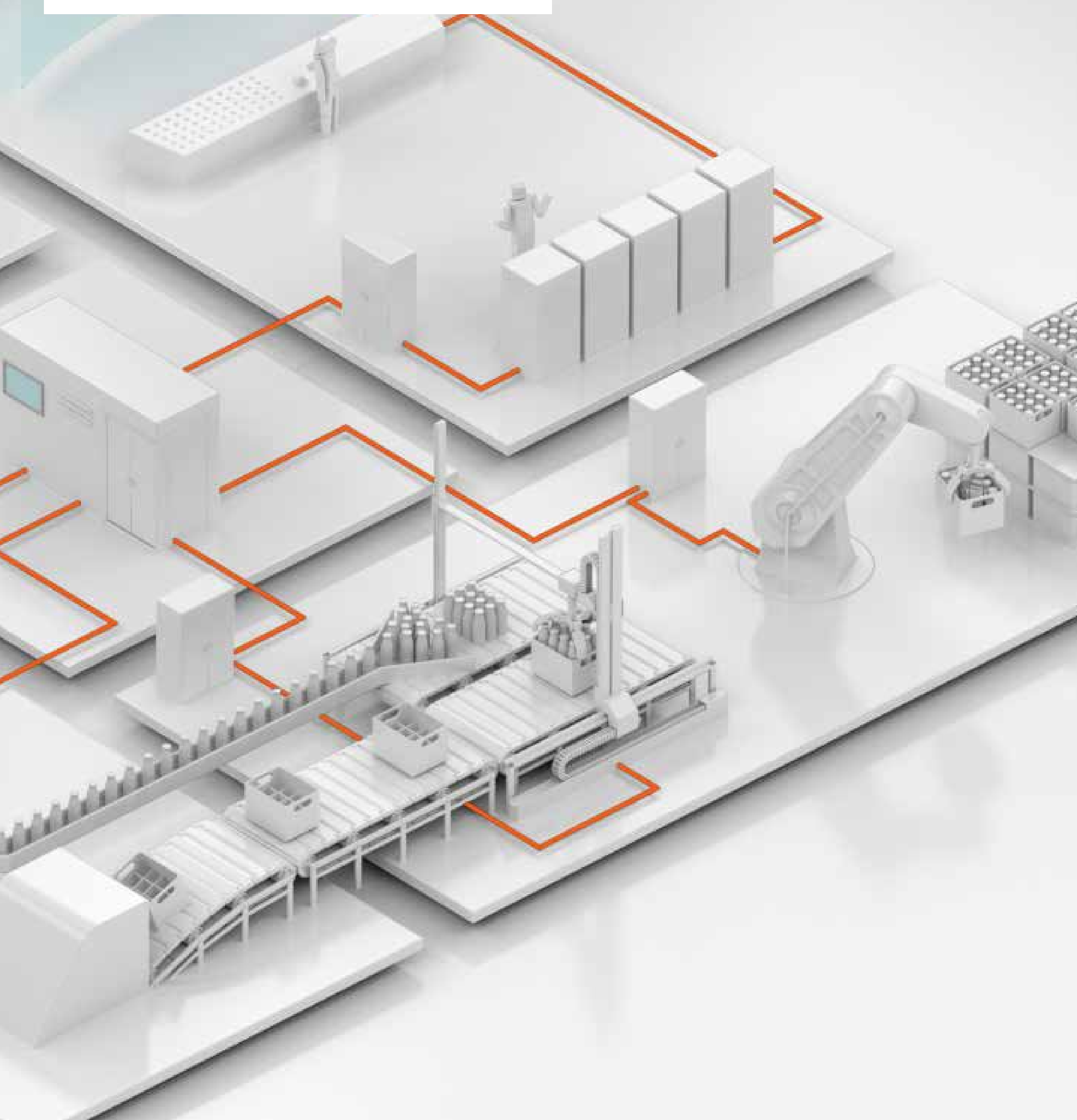


# Innovations 2024

April

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## Cables

Power and control cables



## ÖLFLEX® SOLAR H1 BUR

H1Z2Z2-K solar cable with AD8, with Dca classification and IEC certification, for DC applications up to 1.8 kV, suitable for underground installation in a pipe or sandbed.

### Benefits

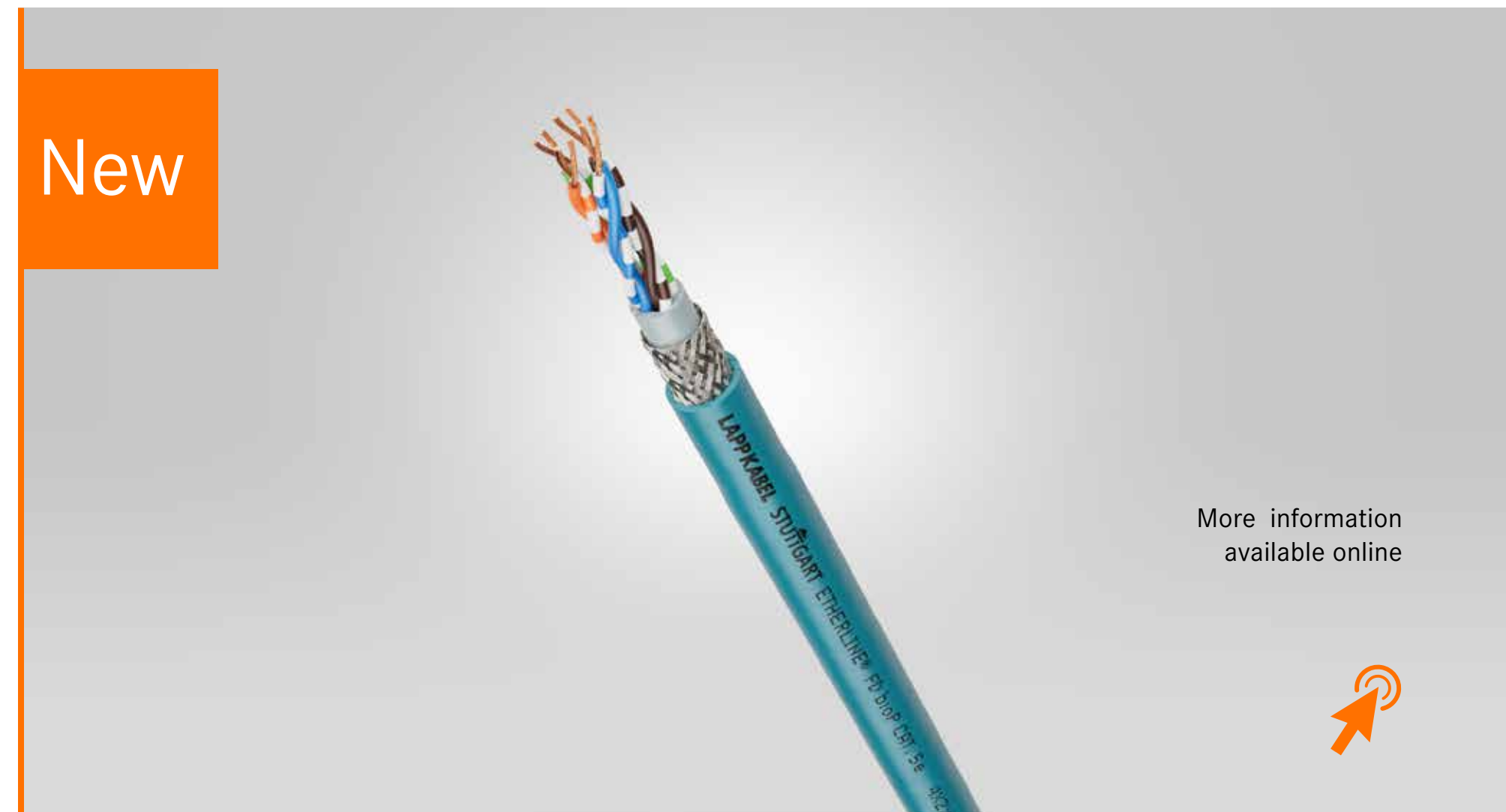
- Halogen-free core insulation and sheath compound to meet special fire protection requirements.
- Classified fire behaviour according to EU Directive 305/2011 (BauPVO/CPR) with article number selection on the LAPP website.
- A laterally waterproof cable allows permanent submersion in shallow, uncontaminated water: AD8 in accordance with IEC 60364-5-51 and IEC 62440.
- Due to its increased mechanical strength, it is suitable for underground installation in a cable trench with a sand bed, tested using the „Impact-Resistance Test“ and the „Crushing-Resistance Test“ in accordance with UL 854.
- Cross-linked insulation and sheath materials promote longevity at high temperatures or at high current load, and provide 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.
- Expected service life of 25 years in accordance with EN 50618 for H1Z2Z2-K-compliant application.
- Available in three different outer sheath colours so that the DC conductor can be identified externally.
- Excellent price-performance ratio thanks to smart material selection.

### Application ranges

- For unprotected connection of solar modules and inverters in earthed and non-earthed photovoltaic systems according to EN 50618.
- For interconnecting solar modules.
- For direct current applications up to 1.8 kV.
- For use with the solar connectors of the EPIC® SOLAR series.
- For fixed installation and occasional flexing, if necessary freely hanging.
- Underground installation in protective cable conduits only with drainage of accumulated water.
- Underground installation in a cable trench with a sand bed based on VDE 0891-6 and DIN EN 50174-3.
- Can be installed in closed installation ducts, under plaster and in devices.

## Cables

Data cables



# ETHERLINE® FD bioP Cat.5e

Highly flexible Cat.5e Ethernet cable (1000 Mbit/s) with outer sheath made of partially bio-based plastic, for constantly flexing use in cable chains, with UL approval.

### Benefits

- The sustainable variant with the bio-based outer sheath consists of more than 40% renewable raw materials (according to ASTM D6866). The product properties are the same as for the standard variant made of purely fossil raw materials.
- The outer sheath made of partially bio-based plastic reduces dependence on fossil fuels and reduces the carbon footprint.
- Fast information exchange through ETHERNET technology.
- Cat.5e performance up to 1000 Mbit/s.
- For transmission of analogue and digital signals in the frequency range up to 100 MHz.
- Ideal protection against electromagnetic interference thanks to copper stranded shielding with a high degree of coverage.
- UL/CSA certification according to technical data enables the product to be used in the North American market.
- Halogen-free and flame-retardant materials reduce the possible hazards in the event of a fire.
- Successfully tested for over 10 million bending cycles in cable chains.

### Application ranges

- Also suitable for EtherCAT and EtherNet/IP applications.
- Especially for environments where electromagnetic compatibility (EMC) is required.
- Suitable for patch cable assembly up to a cable length of 60 m.
- Cable design allows highly flexible, continuously flexing use in moving machine parts and in the cable chain.
- The bio-TPU outer sheath is insensitive to mineral-oil-based lubricants and resistant to many chemicals.

## Technical Data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000830  
ETIM 5.0/6.0 Class-Description:  
Data cable

**Peak operating voltage**  
(not for power applications) 125 V

**Minimum bending radius**  
Fixed installation: 8 x outer diameter  
Flexing: 15 x outer diameter

**Characteristic impedance**  
nom. 100 Ω acc. to IEC 61156-6

**Temperature range**  
Fixed installation: VDE -30 °C to +80 °C;  
UL/CSA -30 °C to +80 °C  
Flexing: VDE -5 °C to +50 °C;  
UL/CSA  
-5 °C to +80 °C



## Cables

Power and control cables

New



More information available online



# UNIRAIL S 50264-3-2 300V MM FR

Fire-resistant control cable in accordance with DIN EN 50264-3-2 (type MM), 300 V, with insulation integrity of up to 120 min. in accordance with DIN EN 50200 for use in railway vehicles.


### Benefits


- For protection against personal injury and damage to property.
- Insulation integrity for up to 120 minutes under the effect of fire (classification PH120 according to DIN EN 50200). Guarantees functional integrity and the power supply in the event of an emergency.
- Compliant with standards for use in rail vehicles: fire safety and cable design requirements according to DIN EN 50264-3-2, type MM; fire behaviour in accordance with DIN EN 45545-2, hazard level HL3.
- The cross-linked insulation and sheath materials promote longevity at high temperatures or with a high current load, and provide high dielectric strength.
- Halogen-free and highly flame-retardant materials reduce the risk of flame propagation, high smoke density and toxic flue gases in the event of a fire.
- Space saving due to reduced wall thicknesses.


### Application ranges


- For wiring safety-related components in railway vehicles.
- Typical application areas are emergency power circuits for alarm, lighting and communication purposes, which must maintain their function for a certain period of time in the event of a fire.
- For use in railway vehicles, for fixed installation and applications where limited movement is to be expected.
- Can be used in dry, damp and especially in harsh and oily environments.
- The cross-linked polymer compound is highly resistant to oils, fuels, alkalis and acids.


## Technical Data


 **Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000104  
ETIM 5.0/6.0 Class-Description:  
Control cable


 **Core identification code**  
Black with white numbers


 **Conductor stranding**  
Fine-wired/ Finely stranded according to IEC 60228, conductor class 5

 **Minimum bending radius**  
Fixed installation: 4 x outer diameter

 **Nominal voltage**  
 $U_0/U$  300/500 V  
 $U_m$  AC 600 V  
 $V_m$  DC 450 V

 **Test voltage**  
2,0 kV AC; 4,8 kV DC

 **Protective conductor**  
G = with GN-YE protective conductor  
X = without protective conductor

 **Temperature range**  
Fixed installation: -40 °C to +90 °C



## Cables

Power and control cables

New



More information available online



# UNIRAIL S 50264-3-2 300V MMS FR

Fire-resistant, shielded control cable in accordance with DIN EN 50264-3-2 (type MMS), 300 V, with insulation integrity of up to 120 min. in accordance with DIN EN 50200 for use in railway vehicles.

### Benefits

- For protection against personal injury and damage to property.
- Insulation integrity for up to 120 minutes under the effect of fire (classification PH120 according to DIN EN 50200). Guarantees functional integrity and the power supply in the event of an emergency.
- Compliant with standards for use in railway vehicles: fire safety and cable design requirements in accordance with DIN EN 50264-3-2, type MMS; fire behaviour in accordance with DIN EN 45545-2, hazard level HL3.
- The cross-linked insulation and sheath materials promote longevity at high temperatures or with a high current load, and provide high dielectric strength.
- Ideal protection against electromagnetic interference thanks to copper stranded shielding with a high degree of coverage.
- Halogen-free and highly flame-retardant materials reduce the risk of flame propagation, high smoke density and toxic flue gases in the event of a fire.
- Space saving due to reduced wall thicknesses.

### Application ranges

- For wiring safety-related components in railway vehicles.
- Especially for environments where electromagnetic compatibility (EMC) is required.
- Typical application areas are emergency power circuits for alarm, lighting and communication purposes, which must maintain their function for a certain period of time in the event of a fire. For use in railway vehicles, for fixed installation and applications where limited movement is to be expected.
- Can be used in dry, damp and especially in harsh and oily environments.
- The cross-linked polymer compound is highly resistant to oils, fuels, alkalis and acids.

## Technical Data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000104  
ETIM 5.0/6.0 Class-Description:  
Control cable

**Core identification code**  
Black with white numbers

**Conductor stranding**  
Fine-wired/ Finely stranded according to IEC 60228, conductor class 5

**Minimum bending radius**  
Fixed installation: 10 x outer diameter

**Nominal voltage**  
 $U_0/U$  300/500 V  
 $U_m$  AC 600 V  
 $V_m$  DC 450 V

**Test voltage**  
2,0 kV AC; 4,8 kV DC

**Protective conductor**  
G = with GN-YE protective conductor  
X = without protective conductor

**Temperature range**  
Fixed installation: -40 °C to +90 °C



## Cables

Power and control cables

New



# UNIRAIL S 50264-3-2 600V MM FR

Fire-resistant control cable in accordance with DIN EN 50264-3-2 (type MM), 600 V, with insulation integrity of up to 120 min. in accordance with DIN EN 50200 for use in railway vehicles.

### Benefits

- For protection against personal injury and damage to property.
- Insulation integrity for up to 120 minutes under the effect of fire (classification PH120 according to DIN EN 50200). Guarantees functional integrity and the power supply in the event of an emergency.
- Compliant with standards for use in rail vehicles: fire safety and cable design requirements according to DIN EN 50264-3-2, type MM; fire behaviour in accordance with DIN EN 45545-2, hazard level HL3.
- The cross-linked insulation and sheath materials promote longevity at high temperatures or with a high current load, and provide high dielectric strength.
- Halogen-free and highly flame-retardant materials reduce the risk of flame propagation, high smoke density and toxic flue gases in the event of a fire.
- Space saving due to reduced wall thicknesses.

### Application ranges

- For wiring safety-related components in railway vehicles.
- Typical application areas are emergency power circuits for alarm, lighting and communication purposes, which must maintain their function for a certain period of time in the event of a fire.
- For use in railway vehicles, for fixed installation and applications where limited movement is to be expected.
- Can be used in dry, damp and especially in harsh and oily environments.
- The cross-linked polymer compound is highly resistant to oils, fuels, alkalis and acids.

## Technical Data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000104  
ETIM 5.0/6.0 Class-Description:  
Control cable

**Core identification code**  
Black with white numbers

**Conductor stranding**  
Fine-wired/ Finely stranded according to IEC 60228, conductor class 5

**Minimum bending radius**  
Fixed installation: 4 x outer diameter

**Nominal voltage**  
 $U_0/U_{AC}$  0,6/1 kV  
 $U_m$  AC 1.2 kV  
 $V_m$  DC 0.9 kV

**Test voltage**  
3,5 kV AC; 8,4 kV DC

**Protective conductor**  
G = with GN-YE protective conductor  
X = without protective conductor

**Temperature range**  
Fixed installation: -40 °C to +90 °C



## Cables

Power and control cables

New



More information available online



# UNIRAIL S 50264-3-2 600V MMS FR

Fire-resistant control cable in accordance with DIN EN 50264-3-2 (type MMS), 600 V, with insulation integrity of up to 120 min. according to DIN EN 50200 for use in railway vehicles.

### Benefits

- For protection against personal injury and damage to property. Insulation integrity for up to 120 minutes under the effect of fire (classification PH120 according to DIN EN 50200). Guarantees functional integrity and the power supply in the event of an emergency.
- Compliant with standards for use in railway vehicles: fire safety and cable design requirements in accordance with DIN EN 50264-3-2, type MMS; fire behaviour in accordance with DIN EN 45545-2, hazard level HL3.
- The cross-linked insulation and sheath materials promote longevity at high temperatures or with a high current load, and provide high dielectric strength.
- Ideal protection against electromagnetic interference thanks to copper stranded shielding with a high degree of coverage.
- Halogen-free and highly flame-retardant materials reduce the risk of flame propagation, high smoke density and toxic flue gases in the event of a fire.
- Space saving due to reduced wall thicknesses.

### Application ranges

- For wiring safety-related components in railway vehicles.
- Especially for environments where electromagnetic compatibility (EMC) is required.
- Typical application areas are emergency power circuits for alarm, lighting and communication purposes, which must maintain their function for a certain period of time in the event of a fire.
- For use in railway vehicles, for fixed installation and applications where limited movement is to be expected.
- Can be used in dry, damp and especially in harsh and oily environments.
- The cross-linked polymer compound is highly resistant to oils, fuels, alkalis and acids.

## Technical Data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000104  
ETIM 5.0/6.0 Class-Description:  
Control cable

**Core identification code**  
Black with white numbers

**Conductor stranding**  
Fine-wired/ Finely stranded according to IEC 60228, conductor class 5

**Minimum bending radius**  
Fixed installation: 10 x outer diameter

**Nominal voltage**  
 $U_0/U_{AC}$  0,6/1 kV  
 $U_m$  AC 1.2 kV  
 $V_m$  DC 0.9 kV

**Test voltage**  
3,5 kV AC; 8,4 kV DC

**Protective conductor**  
G = with GN-YE protective conductor  
X = without protective conductor

**Temperature range**  
Fixed installation: -40 °C to +90 °C





## Cables

Power and control cables

New



More information available online



# UNIRAIL S 50264-3-1 600V M FR

Fire-resistant control cable in accordance with DIN EN 50264-3-1 (type M), 600 V, with insulation integrity of up to 120 min. in accordance with DIN EN 50200 for use in railway vehicles.

### Benefits

- For protection against personal injury and damage to property.
- Insulation integrity for up to 120 minutes under the effect of fire (classification PH120 according to DIN EN 50200). Guarantees functional integrity and the power supply in the event of an emergency.
- Compliant with standards for use in railway vehicles: fire safety and cable design requirements in accordance with DIN EN 50264-3-1, type M; fire behaviour in accordance with DIN EN 45545-2, hazard level HL3.
- Cross-linked insulation material promotes longevity at high temperatures or with high current loads, and provides high dielectric strength.
- Halogen-free and highly flame-retardant materials reduce the risk of flame propagation, high smoke density and toxic flue gases in the event of a fire.
- Space saving due to reduced wall thicknesses.

### Application ranges

- For wiring safety-related components in railway vehicles.
- Typical application areas are emergency power circuits for alarm, lighting and communication purposes, which must maintain their function for a certain period of time in the event of a fire.
- For use in railway vehicles, for fixed installation and applications where limited movement is to be expected.
- Can be used in dry, damp and especially in harsh and oily environments.
- The cross-linked polymer compound is highly resistant to oils, fuels, alkalis and acids.

## Technical Data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000993  
ETIM 5.0/6.0 Class-Description:  
Single core cable

**Conductor stranding**  
Fine-wired/ Finely stranded according to IEC 60228, conductor class 5

**Minimum bending radius**  
Fixed installation:  
≤ 12 mm: 4 x OD  
> 12 mm: 5 x OD

**Nominal voltage**  
 $U_0/U_{AC}$  0,6/1 kV  
 $U_m$  AC 1.2 kV  
 $V_m$  DC 0.9 kV

**Test voltage**  
3,5 kV AC; 8,4 kV DC

**Temperature range**  
Fixed installation: -40 °C to +90 °C



## Cable glands

Tools and accessories for cable glands

New



More information available online



## SKINDICHT® VENT PA6

**What ist new?** The pressure compensation element is now available in all of the most popular control cabinet colours and with smaller connection threads.


### Benefits


- Pressure compensation element that ensures the necessary pressure compensation when the housing is closed. This fully prevents the formation of moisture or condensate.
- The air flow rate for article names with the addition „PLUS“ is 3.5 l/min, and 0.8 l/min for all other articles.
- UL certification in accordance with the technical data (article dependent) allows the product to be used on the North American market.


### Application ranges


- Especially for closed housings where optimum ventilation is needed.
- Good oil and chemical resistance.
- Black variants are UV-resistant and therefore well suited for outdoor use.


## Technical Data


 **Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000441  
ETIM 5.0/6.0 Class-Description:  
Cable screw gland


 **Certifications**  
Metric thread acc. to EN 60423

 **Note**  
Membrane: Acryl - CoPolymer

 **Colour delivered**  
Light grey (RAL 7035)  
Black (RAL 9005), UV-resistant

 **Material**  
Polyamide 6 - Standard version / UL 94 V2  
Polyamide 66 - UL Version / UL 94 V0  
Flat sealing NBR - Standard  
O-Ring NBR - UL version

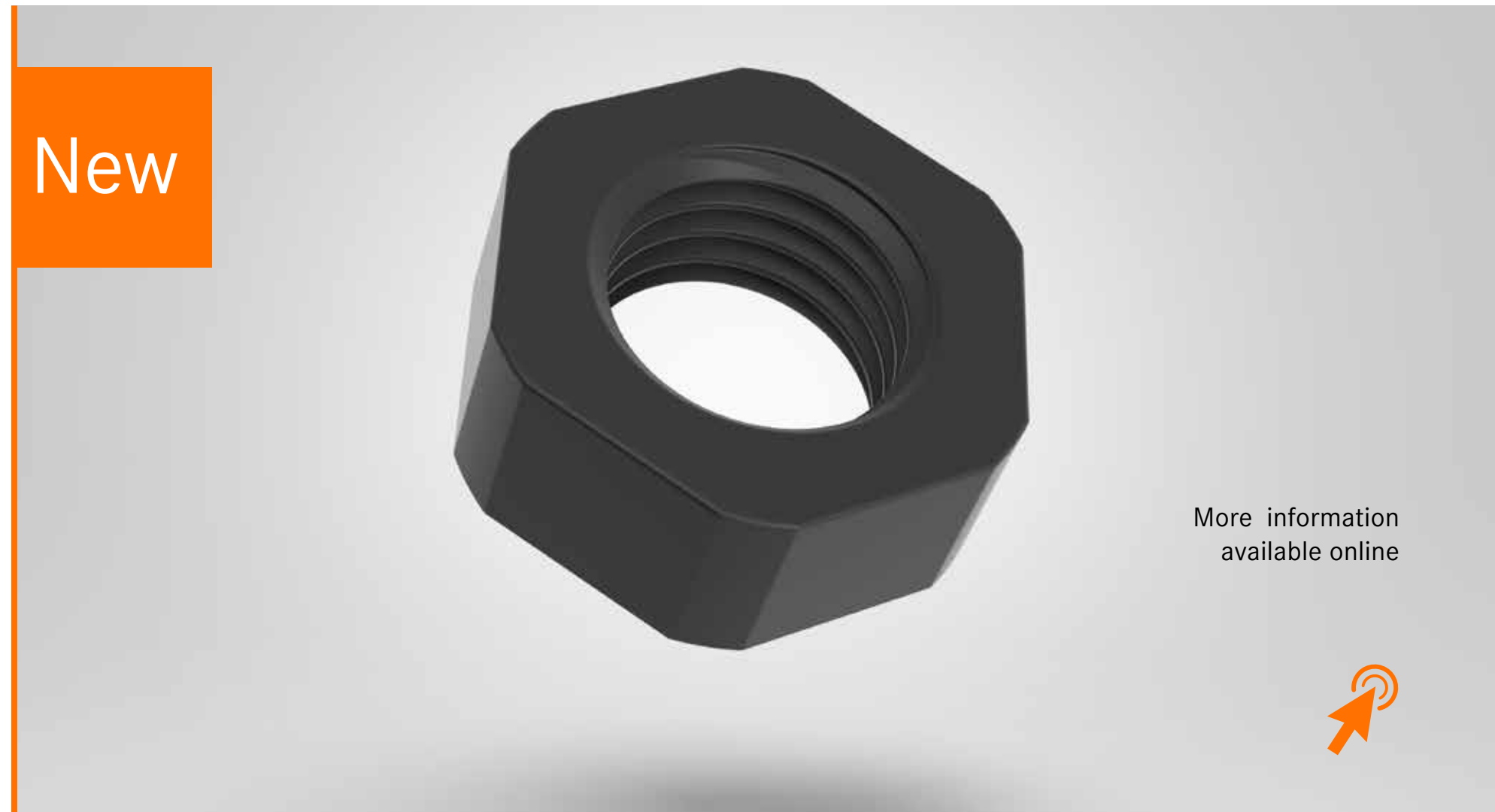
 **Protection rating**  
Standard: IP66 / IP68 / IP69  
UL: IP66 / IP67 / IP69

 **Temperature range**  
-20 °C to +100 °C



## Cable glands

Tools and accessories for cable glands



## PA lock nuts

Lock nut made of plastic, with an M6 and M8 thread, for use with a SKINDICHT® VENT pressure compensation element, for applications with high humidity.

### Benefits

- Available in sizes M6x0.75 and M8x1.0..

### Application ranges

- For locking a SKINDICHT® VENT pressure compensation element on the inside of the application (e.g. housing).
- For thin-walled housings without a thread, which only allow one through bore.
- Good oil and chemical resistance.

## Cable glands

Tools and accessories for cable glands

New



More information available online



## Drainage elements

M12 plastic drainage element, drains condensation water from the housing floor, for applications with high humidity.

### Benefits

- For discharging condensation water on the housing floor that occurs due to high humidity, large temperature fluctuations or pressure differences.
- The early discharge of condensation water reduces the risk of failure of the application and minimises maintenance work.
- Provides a high drainage capacity of at least 1.8 l per hour.
- The protection function of the housing is retained thanks to IP56.
- Ideal for tight spaces thanks to the small connection thread.

### Application ranges

- Especially for closed housings with a high protection class.
- For use in the housing floor (threaded/through bore).
- Good oil and chemical resistance.

## Technical Data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000441  
ETIM 5.0/6.0 Class-Description:  
Cable screw gland

**Certifications**  
Metric thread acc. to EN 60423

**Colour delivered**  
Silver grey (RAL 7001)  
Light grey (RAL 7035)  
Black (RAL 9005)  
Black (RAL 9005), UV-resistant

**Material**  
Polyamide 6.6  
Flat sealing: EPDM

**Protection rating**  
IP 56

**Temperature range**  
-40 °C to +100 °C



## Connectors

Rectangular connectors

New



More information available online



## EPIC® H-Q 4+2

**What is new?** Thanks to our ongoing efforts and strategic partnerships, we are able to offer high-quality rectangular connector inserts at optimised prices.

### Benefits

- High power up to 40 A despite extremely space-saving design for very small devices.
- Crimp termination creates a vibration-proof connection, provides maximum contact protection between the contact and cable and is suitable for automated assembly.
- Can be connected to market-standard connectors.

### Application ranges

- For connecting devices and machines to a power supply in various applications, including signal transmission.
- Typical areas of application are electric motors and servo drives.
- For use with housings of the EPIC® H-Q series.

## Technical Data



**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000438  
ETIM 5.0/6.0 Class-Description: Contact insert for industrial connectors



**Rated voltage (V)**  
IEC: 400/690 V (H-Q Contacts)  
UL: 600V (H-Q Contacts)  
CSA: 600 V (H-Q Contacts)

**Rated impulse voltage**  
6KV (H-Q 4 mm Contacts)  
4KV (H-D 1.6 mm Contacts)



**Rated current (A)**  
IEC: 40 A (H-Q 4 mm Contacts)  
10 A (H-D 1.6 mm Contacts)



**Pollution degree**  
3

**Contact resistance**  
< 4 mOhm



**Contacts**  
Copper alloy, hard silver-plated



**Number of contacts**  
4 + 2 + PE



**Termination methods**  
Crimp termination: 1.5–6.0 mm<sup>2</sup> (H-Q 4 mm contacts)  
0.14–2.5 mm<sup>2</sup> (H-Q 1.6 mm contacts)



**Cycle of mechanical operation**  
500



**Temperature range**  
–40 °C to +125 °C

## Connectors

Rectangular connectors

New



More information available online



## EPIC® H-Q 8

**What is new?** Thanks to our ongoing efforts and strategic partnerships, we are able to offer high-quality rectangular connector inserts at optimised prices.


### Benefits


- High power up to 16 A despite extremely space-saving design for very small devices.
- Crimp termination creates a vibration-proof connection, provides maximum contact protection between the contact and cable and is suitable for automated assembly.
- Can be connected to market-standard connectors.

### Application ranges


- For connecting devices and machines to a power supply in various applications.
- Typical areas of application are electric motors and servo drives.
- For use with housings of the EPIC® H-Q series.


## Technical Data

 **Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000438  
ETIM 5.0/6.0 Class-  
Description: Contact insert for industrial connectors


 **Rated voltage (V)**  
IEC: 500 VUL: 600 VCSA: 600 V


**Rated impulse voltage**  
6 kV


 **Rated current (A)**  
IEC: 16 A  
UL: 16 A  
CSA: 16 A


 **Pollution degree**  
3


**Contact resistance**  
< 2 mOhm

 **Contacts**  
Copper alloy, hard silver-plated

 **Number of contacts**  
8 + PE

 **Termination methods**  
Crimp termination: 0.5–4.0 mm<sup>2</sup>

 **Cycle of mechanical operation**  
500

 **Temperature range**  
–40 °C to +125 °C

## Connectors

Rectangular connectors

New



More information available online



## EPIC® H-Q 17

**What is new?** Thanks to our ongoing efforts and strategic partnerships, we are able to offer high-quality rectangular connector inserts at optimised prices.

### Benefits

- High power up to 10 A despite extremely space-saving design for very small devices.
- Crimp termination creates a vibration-proof connection, provides maximum contact protection between the contact and cable and is suitable for automated assembly.
- Can be connected to market-standard connectors..

### Application ranges

- For connecting devices and machines to a power supply in various applications.
- Typical areas of application are electric motors and servo drives.
- For use with housings of the EPIC® H-Q series.

## Technical Data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000438  
ETIM 5.0/6.0 Class-Description: Contact insert for industrial connectors

**Rated voltage (V)**  
IEC: 250 VUL: 600 VCSA: 600 V

**Rated impulse voltage**  
4 kV

**Rated current (A)**  
max. 10 A

**Pollution degree**  
2

**Contact resistance**  
< 2 mOhm

**Contacts**  
Copper alloy, hard silver/gold-plated

**Number of contacts**  
17 + PE

**Termination methods**  
Crimp termination: 0.14–2.5 mm<sup>2</sup>

**Cycle of mechanical operation**  
500

**Temperature range**  
–40 °C to +125 °C

## Connectors

Rectangular connectors

New



More information available online



## EPIC® H-A 3 AG

**What is new?** The panel-mount base of the EPIC® H-A 3 series is now available with a new design, with a marking arrow and an integrated seal. The single lever is no longer made of metal, but plastic.

### Benefits

- The EPIC® H-A 3 series includes the smallest housings in the heavy-duty industrial connector area, and provides secure connections in a very small space.
- The panel-mount base can be connected to many of the most popular hoods on the market.
- With open base for cable entry into the housing or control cabinet.
- Self-extinguishing in accordance with UL94 V-0 (flammability test for plastics).
- The locking takes place using a plastic single lever.
- Allows protection class IP 67 due to the reliable sealing of the housing.
- The arrow is a new design element on the housing surface and makes it easy to find and easy to connect in tight spaces and possibly poorly visible areas of application.
- UL certification according to technical data enables the product to be used in the North American market.

### Application ranges

- For protecting the connector insert against environmental influences.
- For use with many EPIC® rectangular connector inserts.
- For connecting devices and machines to the power supply.
- Material that is highly resistant to oil for harsh industrial environments.
- Suitable for outdoor use.

## Technical Data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000437  
ETIM 5.0/6.0 Class-Description:  
Housing for industrial connectors

**Material**  
Housing: powder-coated zinc diecasting, grey  
Lever: zinc-plated steel  
Sealing: NBR  
Housing: grey thermoplastic, black  
Lever: zinc-plated steel  
Sealing: NBR

**Protection rating**  
IP 67 (latched)  
NEMA 250, UL50E: 12, 4 (latched)

**DIN VDE**  
**VDE-tested**  
Certified production control: VDE-REG.  
no.: B437  
UL-tested:  
UL File Number: E75770

**Temperature range**  
-40 °C to +100 °C, short-term up to +125 °C





## Connectors

Rectangular connectors

New



More information available online



### Technical Data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000437  
ETIM 5.0/6.0 Class-Description:  
Housing for industrial connectors

**Material**  
thermoplastic, grey, black  
Lever: zinc-plated steel

**Protection rating**  
IP 67 (latched)  
NEMA 250, UL50E: 12, 4 (latched)

**DIN VDE**  
**VDE-tested**  
Certified production control: VDE-REG.  
no.: B437  
UL-tested:  
UL File Number: E75770

**Temperature range**  
-40 °C to +100 °C, short-term up to +125 °C

## EPIC® H-A 3 TG

**What is new?** The hood of the EPIC® H-A 3 series is now available with a new design, including a marking arrow and an M20 thread.

### Benefits

- The EPIC® H-A 3 series includes the smallest housings in the heavy-duty industrial connector area, and provides secure connections in a very small space.
- The hood can be connected with many standard housings (panel-mount base, surface-mount base or cable coupler hoods).
- Self-extinguishing in accordance with UL94 V-0 (flammability test for plastics).
- With threaded borehole for use with a corresponding cable gland.
- Articles with a „V“ in the article name already contain a SKINTOP® plastic cable gland for sealing and strain-relieving cable entry. In comparison to housings where the cable gland is added separately, the overall size of this housing is more space-saving.
- Locking takes place using a plastic lever on the counter-housing.
- Meets protection class IP 67 when locked.
- The arrow is a new design element on the housing surface and makes it easy to find and easy to connect in tight spaces and possibly poorly visible areas of application.
- UL certification according to technical data enables the product to be used in the North American market.

### Application ranges

- For protecting the connector insert against environmental influences.
- For use with many EPIC® rectangular connector inserts.
- For connecting devices and machines to the power supply.
- Material that is highly resistant to oil for harsh industrial environments.
- Suitable for outdoor use.



## Connectors

Rectangular connectors

New



More information available online



## EPIC® H-A 3 TGB

**What is new?** The cable coupler hood of the EPIC® H-A 3 series is now available with a new design, including a marking arrow and an M20 thread.

### Benefits

- The EPIC® H-A 3 series includes the smallest housings in the heavy-duty industrial connector area, and provides secure connections in a very small space.
- The cable coupler hood can be connected to many of the most popular hoods on the market.
- The „flying“ connection between the cable coupler and the hood is not fixed, and acts as an extension of the cable.
- Self-extinguishing in accordance with UL94 V-0 (flammability test for plastics).
- With threaded borehole for use with a corresponding cable gland.
- Articles with a „V“ in the article name already contain a SKINTOP® plastic cable gland for sealing and strain-relieving cable entry. In comparison to housings where the cable gland is added separately, the overall size of this housing is more space-saving.
- Locking takes place using a plastic lever on the counter-housing.
- Meets protection class IP 67 when locked.
- The arrow is a new design element on the housing surface and makes it easy to find and easy to connect in tight spaces and possibly poorly visible areas of application.
- UL certification according to technical data enables the product to be used in the North American market.

### Application ranges

- For protecting the connector insert against environmental influences.
- For use with many EPIC® rectangular connector inserts.
- For connecting devices and machines to the power supply.
- Material that is highly resistant to oil for harsh industrial environments.
- Suitable for outdoor use.

## Technical Data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000437  
ETIM 5.0/6.0 Class-Description:  
Housing for industrial connectors

**Material**  
thermoplastic, grey, black  
Lever: zinc-plated steel

**IP Protection rating**  
IP 67 (latched)  
NEMA 250, UL50E: 12, 4 (latched)

**DIN VDE VDE-tested**  
Certified production control: VDE-REG.  
no.: B437  
UL-tested:  
UL File Number: E75770

**Temperature range**  
-40 °C to +100 °C, short-term up to +125 °C



## Connectors

Rectangular connectors

New



More information available online



## EPIC® H-B 16 T

Hood of the EPIC® H-B series (without insert), aluminium die-casting, new design with improved haptics, for assembling a rectangular connector.

### Benefits

- The hood can be connected with many standard housings (panel-mount base, surface-mount base or cable coupler hoods).
- The user-friendly design with a good grip makes the plug connection easy to connect and release.
- Locking takes place using a stainless-steel double lever on the counter-housing.
- Meets protection class IP 65 when locked.
- UL certification according to technical data enables the product to be used in the North American market.

### Application ranges

- For protecting the connector insert against environmental influences.
- For use with many EPIC® rectangular connector inserts or module inserts.
- For connecting devices and machines to a power supply in various applications.
- With modular connector assembly, also suitable for signal and data transmission.
- For use with a cable gland or a collar.
- Withstands high environmental and mechanical stress.

## Technical Data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000437  
ETIM 5.0/6.0 Class-Description:  
Housing for industrial connectors

**Material**  
Housing: powder-coated aluminium alloy, grey  
Lever: zinc-plated steel  
Sealing: NBR

**Protection rating**  
IP 65 (latched)  
NEMA 250, UL50E: 12, 4 (latched)

**VDE-tested**  
Certified production control: VDE-REG.  
no.: B437  
UL-tested:  
UL File Number: E75770

**Temperature range**  
-40 °C to +100 °C, short-term up to +125 °C



## Connectors

Solar connectors



## EPIC® SOLAR 4 GEN2 contacts

Crimpable pin and socket contacts for the EPIC® SOLAR 4 GEN2 solar connectors, vibration-proof, for conductor cross-sections of 4.0–6.0 mm<sup>2</sup>.


### Benefits

- Crimp contact ensures maximum contact reliability between the contact and the cable and establishes a vibration-resistant connection.
- Suitable for conductor cross-sections from 4.0 to 6.0 mm<sup>2</sup>.
- Large packing unit with 2500 contacts on a roll makes fully automated connector configuration possible.

### Application ranges

- For use with EPIC® SOLAR 4 GEN2 solar connectors.

## Technical Data

 **Material**  
Brass tin-plated

## Connectors

Solar connectors

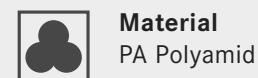
New



More information  
available online



### Technical Data



Material  
PA Polyamid

## EPIC<sup>®</sup> SOLAR 4 GEN2 F

Solar connectors (socket insert) up to 1500 V DC, particularly weather-resistant, ideal for fully automated connector assembly, with the TÜV SÜD testing mark.

### Benefits

- Extremely weatherproof and durable thanks to the high-quality materials and solid construction.
- Compatible with other systems in the industry.
- Ideal for fully automated connector assembly.
- Self-retaining cap nut and contacting with haptic feedback simplify assembly and provide protection from tampering.
- Double snap-in hooks secure the crimp contact to the connector.
- Low contact resistance at the contact point between the connector and socket for efficient energy transmission.
- Suitable for conductor cross-sections of up to 6 mm<sup>2</sup> for overcoming long cable distances.
- With the TÜV SÜD testing mark.
- Articles available with or without contacts. Articles without contacts available in different packaging units.

### Application ranges

- For the cabling of solar modules, inverters and stand-alone systems.
- For modern, high-performance photovoltaic systems up to 1500 V.
- For use with EPIC<sup>®</sup> SOLAR 4 GEN2 M mating connectors (pin insert).
- Can be used with many ÖLFLEX<sup>®</sup> solar cables.
- Plugged connections have protection class IP 68 (1 m for 1 h).

## Connectors

Solar connectors

New



More information  
available online



### Technical Data



Material  
PA Polyamid

## EPIC<sup>®</sup> SOLAR 4 GEN2 M

Solar connectors (pin insert) up to 1500 V DC, particularly weather-resistant, ideal for fully automated connector assembly, with the TÜV SÜD testing mark.

### Benefits

- Extremely weatherproof and durable thanks to the high-quality materials and solid construction.
- Compatible with other systems in the industry.
- Ideal for fully automated connector assembly.
- Self-retaining cap nut and contacting with haptic feedback simplify assembly and provide protection from tampering.
- Double snap-in hooks secure the crimp contact to the connector.
- Low contact resistance at the contact point between the connector and socket for efficient energy transmission.
- Suitable for conductor cross-sections of up to 6 mm<sup>2</sup> for overcoming long cable distances.
- With the TÜV SÜD testing mark.
- Articles available with or without contacts. Articles without contacts available in different packaging units.

### Application ranges

- For the cabling of solar modules, inverters and stand-alone systems.
- For modern, high-performance photovoltaic systems up to 1500 V.
- For use with EPIC<sup>®</sup> SOLAR 4 GEN2 F mating connectors (socket insert).
- Can be used with many ÖLFLEX<sup>®</sup> solar cables.
- Plugged connections have protection class IP 68 (1 m for 1 h).

## Connectors

Solar connectors

New



More information  
available online



## EPIC® SOLAR 4 GEN2 caps

Protective caps for closing unplugged EPIC® SOLAR 4 GEN2 solar connectors, protection against dirt and moisture, with eyelet for attaching a securing cord.

### Benefits

- Prevents the penetration of dirt and moisture.
- With eyelet for attaching a securing cord for fastening to the cable.

### Application ranges

- For closing unplugged connectors.
- For use with EPIC® SOLAR 4 GEN2 solar connectors.

## Data cable assemblies

Solar connectors



## EPIC<sup>®</sup> SOLAR 4 GEN2 splitter

Compact splitter for parallel switching of solar modules and strings, up to 1500 V DC, extremely weather-resistant, available in two variants (FMM and MFF).

### Benefits

- Extremely weatherproof and durable thanks to the high-quality materials and solid construction.
- Easy to handle due to the flexible connection options and compact design.
- Available as a variant with two pin inserts (FMM) or with two socket inserts (MFF).
- Additional variants with different connectors are available upon request.

### Application ranges

- For parallel switching of solar modules and strings.
- For modern, high-performance photovoltaic systems up to 1500 V.
- For use with EPIC<sup>®</sup> SOLAR 4 GEN2 solar connectors.
- Plugged connections have protection class IP 68 (1 m for 1 h).



## Connectors

Solar connectors

New



More information  
available online



## EPIC® SOLAR 4 GEN2 assembly tool

Lightweight and space-saving tool for assembling and disassembling EPIC® SOLAR 4 GEN2 solar connectors, available as a set with 2 assembly tools.

### Benefits

- Lightweight and space-saving tool which combines two functions in one practical tool.
- Available as a set with 2 assembly tools.

### Application ranges

- For assembling and disassembling EPIC® SOLAR 4 GEN2 solar connectors.

## Connectors

Rectangular connectors

New



More information available online



## EPIC® H-Q TG

Hood of the EPIC® H-Q series (without insert), straight cable entry, polyamide plastic, with female thread, for assembling a rectangular connector.


### Benefits


- The hood can be connected with many standard housings (panel-mount base, surface-mount base or cable coupler hoods).
- Space and weight-saving due to the small size.
- With space-saving female thread for use with metric cables or conduit glands.
- Locking takes place using a central lever on the counter-housing.
- Meets protection class IP 65 when locked.


### Application ranges


- For protecting the connector insert against environmental influences.
- For use with rectangular connector inserts in the EPIC® H-Q series.
- For connecting devices and machines to a power supply in various applications.
- Withstands high environmental and mechanical stress.
- Typical areas of application are electric motors and servo drives.

## Technical Data

 **Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000437  
ETIM 5.0/6.0 Class-Description:  
Housing for industrial connectors

 **Material**  
Housing: thermoplastic, grey  
Lever: metal

 **Protection rating**  
IP 66

 **Temperature range**  
-40 °C to +125 °C



## Connectors

Rectangular connectors

New



More information available online



## EPIC® H-Q TS

Hood of the EPIC® H-Q series (without insert), side cable entry, polyamide plastic, with female thread, for assembling a rectangular connector.


### Benefits


- The hood can be connected with many standard housings (panel-mount base, surface-mount base or cable coupler hoods).
- Space and weight-saving due to the small size.
- With side cable entry for orderly cable laying and to prevent the cable from bending too much.
- With space-saving female thread for use with metric cables or conduit glands.
- Locking takes place using a central lever on the counter-housing.
- Meets protection class IP 65 when locked.


### Application ranges


- For protecting the connector insert against environmental influences.
- For use with rectangular connector inserts in the EPIC® H-Q series.
- For connecting devices and machines to a power supply in various applications.
- Withstands high environmental and mechanical stress.
- Typical areas of application are electric motors and servo drives.

## Technical Data

 **Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000437  
ETIM 5.0/6.0 Class-Description:  
Housing for industrial connectors

 **Material**  
Housing: thermoplastic, grey  
Lever: metal

 **Protection rating**  
IP 65

 **Temperature range**  
-40 °C to +125 °C



## Connectors

Circular connectors

New



More information available online



# EPIC<sup>®</sup> SIGNAL M23 D6 TWIST

M23 circular connector housing without insert, cable connector D6 TWIST, for signal transmission, for assembly with encoder or encoder cables.


### Benefits


- Reliable signal transmission, even in harsh environments.
- Stability thanks to die-cast zinc metal housing.
- Reliable protection against electromagnetic interference thanks to integrated EMC cable gland.
- TWIST quick-locking system enables easy connection to the counterpart (locking takes place after a quarter of rotation). TWIST can be connected to market-standard connectors.
- The housing can be used with an insert for socket or pin contacts (available separately).


### Application ranges


- For use in control, regulating and measurement circuits.
- For transmitting feedback and resolver signals from the servo motor to the frequency converter.
- Especially for environments where electromagnetic compatibility (EMC) is required.
- For use with suitable TWIST counterparts in series EPIC<sup>®</sup> SIGNAL M23.

## Technical Data

 **Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000437  
ETIM 5.0/6.0 Class-Description:  
Housing for industrial connectors

 **Material**  
Housing: nickel-plated zinc die-casting  
Cap nut: brass nickel-plated  
Sealing: FPM, NBR (5,0-7,3 mm)

 **Protection rating**  
IP68 (10h/1m)

 **Temperature range**  
-25 °C to +125 °C  
static (no plugging or unplugging) -40 °C



## Connectors

Rectangular connectors



## EPIC® Collar

Brass collar, increases the amount of room for cable insertion, for use with many rectangular connector housings.


### Benefits


- Creates additional room in the connector housing and acts as an adapter, depending on the variant, for providing compatibility between the metric and the PG connection thread.
- Easy assembly with a wrench.
- Available in different thread sizes.
- Can be combined with metric or PG cable glands (depending on the article).
- Mounted O-ring enables optimum sealing to the housing (protection class IP 68 (5 bar)).

### Application ranges

- For use with many EPIC® rectangular connector housings.
- Withstands high chemical and mechanical loads.
- Suitable for outdoor use.

## Technical Data

 **Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000938  
ETIM 5.0/6.0 Class-Description:  
Enlargement/reducing ring

 **Material**  
Nickel-plated brass



## Connectors

Data connectors

New



More information available online



# EPIC® DATA M12D screw connection

Can be assembled in the field: M12 data connector with screw connection, for assembly with Ethernet cables, Cat.5, different variants available.


### Benefits


- High stability thanks to impact-resistant polyamide.
- The service-friendly screw connection makes assembly possible without a special tool, and is suitable for connections which need to be detached again.
- When connected, protection class IP 67 can be achieved.
- Available in different designs.


### Application ranges


- Can be used universally on machine interfaces for many applications in data and signal transmission.
- Also suitable for EtherCAT, EtherNet/IP and 2-pair PROFINET applications.
- Good oil and chemical resistance.

## Technical Data

 **Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC001121  
ETIM 5.0/6.0 Class-Description:  
Modular connector

 **Protection rating**  
IP 67

 **Ambient temperature (operation)**  
-25 °C to +85 °C

 **Contact material**  
brass gold plated CuZn / Au  
**Contact surface material**  
Messing vergoldet CuZn / Au



## Connectors

Data connectors

New



More information  
available online



## EPIC® SENSOR M12A screw connection

Can be assembled in the field: M12 data connector with screw connection, for assembly with sensor/actuator cables, different variants available.


### Benefits


- High stability thanks to impact-resistant polyamide.
- The service-friendly screw connection makes assembly possible without a special tool, and is suitable for connections which need to be detached again.
- When connected, protection class IP 67 can be achieved.
- Available in different designs and with different pole configurations.


### Application ranges


- Can be used universally at machine interfaces for many applications in data and signal transmission in the low-frequency range.
- Typical application areas are sensors and actuators at field level.
- Good oil and chemical resistance.

## Technical Data

 **Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC002062  
ETIM 5.0/6.0 Class-Description:  
Sensor-actuator connector

 **Material**  
Contact: CuZn  
Contact surface: CuSnZn

 **Protection rating**  
IP 67

 **Ambient temperature (operation)**  
-25 °C to +85 °C

**Contact material**  
Copper alloy  
**Contact surface material**  
Au (gold)  
**Coding**  
A-standard



## Connectors

Data connectors

New



More information available online



# EPIC<sup>®</sup> SENSOR M12A solder termination +

Can be assembled in the field: M12 data connector with solder termination, for assembly with sensor/actuator cables, different variants available.

### Benefits

- High stability thanks to impact-resistant polyamide.
- Solder termination is easy to implement, and creates a plug connection that is resistant to shock and vibrations.
- When connected, protection class IP 67 can be achieved. Available in different designs.

### Application ranges

- Can be used universally at machine interfaces for many applications in data and signal transmission in the low-frequency range.
- Typical application areas are sensors and actuators at field level.
- Good oil and chemical resistance.

## Technical Data

**Classification ETIM 5/6**  
 ETIM 5.0/6.0 Class-ID: EC002062  
 ETIM 5.0/6.0 Class-Description:  
 Sensor-actuator connector

**IP Protection rating**  
 IP 67

**Ambient temperature (operation)**  
 -25 °C to +85 °C

**Contact material**  
 brass gold plated CuZn / Au  
**Contact surface material**  
 Au (gold)  
**Coding**  
 A-standard





## Connectors

Data connectors

New



More information available online



# EPIC<sup>®</sup> SENSOR M12B screw termination

Can be assembled in the field: M12 data connector with screw connection, for assembly with fieldbus cables, available in different variants.


### Benefits


- High stability thanks to impact-resistant polyamide.
- The service-friendly screw connection makes assembly possible without a special tool, and is suitable for connections which need to be detached again.
- When connected, protection class IP 67 can be achieved.
- Available in different designs.


### Application ranges

- For fieldbus communication in PROFIBUS<sup>®</sup>-based networks.
- Good oil and chemical resistance.

## Technical Data

 **Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC002062  
ETIM 5.0/6.0 Class-Description:  
Sensor-actuator connector

 **Protection rating**  
IP 67

 **Ambient temperature (operation)**  
-25 °C to +85 °C

**Contact material**  
Copper alloy  
**Contact surface material**  
Au (gold)



## Connectors

Circular connectors

New



More information available online



## EPIC® POWER M 12E screw connection

Compact M12 power connector (E-coded) with screw connection, for small devices and motors in direct current applications, available in different variants.


### Benefits


- High stability thanks to impact-resistant polyamide.
- High power up to 16 A despite extremely space-saving design for very small devices.
- The mechanical E-coding of the connector face prevents incorrect plugging with mating connectors.
- The service-friendly screw connection makes assembly possible without a special tool, and is suitable for connections which need to be detached again.
- When connected, protection class IP 67 can be achieved.
- Available in different designs.

### Application ranges


- For direct current applications in the low-voltage range.
- For supplying power to smaller devices (e.g. decentralised I/O modules, smaller motors).
- Good oil and chemical resistance.


## Technical Data

 **Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC002635  
ETIM 5.0/6.0 Class-Description: Circular connector (industrial connector)


 **Rated voltage (V)**  
63 V


**Rated impulse voltage**  
1,5 kV


 **Rated current (A)**  
16 A

 **Pollution degree**  
3


**Contact resistance**  
< 10 mOhm

 **Number of contacts**  
4 + FE

 **Termination methods**  
Screw termination: 0,5–2,5 mm<sup>2</sup>

 **Protection rating**  
IP 67

 **Cycle of mechanical operation**  
100

 **Temperature range**  
–25 °C to +85 °C



## Connectors

Circular connectors

New



More information available online



# EPIC® POWER M 12F screw connection

Compact M12 power connector (F-coded) with screw connection, for connecting smaller devices and systems, available in different variants.

### Benefits

- High stability thanks to impact-resistant polyamide.
- High power up to 16 A despite extremely space-saving design for very small devices.
- The mechanical F-coding of the connector face prevents incorrect plugging with mating connectors.
- The service-friendly screw connection makes assembly possible without a special tool, and is suitable for connections which need to be detached again.
- When connected, protection class IP 67 can be achieved.
- Available in different designs.

### Application ranges

- For supplying power to smaller devices and systems in a wide range of applications.
- Good oil and chemical resistance.

## Technical Data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC002635  
ETIM 5.0/6.0 Class-Circular connector  
(industrial connector)

**Rated voltage (V)**  
63 V

**Rated impulse voltage**  
1,5 kV

**Rated current (A)**  
16 A

**Pollution degree**  
3

**Contact resistance**  
< 10 mOhm

**Number of contacts**  
4 + PE

**Termination methods**  
Screw termination: 0,5–2,5 mm<sup>2</sup>

**Protection rating**  
IP 67

**Cycle of mechanical operation**  
100

**Temperature range**  
–25 °C to +85 °C



## Connectors

Circular connectors

New



More information available online



# EPIC® POWER M12K screw connection

Compact M12 power connector (K-coded) with screw connection, for connecting smaller devices and systems, available in different variants.


### Benefits


- High stability thanks to impact-resistant polyamide.
- Powerful up to 12 A despite extremely space-saving design for tight spaces.
- The mechanical K-coding of the connector face prevents incorrect plugging with the mating connector.
- The service-friendly screw connection makes assembly possible without a special tool, and is suitable for connections which need to be detached again.
- When connected, protection class IP 67 can be achieved.
- Available in different designs.

### Application ranges


- For connecting three-phase motors up to 7.5 kW.
- For connecting devices and machines to a power supply in various applications.
- Good oil and chemical resistance.


## Technical Data

 **Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC002635  
ETIM 5.0/6.0 Circular connector  
(industrial connector)


 **Rated voltage (V)**  
630 V


**Rated impulse voltage**  
6 kV


 **Rated current (A)**  
12 A


 **Pollution degree**  
3


**Contact resistance**  
< 10 mOhm

 **Number of contacts**  
4 + PE

 **Termination methods**  
Screw termination: 0.5–2.5 mm²

 **Protection rating**  
IP 67

 **Cycle of mechanical operation**  
100

 **Temperature range**  
–25 °C to +85 °C



## Connectors

Circular connectors

New



More information available online



## EPIC® POWER M 12L screw connection

Compact M12 power connector (L-coded) with screw connection, for small devices and motors in direct current applications, available in different variants.

### Benefits

- High stability thanks to impact-resistant polyamide.
- High power up to 16 A despite extremely space-saving design for very small devices.
- The mechanical L-coding of the connector face prevents incorrect plugging with the mating connector.
- The service-friendly screw connection makes assembly possible without a special tool, and is suitable for connections which need to be detached again.
- When connected, protection class IP 67 can be achieved.
- Available in different designs.

### Application ranges

- For direct current applications in the low-voltage range.
- For supplying power to smaller devices (e.g. decentralised I/O modules, smaller motors).
- Also suitable as the power supply in the PROFINET network (M12L is regarded as a standardised power interface).
- Good oil and chemical resistance.

## Technical Data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC002635  
ETIM 5.0/6.0 Circular connector  
(industrial connector)

**Rated voltage (V)**  
63 V

**Rated impulse voltage**  
1,5 kV

**Rated current (A)**  
16 A

**Pollution degree**  
3

**Contact resistance**  
< 10 mOhm

**Number of contacts**  
4 + FE

**Termination methods**  
Screw termination: 0,5–2,5 mm<sup>2</sup>

**Protection rating**  
IP 67

**Cycle of mechanical operation**  
100

**Temperature range**  
–25 °C bis + 85 °C



## Connectors

Circular connectors

New



More information  
available online



# EPIC® POWER M 12M screw connection

Compact M12 power connector (M-coded) with screw connection, for connecting smaller devices and systems, available in different variants.

### Benefits

- High stability thanks to impact-resistant polyamide.
- Compact contact arrangement enables 5 contacts + 1 PE contact in little assembly space.
- The mechanical M-coding of the connector face prevents incorrect plugging with mating connectors.
- The service-friendly screw connection makes assembly possible without a special tool, and is suitable for connections which need to be detached again.
- When connected, protection class IP 67 can be achieved.
- Available in different designs.

### Application ranges

- For supplying power to smaller devices and systems in a wide range of applications.
- Good oil and chemical resistance.

## Technical Data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC002635  
ETIM 5.0/6.0 Circular connector  
(industrial connector)

**Rated voltage (V)**  
630 V

**Rated impulse voltage**  
6 kV

**Rated current (A)**  
8 A

**Pollution degree**  
3

**Contact resistance**  
< 10 mOhm

**Number of contacts**  
5 + PE

**Termination methods**  
Screw termination: 0.5–2.5 mm<sup>2</sup>

**Protection rating**  
IP 67

**Cycle of mechanical operation**  
100

**Temperature range**  
–25 °C to +85 °C



## Connectors

Circular connectors

New



More information available online



## EPIC® POWER M 12S screw connection

Compact M12 power connector (S-coded) with screw connection, for connecting three-phase motors, available in different variants.

### Benefits

- High stability thanks to impact-resistant polyamide.
- Powerful up to 12 A despite extremely space-saving design for tight spaces.
- The mechanical S-coding of the connector face prevents incorrect plugging with mating connectors.
- The service-friendly screw connection makes assembly possible without a special tool, and is suitable for connections which need to be detached again.
- When connected, protection class IP 67 can be achieved.
- Available in different designs and with different pole configurations.

### Application ranges

- For connecting three-phase motors up to 7.5 kW.
- For connecting devices and machines to a power supply in various applications.
- Good oil and chemical resistance.

## Technical Data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC002635  
ETIM 5.0/6.0 Circular connector  
(industrial connector)

**Rated voltage (V)**  
630 V

**Rated impulse voltage**  
6 kV

**Rated current (A)**  
12 A

**Pollution degree**  
3

**Contact resistance**  
< 10 mOhm

**Number of contacts**  
3 + PE  
S-coded

**Termination methods**  
Screw termination: 0.5–2.5 mm<sup>2</sup>

**Protection rating**  
IP 67

**Cycle of mechanical operation**  
100

**Temperature range**  
–25 °C to +85 °C



## Connectors

Circular connectors

New



More information available online



## EPIC® POWER M 12T screw connection

Compact M12 power connector (T-coded) with screw connection, for small devices and motors in direct current applications, available in different variants.

### Benefits

- High stability thanks to impact-resistant polyamide.
- High power up to 12 A despite extremely space-saving design for very small devices.
- The mechanical T-coding of the connector face prevents incorrect plugging with mating connectors.
- The service-friendly screw connection makes assembly possible without a special tool, and is suitable for connections which need to be detached again.
- When connected, protection class IP 67 can be achieved.
- Available in different designs.

### Application ranges

- For direct current applications in the low-voltage range.
- For supplying power to smaller devices (e.g. decentralised I/O modules, smaller motors).
- Good oil and chemical resistance.

## Technical Data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC002635  
ETIM 5.0/6.0 Circular connector  
(industrial connector)

**Rated voltage (V)**  
63 V

**Rated impulse voltage**  
1,5 kV

**Rated current (A)**  
12 A

**Pollution degree**  
3

**Contact resistance**  
< 10 mOhm

**Number of contacts**  
4 + PE

**Termination methods**  
Screw termination: 0,5–2,5 mm<sup>2</sup>

**Protection rating**  
IP 67

**Cycle of mechanical operation**  
100

**Temperature range**  
–25 °C to +85 °C





## Marking systems

Safety and indicators



# FLEXIMARK® THERMO CLIP

Temperature indicator for monitoring power cables, with memory effect, halogen-free, available for different cable outer diameters.


### Benefits


- The attached temperature indicators make visual inspection of electrical equipment possible. A colour change occurs if the temperature is exceeded.
- Quickly identifying overheated electrical components makes rapid cause analysis possible. This allows appropriate countermeasures to be initiated to avoid plant downtimes.
- 24/7 monitoring and the memory effect make it possible to continuously record temperature exceedance, and can act as an early warning of overheating.
- Safe, fast and uncomplicated installation.
- Halogen-free product that generates no harmful gases in the event of a fire.
- Available in different sizes for cable outer diameters ranging from 2.3–31.0 mm.
- Available in different packaging units.


### Application ranges

- For indicating that temperatures have been exceeded.
- Reversible colour change at temperatures of +53 °C to +70 °C.
- Irreversible colour change at temperatures from +71 °C.
- For use with power cables.
- Can be used in dry interiors.

## Technical Data

 **On request**  
Further dimensions and symbols

 **Colour delivered**  
Purple

 **Material**  
5–10% Thermo-chromic Masterbatch.  
90–95% Polypropylene, nonhalogenated  
(Halogen-free).

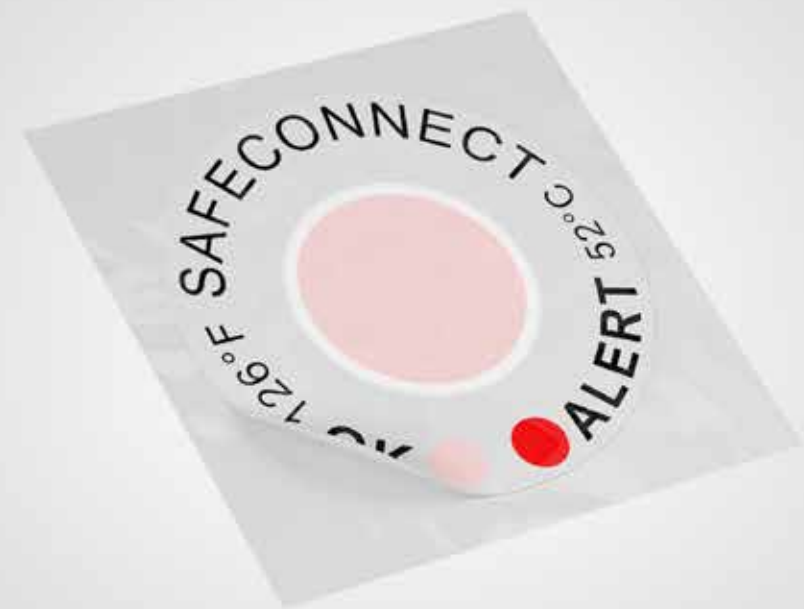
 **Temperature range**  
Reversible colour change at  
temperatures of +53 °C to +70 °C.  
Irreversible colour change at  
temperatures from +71 °C.



## Marking systems

Safety and indicators

New



More information available online



# FLEXIMARK® THERMO SPOT

Temperature indicator for monitoring electrical equipment, with memory effect, activation temperature of +52 °C.

### Benefits

- The attached temperature indicators make it possible to carry out a visual inspection of electrical equipment with a flat surface. A colour change occurs if the temperature is exceeded.
- Quickly identifying overheated electrical components makes rapid cause analysis possible. This allows appropriate countermeasures to be initiated to avoid plant downtimes.
- 24/7 monitoring and the memory effect make it possible to continuously record temperature exceedance, and can act as an early warning of overheating.
- Safe, fast and uncomplicated installation.
- Available in different packaging units.

### Application ranges

- For indicating that temperatures have been exceeded.
- Irreversible colour change at temperatures from +52 °C.
- For use with electrical equipment.
- Can be used in dry interiors.

## Technical Data

**RAL** Colour delivered  
White

**Material**  
Polyester.  
Covering film: Polyester  
Adhesive: Acrylic  
Color change material: Non-toxic, white crystalline solid on a black absorbent backing, adhered with acrylic adhesive.

**Temperature range**

- Activation temperature: 52 °C
- Tolerance: +/- 1 °C
- Store at room temperature & humidity (i.e. 16 °C to 27 °C & 40% to 60% RH)



## Marking systems

Safety and indicators



# FLEXIMARK® THERMO SPOT-B

Temperature indicator for monitoring electrical equipment, with memory effect, activation temperature of +52 °C.

### Benefits

- The attached temperature indicators make it possible to carry out a visual inspection of electrical equipment with a flat surface. A colour change occurs if the temperature is exceeded.
- Quickly identifying overheated electrical components makes rapid cause analysis possible. This allows appropriate countermeasures to be initiated to avoid plant downtimes.
- 24/7 monitoring and the memory effect make it possible to continuously record temperature exceedance, and can act as an early warning of overheating.
- Safe, fast and uncomplicated installation.
- Available in different packaging units.

### Application ranges

- For indicating that temperatures have been exceeded.
- Irreversible colour change at temperatures from +52 °C.
- For use with electrical equipment.
- Can be used in dry interiors.

## Technical Data

**RAL** Colour delivered  
Yellow

**Material**  
Polyester.  
Covering film: Polyester  
Adhesive: Acrylic  
Color change material: Non-toxic, white crystalline solid on a black absorbent backing, adhered with acrylic adhesive.

**Temperature range**

- Activation temperature: 52 °C
- Tolerance: +/- 1 °C
- Store at room temperature & humidity (i.e. 16 °C to 27 °C & 40% to 60% RH)



## Marking systems

Safety and indicators



# FLEXIMARK® THERMO WRAP +

Temperature indicator for monitoring power cables, with memory effect, available for different activation temperatures (+70 °C or +90 °C).

### Benefits

- The attached temperature indicators make visual inspection of electrical equipment possible. A colour change occurs if the temperature is exceeded.
- Quickly identifying overheated electrical components makes rapid cause analysis possible. This allows appropriate countermeasures to be initiated to avoid plant downtimes.
- 24/7 monitoring and the memory effect make it possible to continuously record temperature exceedance, and can act as an early warning of overheating.
- Safe, fast and uncomplicated installation.
- Suitable for cable outer diameters of up to 33 mm.
- Available in different packaging units.

### Application ranges

- For indicating that temperatures have been exceeded.
- Irreversible colour change at temperatures from +70 °C or +90 °C (depending on article).
- For use with power cables.
- Can be used in dry interiors.

## Technical Data

**RAL** Colour delivered  
Yellow

**Material**  
Polyester.  
Covering film: Polyester  
Adhesive: Acrylic  
Color change material: Non-toxic, white crystalline solid on a black absorbent backing, adhered with acrylic adhesive.

**Temperature range**

- Activation temperature: 70 °C and 90 °C
- Tolerance: +/- 1 °C
- Store at room temperature & humidity (i.e. 16 °C to 27 °C & 40% to 60% RH)



## Marking systems

Safety and indicators

New



More information available online



# FLEXIMARK® THERMO CLIP 70 °C starter kit

Starter kit as basic equipment with FLEXIMARK® THERMO CLIP temperature indicators, in a stable and stackable case, with small part inserts and a transparent cover.


### Benefits


- Starter kit as basic equipment with FLEXIMARK® THERMO CLIP temperature indicators in five different sizes for a cable outer diameters of 2.3–31.0 mm.
- The use of small parts ensures optimum order and prevents the content from being mixed up. The size of the individual compartments can be individually adapted.
- Stackable and robust case made of durable plastic.
- The transparent lid provides a perfect overview, even when closed.
- The snap closure provides reliable closing.


### Application ranges


- For safe transport and storage of FLEXIMARK® THERMO CLIP temperature indicators.
- Especially for use in maintenance, e.g. for inspecting industrial plants.

## Technical Data

 **On request**  
Further dimensions and symbols

 **Colour delivered**  
Purple

 **Material**  
5–10% Thermochromic Masterbatch.  
90–95% Polypropylene, nonhalogenated  
(Halogen-free).

 **Temperature range**  
Reversible colour change at  
temperatures of +53 °C to +70 °C.  
Irreversible colour change at  
temperatures from +71 °C.



## Tools and accessories

Electrical connecting material

New



More information available online



## Conductor end sleeves on coils

**What is new?** The conductor end sleeves on a coil are now also available in new colours and for other conductor cross-sections.


### Benefits


- Conductor end sleeve tape on coil for maximum simplification and time saving.
- Ideal for automated cable assembly in large volumes.
- Particularly suitable in combination with GLW crimping machines.
- UL certification according to technical data enables the product to be used in the North American market.


### Application ranges

- For creating a (semi-)automated crimp connection using a crimping machine.

## Technical Data

 **Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000005  
ETIM 5.0/6.0 Class-Description:  
Cable end sleeve

 **Material**  
Copper/PP  
Surface: tin-plated

 **Temperature range**  
Permanent load -5 °C up to +105 °C,  
temporary load +120 °C



## Tools and accessories

Electrical connecting material

New



More information available online



## Cu tube cable lugs +

Tube cable lug made of copper, heat-resistant up to +180 °C, for use with ÖLFLEX® HEAT cables/single cores, available in different dimensions.

### Benefits

- Withstand temperatures up to +180 °C.
- Compatible with equally heat-resistant ÖLFLEX® HEAT cables/single cores (e.g. ÖLFLEX® HEAT 180 product series).
- Heat resistance tested in 1,000 test cycles with ÖLFLEX® HEAT 180 cables, in accordance with DIN EN IEC 61238-1-1.
- Suitable for use with KLAUKE crimping tools.
- When tube cable lugs made of copper are being used, lower contact resistances are generated at the contact point than with tube cable lugs made of stainless steel.
- UL certification according to technical data enables the product to be used in the North American market.

### Application ranges

- For creating a safe crimp connection with multi-wire and fine-wire round cables in classes 2 and 5 in accordance with DIN EN 60228.

## Technical Data

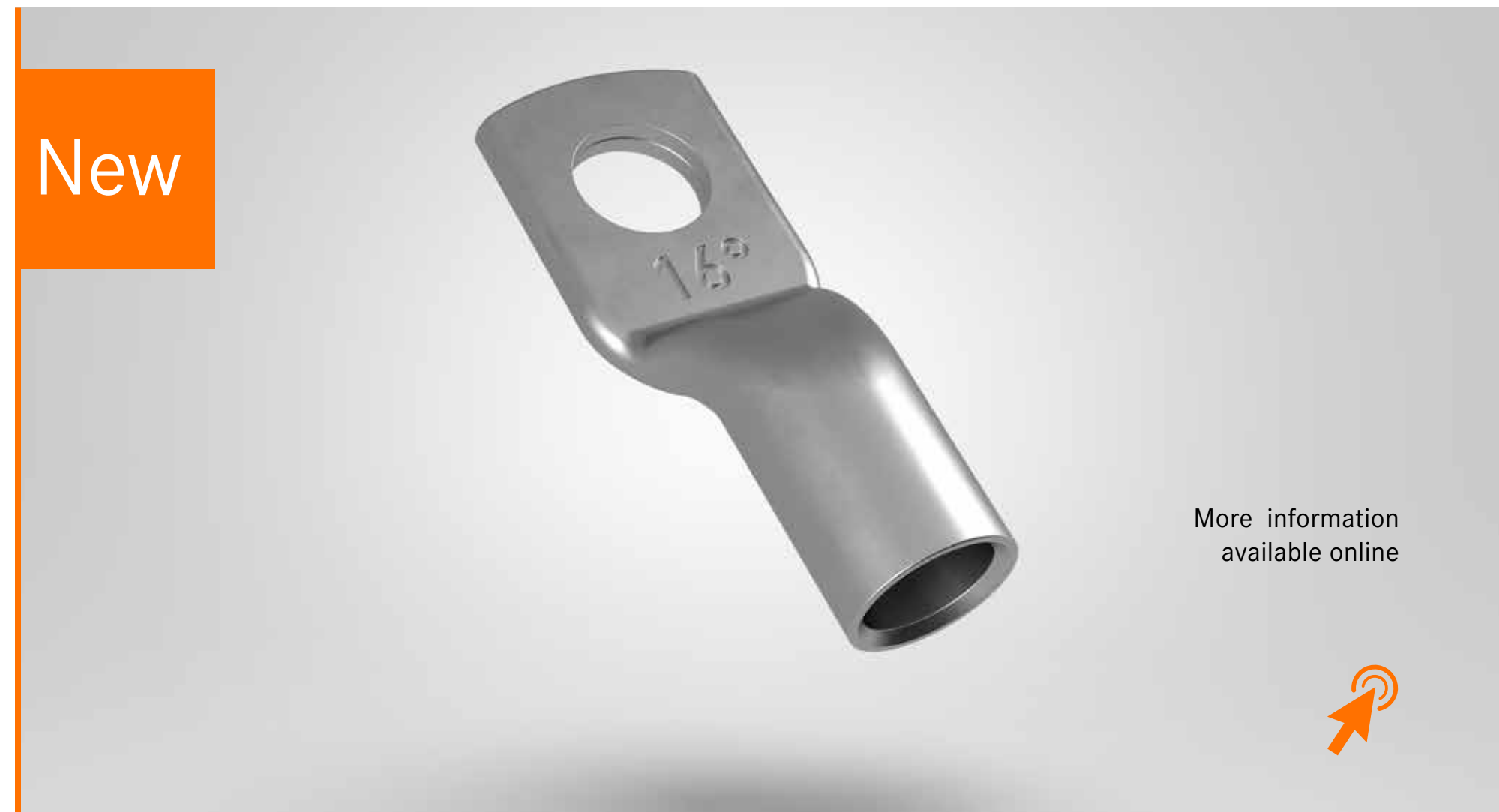
**Material**  
Tinned electrolyte copper

**Temperature range**  
up to +180 °C



## Tools and accessories

Electrical connecting material



## Ni tube cable lugs

Tube cable lug made of nickel, heat-resistant up to +650 °C, for use with ÖLFLEX® HEAT single cores, available in different dimensions.


### Benefits


- Withstand temperatures up to +650 °C.
- Compatible with equally heat-resistant ÖLFLEX® HEAT single cores with nickel conductors.
- The lowest contact resistances are achieved when contacting with pure nickel conductors.
- Suitable for use with KLAUKE crimping tools.
- The flat mounting surface and precise processing simplify the crimping process.

### Application ranges

- For creating a safe crimp connection with multi-wire and fine-wire round cables in classes 2 and 5 in accordance with DIN EN 60228.

## Technical Data

 **Material**  
Nickel alloy

 **Temperature range**  
Temperature (max.): +650 °C





## Tools and accessories

Electrical connecting material



## V2A tube cable lugs

Tube cable lug made of V2A stainless steel, heat-resistant up to +400 °C, for use with ÖLFLEX® HEAT cables/single cores, available in different dimensions.


### Benefits


- Withstand temperatures up to +400 °C.
- Compatible with equally heat-resistant ÖLFLEX® HEAT cables/single cores.
- Suitable for use with KLAUKE crimping tools.
- The flat mounting surface and precise processing simplify the crimping process.

### Application ranges

- For creating a safe crimp connection with multi-wire and fine-wire round cables in classes 2 and 5 in accordance with DIN EN 60228.
- Resistant to corrosion and acid.

## Technical Data

 **Material**  
stainless steel V2A

 **Temperature range**  
Temperature (max.) +400 °C



# LEGEND

## NEW PRODUCT



## PRODUCT EXTENSION



## 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



Clean room



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



Submersible use

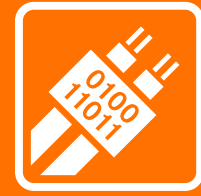
**Please note:**  
The purpose of the icons is to provide you with a quick overview and a rough indication of the product features to which the corresponding information relates. You can find details of product characteristics in the “technical data” sections on the product pages.



**ÖLFLEX®**  
Power and control cables



**EPIC®**  
Industrial connectors



**UNITRONIC®**  
Data communication systems



**SKINTOP®**  
Cable glands



**ETHERLINE®**  
Data communication systems  
for ETHERNET technology



**SILVYN®**  
Protective cable conduit systems  
and cable carrier systems



**HITRONIC®**  
Optical transmission systems



**FLEXIMARK®**  
Marking systems

# Innovations 2024 | April

Part number	Product name
	<b>Article description</b>
	<b>UNIRAIL S 50264-3-1 600V M FR</b>
15382100	UNIRAIL S 50264-3-1 600V M FR 1X0,5
15382101	UNIRAIL S 50264-3-1 600V M FR 1X0,75
15382102	UNIRAIL S 50264-3-1 600V M FR 1X1
15382103	UNIRAIL S 50264-3-1 600V M FR 1X1,5
15382104	UNIRAIL S 50264-3-1 600V M FR 1X2,5
15382105	UNIRAIL S 50264-3-1 600V M FR 1X4
15382106	UNIRAIL S 50264-3-1 600V M FR 1X6
15382107	UNIRAIL S 50264-3-1 600V M FR 1X10
15382108	UNIRAIL S 50264-3-1 600V M FR 1X16
15382109	UNIRAIL S 50264-3-1 600V M FR 1X25
15382110	UNIRAIL S 50264-3-1 600V M FR 1X35
15382111	UNIRAIL S 50264-3-1 600V M FR 1X50
15382112	UNIRAIL S 50264-3-1 600V M FR 1X70
15382113	UNIRAIL S 50264-3-1 600V M FR 1X95
15382114	UNIRAIL S 50264-3-1 600V M FR 1X120
15382115	UNIRAIL S 50264-3-1 600V M FR 1X150
15382116	UNIRAIL S 50264-3-1 600V M FR 1X185
15382117	UNIRAIL S 50264-3-1 600V M FR 1X240
15382118	UNIRAIL S 50264-3-1 600V M FR 1X300
15382119	UNIRAIL S 50264-3-1 600V M FR 1X400
	<b>UNIRAIL S 50264-3-2 300V MM FR</b>
15382130	UNIRAIL S 50264-3-2 300V MM FR 2X0,5
15382131	UNIRAIL S 50264-3-2 300V MM FR 4X0,5
15382132	UNIRAIL S 50264-3-2 300V MM FR 3X0,75
15382133	UNIRAIL S 50264-3-2 300V MM FR 2X1
15382134	UNIRAIL S 50264-3-2 300V MM FR 3X1
15382135	UNIRAIL S 50264-3-2 300V MM FR 4X1
15382136	UNIRAIL S 50264-3-2 300V MM FR 6X1
15382137	UNIRAIL S 50264-3-2 300V MM FR 2X1,5
15382138	UNIRAIL S 50264-3-2 300V MM FR 2X2,5
	<b>UNIRAIL S 50264-3-2 300V MMS FR</b>
15382150	UNIRAIL S 50264-3-2 300V MMS FR 2X0,5
15382151	UNIRAIL S 50264-3-2 300V MMS FR 4X0,5
15382152	UNIRAIL S 50264-3-2 300V MMS FR 3X0,75
15382153	UNIRAIL S 50264-3-2 300V MMS FR 2X1
15382154	UNIRAIL S 50264-3-2 300V MMS FR 3X1
15382155	UNIRAIL S 50264-3-2 300V MMS FR 4X1
15382156	UNIRAIL S 50264-3-2 300V MMS FR 6X1
15382157	UNIRAIL S 50264-3-2 300V MMS FR 2X1,5
15382158	UNIRAIL S 50264-3-2 300V MMS FR 2X2,5
	<b>UNIRAIL S 50264-3-2 600V MM FR</b>
15382170	UNIRAIL S 50264-3-2 600V MM FR 2X1,5
15382171	UNIRAIL S 50264-3-2 600V MM FR 3X1,5
15382172	UNIRAIL S 50264-3-2 600V MM FR 4X1,5
15382173	UNIRAIL S 50264-3-2 600V MM FR 2X2,5
15382174	UNIRAIL S 50264-3-2 600V MM FR 3X2,5
15382175	UNIRAIL S 50264-3-2 600V MM FR 4X2,5
15382176	UNIRAIL S 50264-3-2 600V MM FR 2X4
	<b>UNIRAIL S 50264-3-2 600V MMS FR</b>
15382190	UNIRAIL S 50264-3-2 600V MMS FR 2X1,5
15382191	UNIRAIL S 50264-3-2 600V MMS FR 3X1,5
15382192	UNIRAIL S 50264-3-2 600V MMS FR 4X1,5
15382193	UNIRAIL S 50264-3-2 600V MMS FR 2X2,5
15382194	UNIRAIL S 50264-3-2 600V MMS FR 3X2,5
15382195	UNIRAIL S 50264-3-2 600V MMS FR 4X2,5
	<b>ÖLFLEX® SOLAR H1 BUR</b>
38115806	ÖLFLEX® SOLAR H1 BUR 1X4 BK
38115807	ÖLFLEX® SOLAR H1 BUR 1X6 BK
38115808	ÖLFLEX® SOLAR H1 BUR 1X10 BK
38115813	ÖLFLEX® SOLAR H1 BUR 1X4 RD
38115814	ÖLFLEX® SOLAR H1 BUR 1X6 RD
38115815	ÖLFLEX® SOLAR H1 BUR 1X10 RD
38115820	ÖLFLEX® SOLAR H1 BUR 1X4 BU
38115821	ÖLFLEX® SOLAR H1 BUR 1X6 BU
38115822	ÖLFLEX® SOLAR H1 BUR 1X10 BU

Part number	Product name
	<b>Article description</b>
	ETHERLINE® FD bioP Cat.5e
21704891	ETHERLINE® FD bioP Cat.5e 4x2x26 / 19AWG
	<b>EPIC® SIGNAL M23 D6 TWIST</b>
381166481	EPIC® SIGNAL M23 D6 TWIST N 7-10 (1)
381166482	EPIC® SIGNAL M23 D6 TWIST N 7-10 (20)
381166483	EPIC® SIGNAL M23 D6 TWIST N 9.5-13.5 (1)
381166484	EPIC® SIGNAL M23 D6 TWIST N 9.5-13.5 (20)
381166485	EPIC® SIGNAL M23 D6 TWIST N 5-7.3 (1)
	<b>EPIC® H-A 3 TG</b>
19426000	EPIC® H-A 3 TG M20 gr
19425500	EPIC® H-A 3 TG M20 bk
19426400	EPIC® H-A 3 TG M20 gr 3-13.5mm
19426700	EPIC® H-A 3 TG M20 bk 3-13.5mm
	<b>EPIC® H-A 3 TGB</b>
19429000	EPIC® H-A 3 TGB M20 gr
19429200	EPIC® H-A 3 TGB M20 bk
19429100	EPIC® H-A 3 TGBV M20 gr 3-13.5mm
19620300	EPIC® H-A 3 TGBV M20 bk 3-13.5mm
	<b>EPIC® H-A 3 AG</b>
10422000	EPIC® H-A 3 AG gr
10422200	EPIC® H-A 3 AG bk
	<b>EPIC® H-Q 4+2</b>
44423372	EPIC® H-Q 4+2 SCM
44423373	EPIC® H-Q 4+2 BCM
	<b>EPIC® H-Q 8</b>
44423374	EPIC® H-Q 8 SCM
44423375	EPIC® H-Q 8 BCM
	<b>EPIC® H-Q 17</b>
44423376	EPIC® H-Q 17 SCM
44423377	EPIC® H-Q 17 BCM
	<b>EPIC® H-Q TG</b>
381166440	EPIC® H-Q TG M25
	<b>EPIC® H-Q TS</b>
381166441	EPIC® H-Q TS M25
	<b>EPIC® SOLAR 4 GEN2 M</b>
44428270	EPIC® SOLAR 4 GEN2 M 5.2-7.0mm
44428277	EPIC® SOLAR 4 GEN2 M 4-6 5.2-7.0mm
381166461	EPIC® SOLAR 4 GEN2 M 5.2-7.0mm
	<b>EPIC® SOLAR 4 GEN2 F</b>
44428271	EPIC® SOLAR 4 GEN2 F 5.2-7.0mm
44428278	EPIC® SOLAR 4 GEN2 F 4-6 5.2-7.0mm
381166462	EPIC® SOLAR 4 GEN2 F 5.2-7.0mm
	<b>EPIC® SOLAR 4 GEN2 Kontakte / EPIC® SOLAR 4 GEN2 Contacts</b>
44428272	EPIC® SOLAR 4 GEN2 PIN M 4-6mm (2500)
44428273	EPIC® SOLAR 4 GEN2 PIN F 4-6mm (2500)
	<b>EPIC® SOLAR 4 GEN2 Splitter</b>
44428274	EPIC® SOLAR 4 GEN2 SPLITTER FMM
44428275	EPIC® SOLAR 4 GEN2 SPLITTER MFF
	<b>EPIC® SOLAR 4 GEN2 Montagewerkzeug / EPIC® SOLAR 4 GEN2 Assembly tool</b>
44428276	EPIC® SOLAR 4 GEN2 ASSEMBLY TOOL
	<b>EPIC® SOLAR 4 GEN2 Kappen / EPIC® SOLAR 4 GEN2 Caps</b>
381166463	EPIC® SOLAR 4 GEN2 M CAP
381166464	EPIC® SOLAR 4 GEN2 F CAP
	<b>EPIC® H-B 16 T</b>
19080001	EPIC® H-B 16 TG M20
	<b>EPIC® Zwischenstutzen / EPIC® Collar</b>
10016000	EPIC® ZW M20
10016001	EPIC® ZW M25
10016002	EPIC® ZW M32
10016003	EPIC® ZW M40
10016004	EPIC® ZW M20 PG13,5
10016005	EPIC® ZW M25 PG16
10016006	EPIC® ZW M32 PG21
10016007	EPIC® ZW M40 PG29

Part number	Product name
	<b>Article description</b>
	EPIC® SENSOR M 12A Lötanschluss / EPIC® SENSOR M 12A Solder termination
381166329	EPIC® SENSOR M12A D6 12 SL 1220 6-8
381166322	EPIC® SENSOR M12A F6 12 SL 1220 6-8
	<b>EPIC® SENSOR M 12A Schraubanschluss / EPIC® SENSOR M 12A Screw termination</b>
381166318	EPIC® SENSOR M12A F6 3 SR 1220 6-8
381166319	EPIC® SENSOR M12A F6 4 SR 1220 6-8
381166320	EPIC® SENSOR M12A F6 5 SR 1220 6-8
381166321	EPIC® SENSOR M12A F6 8 SR 1220 6-8
381166339	EPIC® SENSOR M12A D7 4 SR 1220 6-8
381166325	EPIC® SENSOR M12A D6 3 SR 1220 6-8
381166326	EPIC® SENSOR M12A D6 4 SR 1220 6-8
381166327	EPIC® SENSOR M12A D6 5 SR 1220 6-8
381166328	EPIC® SENSOR M12A D6 8 SR 1220 6-8
381166341	EPIC® SENSOR M12A D7 5 SR 1220 6-8
381166343	EPIC® SENSOR M12A D7 8 SR 1220 6-8
381166332	EPIC® SENSOR M12A F1 3 SR 1220 6-8
381166333	EPIC® SENSOR M12A F1 4 SR 1220 6-8
381166335	EPIC® SENSOR M12A F1 5 SR 1220 6-8
381166337	EPIC® SENSOR M12A F1 8 SR 1220 6-8
381166338	EPIC® SENSOR M12A D7 3 SR 1220 6-8
	<b>EPIC® SENSOR M 12B Schraubanschluss / EPIC® SENSOR M 12B Screw termination</b>
381166323	EPIC® SENSOR M12B F6 5 SR 1220 6-8
381166330	EPIC® SENSOR M12B D6 5 SR 1220 6-8
381166336	EPIC® SENSOR M12B F1 5 SR 1220 6-8
381166342	EPIC® SENSOR M12B D7 5 SR 1220 6-8
	<b>EPIC® DATA M 12D Schraubanschluss / EPIC® DATA M 12D Screw termination</b>
381166324	EPIC® DATA M12D F6 4 SR 1220 6-8
381166331	EPIC® DATA M12D D6 4 SR 1220 6-8
381166334	EPIC® DATA M12D F1 4 SR 1220 6-8
381166340	EPIC® DATA M12D D7 4 SR 1220 6-8
	<b>EPIC® POWER M 12L Schraubanschluss / EPIC® POWER M 12L Screw termination</b>
381166308	EPIC® POWER M12L F6 4+FE SR 1220 8-12
381166313	EPIC® POWER M12L D6 4+FE SR 1220 8-12
381166316	EPIC® POWER M12L F1 4+FE SR 1220 8-12
381166317	EPIC® POWER M12L D7 4+FE SR 1220 8-12
	<b>EPIC® POWER M 12K Schraubanschluss / EPIC® POWER M 12K Screw termination</b>
381166315	EPIC® POWER M12K F6 4+PE SR 1220 8-12
381166314	EPIC® POWER M12K D6 4+PE SR 1220 8-12
381166311	EPIC® POWER M12K F1 4+PE SR 1220 8-12
381166312	EPIC® POWER M12K D7 4+PE SR 1220 8-12
	<b>EPIC® POWER M 12M Schraubanschluss / EPIC® POWER M 12M Screw termination</b>
381166344	EPIC® POWER M12M F6 5+PE SR 1220 8-12
381166345	EPIC® POWER M12M D6 5+PE SR 1220 8-12
	<b>EPIC® POWER M 12S Schraubanschluss / EPIC® POWER M 12S Screw termination</b>
381166309	EPIC® POWER M12S F6 2+PE SR 1220 8-12
381166306	EPIC® POWER M12S D6 2+PE SR 1220 8-12
381166310	EPIC® POWER M12S F6 3+PE SR 1220 8-12
381166307	EPIC® POWER M12S D6 3+PE SR 1220 8-12
	<b>EPIC® POWER M 12T Schraubanschluss / EPIC® POWER M 12T Screw termination</b>
381166346	EPIC® POWER M12T F6 4 SR 1220 8-12
381166347	EPIC® POWER M12T D6 4 SR 1220 8-12
	<b>EPIC® POWER M 12E Schraubanschluss / EPIC® POWER M 12E Screw termination</b>
381166348	EPIC® POWER M12E F6 4+FE SR 1220 8-12
381166349	EPIC® POWER M12E D6 4+FE SR 1220 8-12
	<b>EPIC® POWER M 12F Schraubanschluss / EPIC® POWER M 12F Screw termination</b>
381166350	EPIC® POWER M12F F6 4 SR 1220 8-12
381166351	EPIC® POWER M12F D6 4 SR 1220 8-12

Part number	Product name
	<b>Article description</b>
	<b>SKINDICHT® VENT PA6</b>
51730190	SKINDICHT® VENT 6X0,75 LGY
51730192	SKINDICHT® VENT 6X0,75 SGY
51730188	SKINDICHT® VENT 6X0,75 BK
51730196	SKINDICHT® VENT 8X1,0 LGY
51730198	SKINDICHT® VENT 8X1,0 SGY
51730194	SKINDICHT® VENT 8X1,0 BK
	<b>Gegenmuttern PA / Locknuts PA</b>
51730211	PA-LOCKNUT M6X0,75 LGY
51730210	PA-LOCKNUT M6X0,75 BK
51730214	PA-LOCKNUT M8X1,0 LGY
51730213	PA-LOCKNUT M8X1,0 BK
	<b>Entwässerungselement / Drainage elements</b>
51730220	DRAINAGE ELEMENT M12X 1.5 BK
51730221	DRAINAGE ELEMENT M12X 1.5 LGY
51730222	DRAINAGE ELEMENT M12X 1.5 SGY
	<b>Rohrkabelschuhe Cu / Tube cable lugs Cu</b>
63207053	91R3 COPPER CABLE LUG 0.75 M3
63207054	91R4 COPPER CABLE LUG 0.75 M4
63207055	91R5 COPPER CABLE LUG 0.75 M5
63207056	92R3 COPPER CABLE LUG 1.5 M3
63207057	92R4 COPPER CABLE LUG 1.5 M4
63207058	92R5 COPPER CABLE LUG 1.5 M5
63207059	92R6 COPPER CABLE LUG 1.5 M6
63207061	93R3 COPPER CABLE LUG 2.5 M3
63207062	93R4 COPPER CABLE LUG 2.5 M4
63207063	93R5 COPPER CABLE LUG 2.5 M5
63207064	93R6 COPPER CABLE LUG 2.5 M6
63207065	93R8 COPPER CABLE LUG 2.5 M8
63207066	94R4 COPPER CABLE LUG 4 M4
63207067	94R5 COPPER CABLE LUG 4 M5
63207068	94R6 COPPER CABLE LUG 4 M6
63207069	94R8 COPPER CABLE LUG 4 M8
63207071	95R4 COPPER CABLE LUG 6 M4
63207072	95R5 COPPER CABLE LUG 6 M5
63207073	95R6 COPPER CABLE LUG 6 M6
63207074	95R8 COPPER CABLE LUG 6 M8
63207075	2R5 COPPER CABLE LUG 10 M5
63207076	2R6 COPPER CABLE LUG 10 M6
63207077	2R8 COPPER CABLE LUG 10 M8
63207078	2R10 COPPER CABLE LUG 10 M10
63207079	2R12 COPPER CABLE LUG 10 M12
63207080	3R5 COPPER CABLE LUG 16 M5
63207081	3R6 COPPER CABLE LUG 16 M6
63207082	3R8 COPPER CABLE LUG 16 M8
63207083	3R10 COPPER CABLE LUG 16 M10
63207084	3R12 COPPER CABLE LUG 16 M12
	<b>Rohrkabelschuhe V2A / Tube cable lugs V2A</b>
63207037	79V4 V2A CABLE LUG 0.5-1.0 M4
63207038	79V5 V2A CABLE LUG 0.5-1.0 M5
63207039	80V4 V2A CABLE LUG 1.5-2.5 M4
63207041	80V5 V2A CABLE LUG 1.5-2.5 M5
63207042	80V6 V2A CABLE LUG 1.5-2.5 M6
63207043	81V4 V2A CABLE LUG 4-6 M4
63207044	81V5 V2A CABLE LUG 4-6 M5
63207045	81V6 V2A CABLE LUG 4-6 M6
63207046	82V5 V2A CABLE LUG 10 M5
63207047	82V6 V2A CABLE LUG 10 M6
63207048	82V8 V2A CABLE LUG 10 M8
63207049	83V5 V2A CABLE LUG 16 M5
63207051	83V6 V2A CABLE LUG 16 M6
63207052	83V8 V2A CABLE LUG 16 M8

Part number	Product name
	<b>Article description</b>
	<b>Rohrkabelschuhe Ni / Tube cable lugs Ni</b>
63207020	56N3 NICKEL CABLE LUG 0.5-1.0 M3
63207021	56N4 NICKEL CABLE LUG 0.5-1.0 M4
63207022	56N5 NICKEL CABLE LUG 0.5-1.0 M5
63207023	57N3 NICKEL CABLE LUG 1.5-2.5 M3
63207024	57N4 NICKEL CABLE LUG 1.5-2.5 M4
63207025	57N5 NICKEL CABLE LUG 1.5-2.5 M5
63207026	57N6 NICKEL CABLE LUG 1.5-2.5 M6
63207027	58N4 NICKEL CABLE LUG 4-6 M4
63207028	58N5 NICKEL CABLE LUG 4-6 M5
63207029	58