Reliable Connections for eMobility Systems

High performance
Assembly friendly
Space efficient
Tailored solutions

eMobility 360°
BY OETIKER
### eMobility 360°

Speed of delivery is crucial for electric vehicle development. We help our customers to drive innovation through all phases of electric vehicle development utilizing our 360° solution approach.

Customers count on Oetiker to provide peace of mind for a wide range of proven eMobility connections. Pioneering reliable fastening components for over 75 years, we design, test and deliver high-quality connecting and assembly solutions that are simpler, smarter and stronger than ever before.

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eMobility 360° by OETIKER

Reliable connections for all phases of development.

- Computer Cooling
- Quick Connectors
- Clamps & Rings

- eMotor Cooling
- Quick Connectors
- High Current Terminals
- Clamps & Rings

- Inverter Cooling
- Quick Connectors
- Clamps & Rings

- Occupant Safety
- Clamps & Rings

- Battery Tempering
- Quick Connectors
- Clamps & Rings

- High Voltage Wire Harness
- Clamps & Rings

- Steering
- Clamps & Rings

- High Power Charger Cooling
- Quick Connectors
- Clamps & Rings

- In-wheel Motor Cooling
- Quick Connectors
- Clamps & Rings

- Computer Cooling
- Quick Connect Disconnect

- Drivetrain
- Propulsion
- Occupant Safety
- Infrastructure
GLOBAL FOOTPRINT AND LONG-TERM COMMITMENT

With 14 manufacturing facilities worldwide producing more than 2 billion connections per year in over 30 countries, Oetiker is the trusted, global, long-term partner of the world’s leading OEMs.

eMobility Connections

**StepLess® Ear Clamps**

167 & 193 oval/standard

- Stainless steel
- 6.5 – 120.5 mm
- Provides a 360° leak-free seal. Lightweight, strong, tamper-proof design. Offers high radial loads and compensates for component tolerances.
- *11.9 – 18.0 mm sizes available in the StepLess® Ear Clamp 167 design.

**Quick Connector**

210 & 220

- 210 Aluminum
- 220 Polymer
- One piece machined body is lightweight and ideal for compact spaces. Controlled axial clearance prevents micro leakage. Minimum pressure drop ensures optimum flow.

**Multi Crimp Ring**

150 & 250

- Stainless steel
- 5.0 – 120.5 mm
- Full material cross-section over 360° for constant pressure applied uniformly around the circumference offers leak-free sealing with low assembled height.

**Quick Connect Disconnect**

241

- Aluminum
- 1/4", 3/8", 1/2"
- High flow valve technology allows for maximum flow-through diameter resulting in low pressure drop and high flow, with minimal to no fluid loss during disconnection. 100% leak tested before shipment.

Please visit www.oetiker.com for complete product information.
**Ear Clamp with Stud**

203

Galvanized steel

20.5 – 50 mm

Compact design for securing components with circular cross-sections. Provides high retention properties and good corrosion resistance.

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**StepLess® Low Profile Clamps**

192

Stainless steel

19.5 – 120.5 mm

Low profile design includes tolerance compensation elements to allow for variations in component tolerances. Includes 360° leak-proof seal.

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**ToothLock® Low Profile Clamps**

292

Stainless steel

57.5 – 118 mm

High and permanent compression rates with outstanding expansion resistance. Ultra low profile design supports very low imbalance on rotating parts. Uniform 360° compression and surface pressure. Process reliable assembly with visual clamp closure verification.

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**WingGuard® Strap Clamps**

270

High strength steel

20 – 50 mm

Unique winged band-locking mechanism provides high holding force and fully encloses all sharp edges. Highly space-efficient and provides a low profile design providing ample clearance for easy assembly. Fast, economical and process reliable assembly.

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**High Current Terminal**

246

Oetiker’s High Current Terminal provides a space efficient and easy assembly solution for direct mounted high voltage power inverter to eMotor systems. The polymer housing and o-ring seats provide electrical isolation and cooling fluid retention to metallic housings while the aluminum terminal provides critical high voltage pass-through and thermal isolation between systems.

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**Assurance Caps**

Provides assembler with the means to identify an incomplete connection. By placing the optional assurance cap on the tube, it cannot be slid over the retainer in the event of a partial connection.

Default: up to 85°C (black or grey)

High temperature: up to 230°C (white)

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**Disconnect Tools**

Size - 3/8", 1/2", 5/8", 3/4"

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**Shipping Plugs**


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Please visit www.oetiker.com for complete product information.
Assembly tool and maintenance support are managed through dedicated in-house service teams, ensuring electric vehicle connections are installed properly every time during production.

Assembly Tools

**Swaging Tools**
- For high-volume installation of Multi Crimp Rings.
- Available interlocking swaging segments guarantee uninterrupted 360° compression
- Fully reliable assembly process
- Electronic process data tracking capability

**Pneumatic Pincers**
- For high-volume assembly of Ear Clamps and Low Profile Clamps.
- Highly efficient
- Process reliable
- Closure verification
- Ergonomic pistol grip (optional)
- Easy assembly integration

**Cordless Pincers**
- For assembly of Ear Clamps, Low Profile Clamps, Multi Crimp Rings (MCR)
- Flexible cordless design
- Process reliable
- Closure verification
- Ergonomic design

**Hand Installation Tools**
- Quick and easy installation
- Exponential gain of mechanical advantage
- Secure grip and comfort
- Reduced fatigue and risk of repetitive injury

**FAST 3000 with AdvantEdge® Technology**
- For assembly of Strap Clamps
- Fast assembly process: 3.5 seconds assembly time for typical airbag applications
- Easy to maintain: approximately 5 minute service time per 100,000 closures
- Safe & reliable closure: enclosed and separated residual using AdvantEdge® technology

Please consult an Oetiker representative or visit www.oetiker.com for a complete range of assembly tool options.
We are committed to deliver the best suited connection and support for our customers at every stage of development. In addition to our high-quality clamps, rings and quick connectors, we offer extensive global customer services and assembly solutions to overcome a wide range of connecting challenges. Quality and reliability guide every step of our 360° solution approach.