFLEX® ROBOT 928 D

Robots and torsion



Flexible, shielded PVC data cable (LAPP Basic Line performance class) for dynamic 3D movements, balanced bending and torsion properties, UL-certified.

Benefits

- Balanced bending and torsional properties for dynamic 3D applications (LAPP performance class „Basic Line“).
- Ideal protection against electromagnetic interference thanks to robust wrapping with braided tin-plated copper wires.
- Proven cable successfully tested for over 2 million bending cycles in cable chains and 2 million torsion cycles.
- Special core stranding allows simultaneous bending and twisting (torsion angle up to $\pm 180^\circ/\text{m}$).
- UL certification according to technical data enables the product to be used on the North American market.
- Product with multiple certifications enables universal use and reduces the variety of parts, thus guaranteeing logistics savings.

Application ranges

- Data cable for applications in automation, production lines and cable chains as well as for robots.
- Especially for environments where electromagnetic compatibility (EMC) is required.
- The cable design enables flexible, continuously moving use in moving machine parts and cable chains, with horizontal travel distances of up to 5 m.
- Cable design allows flexible, permanent moving use with torsional stress in robots and handling devices.
- Can be used in dry, damp and wet spaces.
- The PVC outer sheath is resistant to acids and alkalis and has limited oil resistance.
- Suitable for outdoor use, subject to the temperature range.



Technical data

Nominal voltage	48 V AC rms according to IEC	Minimum bending radius, fixed installation	4 x outer diameter
Rated voltage	300 V AC rms according to cRU AWM / 300 V AC rms according to UL AWM	Minimum bending radius, occasionally moved	15 x outer diameter
Conductor material	Tin-plated copper	Torsion	for $\pm 180^\circ/\text{m}$ up to 2000000 Torsion cycles
Conductor design	extra-fine wire	Temperature, fixed installation	-40 °C to 70 °C max. conductor temperature: according to EN / -40 °C to 80 °C max. conductor temperature: according to UL AWM
Core insulation base material	Polypropylene (PP)	Temperature, occasionally moved	-5 °C to 70 °C max. conductor temperature: according to EN / -5 °C to 80 °C max. conductor temperature: according to UL AWM
Base material of outer sheath	Polyvinylchloride (PVC)	Temperature, dynamic continuously flexing	-5 °C to 70 °C max. conductor temperature: according to EN / -5 °C to 80 °C max. conductor temperature: according to UL AWM
Cable sheath colour	black (RAL 9005)		
Core identification	Colours		
Core colour code	DIN 47100		
Application area	Torsion / Flexible / Cable chain		



Number of cores	Conductor cross-section	Nominal voltage	Core identification	Shielded	Approval 1	Approval 2
2 - 25	0.14 - 0.34 mm ²	48 V	colour-coded	yes	UL AWM	cUL AWM

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ÖLFLEX® SOLAR XLR-E SWR

Industry-specific use



Solar cable, designed for floating PV systems, tested by TÜV Rheinland in accordance with 2 PFG 2962, permanently resistant to moisture, salt spray, mould and UV radiation.

Benefits

- Solar cable tested by TÜV Rheinland in accordance with 2 PFG 2962, which permanently withstands moisture, salt spray, mould and UV radiation, thereby ensuring reliable operation.
- Halogen-free core insulation and sheath compound to comply with special fire safety requirements.
- Cross-linked insulation and sheathing materials promote longevity at high temperatures or at high current loads, and ensure a high dielectric strength and a high short circuit temperature.
- IEC certification allows international use of the product in countries in which the IEC standards are applicable.
- Available in three different outer sheath colours so that the DC conductor can be identified externally.

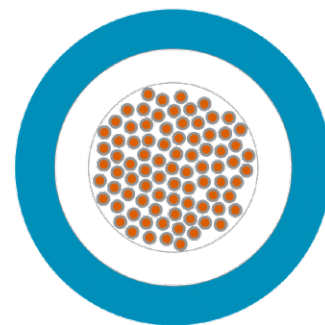
Application ranges

- For the unprotected connection of solar modules and inverters in earthed and unearthed photovoltaic systems in accordance with IEC 62930 and TÜV Rheinland 2 PFG 2962.
- For interconnecting solar modules.
- Specially designed for use in floating photovoltaic systems on lakes, reservoirs and oceans.
- For direct current applications up to 1.8 kV.
- For fixed installation and occasional movement, if necessary freely hanging.
- Can be installed in closed installation ducts, under plaster and in devices.
- Suitable for outdoor use.



Technical data

Nominal voltage	U ₀ /U: 1 / 1 kV AC rms according to IEC	Minimum bending radius, fixed installation	5 x outer diameter / 4 x outer diameter
Test voltage	6.5 kV	Temperature, fixed installation	-40 °C to 90 °C max. conductor temperature:
Conductor material	Tin-plated copper	Temperature, occasionally moved	-25 °C to 90 °C max. conductor temperature:
Core insulation base material	Electron beam cross-linked polymer compound	Flame retardance according to	IEC 60332-1-2
Base material of outer sheath	Electron beam cross-linked polymer compound	UV-resistant according to	EN 50618
Cable sheath colour	red / blue / black		
Application area	Fixed installation		



Number of cores	Conductor cross-section	Nominal voltage	Material	Installation	Halogen-free	Colours
1	2.5 - 300 mm ²	U ₀ /U 1/1 kV	electron beam cross-linked polymer compound	fixed	yes	various colors

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EPIC® ClickConnect M12D

Ethernet



Highly flexible Cat.5e patch cable for data transmission in the PROFINET network, with M12 push-pull connectors (D-coded) and SF/UTP shielding, for use on moving machine parts. The highly flexible Ethernet patch cable is now available in additional lengths (1 m, 3 m, 5 m, 10 m, 20 m).

Benefits

- The patch cable assembled on both sides saves time during installation and reduces or eliminates the potential for errors during on-site assembly.
- The two M12 connectors with innovative push-pull locking in accordance with DIN EN IEC 61076-2-010 are plugged in and locked or unlocked completely without tools. Thanks to this technology, there is no need for the labour-intensive screwing that is otherwise required for conventional M12 connections.
- Fast information exchange through Ethernet technology.
- Cat. 5e performance up to 100 Mbit/s.
- Ideal protection against electromagnetic interference thanks to double shielding made of aluminium-laminated foil and copper stranded shielding with high degree of coverage (SF/UTP).

- Halogen-free core insulation and sheath compound to comply with special fire safety requirements.

Application ranges

- For flexible use in the PROFINET network (type B), due to stranded conductor design.
- Also suitable for EtherCAT and Ethernet/IP applications.
- Can be used in dry and damp conditions, and especially in harsh and oily spaces.
- The PUR outer sheath and connectors withstand high mechanical stresses.
- The PUR outer sheath is resistant to mineral oil-based lubricants and highly resistant to chemicals.



Technical data

Application area Flexible

Min. number of plug cycles 100

IP protection rating IP 67

Installation temperature min. -25 °C - 85 °C



Installation	Connectors	Ethernet cable category	Connection	Cable length
flexible	push-pull technology	Cat.5e	M12 D-coded straight socket/plug	1 - 20 m

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EPIC® ClickConnect M12A

Sensor/actuator



Highly flexible PVC patch cable for signal transmission between sensors and actuators at field level, with M12 push-pull connectors (A-coded), for use on moving machine parts. In addition to the 17-pin variant, 5-, 8- and 12-pin variants are now also available. The highly flexible sensor/actuator patch cable is also available in additional lengths: 1 m, 3 m, 5 m and 10 m.

Benefits

- The patch cable assembled on both sides saves time during installation and reduces or eliminates the potential for errors during on-site assembly.
- The two M12 connectors with innovative push-pull locking in accordance with DIN EN IEC 61076-2-010 are plugged in and locked or unlocked completely without tools. Thanks to this technology, there is no need for the labour-intensive screwing that is otherwise required for conventional M12 connections.

Application ranges

- Can be used universally on machine interfaces for many applications in data and signal transmission.
- Typical application areas are sensors and actuators at field level.
- For flexible use.
- Can be used in dry and damp spaces.
- The PVC outer sheath is resistant to acids and alkalis and has limited oil resistance.



Technical data

Application area	Flexible	IP protection rating	IP 67
Min. number of plug cycles	100	Installation temperature min.	-25 °C - 80 °C



Connectors	Connection	Pins/wires	Cable length	Installation	Shielded	Conductor material
push-pull technology	M12 A-coded with push-pull technology	5 - 17 Pins/wires	1 m - 10 m	flexible	yes	polyvinyl chloride

[All variants & details online](#)



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EPIC® ClickConnect M12X

Ethernet

EtherNet/IP™



Highly flexible Cat.6A patch cables for data transmission via Ethernet, with M12 push-pull connectors (X-coded) and SF/UTP shielding, for use on moving machine parts. The highly flexible Ethernet patch cable is now available in additional lengths (1 m, 3 m, 5 m, 10 m, 20 m).

Benefits

- The patch cable assembled on both sides saves time during installation and reduces or eliminates the potential for errors during on-site assembly.
- The two M12 connectors with innovative push-pull locking in accordance with DIN EN IEC 61076-2-010 are plugged in and locked or unlocked completely without tools. Thanks to this technology, there is no need for the labour-intensive screwing that is otherwise required for conventional M12 connections.
- Fast information exchange through Ethernet technology.
- Cat. 6A performance up to 10 Gbit/s.
- Ideal protection against electromagnetic interference thanks to double shielding made of aluminium-laminated foil and copper stranded shielding with high degree of coverage (SF/UTP).

- Halogen-free core insulation and sheath compound to comply with special fire safety requirements.

Application ranges

- For flexible use.
- Also suitable for EtherCAT and EtherNet/IP applications.
- Can be used in dry and damp conditions, and especially in harsh and oily spaces.
- The PUR outer sheath and connectors withstand high mechanical stresses.
- The PUR outer sheath is resistant to mineral oil-based lubricants and highly resistant to chemicals.



Technical data

Application area	Flexible	IP protection rating	IP 67
Min. number of plug cycles	100	Installation temperature min.	-40 °C - 80 °C



Ethernet cable category	Conductor material	Connection	Cable length
Cat.6A	PUR	M12 X-coded straight female connector - M12 X-coded straight male connector	1 - 20 m

[All variants & details online](#)



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ETHERLINE® ACCESS U Basic

Switches



Unmanaged Fast Ethernet switch for cost-conscious applications, 5 or 8 Fast Ethernet ports, 35 mm top-hat rail mounting, IP 40, low-noise and maintenance-free.

Benefits

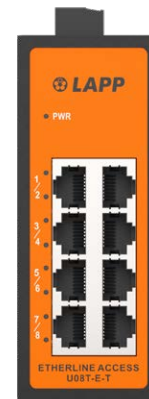
- Basic-Switch offers essential functions for industrial networks and is specially designed for cost-conscious Industrial Ethernet applications.
- Available with 5 or 8 ports (10/100BASE-T(X)).
- Low-noise and maintenance-free as it is operated without fans.
- Robust housing ensures reliable operation even in harsh industrial environments and reduces downtime.
- Direct mounting on 35 mm top-hat rails speeds up installation and reduces the installation effort as no additional accessories are required.

Application ranges

- For use in Ethernet-based networks in automation technology.
- For use in control cabinets in harsh environments (protection class IP 40).
- Can be used in an extended temperature range from -40 °C to +75 °C.



Technical data		
Assembly type	auf Hutschiene	Overall width
Housing base material	Stahl	5 Ports: 76 mm; 8 Ports: 91 mm
IP protection rating	IP 40	Overall height
Operating temperature	-40 °C - 75 °C	5 Ports: 26 mm; 8 Ports: 40 mm
Data transmission rate	10 Mbit/s; 100 Mbit/s	Total length
		5 Ports: 94 mm; 8 Ports: 94 mm
		Operating voltage (max.)
		52 V DC
		Operating voltage (min.)
		12 V DC



Product type	Interfaces	Industrial protocols
Unmanaged Switch	5 or 8 × RJ-45 (10 Mbit/s, 100 Mbit/s)	Ethernet

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ETHERLINE® ACCESS U Gigabit Basic

Switches



Unmanaged Gigabit switch for cost-conscious applications, 5 or 8 Gigabit ports, 35 mm top-hat rail mounting, IP 40, low-noise and maintenance-free.

Benefits

- Basic-Switch offers essential functions for industrial networks and is specially designed for cost-conscious Industrial Ethernet applications.
- Available with 5 or 8 Gigabit ports (10/100/1000Base-T(X)) for maximum data transmission rates.
- Low-noise and maintenance-free as it is operated without fans.
- Robust housing ensures reliable operation even in harsh industrial environments and reduces downtime.
- Direct mounting on 35 mm top-hat rails speeds up installation and reduces the installation effort as no additional accessories are required.

Application ranges

- For use in Ethernet-based networks in automation technology.
- For use in control cabinets in harsh environments (protection class IP 40).
- Can be used in an extended temperature range from -40 °C to +75 °C.



Technical data	
Assembly type	on top-hat rail
Housing base material	Steel
IP protection rating	IP 40
Operating temperature	-40 °C - 75 °C
Data transmission rate	10 Mbit/s; 100 Mbit/s; 1.000 Mbit/s
Overall width	5 Ports: 85.5 mm; 8 Ports: 104 mm
Overall height	5 Ports: 33.5 mm; 8 Ports: 47.7 mm
Total length	5 Ports: 18 mm; 8 Ports: 143.7 mm
Operating voltage (max.)	52 V DC
Operating voltage (min.)	12 V DC



Product type	Interfaces	Industrial protocols
Unmanaged Switch	5 or 8 RJ 45 (10 Mbit/s; 100 Mbit/s; 1.000 Mbit/s)	Ethernet

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EPIC® H-A 3 Kits Thermoplastic

Kits



Plastic rectangular connector kits in size 3A, for 400 V AC/10 A, with EPIC® H-A 3 insert, contacts, EPIC® H-A 3 housing, tlws. SKINTOP® ST-M cable gland.
The new kit variants include rectangular connector inserts with cage clamp connection.

Benefits

- Kits for the production of a rectangular connector with optimally matched components to reduce ordering effort and avoid incorrect orders.
- Kits consist of a rectangular connector insert, integrated (matching) contacts and a rectangular connector housing. Kits with a grommet or base housing also include a matching SKINTOP® cable gland.
- The rectangular connector inserts in the EPIC® H-A 3 series can be used for voltages up to 400 V AC and currents up to 10 A. They are available in various connection types: With classic screw connection or with vibration-proof cage clamp connection, which allows stranded wire contacting quickly, easily and even without conductor end sleeves.

- The rectangular connector housings in the EPIC® H-A 3 series are the smallest housings, especially for use where space is limited. The self-extinguishing and highly oil-resistant plastic housing is available in various designs and offers IP 65 protection.
- UL certification according to technical data enables the product to be used on the North American market.

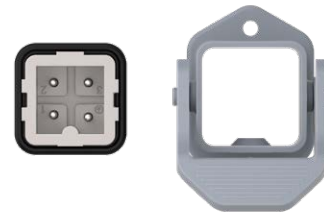
Application ranges

- For connecting devices and machines to a power supply in various applications.
- Especially suitable for applications with limited space.
- Suitable for outdoor use.



Technical data

Rated voltage	400 V AC rms / DC according to IEC	Thread size	M 20
Rated current	10 A according to IEC	Conductor connection type	cage spring terminal
Number of contacts	3+PE	cUR certification	according to GSA C22.2 No. 182.2 (e-file number: E75770)



Thread size	number of poles
M20	3+PE

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EPIC® H-A 3 Kits metal

Kits



Metal rectangular connector kits in size 3A, for 400 V AC/ 10 A, with EPIC® H-A 3 insert, contacts, EPIC® H-A 3 housing, tlws. SKINTOP® MS-M cable gland.
The new kit variants include rectangular connector inserts with cage clamp connection.

Benefits

- Kits for the production of a rectangular connector with optimally matched components to reduce ordering effort and avoid incorrect orders.
- Kits consist of a rectangular connector insert, integrated (matching) contacts and a rectangular connector housing. Kits with a grommet or base housing also include a matching SKINTOP® cable gland.
- The rectangular connector inserts in the EPIC® H-A 3 series can be used for voltages up to 400 V AC and currents up to 10 A. They are available in various connection types: With classic screw connection or with vibration-proof cage clamp connection, which allows stranded wire contacting quickly, easily and even without conductor end sleeves.

- The rectangular connector housings in the EPIC® H-A 3 series are the smallest housings, especially for use where space is limited. The robust housing made of die-cast zinc can withstand high environmental and mechanical loads, is available in various versions and offers IP 65 protection.
- UL certification according to technical data enables the product to be used on the North American market.

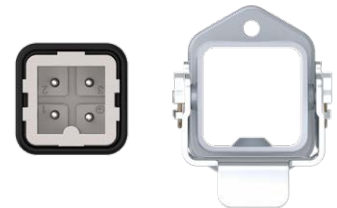
Application ranges

- For connecting devices and machines to a power supply in various applications.
- Especially suitable for applications with limited space.
- Suitable for outdoor use.



Technical data

Rated voltage	400 V AC rms / DC according to IEC	Thread size	M 20
Rated current	10 A according to IEC	Conductor connector type	cage spring terminal
Number of contacts	3+PE	cUR certification	according to CSA C22.2 No. 182.2 (e-file number: E75770)



number of poles

3+PE

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EPIC® H-A 4 Kits thermoplastic

Kits



Plastic rectangular connector kits in size 3A, for 400 V AC/10 A, with EPIC® H-A 4 insert, contacts, EPIC® H-A 3 housing, tlws. SKINTOP® ST-M cable gland.
The new kit variants include rectangular connector inserts with cage clamp connection.

Benefits

- Kits for the production of a rectangular connector with optimally matched components to reduce ordering effort and avoid incorrect orders.
- Kits consist of a rectangular connector insert, integrated (matching) contacts and a rectangular connector housing. Kits with a grommet or base housing also include a matching SKINTOP® cable gland.
- The rectangular connector inserts in the EPIC® H-A 4 series can be used for voltages up to 400 V AC and currents up to 10 A. They are available in various connection types: With classic screw connection or with vibration-proof cage clamp connection, which allows stranded wire contacting even without conductor end sleeves.

- The rectangular connector housings in the EPIC® H-A 3 series are the smallest housings, especially for use where space is limited. The self-extinguishing and highly oil-resistant plastic housing is available in various designs and offers IP 65 protection.
- UL certification according to technical data enables the product to be used on the North American market.

Application ranges

- For connecting devices and machines to a power supply in various applications.
- Especially suitable for applications with limited space.
- Suitable for outdoor use.



Technical data

Rated voltage	230 V AC rms / DC according to IEC	Thread size	M 20
Rated current	10 A according to IEC	Conductor connection type	cage spring terminal
Number of contacts	4+PE	cUR certification	according to GSA C22.2 No. 182.2 (e-file number: E75770) / according to CSA C22.2 No. 182.1 (e-file number: E75770)



number of poles

4+PE

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EPIC® H-A 4 Kits metal

Kits



Metal rectangular connector kits in size 3A, for 400 V AC/10 A, with EPIC® H-A 4 insert, contacts, EPIC® H-A 3 housing, tlws. SKINTOP® ST-M cable gland.
The new kit variants include rectangular connector inserts with cage clamp connection.

Benefits

- Kits for the production of a rectangular connector with optimally matched components to reduce ordering effort and avoid incorrect orders.
- Kits consist of a rectangular connector insert, integrated (matching) contacts and a rectangular connector housing. Kits with a grommet or base housing also include a matching SKINTOP® cable gland.
- The rectangular connector inserts in the EPIC® H-A 4 series can be used for voltages up to 400 V AC and currents up to 10 A. They are available in various connection types: With classic screw connection or with vibration-proof cage clamp connection, which allows stranded wire contacting even without conductor end sleeves.

- The rectangular connector housings in the EPIC® H-A 3 series are the smallest housings, especially for use where space is limited. The robust housing made of die-cast zinc can withstand high environmental and mechanical loads, is available in various versions and offers IP 65 protection.
- UL certification according to technical data enables the product to be used on the North American market.

Application ranges

- For connecting devices and machines to a power supply in various applications.
- Especially suitable for applications with limited space.
- Suitable for outdoor use.



Technical data

Rated voltage	230 V AC rms / DC according to IEC	Thread size	M 20
Rated current	10 A according to IEC	Conductor connection type	Screw connection / cage spring terminal
Number of contacts	4+PE	cUR certification	according to CSA C22.2 No. 182.2 (e-file number: E75770)



number of poles
4+PE

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EPIC® H-BE 6 Kits

Kits



Rectangular connector kits in size 6B, for 500 V AC and 16 A, consisting of EPIC® H-BE insert, contacts, EPIC® H-B housing and SKINTOP® MS-M cable gland. The new kit variants include rectangular connector inserts with push-in connection.

Benefits

- Kits for the production of a rectangular connector with optimally matched components to reduce ordering effort and avoid incorrect orders.
- Kits consist of a rectangular connector insert, integrated (matching) contacts and a rectangular connector housing. Kits with a grommet or base housing also include a matching SKINTOP® cable gland.
- The rectangular connector inserts in the EPIC® H-BE series are ideal for use with higher voltages (500 V AC) and currents (16 A). They are available in different connection types: With classic screw connection or with vibration-proof, maximum ease of realisation push-in connection via orange button.

- The rectangular connector housings in the EPIC® H-B series are spacious housings for many or thicker cables. They are available in various designs and provide IP 65 protection.

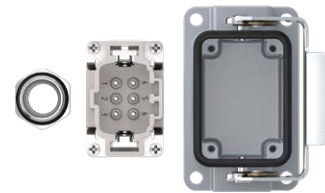
Application ranges

- For connecting devices and machines to a power supply in various applications.
- For transmission of control signals to actuators.
- Typical applications include platform, lighting and lifting technology.
- Suitable for outdoor use.



Technical data

Rated voltage	500 V AC rms / DC according to IEC / 600 V AC rms / DC according to UL/CSA	Conductor connection type	Screw connection / Push-in
Rated current	16 A according to IEC / 16 A according to UL/CSA	cUR certification	according to CSA C22.2 No. 182.2 (e-file number: E75770) / according to CSA C22.2 No. 182.3 (CCN: ECBT8 / e-file number: E75770) / according to CSA C22.2 No. 182.3 (CCN: ECBT2 / e-file number: E75770)
Number of contacts	6+PE		
Thread size	M 20		



number of poles

6+PE

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EPIC® H-BE 10 Kits

Kits



Rectangular connector kits in size 10B, for 500 V AC and 16 A, consisting of EPIC® H-BE insert, contacts, EPIC® H-B housing and SKINTOP® MS-M cable gland. The new kit variants include rectangular connector inserts with push-in connection.

Benefits

- Kits for the production of a rectangular connector with optimally matched components to reduce ordering effort and avoid incorrect orders.
- Kits consist of a rectangular connector insert, integrated (matching) contacts and a rectangular connector housing. Kits with a grommet or base housing also include a matching SKINTOP® cable gland.
- The rectangular connector inserts in the EPIC® H-BE series are ideal for use with higher voltages (500 V AC) and currents (16 A). They are available in different connection types: With classic screw connection or with vibration-proof, maximum ease of realisation push-in connection via orange button.

- The rectangular connector housings in the EPIC® H-B series are spacious housings for many or thicker cables. They are available in various designs and provide IP 65 protection.

Application ranges

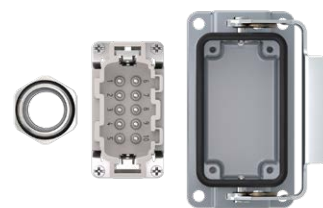
- For connecting devices and machines to a power supply in various applications.
- For transmission of control signals to actuators.
- Typical applications include platform, lighting and lifting technology.
- Suitable for outdoor use.



Technical data

Rated voltage	500 V AC rms / DC according to IEC / 600 V AC rms / DC according to UL/CSA
Rated current	16 A according to IEC / 16 A according to UL/CSA
Number of contacts	10+PE

Thread size	M 25 / M 20
Conductor connection type	Push-in
cUR certification	according to CSA C22.2 No. 182.2 (e-file number: E75770)



number of poles

10+PE

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EPIC® H-BE 16 Kits

Kits



Rectangular connector kits in size 16B, for 500 V AC and 16 A, consisting of EPIC® H-BE insert, contacts, EPIC® H-B housing and SKINTOP® MS-M cable gland.
The new kit variants include rectangular connector inserts with push-in connection.

Benefits

- Kits for the production of a rectangular connector with optimally matched components to reduce ordering effort and avoid incorrect orders.
- Kits consist of a rectangular connector insert, integrated (matching) contacts and a rectangular connector housing. Kits with a grommet or base housing also include a matching SKINTOP® cable gland.
- The rectangular connector inserts in the EPIC® H-BE series are ideal for use with higher voltages (500 V AC) and currents (16 A). They are available in different connection types: With classic screw connection or with vibration-proof, maximum ease of realisation push-in connection via orange button.

- The rectangular connector housings in the EPIC® H-B series are spacious housings for many or thicker cables. They are available in various designs and provide IP 65 protection.

Application ranges

- For connecting devices and machines to a power supply in various applications.
- For transmission of control signals to actuators.
- Typical applications include platform, lighting and lifting technology.
- Suitable for outdoor use.



Technical data

Rated voltage	500 V AC rms / DC according to IEC / 600 V AC rms / DC according to UL/CSA	Thread size	M 25
Rated current	16 A according to IEC / 16 A according to UL/CSA	Conductor connection type	Push-in
Number of contacts	16+PE	cUR certification	according to CSA C22.2 No. 182.2 (e-file number: E75770)



number of poles

16+PE

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EPIC® H-BE 24 Kits

Kits



Rectangular connector kits in size 24B, for 500 V AC and 16 A, consisting of EPIC® H-BE insert, contacts, EPIC® H-B housing and SKINTOP® MS-M cable gland. The new kit variants include rectangular connector inserts with push-in connection.

Benefits

- Kits for the production of a rectangular connector with optimally matched components to reduce ordering effort and avoid incorrect orders.
- Kits consist of a rectangular connector insert, integrated (matching) contacts and a rectangular connector housing. Kits with a grommet or base housing also include a matching SKINTOP® cable gland.
- The rectangular connector inserts in the EPIC® H-BE series are ideal for use with higher voltages (500 V AC) and currents (16 A). They are available in different connection types: With classic screw connection or with vibration-proof, maximum ease of realisation push-in connection via orange button.

- The rectangular connector housings in the EPIC® H-B series are spacious housings for many or thicker cables. They are available in various designs and provide IP 65 protection.

Application ranges

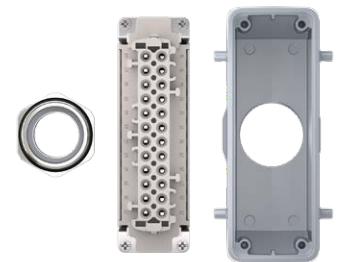
- For connecting devices and machines to a power supply in various applications.
- For transmission of control signals to actuators.
- Typical applications include platform, lighting and lifting technology.
- Suitable for outdoor use.



Technical data

Rated voltage	500 V AC rms / DC according to IEC / 600 V AC rms / DC according to UL/CSA
Rated current	16 A according to IEC / 16 A according to UL/CSA
Number of contacts	24+PE

Thread size	M 25 / M 32
Conductor connection type	Push-in
cUR certification	according to CSA C22.2 No. 182.2 (e-file number: E75770)



number of poles

24+PE

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EPIC® H-BSS Kits

Kits



Rectangular connector kits in size 6B, for 600 V AC and 35 A, consisting of EPIC® H-BSS insert, contacts, EPIC® H-B housing and SKINTOP® MS-M cable gland.

We now also offer rectangular connector kits with inserts from the EPIC® H-BSS series.

Benefits

- Kits for the production of a rectangular connector with optimally matched components to reduce ordering effort and avoid incorrect orders.
- Kits consist of a rectangular connector insert, integrated (matching) contacts and a rectangular connector housing. Kits with a grommet or base housing also include a matching SKINTOP® cable gland.
- The rectangular connector inserts in the EPIC® H-BSS series are powerful up to 35 A, despite their extremely space-saving size. Conductors with core cross-sections of up to 6.0 mm² are connected using a screw connection.
- The rectangular connector housings in the EPIC® H-B series are spacious housings for many or thicker cables. They are available in various designs and provide IP 65 protection.

Application ranges

- For connecting devices and machines to a power supply in various applications.
- Suitable for outdoor use.



Technical data

Rated voltage	400 V AC rms / DC according to IEC / 600 V AC rms / DC according to UL/CSA	Thread size	M 25
Rated current	35 A according to IEC / 35 A according to UL/CSA	Conductor connection type	Screw connection
Number of contacts	4+PE	cUR certification	according to CSA C22.2 No. 182.3 (CCN: ECBT8 / e-file number: E75770)



Number of poles	Rated current	Components	Optional
4+PE	35 A	insert; housing	screw connection

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SKINTOP® CLEAN

Plastic



Cleanroom-suitable cable gland, resistant to microbial degradation to support hygiene standards, white surface for quick contamination detection.

Benefits

- Tested for low particle emission in accordance with EN ISO 14644-14 and therefore suitable for use in cleanrooms up to ISO class 1 in accordance with EN ISO 14644-1. This supports a high level of process reliability in sensitive environments.
- The material is resistant to bacterial growth in accordance with DIN EN ISO 846, method C. This protects the material from microbial degradation and supports compliance with hygiene standards in demanding areas of application.
- The white colour enables quick detection of possible contamination. This allows sources of contamination to be identified at an early stage.
- Highly stable when being turned and closes quickly thanks to its multi-start, flattened trapezoidal thread.

- If vibration occurs, the permanent vibration protection prevents the cap nut from opening.
- The best possible sealing enables protection class IP 66 and IP 68 (5 bar).
- Large, variable clamping range for different cable outer diameters.

Application ranges

- For sealing and strain relieving cable insertion into a housing.
- Typical areas of application are clean rooms, drying rooms or the food and beverage industry.



Technical data

Assembly type	screw	Colour	white/blue
Thread size	M 12 / M 16 / M 20 / M 25 / M 32 / M 40	IP protection rating	IP 66 / IP 68 - 5 bar (30 min)
O-ring material	Silicone	Temperature	-20 °C - 100 °C
Sealing material	Silicone	Flame retardance according to	UL 94 V-2
Material body	Polyamide		



Thread size	For cable outer diameter	Body material	IP rating	Cleanroom class
M 12 - M 40	4,5 - 28 mm	Polyamide	IP68	ISO Class 1 (EN ISO 14644-1)

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SKINTOP® TRAIN / SKINTOP® TRAIN XL

Brass



Cable gland with full-surface compression for increased fire safety, halogen-free, standard-compliant for railway vehicles (HL3 and E30).

Benefits

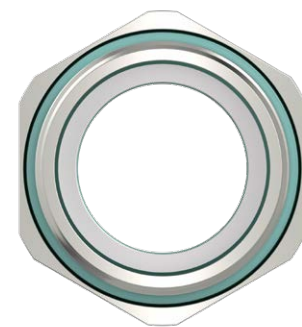
- Increases fire safety, as the full-surface compression forms a closed and tight barrier against fire and smoke in the event of a fire.
- Halogen-free materials make the product suitable for use in public areas.
- Safe, fast and uncomplicated installation.
- The best possible sealing enables protection class IP 68 (3 bar).

Application ranges

- For sealing and strain relieving cable insertion into a housing.
- Can be used in railway vehicles in accordance with standards (fire behaviour test in accordance with DIN EN 45545-2, requirement sets R22/R23, hazard levels HL1-HL3; fire resistance test in accordance with DIN EN 45545-3, classification E30).
- The „XL“ variant is particularly suitable for thick-walled housings thanks to the exceptionally long connection thread.
- Withstands high chemical and mechanical loads.
- Suitable for outdoor use, subject to the temperature range.



Technical data	
Assembly type	screw
Thread size	M 12 / M 16 / M 20 / M 25 / M 32 / M 40 / M 50 / M 63
O-ring material	Ethylene vinyl acetate copolymer
Sealing material	Ethylene vinyl acetate copolymer
Material body	Brass
Surface protection	Nickel-plated
Colour	silver
IP protection rating	IP 68 - 3 bar (30 min)
Temperature dynamic	-20 °C - 100 °C
Temperature static	-40 °C - 100 °C
Fire protection for railway vehicles hazard level	EN 45545-2 HL3 / DIN EN 45545-3 E30



Thread size	Für For cable outer diameter	Body material	IP rating	Halogen-free	Standard/Classification
M12 - M63	3,5-44 mm	Nickel-plated brass	IP68	yes	EN 45545-2 HL3

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SKINTOP® TRAIN EMC / SKINTOP® TRAIN EMC XL

Brass



Cable gland with full-surface compression for increased fire safety, halogen-free, 360° brass brush, standard-compliant for railway vehicles (HL3 and E30).

Benefits

- Increases fire safety, as the full-surface compression forms a closed and tight barrier against fire and smoke in the event of a fire.
- Optimum EMC protection thanks to the unique 360° brass brush, which creates a low-resistance contact between the copper stranded shielding and the cable gland.
- Reliable EMC protection is guaranteed even after dismantling and reinstallation, as the copper stranded shielding is not damaged by the brass brush.
- Halogen-free materials make the product suitable for use in public areas.
- Safe, fast and uncomplicated installation.
- The best possible sealing enables protection class IP 68 (3 bar).

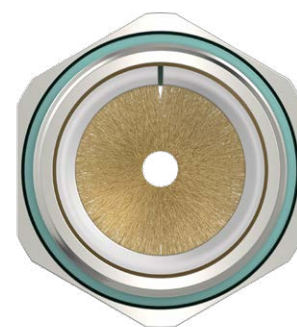
Application ranges

- For EMC-compliant insertion of copper-shielded cables.
- Can be used in railway vehicles in accordance with standards (fire behaviour test in accordance with DIN EN 45545-2, requirement sets R22/R23, hazard levels HL1-HL3; fire resistance test in accordance with DIN EN 45545-3, classification E30).
- The „XL“ variant is particularly suitable for thick-walled housings thanks to the exceptionally long connection thread.
- Withstands high chemical and mechanical loads.
- Suitable for outdoor use, subject to the temperature range.
- Note: For painted, anodised or powder-coated housings, use the SKINDICHT® SM-PE-M lock nut for equipotential bonding.



Technical data

Assembly type	screw	Colour	silver
Thread size	M 16 / M 20 / M 25 / M 32 / M 40 / M 50 / M 63	IP protection rating	IP 68 - 3 bar (30 min)
O-ring material	Ethylene vinyl acetate copolymer	Temperature dynamic	-20 °C - 100 °C
Sealing material	Ethylene vinyl acetate copolymer	Temperature static	-40 °C - 100 °C
Material body	Brass	Fire protection for railway vehicles hazard level	EN 45545-2 HL3 / DIN EN 45545-3 E30
Surface protection	Nickel-plated		



Thread size	For cable outer diameter	Body material	IP rating	Halogen-free	Standard/Classification
M 16-M 63	6-44.0 mm	Nickel-plated brass	IP68	yes	EN45545-2, HL3

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SKINTOP® HEAT / SKINTOP® HEAT XL

Brass



Heat-resistant cable gland with FKM sealing for temperatures up to +200 °C, full-surface compression to protect the cable sheath, resistant to aggressive media.

Benefits

- Thanks to FKM sealing, very heat-resistant and suitable for use at extremely hot temperatures (up to + 200°C).
- Protects the cable sheath, as the full-surface compression enables uniform all-round sealing.
- Large, variable clamping range for different cable outer diameters.
- The best possible sealing enables protection class IP 68 (3 bar).

Application ranges

- For sealing and strain relieving cable insertion into a housing.
- For use with ÖLFLEX® HEAT cables.
- Good oil and chemical resistance.
- Withstands high mechanical stress.
- Suitable for outdoor use.



Technical data

Assembly type	screw	Surface protection	Nickel-plated
Thread size	M 12 / M 16 / M 20 / M 25 / M 32 / M 40 / M 50 / M 63	Colour	silver
O-ring material	Fluorinated rubber	IP protection rating	IP 68 - 3 bar (30 min)
Sealing material	Fluorinated rubber	Temperature	-20 °C - 200 °C
Material body	Brass		



Thread size	For cable outer diameter	Body material	IP rating	Halogen-free
M 12-M63	3.5-44.0mm	Nickel-plated brass	IP68	no

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SKINTOP® HEAT EMC / SKINTOP® HEAT EMC XL

Brass



Heat-resistant cable gland with FKM sealing for temperatures up to +200 °C, 360° brass brush, full-surface compression to protect the cable sheath, resistant to aggressive media.

Benefits

- Thanks to FKM sealing, very heat-resistant and suitable for use at extremely hot temperatures (up to + 200°C).
- Protects the cable sheath, as the full-surface compression enables uniform all-round sealing.
- Optimum EMC protection thanks to the unique 360° brass brush, which creates a low-resistance contact between the copper stranded shielding and the cable gland.
- Reliable EMC protection is guaranteed even after dismantling and reinstallation, as the copper stranded shielding is not damaged by the brass brush.
- Large, variable clamping range for different cable outer diameters.
- The best possible sealing enables protection class IP 68 (3 bar).

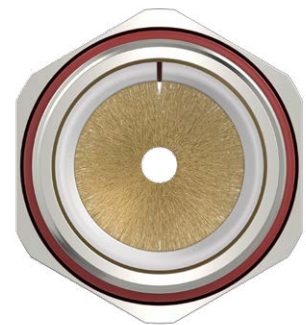
Application ranges

- For EMC-compliant insertion of copper-shielded cables.
- For use with ÖLFLEX® HEAT cables.
- Good oil and chemical resistance.
- Withstands high mechanical stress.
- Suitable for outdoor use.
- Note: For painted, anodised or powder-coated housings, use the SKINDICHT® SM-PE-M lock nut for equipotential bonding.



Technical data

Assembly type	screw	Material body	Brass
Thread size	M 16 / M 20 / M 25 / M 32 M 40 / M 50 / M 63	Surface protection	Nickel-plated
O-ring material	Fluorinated rubber	Colour	silver
Sealing material	Fluorinated rubber	IP protection rating	IP 68 - 3 bar (30 min)
		Temperature	-20 °C - 200 °C



Thread size	For cable outer diameter	Body material	IP rating	Halogen-free
M16-M63	3.5-44.0 mm	Nickel-plated brass	IP68	no

[All variants & details online](#)



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Remark
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Cable Tie BASIC

Cable ties

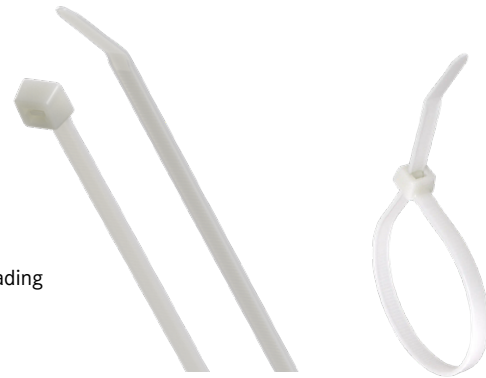


All-purpose cable ties with many possible applications, strong holding force, low threading forces, UL approval, UV-resistant variants available.

[All variants & details online](#)



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Cable Tie SOLAR

Cable ties



Cable ties for outdoor use, high UV resistance, reliable function even in permanent sunlight, strong holding force, low threading forces, UL approval.

[All variants & details online](#)



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Cable Tie HEAVY DUTY

Cable ties



Hard-wearing cable ties, wide design for increased pull-out forces and more stability, UV-resistant black variants available for outdoor use.

[All variants & details online](#)



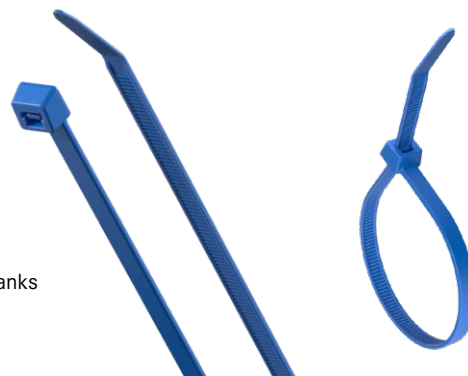
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Cable Tie DETECT

Cable ties



Cable ties for hygiene-critical areas, increased product safety in the event of breakage thanks to detection by metal devices, quick visual recognition thanks to blue colouring.

[All variants & details online](#)



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Cable Tie TWIST

Cable ties



Cable ties for quick and easy installation, cable tie end can be cut off by twisting, no sharp edges, safe handling.

[All variants & details online](#)



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Cable Tie CLIP

Cable ties



Cable clip for attaching cables and wires to edges, easy installation without tools, no drilling or gluing required, available with or without integrated cable ties.

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CABLES
CABLE ASSEMBLIES
NETWORK AND DISTRIBUTION COMPONENTS
CONNECTORS
CABLE GLANDS
CABLE PROTECTION AND GUIDING SYSTEMS
MARKING SYSTEMS
TOOLS AND ACCESSORIES
LOGISTICS PRODUCTS
EMOBILITY
DRAG CHAINS

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The following applies for the use of our products

The conformity of our products to the relevant European directives and compliance with the provisions contained therein shall be indicated by the CE marking.

The safety of our products is closely associated with how they are used. Knowledge of and adherence to the respective international/national standards of use (e.g. DIN VDE 0100; 0298)

are mandatory. There are particular risks if installed improperly. This applies to all our products/items:

Processing must only be done by an authorised electrician! Otherwise, there is the risk of an electric shock or a fire ignited by electric current!

Safety

Without exception, our products are tested for application safety in accordance with defined standards and our own regulations, which complement the standards. Relevant legal requirements and safety regulations are also observed. Provided due care and attention is paid, the possibility of product-specific danger to the user may thus reasonably be excluded. Where products are used carelessly or incorrectly, however, considerable danger to

persons and the environment may arise. For this reason, our cables must only be processed and/or used responsibly by trained electricians or specialists. This catalogue contains general information on the application of each product. Independent of such information, the application standards DIN VDE 0298 and DIN VDE 0891 for cables apply. Excerpts from these standards, as well as complementary selection and application tables, design

and installation guidelines, are contained in the tables in the appendix to this catalogue. Our machines and installation tools are – where necessary – designed in accordance with the machine guidelines and display the CE identification mark. It must be noted, however, that our machines and installation tools must only be used by trained specialist personnel and for the purpose for which they were designed.

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Power and control cables



UNITRONIC[®]
Data communication systems



ETHERLINE[®]
Data communication systems
for Ethernet technology



HITRONIC[®]
Optical transmission systems



EPIC[®]
Industrial connectors



SKINTOP[®]
Cable glands



SILVYN[®]
Protective cable conduit systems
and cable carrier systems



FLEXIMARK[®]
Marking systems

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