

Webguide

**New Products Spring 2022**

# CONTENT

## MACHINE AND PLANT ENGINEERING

Cables and accessories for machines and plants:  
a perfect match

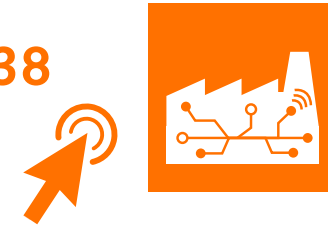
at page 3



## ETHERNET DATA TRANSMISSION

Your highway for big data

at page 38



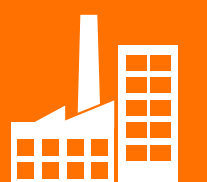
# MACHINE AND PLANT ENGINEERING

CABLES AND ACCESSORIES  
FOR MACHINES AND PLANTS:  
A PERFECT MATCH



New: Spring 2022

- + ÖLFLEX® 127 HSLH**  
Halogen-free cable, flexible and inexpensive, with CPR Cca, for building wiring.
- + ÖLFLEX® DC GRID**  
Flexible, buriable DC cable with colour code according to EN 60445 for DC applications in industrial plants.
- + EPIC® ULTRA H-A 3**  
Portfolio expansion of corrosion-resistant rectangular connector housings with EMC protection; new construction forms, new design.
- + EPIC® H-A 3**  
Portfolio expansion of the robust, mechanically resistant rectangular connector housings; new construction forms, new design.
- + EPIC® H-Q 5**  
Compact, 5-pole rectangular connector insert, powerful up to 30 A, with screw or crimpable PE contact.
- + EPIC® H-Q 5 PE contacts**  
Crimpable and thus vibration-proof PE protective conductor contact for rectangular connector inserts EPIC® H-Q 5 and 7.
- + EPIC® H-Q 7**  
Compact, 7-pole rectangular connector insert, powerful up to 10 A, with screwable or crimpable PE contact.
- + EPIC® POWER M 12L – Series**  
Small power connector M 12, L-coded, for power supply in the low-voltage range (decentralised I/O modules, DC motors), PROFINET-compliant.
- + EPIC® POWER M 12L contacts**  
Contacts with multiple slots and conductor cross-section marking, for EPIC® POWER M 12L power connectors.
- + EPIC® MH 2 40A**  
2-pole rectangular connector insert for modular system EPIC® MH, powerful up to 40 A, also for railway applications.
- + SKINTOP® DIX-M**  
Multiple sealing insert made of NBR (oil-resistant), FKM (heat-resistant) or silicone (chemical-resistant), leads several cables through one cable gland.
- + SKINTOP® MULTI VENT**  
Multiple entry for up to 29 lines, with breathable pressure compensation element for venting when enclosures are closed.
- + SKINDICHT® Lead Free Series**  
Cable gland accessories made of lead-free brass to comply with future RoHS regulations (product characteristics identical to lead-containing articles).

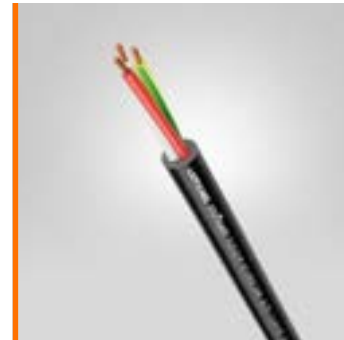


# CABLES AND ACCESSORIES FOR MACHINES AND ENCLOSURES: A PERFECT MATCH



## ÖLFLEX® 127 HSLH

Do you need a halogen-free, low-priced control cable with highly classified fire behaviour according to CPR, which is also flexible and easy to install? Our ÖLFLEX® cable with Cca class should sweeten your day! It is universally used for cabling buildings and industrial plants and complies with the legal fire protection requirements.



## ÖLFLEX® DC GRID

Would you like to have direct current? If so, you will be able to connect buildings or industrial plants without any problems with this flexible cable being suitable for direct burial. The cores are marked according to the currently valid standard EN 60445.



## EPIC® ULTRA H-A 3

The EMC products of our revised EPIC® ULTRA H-A 3 product family are ultra-small. The existing enclosures as well as the completely new enclosure designs EGS, TGV, TSV and TGHV offer more space inside and at the same time take up less space in your application. The enclosure variety is enormous. And so are the areas of application.



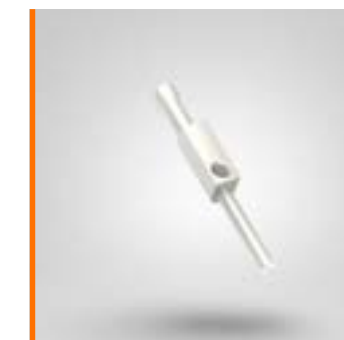
## EPIC® H-A 3

With the revised EPIC® H-A 3 product family, we have once again reinforced the meaning of „extremely compact“. The existing metal enclosures as well as the completely new enclosure designs MTG, MTS, MAG, MAGS, MAGSV, MAGD and MTGVB offer more space inside and at the same time take up less space in your application. The enclosure variety is huge. And furthermore are the areas of application.



## EPIC® H-Q 5

This compact, 5+1-pole standard insert is anything but standard. Why? Because the „PE-C“ variant, which is a crimpable PE protective earth contact can be used. The crimp connection of power AND protective earth contacts offers you the chance to assemble the entire connector automatically for the first time. In addition the insert with 30 A is exceptionally powerful for its size.



## EPIC® H-Q 5 PE contacts

A contact that will be remembered: This PE contact for connecting a protective earth conductor can be crimped for the first time. This is currently unique on the market. Crimp connections are known to be reliable for years, especially in applications with high vibrations. With a PE crimp contact, you'll receive a fully automated connector assembly process.

# CABLES AND ACCESSORIES FOR MACHINES AND ENCLOSURES: A PERFECT MATCH



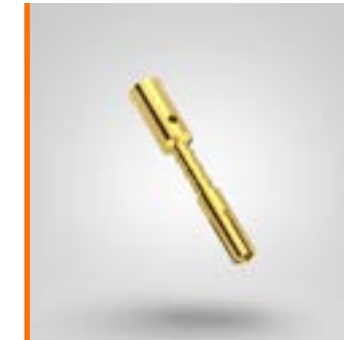
## EPIC® H-Q 7

This compact, 7+1-pole standard insert is anything but standard. Why? Because the „PE-C“ variant, which is a crimpable PE protective earth contact can be used. The crimp connection of power AND protective earth contacts offers you the chance to assemble the entire connector automatically for the first time. And is it mateable with other connectors on the market? Yes indeed!



## EPIC® POWER M 12L – Series

State-of-the-art development and design methods combined in the smallest of spaces: the extremely small and powerful M12 with L-coding prevents mismatching, is PROFINET-compliant and UL-certified. M12L enables sensor/actuator cabling as well as the power supply of smaller DC motors, e.g. in automated guided vehicles.



## EPIC® POWER M 12L contacts

Not all contacts are the same! To make sure that the miniaturised power connector EPIC® POWER M12L to do its job properly, long-lasting contacts are required that make maximum contact at the connector and keep contact resistances low. Et voilà, here they are!



## EPIC® MH 2 40A

We love modular plug-in connectors. That's why we are expanding our product family with another module for power supply in your applications. The module simply snaps into the multi-frame, becomes UL-certified and can be used in rail vehicles. Wonderfully flexible in use!



## SKINTOP® DIX-M

Unmissable: Our cold-flexible multiple sealing insert made of blue silicone allows several cables to be gently inserted through one cable gland. The extremely cold-flexible, ECOLAB-tested polyamide is always highly visible and clearly distinguishable from other components in food and beverage industry.



## SKINTOP® MULTI VENT

Goodbye moisture: With this multiple entry, you will never again have to complain about moisture problems in closed enclosures thanks to the firmly integrated pressure compensation element. The elastic gel membrane technology also enables direct cable entry without pre-piercing. There are six versions with different clamping ranges for up to 29 cables available.



# CABLES AND ACCESSORIES FOR MACHINES AND ENCLOSURES: A PERFECT MATCH

---



## **SKINDICHT® Lead-free Series**

Whether blind plugs, reducers, enlargers, adapters or locknuts – the accessories for cable glands must also be manufactured completely without the addition of lead in the long term. This is what the RoHS directive wants. With our lead-free products, you are already on the safe side. Don't worry, the product properties do not change due to the absence of lead!

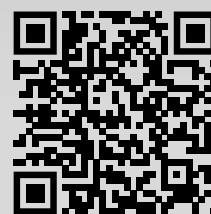
## Power and control cables

Various applications • Halogen-free ÖLFLEX®

NEW



Click or Scan – More  
information available online



## ÖLFLEX® 127 HSLH

Halogen-free cable, flexible and inexpensive, with CPR Cca,  
for building wiring.

### Benefit

- Easy handling and installation due to flexible design.
- Halogen-free and highly flame-retardant materials reduce the risk of fire propagation, high smoke density and toxic fumes in case of an event of fire.
- Classified fire behavior according to EU Directive 305/2011 (CPR) with article number selection under [www.lappkabel.com/cpr](http://www.lappkabel.com/cpr).
- High electrical safety due to 4000V test voltage.

### Application

- For building wiring to comply with special fire protection requirements.
- Universally applicable for wiring internal machine and plant-wide control circuits.
- For fixed installation and occasional movement without tensile stress.
- Can be used in dry and damp environments.
- Suitable for medium mechanical stress.
- HFFR outer sheath is largely resistant to acids and alkalis.

## 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 acc. to VDE  
0293-334



**Conductor stranding**  
Fine wire according to VDE 0295,  
class 5/IEC 60228 class 5



**Minimum bending radius**  
Occasional flexing: 15 x outer diameter  
Fixed installation: 4 x outer diameter



**Nominal voltage**  
 $U_0/U$ : 300/500 V



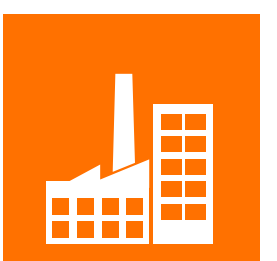
**Test voltage**  
4000 V



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



**Temperature range**  
Occasional flexing: -5 °C to +70 °C  
Fixed installation: -40 °C to +80 °C



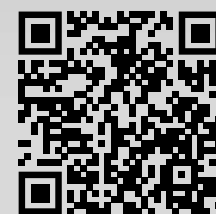
# Power and control cables

Various applications • PVC outer sheath and coloured cores

NEW



Click or Scan – More information available online



## ÖLFLEX® DC GRID

Flexible, buriable DC cable with colour code according to EN 60445 for DC applications in industrial plants.

### Benefit

- Suitable for the installation of energy-saving DC networks in industrial plants.
- Can be laid in the underground thanks to resistant insulating and sheathing material in accordance to DIN VDE 0276-603.
- Good installation properties thanks to the fine-wire, flexible conductor.
- With color code according to EN 60445 for DC systems.

### Application

- For DC applications in low-voltage range.
- For industrial installations where power is distributed via a DC network.
- For use on control equipment, motors and frequency converters.
- Can be used in dry, damp and wet environments.
- For open installation on cable trays.
- Can be laid in the underground.
- Withstands high mechanical loads.

## Technical Data



**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000057  
ETIM 5.0/6.0 Class-Description: Low voltage power cable



**Core identification code**  
According to EN 60445



**Conductor stranding**  
Fine wire according to VDE 0295, class 5/IEC 60228 class 5



**Minimum bending radius**  
Occasional flexing: 15 x outer diameter  
Fixed installation: 4 x outer diameter



**Nominal voltage**  
DC (core-ground): max. 0,75 kV  
DC (core-core): max. 1,5 kV



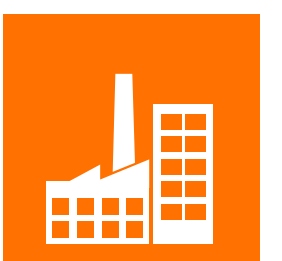
**Test voltage**  
4000 V



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



**Temperature range**  
Occasional flexing: -5 °C to +70 °C  
Fixed installation: -40 °C to +80 °C





## EPIC® Industrial connectors

Rectangular connectors • EPIC® ULTRA H-A 3

NEW



Click or Scan – 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**  
Housing: nickel-plated zinc diecasting  
Lever: stainless steel  
Sealing: CR



**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® ULTRA H-A 3 TGV

Portfolio expansion of corrosion-resistant rectangular connector housings with EMC protection; new construction forms, new design. Available as hood, surface-mounted, recessed, base or coupling housing.

### Benefit

- The EPIC® ULTRA H-A 3 range comprises the smallest EMC housings in the heavy-duty industrial connector sector and ensures safe plug connections in a small amount of space.
- The hood housing is mateable with many commercially available housings (panel-mount base, surface-mount base or coupler hood housings).
- The integrated SKINTOP® cable gland is used for sealing and strain-relieving cable entry. Compared to enclosures where the cable gland is added separately, the overall size of the enclosure is more space-saving.
- Locking is via stainless steel single lever on the enclosure.
- Corresponds to protection class IP 65 when locked.
- Protection class classified according to NEMA 250 as well as tested according to UL50E.
- The arrow as a new design element on the surface of the housing is easy to feel and simplifies plugging in spatially confined and possibly poorly visible application areas.

### Application

- To protect the connector insert from environmental influences.
- Especially for environments where the product is getting into contact with water, cleaning agents and saline substances.
- Especially for environments where electromagnetic compatibility (EMC) is required.
- For use with many EPIC® rectangular connector inserts.
- For power supply connection of devices and machines in various applications.
- Withstands high environmental and mechanical stresses.
- Suitable for the outdoors.



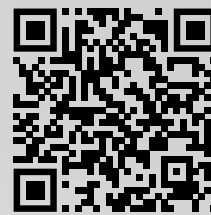
## EPIC® Industrial connectors

Rectangular connectors • EPIC® ULTRA H-A 3

NEW



Click or Scan – 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**  
Housing: nickel-plated zinc diecasting  
Lever: stainless steel  
Sealing: NBR



**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® ULTRA H-A 3 TGHV +

Portfolio expansion of corrosion-resistant rectangular connector housings with EMC protection; new construction forms, new design. Available as hood, surface-mounted, recessed, base or coupling housing.

### Benefit

- The EPIC® ULTRA H-A 3 range comprises the smallest EMC housings in the heavy-duty industrial connector sector and ensures safe plug connections in a small amount of space.
- The hood housing is mateable with many commercially available housings (panel-mount base, surface-mount base or coupler hood housings).
- The tall design offers more space and is therefore suitable for larger deployments or applications with more space requirements in the enclosure.
- The integrated SKINTOP® cable gland is used for sealing and strain-relieving cable entry. Compared to enclosures where the cable gland is added separately, the overall size of the enclosure is more space-saving.
- For article names with the addition „BRUSH“, the integrated cable gland is supplemented by our innovative SKINTOP® BRUSH brass brush, which enables 360° contacting of the copper shielding braid and is even more effective dissipation of interference signals. The brush wires enable easier assembly of the connector and maintain the gapless 360° coverage of the copper shielding braid.
- Locking is via stainless steel longitudinal brackets on the mating enclosure.

- Corresponds to protection class IP 65 when locked.
- Protection class classified according to NEMA 250 as well as tested according to UL50E.
- The arrow as a new design element on the surface of the housing is easy to feel and simplifies plugging in spatially confined and possibly poorly visible application areas.

### Application





- To protect the connector insert from environmental influences.
- Especially for environments where the product is getting into contact with water, cleaning agents and saline substances.
- Especially for environments where electromagnetic compatibility (EMC) is required.
- For use with many EPIC® rectangular connector inserts.
- For power supply connection of devices and machines in various applications.
- Withstands high environmental and mechanical stresses.
- Suitable for the outdoors.



# EPIC® Industrial connectors

Rectangular connectors • EPIC® ULTRA H-A 3



Technical Data	
 <b>Classification ETIM 5/6</b> ETIM 5.0/6.0 Class-ID: EC000437 ETIM 5.0/6.0 Class-Description: Housing for industrial connectors	 <b>VDE-tested:</b> in preparation <b>UL-tested:</b> UL File Number: E75770
 <b>Material</b> Housing: nickel-plated zinc diecasting Lever: stainless steel Sealing: NBR	 <b>Temperature range</b> -40 °C to +100 °C, short-term up to +125 °C

## EPIC® ULTRA H-A 3 TSV

Portfolio expansion of corrosion-resistant rectangular connector housings with EMC protection; new construction forms, new design. Available as hood, surface-mounted, recessed, base or coupling housing.

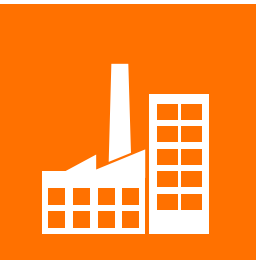
### Benefit

- The EPIC® ULTRA H-A 3 range comprises the smallest EMC housings in the heavy-duty industrial connector sector and ensures safe plug connections in a small amount of space.
- The hood housing is mateable with many commercially available housings (panel-mount base, surface-mount base or coupler hood housings)
- With lateral cable entry for orderly cable routing and to prevent excessive bending of the cable.
- The integrated SKINTOP® cable gland is used for sealing and strain-relieving cable entry. Compared to enclosures where the cable gland is added separately, the overall size of the enclosure is more space-saving.
- For article names with the addition „BRUSH“, the integrated cable gland is supplemented by our innovative SKINTOP® BRUSH brass brush, which enables 360° contacting of the copper shielding braid and thus even more effective dissipation of interference signals. The brush wires enable easier assembly of the connector and maintain the gapless 360° coverage of the copper shielding braid.
- Locking is via stainless steel longitudinal brackets on the mating enclosure.
- Corresponds to protection class IP 65 when locked.

- Protection class classified according to NEMA 250 as well as tested according to UL50E.
- The arrow as a new design element on the surface of the housing is easy to feel and simplifies plugging in spatially confined and possibly poorly visible application areas.

### Application

- To protect the connector insert from environmental influences.
- Especially for environments where the product is getting into contact with water, cleaning agents and saline substances.
- Especially for environments where electromagnetic compatibility (EMC) is required.
- Can be used by many EPIC® rectangular connector inserts.
- For power supply connection of devices and machines in various applications.
- Withstands high environmental and mechanical stresses.
- Suitable for the outdoors.





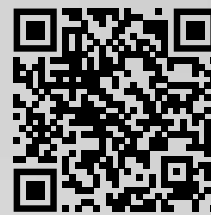
## EPIC® Industrial connectors

Rectangular connectors • EPIC® ULTRA H-A 3

NEW



Click or Scan – 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**  
Housing: nickel-plated zinc diecasting  
Lever: stainless steel  
Sealing: NBR



**Protection rating**  
IP 66 / IP 68 1 meter / 10 hours  
NEMA 250, UL50E: 12, 4, 4X (latched)



**VDE-tested:**  
in preparation  
**UL-tested:**  
in preparation



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

## EPIC® ULTRA H-A 3 EGS

Portfolio expansion of corrosion-resistant rectangular connector housings with EMC protection; new construction forms, new design. Available as hood, surface-mounted, recessed, base or coupling housing.

### Benefit

- The EPIC® ULTRA H-A 3 range comprises the smallest EMC housings in the heavy-duty industrial connector sector and ensures safe plug connections in the smallest amount of space.
- The built in housing is mateable by many commercially available hood housings.
- With lateral cable entry for orderly cable routing and to prevent excessive bending of the cable.
- Simple mounting on the enclosure by screwing in and fixing with locknut.
- Contact is achieved when the locknut is tightened by the cutting edges scratching the coated layer of the housing.
- Locking is via a stainless steel longitudinal bracket.
- Corresponds to protection class IP 65 when locked.
- Protection class classified according to NEMA 250 as well as tested according to UL50E.
- The arrow as a new design element on the surface of the housing is easy to feel and simplifies plugging in spatially confined and possibly poorly visible application areas.

### Application

- To protect the connector insert from environmental influences.
- Especially for environments where the product is getting into contact with water, cleaning agents and saline substances.
- Especially for environments where electromagnetic compatibility (EMC) is required.
- Can be used with many EPIC® rectangular connector inserts.
- For power supply connection of devices and machines in various applications.
- Withstands high environmental and mechanical stresses.
- Suitable for the outdoors.



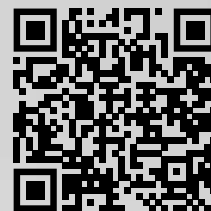
## EPIC® Industrial connectors

Rectangular connectors • EPIC® H-A 3 Housings

NEW



Click or Scan – 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**  
**EPIC® H-A 3 MTG**  
Housing: powder-coated zinc diecasting,  
grey  
Lever: zinc-plated steel



**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

## EPIC® H-A 3 MTG +

Portfolio expansion of the robust, mechanically resistant rectangular connector housings; new construction forms, new design.

### Benefit

- The EPIC® H-A 3 Series comprises the smallest housings in the heavy-duty industrial connector range and ensures secure connections in the smallest of spaces.
- The hood housing is mateable with many commercially available housings (panel-mount base, surface-mount base or coupler hood housings)
- With threaded hole for use with a corresponding cable gland.
- Locking is via longitudinal brackets on the mating enclosure.
- Corresponds to protection class IP 65 when locked.
- The arrow as a new design element on the surface of the housing is easy to feel and simplifies plugging in spatially confined and possibly poorly visible application areas.

### Application

- To protect the connector insert from environmental influences.
- Can be used with many EPIC® rectangular connector inserts.
- For power supply connection of devices and machines in various applications.
- Withstands high environmental and mechanical stresses.
- Suitable for the outdoors.





## EPIC® Industrial connectors

Rectangular connectors • EPIC® H-A 3 Housings

NEW



Click or Scan – 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**  
EPIC® H-A 3 MTS  
Housing: powder-coated zinc diecasting,  
grey  
Lever: zinc-plated steel



**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

## EPIC® H-A 3 MTS

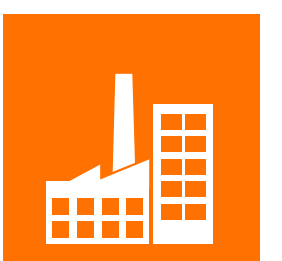
Portfolio expansion of the robust, mechanically resistant rectangular connector housings; new construction forms, new design.

### Benefit

- The EPIC® H-A 3 Series comprises the smallest housings in the heavy-duty industrial connector range and ensures secure connections in the smallest amount of space.
- The hood housing is mateable with many commercially available housings (add-on, base or coupling housings).
- With lateral cable entry for orderly cable routing and to prevent excessive bending of the cable.
- With threaded hole for use with a corresponding cable gland.
- Locking is via longitudinal brackets on the mating enclosure.
- Corresponds to protection class IP 65 when locked.
- The arrow as a new design element on the surface of the housing is easy to feel and simplifies plugging in spatially confined and possibly poorly visible application areas.

### Application

- To protect the connector insert from environmental influences.
- Can be used with many EPIC® rectangular connector inserts.
- For power supply connection of devices and machines in various applications.
- Withstands high environmental and mechanical stresses.
- Suitable for the outdoors.



## EPIC® Industrial connectors

Rectangular connectors • EPIC® H-A 3 Housings

NEW



Click or Scan – 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**  
EPIC® H-A 3 MAG  
Housing: powder-coated zinc diecasting, grey  
Lever: zinc-plated steel  
Sealing: NBR



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



**VDE-tested:**  
EPIC® H-A 3 MAG  
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 MAG

Portfolio expansion of the robust, mechanically resistant rectangular connector housings; new construction forms, new design.

### Benefit

- The EPIC® H-A 3 Series comprises the smallest housings in the heavy-duty industrial connector range and ensures secure connections in a small amount of space.
- The bulkhead mounting housing is mateable with many commercially available hood housings.
- Integrated, internal seal simplifies assembly (no small parts to lose).
- Locking is via longitudinal brackets on the mating enclosure.
- Corresponds to protection class IP 65 when locked.
- The arrow as a new design element on the surface of the housing is easy to feel and simplifies plugging in spatially confined and possibly poorly visible application areas.

### Application

- To protect the connector insert from environmental influences.
- For use with many EPIC® rectangular connector inserts.
- For power supply connection of devices and machines in various applications.
- Withstands high environmental and mechanical stresses.
- Suitable for the outdoors.



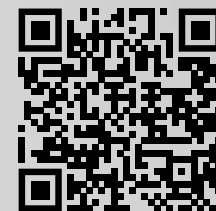
## EPIC® Industrial connectors

Rectangular connectors • EPIC® H-A 3 Housings

NEW



Click or Scan – 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**  
Housing: powder-coated zinc diecasting, 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

## EPIC® H-A 3 MAGS

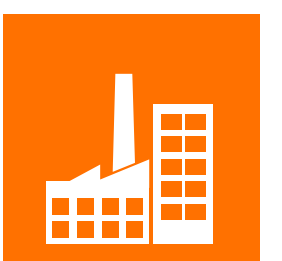
Portfolio expansion of the robust, mechanically resistant rectangular connector housings; new construction forms, new design.

### Benefit

- The EPIC® H-A 3 Series comprises the smallest housings in the heavy-duty industrial connector range and ensures secure connections in the smallest of spaces.
- The bulkhead mounting housing is mateable to many commercially available hood housings.
- With lateral cable entry for orderly cable routing and to prevent excessive bending of the cable.
- Integrated, internal seal simplifies assembly (no small parts to lose).
- Locking is via longitudinal brackets on the mating enclosure.
- Corresponds to protection class IP 65 when locked.
- The arrow as a new design element on the surface of the housing is easy to feel and simplifies plugging in spatially confined and possibly poorly visible application areas.

### Application

- To protect the connector insert from environmental influences.
- For use with many EPIC® rectangular connector inserts.
- For power supply connection of devices and machines in various applications.
- Withstands high environmental and mechanical stresses.
- Suitable for the outdoors.



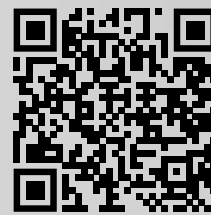
## EPIC® Industrial connectors

Rectangular connectors • EPIC® H-A 3 Housings

NEW



Click or Scan – 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**  
Housing: powder-coated zinc diecasting, 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

## EPIC® H-A 3 MAGSV +

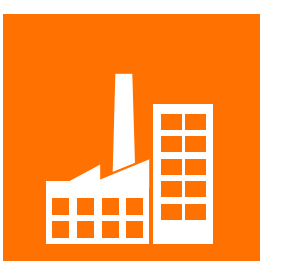
Portfolio expansion of the robust, mechanically resistant rectangular connector housings; new construction forms, new design.

### Benefit

- The EPIC® H-A 3 Series comprises the smallest housings in the heavy-duty industrial connector range and ensures secure connections in a small amount of space.
- The bulkhead mounting housing is mateable with many commercially available hood housings.
- With lateral cable entry for orderly cable routing and to prevent excessive bending of the cable.
- The integrated SKINTOP® cable gland made of brass is used for sealing and strain-relieving cable entry. Compared to enclosures where the cable gland is added separately, the overall size of the enclosure is more space-saving.
- Integrated, internal seal simplifies assembly (no small parts to lose).
- Locking is via longitudinal brackets on the mating enclosure.
- Corresponds to protection class IP 65 when locked.
- The arrow as a new design element on the surface of the housing is easy to feel and simplifies plugging in spatially confined and possibly poorly visible application areas.

### Application

- To protect the connector insert from environmental influences.
- Can be used with many EPIC® rectangular connector inserts.
- For power supply connection of devices and machines in various applications.
- Withstands high environmental and mechanical stresses.
- Suitable for the outdoors





# EPIC® Industrial connectors

Rectangular connectors • EPIC® H-A 3 Housings

NEW



Click or Scan – 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**  
Housing: powder-coated zinc diecasting, 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

## EPIC® H-A 3 MTGVB +

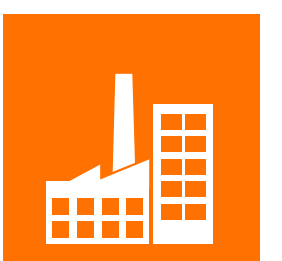
Portfolio expansion of the robust, mechanically resistant rectangular connector housings; new construction forms, new design.

### Benefit

- The EPIC® H-A 3 Series comprises the smallest housings in the heavy-duty industrial connector range and ensures secure connections in a small amount of space.
- The coupling housing is mateable with many commercially available hood housings.
- The integrated SKINTOP® cable gland made of brass is used for sealing and strain-relieving cable entry. Compared to enclosures where the cable gland is added separately, the overall size of the enclosure is more space-saving.
- The locking is done via crossbars.
- Corresponds to protection class IP 65 when locked.
- The arrow as a new design element on the surface of the housing is easy to feel and simplifies plugging in spatially confined and possibly poorly visible application areas.

### Application

- To protect the connector insert from environmental influences.
- For use with many EPIC® rectangular connector inserts.
- For power supply connection of devices and machines in various applications.
- Withstands high environmental and mechanical stresses.
- Suitable for the outdoors.





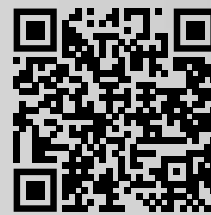
## EPIC® Industrial connectors

Rectangular connectors • EPIC® H-A 3 Housings

NEW



Click or Scan – More information available online



### Technical Data



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



**Protection rating**  
IP 66 / IP 68 1 meter / 10 hours (locked)  
IP 44 (cover locked)



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

## EPIC® H-A 3 MAGD

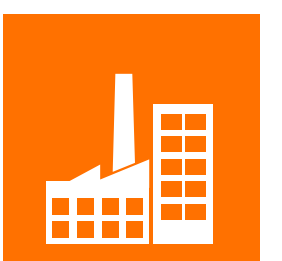
Portfolio expansion of the robust, mechanically resistant rectangular connector housings; new construction forms, new design.

### Benefit

- The EPIC® H-A 3 Series comprises the smallest housings in the heavy-duty industrial connector range and ensures secure connections in a small amount of space.
- The panel mount housing is mateable with many commercially available hood housings.
- Protective cover protects against environmental influences when not plugged in.
- Integrated, internal seal simplifies assembly (no small parts to lose).
- Locking is via longitudinal brackets on the mating enclosure.
- Protective cover protects against environmental influences when not plugged in.
- The arrow as a new design element on the surface of the housing is easy to feel and simplifies plugging in spatially confined and possibly poorly visible application areas.

### Application

- To protect the connector insert from environmental influences.
- Can be used with many EPIC® rectangular connector inserts.
- For power supply connection of devices and machines in various applications.
- Withstands high environmental and mechanical stresses.
- Suitable for the outdoors.



## EPIC® Industrial connectors

Rectangular connectors • EPIC® H-Q 5 Inserts

NEW



Click or Scan – More  
information available online



## EPIC® H-Q 5

Compact, 5-pole rectangular connector insert, powerful up to 30 A, for screw or crimpable PE contact.


### Benefit


- Powerful up to 30 A thanks to compact arrangement of the 5 power contacts.
- Crimp connection creates a vibration-proof connection, ensures maximum contacting reliability between contact and cable and is suitable for automated assembly.
- Protective earth (PE) can be connected in two ways: Variant „PE-S“ can be used with a PE screw contact, variant „PE-C“ with a PE crimp contact.
- Special PE crimp contact enables automated assembly of a completely vibration-proof connector.
- Mateable with market standard connectors.
- Suitable for conductor cross-sections from 0.14 – 4.00 mm<sup>2</sup>.


### Application


- For power supply connection of devices and machines in various applications.
- Suitable for wiring inside the control cabinet.
- Can be used with many EPIC® rectangular connector housings.

## Technical Data


 **Rated voltage (V)**  
400 V  
Rated impulse voltage  
6 kV


 **Rated current (A)**  
30 A


 **Pollution degree**  
3


 **Flammability**  
UL94 V-0


**Contact resistance**  
< 2 mOhm

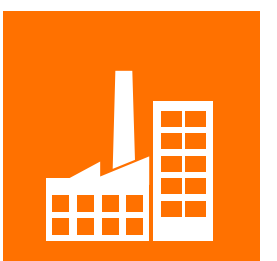
 **Number of contacts**  
5 + PE

 **Termination methods**  
Crimp termination: 0.14 – 4.0 mm<sup>2</sup>  
Crimp termination PE: 0.25 mm<sup>2</sup> ...4.0 mm<sup>2</sup>

 **Material**  
Polyamide

 **Cycle of mechanical operation**  
500

 **Temperature range**  
–40 °C to +120 °C  
Article number



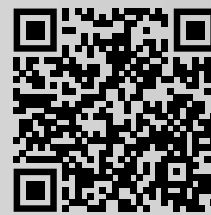
## EPIC® Industrial connectors

Rectangular connectors • EPIC® Contacts + tools

NEW



Click or Scan – More  
information available online



### Technical Data

**Contact resistance**  
< 2 mOhm



**Termination methods**  
Crimp termination: 0.75 mm² ... 4.0 mm²



**Material**  
brass silver plated



**Cycle of mechanical operation**  
500

## EPIC® H-Q 5 PE contacts

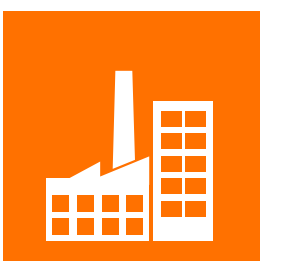
Crimpable and thus vibration-proof PE protective conductor contact for rectangular connector inserts EPIC® H-Q and EPIC® H-Q 7

### Benefit

- Crimp connection creates a vibration-proof connection, ensures maximum contacting reliability between contact and cable and is suitable for automated assembly.
- Silver coating with tarnish protection for high electrical conductivity and thermal conductivity.
- Suitable for conductor cross-sections up to 4.00 mm².

### Application

- • For use with EPIC® H-Q 5 and EPIC® H-Q 7 rectangular connector inserts.



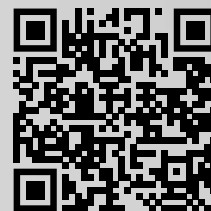
## EPIC® Industrial connectors

Rectangular connectors • EPIC® H-Q 7 Inserts


NEW





Click or Scan – More information available online




### Technical Data


 **Rated voltage (V)**  
400 V  
**Rated impulse voltage**  
6 kV


 **Rated current (A)**  
10 A


 **Pollution degree**  
3


 **Flammability**  
UL94 V-0


**Contact resistance**  
< 2 mOhm


 **Number of contacts**  
7

 **Termination methods**  
Crimp termination: 0.14 - 2.5 mm<sup>2</sup>  
Crimp termination PE: 0.25 mm<sup>2</sup> ...4.0 mm<sup>2</sup>

 **Material**  
Polyamide

 **Cycle of mechanical operation**  
500

 **VDE-tested:**  
UL: in preparation

 **Temperature range**  
-40 °C to +120 °C

## EPIC® H-Q 7

Compact, 7-pole rectangular connector insert, powerful up to 10 A, for screw or crimpable PE contact.

### Benefit

- Compact contact arrangement allows 7 contacts + 1 PE contact in a small installation space.
- Crimp connection creates a vibration-proof connection, ensures maximum contacting reliability between contact and cable and is suitable for automated assembly.
- Protective earth (PE) can be connected in two ways: Variant „PE-S“ can be used with a PE screw contact, variant „PE-C“ with a PE crimp contact.
- Special PE crimp contact enables automated assembly of a completely vibration-proof connector.
- Mateable with market standard connectors.
- Suitable for conductor cross-sections from 0.14 - 2.50 mm<sup>2</sup>.

### Application

- For power supply connection of devices and machines in various applications.
- Suitable for wiring inside the control cabinet.
- Can be used with many EPIC® rectangular connector housings.





## EPIC® Industrial connectors

Circular connectors • EPIC® POWER M12L

NEW



Click or Scan – More  
information available online



### Technical Data



**Rated voltage (V)**  
63 V



**Rated current (A)**  
16 A



**Pollution degree**  
3



**Number of contacts**  
4, 4+PE



**Termination methods**  
0.75mm<sup>2</sup> – 2.5mm<sup>2</sup>



**Material**  
Housing: nickel-plated zinc die-casting,  
nickel-plated brass  
Insert: PA  
Seal: FPM



**Protection rating**  
IP65/IP67/IP69



**Temperature range**  
–25 °C up to +125 °C

## EPIC® POWER M12L D6

Smallest M 12 power connector available on the market, L-coded, for power supply in the low-voltage range (decentralised I/O modules, DC motors), PROFINET-compliant.

### Benefit

- Coupling plug D6 for use with attachment housing G4 or cable plug F6.
- Powerful up to 16 A despite extremely space-saving size for very small devices.
- Mechanical L-coding of the mating face prevents mismating with mating connector.
- Crimp connection creates a vibration-proof connection, ensures maximum contacting reliability between contact and cable and is suitable for automated assembly.
- Suitable for conductor cross-sections from 0.75 – 2.50 mm<sup>2</sup>.
- When plugged in, protection class IP 65 / 67 and 69 can be achieved.
- UL certification according to technical data enables the use of the product in the North American region.
- Available as 4-pole variant with black insulating body and as 4+FE variant with grey insulating body and functional earth contact (FE).

### Application

- For DC applications in the low-voltage range.
- For power supply of smaller devices (e.g. decentralised I/O modules, smaller motors).
- Also suitable for power supply in the PROFINET network (M12L is considered the standardised power interface there).





## EPIC® Industrial connectors

Circular connectors • EPIC® POWER M12L


NEW





Click or Scan – More  
information available online





### Technical Data


 **Rated voltage (V)**  
63 V


 **Rated current (A)**  
16 A


 **Pollution degree**  
3

 **Number of contacts**  
4, 4+PE

 **Termination methods**  
0.75mm<sup>2</sup> – 2.5mm<sup>2</sup>

 **Material**  
Housing: nickel-plated zinc die-casting,  
nickel-plated brass  
Insert: PA  
Seal: FPM

 **Protection rating**  
IP65/IP67/IP69

 **Temperature range**  
–25 °C up to +125 °C

## EPIC® POWER M12L G4

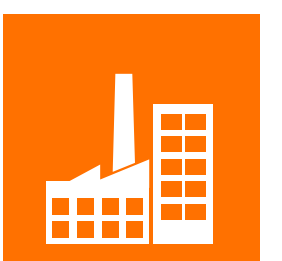
Smallest M 12 power connector available on the market, L-coded, for power supply in the low-voltage range (decentralised I/O modules, DC motors), PROFINET-compliant.

### Benefit

- Attachment housing G4 in combination with coupling plug D6.
- Powerful up to 16 A despite extremely space-saving size for very small devices.
- Mechanical L-coding of the mating face prevents mismating with mating connector.
- Crimp connection creates a vibration-proof connection, ensures maximum contacting reliability between contact and cable and is suitable for automated assembly.
- Suitable for conductor cross-sections from 0.75 – 2.50 mm<sup>2</sup>.
- When plugged in, protection class IP 65 / 67 and 69 can be achieved.
- UL certification according to technical data enables using the product in the North American region.
- Available as 4-pole variant with black insulating body and as 4+FE variant with grey insulating body and functional earth contact (FE).

### Application

- For DC applications in low-voltage range.
- For power supply of smaller devices (e.g. decentralised I/O modules, smaller motors).
- Also suitable for power supply in the PROFINET network (M12L is considered the standardised power interface there).



## EPIC® Industrial connectors

Circular connectors • EPIC® POWER M12L


NEW





Click or Scan – More  
information available online





### Technical Data


 **Rated voltage (V)**  
63 V


 **Rated current (A)**  
16 A

 **Pollution degree**  
3

 **Number of contacts**  
4, 4+PE

 **Termination methods**  
0.75mm<sup>2</sup> – 2.5mm<sup>2</sup>

 **Material**  
Housing: nickel-plated zinc die-casting,  
nickel-plated brass  
Insert: PA  
Seal: FPM

 **Protection rating**  
IP65/IP67/IP69

 **Temperature range**  
–25 °C up to +125 °C

## EPIC® POWER M12L F6

Smallest M 12 power connector available on the market, L-coded, for power supply in the low-voltage range (decentralised I/O modules, DC motors), PROFINET-compliant.

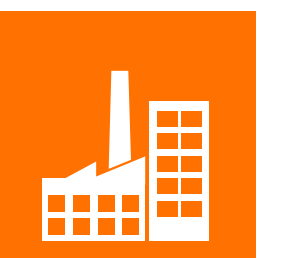
### Benefit

- Cable connector F6 can be used with attachment housing A4 or coupling connector D6.
- Powerful up to 16 A despite extremely space-saving size for very small devices.
- Mechanical L-coding of the mating face prevents mismating with mating connector.
- Crimp connection creates a vibration-proof connection, ensures maximum contacting reliability between contact and cable and is suitable for automated assembly.
- Suitable for conductor cross-sections from 0.75 – 2.50 mm<sup>2</sup>.
- When plugged in, protection class IP 65 / 67 and 69 can be achieved.
- UL certification according to technical data enables using the product in the North American region.
- Available as 4-pole variant with black insulating body and as 4+FE variant with grey insulating body and functional earth contact (FE).

### Application

- • For DC applications in low-voltage range.
- For power supply of smaller devices (e.g. decentralised I/O modules, smaller motors).
- Also suitable for power supply in the PROFINET network (M12L is considered the standardised power interface there).

PROFI  
NET



## EPIC® Industrial connectors

Circular connectors • EPIC® POWER M12L


NEW





Click or Scan – More  
information available online





### Technical Data


 **Rated voltage (V)**  
63 V


 **Rated current (A)**  
16 A


 **Pollution degree**  
3

 **Number of contacts**  
4, 4+PE

 **Termination methods**  
0.75mm<sup>2</sup> – 2.5mm<sup>2</sup>

 **Material**  
Housing: nickel-plated zinc die-casting,  
nickel-plated brass  
Insert: PA,  
Seal: FPM

 **Protection rating**  
IP65/IP67/IP69

 **Temperature range**  
–25 °C up to +125 °C

## EPIC® POWER M12L A4

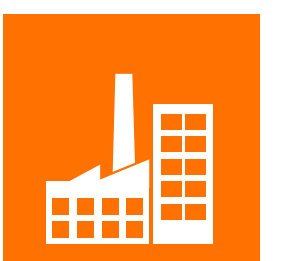
Smallest M 12 power connector available on the market, L-coded, for power supply in the low-voltage range (decentralised I/O modules, DC motors), PROFINET-compliant.

### Benefit

- Surface-mount housing A4 for using the cable connector F6.
- Powerful up to 16 A despite extremely space-saving size for very small devices.
- Mechanical L-coding of the mating face prevents mismating with mating connector.
- Crimp connection creates a vibration-proof connection, ensures maximum contacting reliability between contact and cable and is suitable for automated assembly.
- Suitable for conductor cross-sections from 0.75 – 2.50 mm<sup>2</sup>.
- When plugged in, protection class IP 65 / 67 and 69 can be achieved.
- UL certification according to technical data enables using the product in the North American region.
- Available as 4-pole variant with black insulating body and as 4+FE variant with grey insulating body and functional earth contact (FE).

### Application

- For DC applications in the low-voltage range.
- For power supply of smaller devices (e.g. decentralised I/O modules, smaller motors).
- Also suitable for power supply in the PROFINET network (M12L is considered the standardised power interface there).



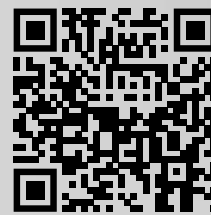
## EPIC® Industrial connectors

Circular connectors • EPIC® POWER M12L

NEW



Click or Scan – More  
information available online



### Technical Data



**Termination methods**  
0,75mm<sup>2</sup> – 2,5mm<sup>2</sup>



**Material**  
brass gold plated CuZn/Au

## EPIC® POWER M12L contacts

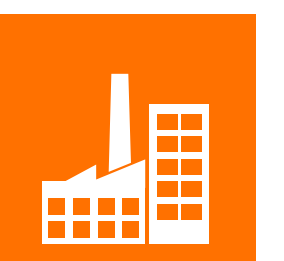
Contacts with multiple slots and conductor cross-section marking, for EPIC® POWER M12L power connectors.

### Benefit

- Crimp contact ensures maximum contacting reliability between contact and cable and establishes a vibration-proof connection.
- With improved contacting due to multiple slots.
- Clear marking of the maximum conductor cross-section prevents incorrect assembly.
- With corrosion-resistant gold coating for low contact resistance and long product life.
- Suitable for conductor cross-sections up to 2.5 mm<sup>2</sup>.

### Application

- For use with EPIC® POWER M12L circular connectors.





## EPIC® Industrial connectors

Rectangular connectors • EPIC® MH modular system module


NEW





Click or Scan – More  
information available online




### Technical Data


 **Rated voltage (V)**  
1000 V AC/DC  
Rated impulse voltage  
8 kV


 **Rated current (A)**  
40


 **Pollution degree**  
3

 **Flammability**  
UL94 V-0

**Contact resistance**  
< 5 mOhm

 **Number of contacts**  
2

 **Termination methods**  
Crimp termination: 1.5 - 10 mm²

 **Material**  
Polyamide, glass fibre-reinforced

 **Cycle of mechanical operation**  
500

 **VDE-tested:**  
UL: in preparation

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

## EPIC® MH 2 40A

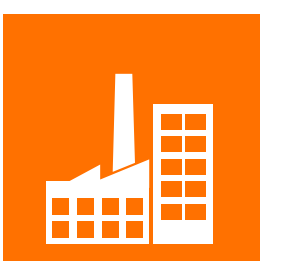
2-pole rectangular connector insert for modular system EPIC® MH, powerful up to 40 A, also for railway applications.

### Benefit

- Module with 2 power contacts for power supply up to 40 A and voltages up to 1000 V.
- Modular assembled connectors are mateable with market standard connectors.
- Crimp connection creates a vibration-proof connection, ensures maximum contacting reliability between contact and cable and is suitable for automated assembly.
- Different crimp contacts available for different conductor cross-sections.
- Snaps effortlessly into the fixed EPIC® MH multi-frame with a clicking sound. Easier to assemble than folding and sliding frames.
- UL certification according to technical data enables use of the product in the North American region.

### Application

- For the production of a modular connector insert.
- For power supply connection of devices and machines in various applications.
- Can be used in rail vehicles in compliance with standards (fire behaviour test according to DIN EN 45545-2:2016-02, requirement sets R22 and R23, hazard levels HL1, HL2 and HL3).

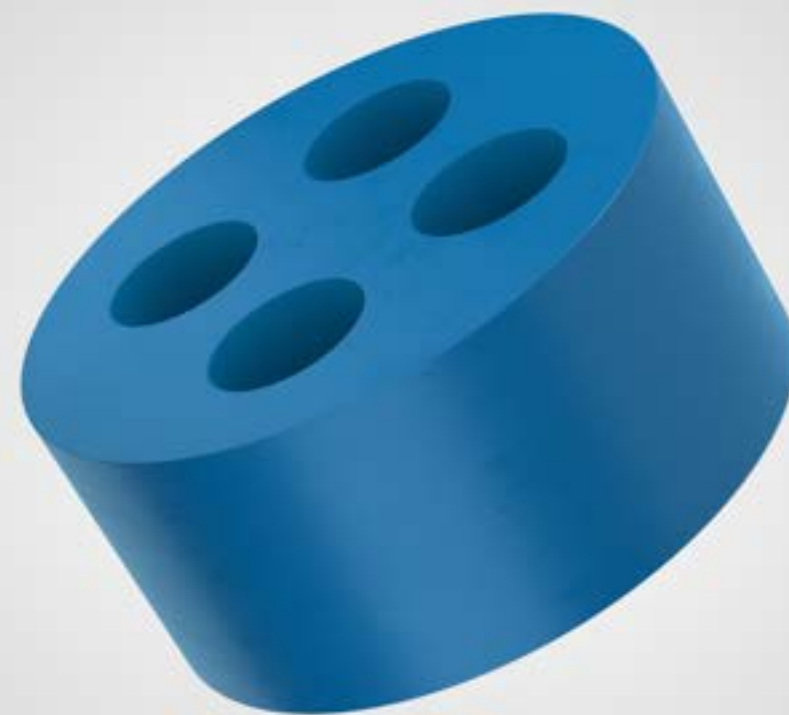




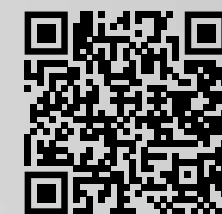
## Cable glands

SKINTOP® cable gland accessories metric • Multiple sealing inserts/dust protection

NEW



Click or Scan – More information available online



## Technical Data



**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000032  
ETIM 5.0/6.0 Class-Description: Plug for cable screw gland



**On request**  
Special shapes  
Colour delivered  
Black, RAL 9005  
Blue, RAL 5017



**Material**  
NBR, FKM, silicone



**Protection rating**  
IP 54  
IP 68 (at maximum use of all boreholes)



**Temperature range**  
NBR: -40 °C bis +100 °C  
FKM: -20 °C bis +200 °C  
silicone: -50 °C bis +200 °C

## SKINTOP® DIX-M

Multiple sealing insert made of NBR (oil resistant), FKM (heat resistant) or silicone (chemical resistant), leads several cables through one cable gland.

### Benefit

- Easy insertion of several cables through one cable gland.
- Multiple cable insertion enables higher packing density.
- Gentle clamping of the cables due to the high elasticity of the sealing insert material.
- Protection class IP 68 can be achieved, if all holes are used by cables with nominal diameter and unused openings are closed with SKINTOP® DIX-DV sealing plugs.
- Variety of versions available, depending on the number and diameter of cables. Made of acrylonitrile butadiene rubber (NBR), fluororubber (FKM) or silicone (SI).
- The NBR variants are oil-resistant.
- The FKM variants are resistant to aggressive media such as alkalis, acids, solvents and are also oil-resistant. They are extremely heat-resistant and suitable for use with extreme high temperatures (up to +200 °C).
- The silicone variants are resistant to ECOLAB® cleaning agents and disinfectants and are chemically resistant in many cases. They conform to FDA 21 CFR 177.2600 and are therefore permitted for food and beverage industry. With their blue colour, they can easily distinguish from food. In addition, they are extremely flexible at low temperatures and suitable for use at extreme minus temperatures (down to -50 °C).

### Application

- For use with metric SKINTOP®/SKINTOP® CLICK cable glands.
- Suitable for outdoor use.

# Cable glands

SKINTOP® cable bushing systems • Cable bushing systems

NEW



Click or Scan – More information available online



## Technical Data



**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000240  
ETIM 5.0/6.0 Class-Description:  
Cable entry



**Note**  
Individual hole configuration on request



**Material**  
Frame: Polycarbonat  
Sealing: Gel  
Pressure compensation unit: PBT,  
PTFE, NBR



**Protection rating**  
IP 68



**Temperature range**  
-30 °C to +100 °C

## SKINTOP® MULTI VENT

**WHAT IS NEW?** Multiple entry for up to 29 cables, with breathable pressure compensation element for venting when enclosures are closed.

### Benefit

- Multiple insertion of cables enables higher packing density (up to 29 cables depending on the variant).
- Large clamping areas, each variable by 4 mm for different cable diameters as well as clamping areas especially for AS-I bus cables.
- Flexibility in the choice of cable diameters reduces the variety of parts in the warehouse and provides logistical and cost advantages.
- Direct cable entry without pre-piercing the bushings thanks to elastic gel technology with innovative membrane technology.
- Includes breathable pressure compensation element, which provides the necessary pressure compensation in closed enclosures. This completely prevents the ingress of moisture.
- Clear marking of the feed-through points and clamping areas. There is no potential for errors during cable entry.
- Simple mounting of the multiple insertion on the enclosure by means of 4 fastening screws. The adhesive effect of the sealing gel allows an easy positioning of the product during assembly.
- Available in different versions for a wide range of applications.

### Application

- For sealing and strain-relieving multiple insertion of non-assembled cables and media hoses through a housing.
- Specialized for closed enclosures to achieve optimum ventilation.
- Can be used in dry, humid and oily environments.
- Suitable for outdoor use.



## Cable glands

SKINDICHT® cable gland accessories PG • Adapter

NEW



Click or Scan – More  
information available online



## SKINDICHT® MA-PG/M

Cable gland accessories made of lead-free brass to comply with future RoHS regulations (product characteristics identical to lead-containing articles).

### Benefit

- Enables easy transition from a PG male thread to a metric female thread.
- Withstands temperatures up to +200 °C.
- Available for thread sizes up to PG36 or up to M40.
- Form A in easy-grip knurled design for easy screwing in of the adapter even in oily environments; form B in smooth design.
- Article numbers ending in „LF“ are lead-free product alternatives with the same product properties. „Lead-free“ articles do not contain lead, which is currently still allowed to make up to four percent in copper alloys. It could be banned in the future according to the RoHS Directive.

### Application

- For applications with different types of threads.
- Withstands high chemical and mechanical stress.
- Suitable 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



**Material**  
Nickel-plated brass



**Temperature range**  
-60 °C to +200 °C





# Cable glands

SKINDICHT® cable gland accessories metric • Blind plugs

NEW



Click or Scan – More information available online



## Technical Data



**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000032  
ETIM 5.0/6.0 Class-Description: Plug for cable screw gland



**Certifications**  
UL File E79903



**On request**  
Fitted with FKM O-ring (–20 °C to +200 °C)



**Material**  
Body: nickel-plated brass  
O-ring: NBR



**Protection rating**  
IP 54  
IP 68 (with O-ring)



**Temperature range**  
With O-ring: –20 °C to +100 °C  
Without O-ring: –60 °C to +200 °C

## SKINDICHT® BL-M

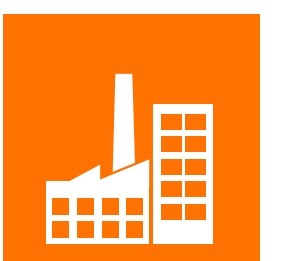
Cable gland accessories made of lead-free brass to comply with future RoHS regulations (product characteristics identical to lead-containing articles).

### Benefit

- Withstands temperatures up to +200 °C.
- Simple assembly by using a slotted screwdriver.
- Article numbers ending in „LF“ are lead-free product alternatives with the same product properties. „Lead-free“ articles do not contain lead, which is currently still allowed to make up to four percent in copper alloys. It could be banned in the future according to the RoHS Directive.

### Application

- For closing an unoccupied metric threaded hole on the housing.
- Withstands high chemical and mechanical stress.
- Suitable for outdoor use.





## Cable glands

SKINDICHT® cable gland accessories metric • Blind plugs

NEW



Click or Scan – More  
information available online



## SKINDICHT® BL-M hex.

Cable gland accessories made of lead-free brass to comply with future RoHS regulations (product characteristics identical to lead-containing articles).

### Benefit

- Withstands temperatures up to +100 °C.
- Mounted O-ring enables liquid-tight sealing of the threaded/through hole and for that reason a higher degree of protection (up to IP 68).
- Simple assembly by using an open-end spanner.
- Article numbers ending in „LF“ are lead-free product alternatives with the same product properties. „Lead-free“ articles do not contain lead, which is currently still allowed to make up to four percent in copper alloys. It could be banned in the future according to the RoHS Directive.

### Application

- For closing an unoccupied metric threaded hole on the housing.
- Withstands high chemical and mechanical stress.
- Suitable for outdoor use.

## Technical Data



**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000032  
ETIM 5.0/6.0 Class-Description: Plug  
for cable screw gland



**On request**  
Fitted with FKM O-ring (–20 °C to  
+200 °C)



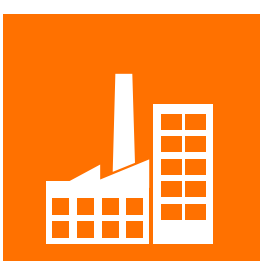
**Material**  
Body: nickel-plated brass  
O-ring: NBR



**Protection rating**  
IP 68 – 5 bar



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



## Cable glands

SKINDICHT® cable gland accessories metric • Reducers

NEW



Click or Scan – More  
information available online



## Technical Data



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



**On request**  
Also available with pre-installed O-ring



**Material**  
Nickel-plated brass



**Temperature range**  
-60 °C to +200 °C

## SKINDICHT® MR-M

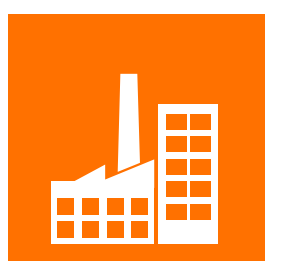
Cable gland accessories made of lead-free brass to comply with future RoHS regulations (product characteristics identical to lead-containing articles).

### Benefit

- Corrects the size difference between the connection thread of a cable gland and the threaded hole in an enclosure.
- Provides flexibility in the selection of a cable gland, as the selection is independent to the threaded hole of the enclosure.
- Article numbers ending in „LF“ are lead-free product alternatives with the same product properties. „Lead-free“ articles do not contain lead, which is currently still allowed to make up to four percent in copper alloys. It could be banned in the future according to the RoHS Directive.

### Application

- For use with a metric cable gland whose connection thread is smaller than the existing threaded hole.
- Withstands high chemical and mechanical stress.
- Suitable for outdoor use.



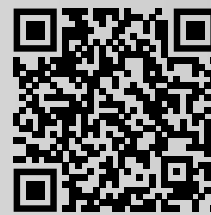
## Cable glands

SKINDICHT® cable gland accessories metric • Reducers

NEW



Click or Scan – More information available online



### Technical Data



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



**On request**  
Also available with pre-installed O-ring



**Material**  
Nickel-plated brass



**Temperature range**  
-60 °C to +200 °C

## SKINDICHT® MR-M hex.

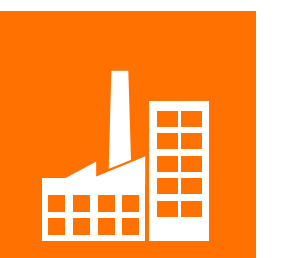
Cable gland accessories made of lead-free brass to comply with future RoHS regulations (product characteristics identical to lead-containing articles).

### Benefit

- Corrects the size difference between the connection thread of a cable gland and the threaded hole in an enclosure.
- Provides flexibility in the selection of a cable gland, as the selection is independent to the threaded hole of the enclosure.
- Mounted O-ring enables a higher protection class (IP) for a cable gland due to the secure seal to the enclosure.
- Article numbers ending in „LF“ are lead-free product alternatives with the same product properties. „Lead-free“ articles do not contain lead, which is currently still allowed to make up to four percent in copper alloys. It could be banned in the future according to the RoHS Directive.

### Application

- For use with a metric cable gland whose connection thread is smaller than the existing threaded hole.
- Withstands high chemical and mechanical stress.
- Suitable for outdoor use.



## Cable glands

SKINDICHT® cable gland accessories metric • Enlargers

NEW



Click or Scan – More information available online



## Technical Data



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



**On request**  
with O-ring fitted



**Material**  
Nickel-plated brass



**Temperature range**  
-60 °C to +200 °C

## SKINDICHT® ME-M

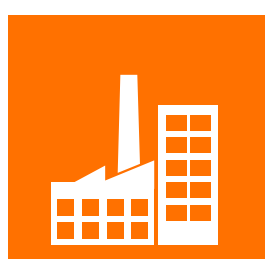
Cable gland accessories made of lead-free brass to comply with future RoHS regulations (product characteristics identical to lead-containing articles).

### Benefit

- Corrects the size difference between the connection thread of a cable gland and the threaded hole in an enclosure.
- Provides flexibility in the selection of a cable gland, as the selection is independent of the threaded hole of the enclosure.
- Article numbers ending in „LF“ are lead-free product alternatives with the same product properties. „Lead-free“ articles do not contain lead, which is currently still allowed to make up to four percent in copper alloys. It could be banned in the future according to the RoHS Directive.

### Application

- For use with a metric cable gland whose connection thread is larger than the existing threaded hole.
- Withstands high chemical and mechanical stress.
- Suitable for outdoor use.





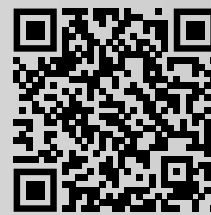
## Cable glands

SKINDICHT® cable gland accessories metric • Counter nuts

NEW



Click or Scan – More information available online



### Technical Data



**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000940  
ETIM 5.0/6.0 Class-Description:  
Locknut for cable screw gland



**Material**  
Nickel-plated brass



**Temperature range**  
-60 °C to +200 °C

## SKINDICHT® SM-PE-M

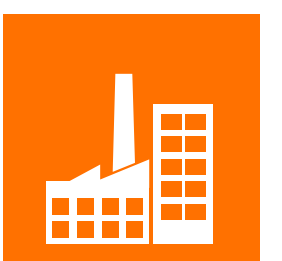
Cable gland accessories made of lead-free brass to comply with future RoHS regulations (product characteristics identical to lead-containing articles).

### Benefit

- Optimum contacting of a coated enclosure for protection against electromagnetic interference and for equipotential bonding.
- Contact is achieved when the locknut is tightened by the cutting edges scratching the coated layer of the housing.
- Withstands temperatures up to +200 °C.
- Article numbers ending in „LF“ are lead-free product alternatives with the same product properties. „Lead-free“ articles do not contain lead, which is currently still allowed to make up to four percent in copper alloys. It could be banned in the future according to the RoHS Directive.

### Application

- For use on the inside of painted, anodised or powder-coated enclosures.
- Can be used with metric SKINTOP® and SKINDICHT® cable glands for applications where electromagnetic compatibility (EMC) is required.
- Withstands high chemical and mechanical stress.
- Suitable for outdoor use.





# ETHERNET DATA TRANSMISSION

YOUR HIGHWAY FOR BIG DATA



LAPPKABEL STUTTGART ETHERLINE® Cat. 6A P FD FC 4x2xR

NEW: Spring 2022



#### **Coloured Clips for ETHERLINE® Patchcords**

Coloured clip for RJ45 connectors to extend the latching lug and improve colour identification on LAPP Ethernet patch cables.



#### **ETHERLINE® Cat. 6<sub>A</sub> FD FC**

Highly flexible 26 AWG Ethernet cable with Fast-Connect connection for permanently moving use in drag chains and short transmission distances.



#### **SKINTOP® DIX-M AUTOMATION**

Multiple sealing insert with longitudinal cut for assembled data cables, IP 68 sealing.

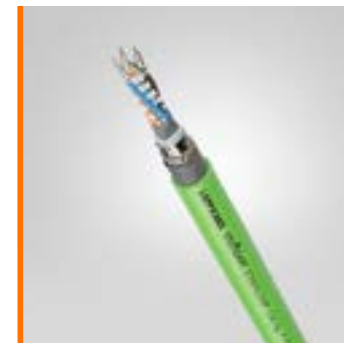


# ETHERNET DATA TRANSMISSION: YOUR HIGHWAY FOR BIG DATA



## COLOURED CLIPS FOR ETHERLINE® PATCHCORDS

To keep an order in the control cabinet is very important. Especially in switches with recessed sockets and high port density, RJ45 connectors are often difficult to grip. Our clips, which extend the latching lug of the connector, provide a remedy for this. They are also used for colour coding of otherwise identically coloured cables and are suitable for all RJ45 patch cables from LAPP.



## ETHERLINE® CAT. 6<sub>A</sub> FD FC

The Ethernet cable with 26 AWG conductor cross-section is your perfect companion for data communication with short transmission distances. Thanks to its „Fast-Connect“ design, it can be assembled quickly and used in drag chains in a highly flexible manner. Choose between a PVC or PUR outer sheath, depending on the environmental conditions in your system.



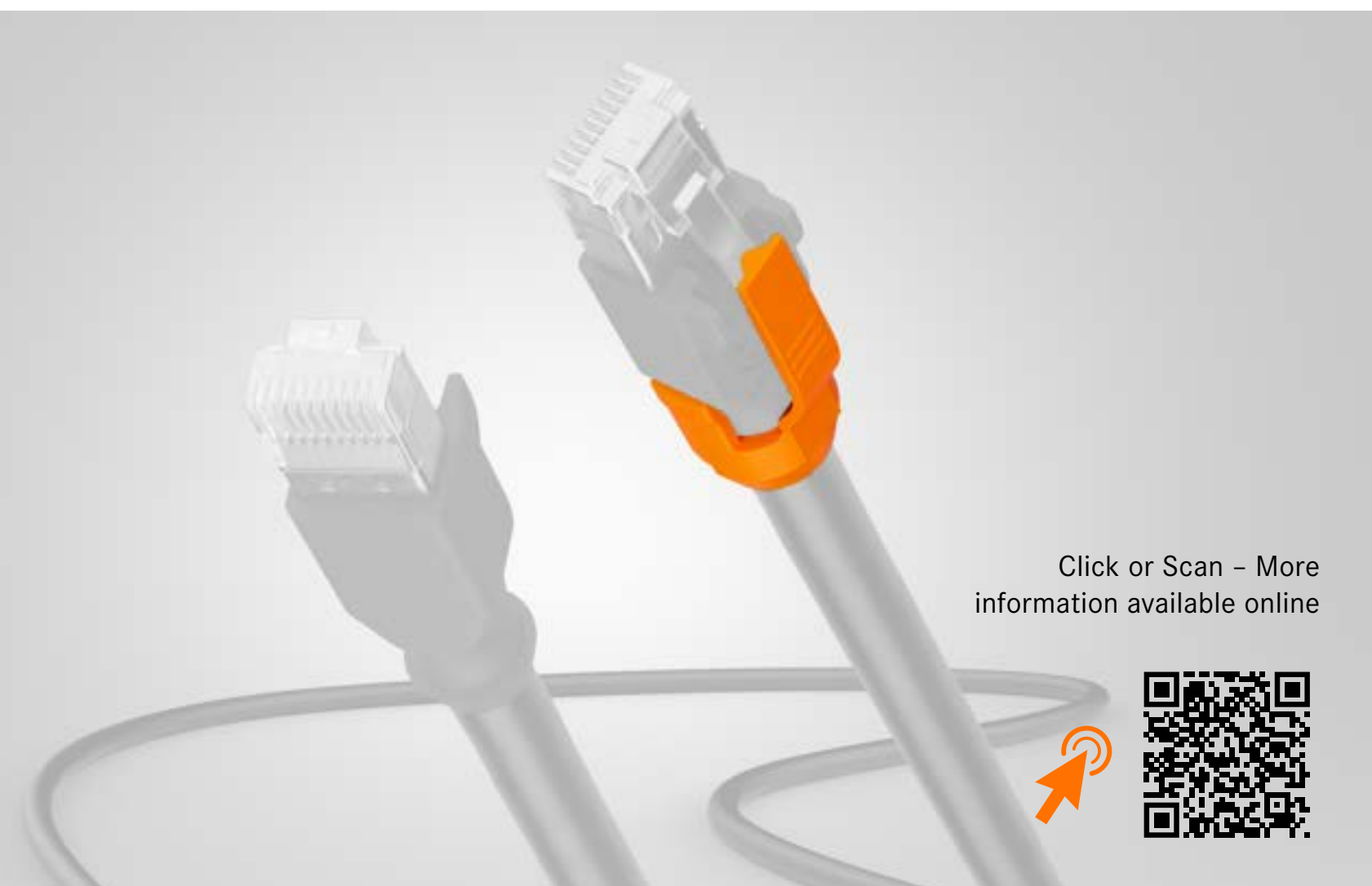
## SKINTOP® DIX-M AUTOMATION

Precise fit due to lengthwise slot! With this multiple sealing insert, you can easily insert up to four assembled data cables through your cable gland thanks to the longitudinal cut. Depending on the variant, the insert has a different number of pre-drilled holes for optimum sealing with a defined clamping range.

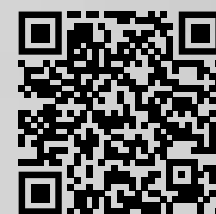
## Data communication systems for ETHERNET technology

Industrial Ethernet, Accessories • Accessories Cable assemblies

NEW



Click or Scan – More information available online



### Technical Data



**Klassifikation ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC002310



**Material Kontakt**  
Polyoxymethylene (POM)

## Coloured Clips for ETHERLINE® Patchcords

Coloured clip for RJ45 connectors to extend the latching lug and improve colour identification on LAPP Ethernet patch cables.

### Benefit

- Extends the latching lug of the RJ45 connector and thus ensures a better grip.
- Used for better colour identification on Ethernet patch cables when many cables of the same colour are used (e.g. in the PROFINET network).
- Available in different colours.

### Application

- For use in the control cabinet.
- For use with ETHERLINE® RJ45 patch cables from LAPP.
- Especially for devices with very high port density.
- Especially for switches with deep internal sockets.





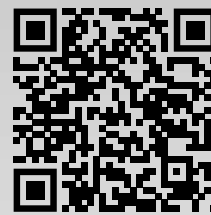
## Data communication systems for ETHERNET technology

Industrial Ethernet, Cat.6<sub>A</sub> • Cables for continuous flexing applications

NEW



Click or Scan – More information available online



### Technical Data



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



**Minimum bending radius**  
Flexing: 8 x outer diameter  
Fixed installation: 4 x outer diameter



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



**Temperature range**  
cable halogenfree compound  
Fixed installation: -25 °C to +80 °C  
cable with PVC jacket  
Fixed installation: -40 °C to +80 °C

## ETHERLINE® Cat. 6<sub>A</sub> FD FC

Highly flexible 26 AWG Ethernet cable with Fast-Connect connection for permanently moving use in drag chains and short transmission distances.

### Benefit

- The „Fast Connect“ construction including inner sheath and separating cross significantly reduces the cable's assembly time, as the time-consuming removal of the pair shielding is no longer necessary. In addition it offers undiminished shielding of the wire pairs from each other.
- Additional protection against electromagnetic interference through double overall shielding made of aluminium-laminated foil and copper shielding braid with a high degree of coverage (SF/UTP).
- UL certification according to technical data enables the use of the product in the North American region.
- Fast information exchange through Ethernet technology.
- Cat.6<sub>A</sub> performance up to 10 Gbit/s.
- For transmission of analogue and digital signals in the frequency range up to 500 MHz.
- Available with robust PVC outer sheath or abrasion-resistant PUR outer sheath.
- Successfully tested for over 1 million bending cycles in the drag chain.

### Application

- Cable design allows highly flexible, continuously moving use in moving machine parts and in the drag chain.
- Usable in dry, damp and wet environments.
- Usable in a variety of ways depending on the sheath material.



ECOLAB



## Cable glands

SKINTOP® cable gland accessories metric • Multiple sealing inserts/dust protection

NEW



Click or Scan – More  
information available online



## Technical Data



**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000032  
ETIM 5.0/6.0 Class-Description: Plug  
for cable screw gland



**On request**  
Special shapes  
Colour delivered  
Black, RAL 9005



**Material**  
NBR



**Protection rating**  
IP 54  
IP 66 and IP 68 – 5 bar, 30 min (only  
applies to slotted DIX inserts if the  
specified clamping range is observed)



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

## SKINTOP® DIX-M AUTOMATION

**WHAT IS NEW?** Multiple sealing insert with longitudinal cut for assembled data cables,  
IP 68 sealing.

### Benefit

- Special design with a round pilot hole and longitudinal cut for an easy insertion of one or more assembled data cables.
- Protection class IP 68 can be achieved if the holes are optimally covered.
- High functional safety thanks to optimal strain relief.

### Application

- For use with metric SKINTOP®/SKINTOP® CLICK cable glands.
- To be used instead of the standard sealing insert in the SKINTOP® cable gland.
- UV and oil resistant material.



LEGEND

NEW PRODUCT



PRODUCT EXTENSION



PRODUCT CHARACTERISTICS

 Suitable for outdoor use	 Maximum vibration protection	 Clean room	 Temperature-resistant
 Good chemical resistance	 Mechanical resistance	 Robust	 Torsion-resistant
 Flame-retardant	 Assembly time	 Acid-resistant	 Torsion load
 Wide clamping range	 Low weight	 Reliability	 UV-resistant
 Halogen-free	 Oil-resistant	 Integrated SKINTOP® cable gland	 Waterproof
 Heat-resistant	 Optimum strain relief	 Voltage	 Variety of approval certifications
 Cold-resistant	 Space requirement	 Connector with standard housing unit	 Submersible use
 Corrosion-resistant	 Power Chain	 Interference signals	

**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.



Note: A detailed article list is available online or from your contact person.



Click or Scan

Due to the current material shortages, delivery times may be longer.