

# **M12 und M8**

# **Products**





# M12 and M8 High Performance Connectors

The functionally reliable data transmission in operating conditions with highest rquirements secure the M12 and M8 high performance cable connectors.

Key factor is a special crimp flange / crimp sleeve system, that secures the reliable 360 ° shielding and the vibration and torsion-proof shield connection and cable strain relief by means of the hexagonal crimp. Together with the special housing design, as well as the use of turned crimp contacts and the use of high quality materials, the high performance of these connectors is guaranteed.

Plastics certified according to EN 45 545-2 for railway applications.



### M12 Connector 90°

- 360° shielding
- Simple assembly
- 8 cable exit positions easily adjustable (8 x 45°)
- Secure fixing of the selected cable exit position
- Torsion- and vibrationproof strain relief for high requirements
- Codings: A-5, A-8, B, D, X

In 8 steps with 45° rotatable









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# M12 X-Code 180° and 90° for secure 10 GBit Ethernet

#### Version crimp flange / crimp sleeve 180° and 90°

- 360° shielding
- Very compact dimensions
- Functionally reliable due to vibrationproof crimp technology for signals + screen
- Torsion- and vibrationproof shield connection
- Torsion- and vibrationproof strain relief

#### Version cable gland 180° and 90°

Wide cable clamping range from 4 to 9 mm.



### M12 Mini Cable Gland High Performance in miniature format

- Most compact M12 IP67 cable connector
- Very compact dimensions : L=40/0D: Ø15/Ø14
- 10Gbit Ethernet and Profinet with version M12 X-coded
- Ethernet and Profinet with version M12 D-Coded
- Further codings available: A-5, A-8 and B
- Cable diameter: 4–9 mm
- Fully shielded version
- Bulkhead version also available
- No mismating of connectors due to easy retrofittable color coding rings
- Certified plastics according to EN 45 545-2 for railway applications



# M8 for secure Industrial Ethernet in miniature format

#### Version crimp flange / crimp sleeve

- 360 ° shielding
- Very compact dimensions
- Functionally reliable due to vibrationproof crimp technology for signals + screen
- Torsion- and vibrationproof shield connection
- Torsion- and vibrationproof strain relief

#### Version cable gland

Wide cable clamping range from 3.5 to 5.5



# M12 Cable assemblies Assembled or overmolded

Fully shielded cable assemblies for Industrial Ethernet/Profinet, Profibus, CAN bus/DeviceNet and DRIVE-CLiQ.

- Functionally reliable data transmission due to crimp technology and metal housing
- Shielding and strain relief vibrationproof with crimp flange/crimping sleeve
- 360° EMI/RFI shielding by means of crimp flange/crimp sleeve system
- Highly flexible Profibus UL drag chain cable, Profinet Type C cable, CAN drag chain cable
- M12 hexagon combi knurl locking nut for defined tightening torque
- Certified qualification acc. to DIN EN 61373 for railway applications
- Cable lengths in m: 0.3 / 0.5 / 0.75 / 1 / 1.5 / 2 / 3 / 5 / 10



### M12 Rear Panel Connectors 180° and 90°

- Rear panel field assembly connector for cables
- Functional reliability from the cabinet door to the device

M12 rear panel connectors crimp flange/crimp sleeve 180° and 90° 360° shielding and vibration-/torsionproof

- Very compact dimensions
- Torsion- and vibrationproof strain relief and shield termination due to crimp flange/crimp sleeve system
- Torsion- and vibrationproof shield connection
- Torsion- and vibrationproof strain relief
- Certified plastics acc. to EN 45545-2 for railway applications
- Codings: A-5, A-8, B, D and X

M12 rear panel connectors cable gland 180 $^{\circ}$  und 90 $^{\circ}$  Wide cable clamping range from 4 – 9 mm.



### M12 Cable connectors cable gland

- Shielded and wide cable clamping range 4–9 mm
- Suitable for cable diameter 4–6.5 mm and 5.5–9 mm
- Fully shielded solution
- Compact dimensions
- Reliable strain relief for high requirements with cable gland
- Codings: A-5, A-8, B, D, X
- Straight and 90 ° versions



# M12 Cable connectors crimp flange/crimp sleeve

- 360° shielding and vibration-/torsion-proof
- Very compact dimensions
- Functionally reliable due to vibrationproof crimp technology for signals + screen
- Torsion- and vibrationproof shield connection
- Torsion- and vibrationproof strain relief with CF system
- Codings: A-5, A-8, B, D, X
- Certified plastics acc. to EN 45545-2 for railway applications



# M12 crimp device connectors and assemblies

- Shielded housing
- Pre-assembled with UL strand
- Compact external dimensions
- Degree of protection IP 67: only screw-locked or protection class IP 67 not screw locked
- Wireclip-ready for process-reliable automatic soldering of strands on solder wave
- Non-rotating assembly due to surfaces on the housing
- Codes: A-5, A-8, B, D, X (planned)



### **Gender Changer**

#### For secure interfaces on the cabinet door

- Fully shielded metal housing
- Very compact dimensions
- Functionally reliable due to vibrationproof crimp
- Rotation-proof assembly due to surfaces on the housing
- Certified plastics acc. to EN 45 545-2 for railway applications



### M12 V4A Stainless steel

- Compact dimensions
- Reliable solutions with 360°-shielding
- Reliable shielding and strain relief with the cable gland
- Vibrationproof crimp technology for the signal contacts
- Codings: A-5, A-8, B, D and X
- Cable connectors and panel mount connectors
- V4A Stainless steel
- Applications in process and process engineering, medical technology, clean rooms, food industry, vacuum technology and shipbuilding



### M12 90° Adapter

- Compact dimensions for applications with smallest space
- Male Female. Female Female. Male Male
- Various versions for Profi bus, DeviceNet/ CAN-Bus, Industrial Ethernet (Profinet)
- Customized versions upon request





### Fully shielded M12 T and M12 Y splitter Profibus and CAN/DeviceNet version

- 360°-EMI/RFI shielding
- Degree of protection IP 67
- Profibus: M12 B code, 5-pole, Pin 1-4 connected
- CAN/DeviceNet: M12 A code, 5-pin, pin 1-5 connected
- Version for direct interface connection with rotatable M12 connection
- Version with fastening straps for wall mounting
- Option for DIN rail mounting as service or transfer point
- Customized versions on request
- For harsh environmental conditions due to full metal housing



# PROVERTHA® CONNECTORS, CABLES & SOLUTIONS

# M12 Connector crimp flange conduit connection NW 10

#### Secure data transmission and cable routing

- 360 °-EMI/RFI shielding
- Functionally reliable data transmission by crimp technology for signals + shield
- Safe cable routing in the connectable conduit
- Torsional- and vibrationproof strain relief and shield connection due to crimp flange / crimp sleeve system
- Degree of protection IP 67 / IP68 (conduit side)
- Codings: A-5 and D; other codings on request
- Straight and angled versions
- Recommended conduit: PMA PCST-10B.50



# M12 Power L-Code forcables up to 14 mm (wires up to 2.5 mm²)

- Full metal housing with 360° shielding
- Vibration-proof crimp technology for the conductors
- Cable strain relief for cable D: 7–14 mm
- Wire size: 0.5–2.5 mm²/AWG 20–14
- Certified plastics acc. to EN 45545-2 for railway applications

#### **Sales Partner**



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# **About us**



More than 35 years of

experience

- Products for highest physical stability in extremely challenging networks
- Many innovations
- Customer-specific solutions



850 employees

- German-Hungarian company
- Production in Hungary
- Customer Service in Germany
- Happy customers



Certificates

- For your safety
  - IATE 16949
  - ISO 9001
- For our environment our production locations are ISO 14001 certified
- UL approvals

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