Reliable Connections
Made by Oetiker

OETIKER ®

Reliable Connections

Oetiker Product Guide

Complete Connecting and Assembly Solutions
for Mobility and Industrial Applications.

Proven.
Advanced.
Experts.
Focused.
Partners.

Connected to Customer Quality.
Built on Our Customers Success.

Oetiker's **proven,** high-performing connecting and assembly solutions provide customers peace of mind for automotive, commercial and industrial markets. Our **advanced** quality and reliability ensures customers meet the most demanding specifications for their applications. With 80+ years of **expert** experience, global engineering teams and 13 manufacturing facilities, we are **focused** on solutions for our **partners** continued success.
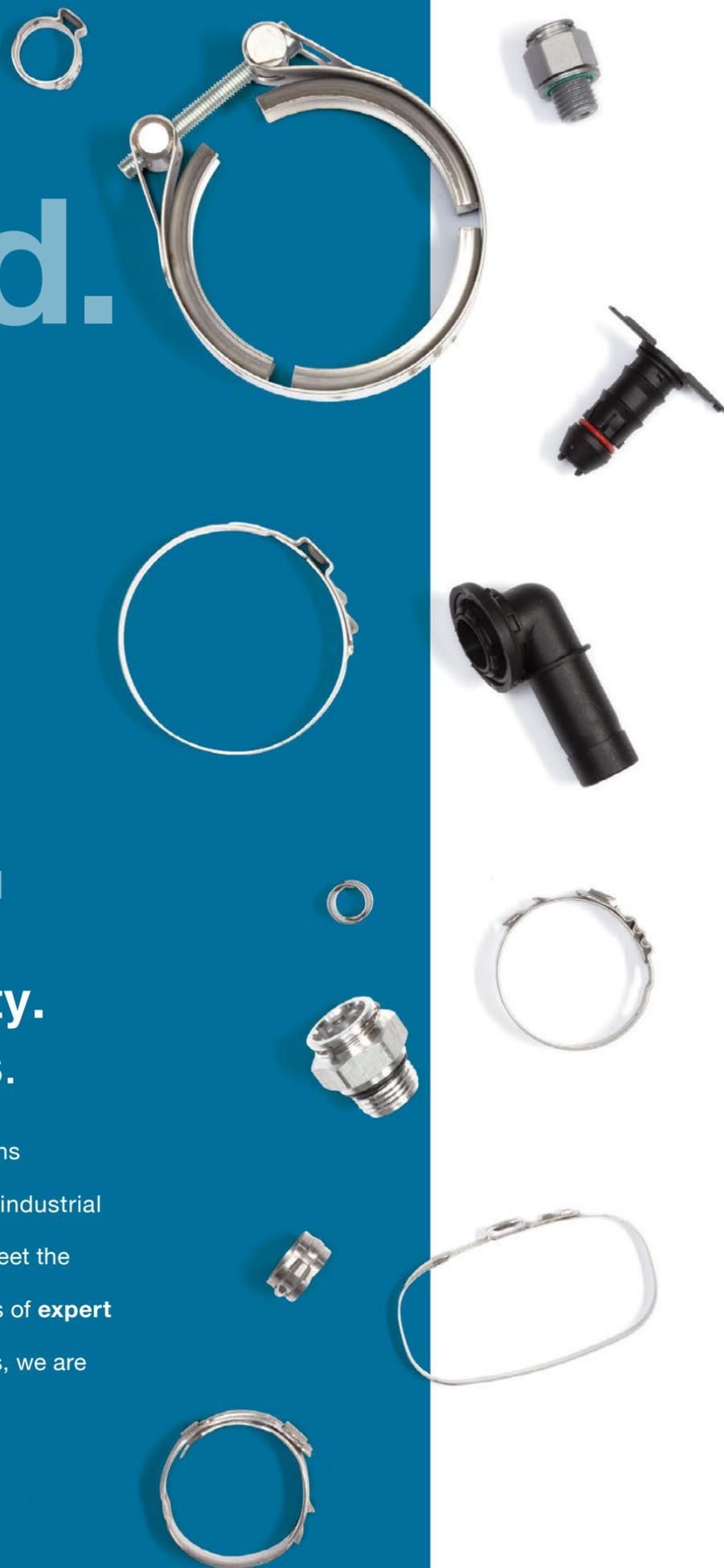
DualHook Adjustable Ear Clamps
259

Stainless steel

24.5 – 120.2 mm

Specially designed for use with applications where high performance and universal features are demanded. Optimized interlock design with three dual hooks provides extra high force. Waved band edge with dimples enhances band strength and avoids risk of breakage.

StepLess® Ear Clamps
123 & 193 – next generation 117 & 167

123 High strength steel
193 Stainless steel
18.0 – 120.5 mm

117 Galvanized or zinc plated steel
167 Stainless steel
6.5 – 120.5 mm

Provides a 360° leak-free seal. Lightweight, strong, tamper-proof design. Ideal for many materials. Fast & simple installation. Some product groups available in Oval design.

Also available in 123 Light Fit, 167 Dual Slide and 167 PEX series designs.

1-Ear Clamps
153 & 154 (with insert)

153 & **154** Stainless steel

153 3.3 – 30.7 mm
154 2.9 – 30.0 mm

Compact one-piece design for robust, secure connections. 154 includes a pre-shaped insert for effective and powerful all-around seal.

Also available in miniature sizes.

ToothLock® Ear Clamps
293

Stainless steel

40.0 – 120.5 mm

Provides extended diameter range, 360° uniform seal and ease of installation. Highly pressure and expansion resistant.

Enhanced clearance for easy assembly.

2-Ear Clamps
101 & 151

101 Zinc plated steel
151 Stainless steel

4.1 – 46.0 mm

Compact one-piece design with extended clamping range for robust secure connections. Fast and easy installation for industrial air or fluid line applications.

1-Ear Clamps
with mechanical interlock 105 & 155

105 Galvanized or zinc plated steel
155 Stainless steel

10.5 – 116.0 mm

Economical sealing solution for low pressure applications. Fast and simple installation.

Adjustable Clamps
113 & 163, 109, 159 (flat)

163 & **159** Stainless steel
113 & **109** Zinc plated steel

25.0 – 132.0 mm

Multi-purpose clamps can be adjusted to several diameters. Fast and easy radial or axial installation.

Some product groups available in flat design.

1-Ear Clamps SV
153

18 SR™, high oxidation resistance

40.0 – 150.0 mm

Offers excellent heat and oxidation resistance. Axial and radial assembly for easy installation.

1-Ear Clamps
with "Open End" 195

Stainless steel

18.0 – 45.5 mm

Developed specially for radial installation, i.e. for applications where axial installation is impossible. Because of its good sealing properties, this clamp is often used in the automotive industry. But our 1-Ear Clamps with "Open End" are also an ideal connection for industrial tube connections where there is no possibility of axial access.

Clamps are available upon request only.

1-Ear Clamps with Stud
103

Galvanized steel band

20.6 – 50.0 mm

Easily adjustable clamp positioning. Space saving with ear position available in 180° or 45° for easy assembly. Strong, high strength low alloy material with high retention properties provides good corrosion resistance.

Secure and reliable fixation of airbag inflators within Occupant Safety Systems.

Color Coded ID clamps

Color Coded ID Clamps are made of pre-coated epoxy steel, which has a color stripe on the band surface for final visual inspection in the assembly line to differentiate driveshafts built in the car.

Contact an Oetiker representative for more information.

Expertainer & Service Kits

Make your work processes more efficient with Oetiker all-in-one Expertainer assortment kits. With 75% of Aftermarket auto repairs happening in independent shops, the accessibility to a variety of genuine original equipment, without having to buy it in bulk, becomes key in offering quality service.

We also have available a variety of service kits for MRO, Beverage, Irrigation and Welding applications.

Reusable Low Profile Clamps
268

Stainless steel

22.5 – 41.0 mm

Can be repeatedly opened and re-installed. Low assembled height for simplified implementation under the hood, reducing the risk of damage to neighboring parts. Minimum band width provides optimized packaging in tight spaces. Uniform 360° sealing.

ToothLock® Low Profile Clamps
292

Stainless steel

57.5 – 120.5 mm

Combines optimum compression performance, ultra low profile design, 360° uniform seal.

Extended diameter range.

Worm Drive Clamps
126 & 177

126 Stainless steel and zinc-plated
177 Stainless steel

8.0 – 160.0 mm

Large clamping range. Suitable for numerous applications. Complies with DIN 3017.

Also available in SAE J1508 Type F.

Reusable.

StepLess® Screw Clamps
178

Stainless steel

24.0 – 255.0 mm

Can be adjusted to several diameters and features a 360° leak-proof seal. Also available in Self-Tensioning.

Popular for silicone and EPDM hose materials.

Reusable.

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.

StepLess® Low Profile Clamps
168

Stainless steel

10.5 – 120.5 mm

Low installed height for space-restricted areas. The StepLess® design provides a 360° leak-proof seal.

Reusable.

Also available with tolerance compensation.

Universal Clamps
174

Stainless steel

For details about sizes see oetiker.com

Perforated band for various diameters and widths. Ratchet or screw lock available.

Reusable.

Worm Drive Clamps
180

Stainless steel

30.0 – 500.0 mm

Toggle lock with intermediate position for fast and simple installation and high tightening torque. Visual overload protection protects against excessive tightening. Hexagon socket screw SW5 for fast and safe installation. Alternative wing screw design provides the installation tool integrated in the clamp.

Reusable version available.

Clamps ER
194

Stainless steel

4.8 – 25.0 mm

Lightweight miniature clamp is a safe connection for low pressure applications.

Worm Drive Clamps Mini
180

R 180 Rust-resistant chromium steel and zinc-plated
R+S 180 Stainless steel

7.0 - 219.0 mm

Compact design for minimal space requirements. Cylindrical screw head allows fast, simple and safe installation. Embossed band strip reduces risk of damage to the part being clamped. Alternative wing screw design provides the installation tool integrated in the clamp.

Reusable version available.

Quick Connectors
201, 210

201 coated carbon steel
210 6061-T6 aluminum

Imperial and Metric size options.
For details about sizes see oetiker.com

Simple, fast and safe connection offering serviceability and tool-free assembly.

Compact one-piece design. Suitable for oil and / or coolant and heating lines to turbochargers, engines and transmissions.

Quick Connectors
Scan to learn more

SMILe® Compact Quick Connectors

Our compact quick connector, turns Millimeters into Kilometers of EV range!

Significantly increases battery compartment space for thermal management, reducing the overall footprint of the battery cooling system, giving OEM's the ability to pack a larger volume of battery cells.

Assurance Caps

Sizes: 1/4", 3/8" 1/2", 5/8"

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)

Disconnect Tools

Sizes: 3/8", 1/2", 5/8", 3/4"

Shipping Plugs

Sizes: 1/4", 3/8", 1/2", 5/8", 3/4"

Available material.

Default: Polypropylene
For improved cleanliness: Celcon

Locking Assurance Caps

For 201 & 210 Quick Connectors

Sizes: Sizes: 3/8", 1/2"

Serves as a device to provide 100% confidence the tube is fully seated into the quick connector and features a durable secondary latch.

Temperature resistance up to 250 °C.

Connection Verification Aid (CVA)
133

Featuring Oetiker QuickSense® technology.

Provides tube to quick connector connection verification in a space-efficient manner to be integrated in final vehicle assembly.

The CVA confirms a proper tube to quick connector connection via haptic feedback to the operator and an electronic signal to a customer interface connected control box, while being compact and ergonomically designed.

Multi Crimp Rings
150 & 250

150 Stainless steel (spirally welded)
5.0 – 50.0 mm

150 Aluminum (3T puzzle lock)
24.5 – 120.0 mm

250 Stainless steel (cross welded)
15.0 – 120.5 mm

Highest radial load, low assembled height. Provides consistent uniform circumferential pressure.

WingGuard® Strap Clamps
270

Band: High strength steel
Housing: Stainless steel

20.0 – 50.0 mm

The strap provides an extended diameter range to fit various application diameters and irregular shapes. Highly space-efficient and the unique locking mechanism ensures high holding forces

Tank Straps
283

Stainless or carbon steels with different kinds of surface treatments.

Engineered to provide cost-effective and robust Tank Strap solutions, based on a range of materials, surface treatments or coatings and connectors and screws.

Additional thermoplastic and rubber liner options ensure easy assembly and reliable fastening.

Powertrain Straps
284

Stainless or carbon steels with different kinds of surface treatments.

Engineered to provide cost-effective, space efficient and robust Powertrain Strap solutions, based on a range of materials, surface treatments or coatings.

A variety of available connectors and screws ensures easy implementation, assembly and reliable fastening.

V-Clamps
280

Various stainless and carbon steel combinations available.

Diameters up to 400 mm

Engineered to connect flanges reliably and safely under conditions of stress, vibration, corrosion and temperature variation.

Customized design adaptions and engineered features guarantee high efficiency, performance and long-lasting reliability.

Pneumatic Pincers

For high-volume assembly of Ear Clamps and Low Profile Clamps

- Highly efficient
- Process reliable
- Closure verification
- Ergonomic pistol grip (optional)
- Medical grade tool options also available

Cordless Pincers

For assembly of Ear Clamps, Low Profile Clamps, Multi Crimp Rings (MCR)

- Flexible cordless design
- Process reliable
- Closure verification
- Ergonomic design

Swaging Tools

For high-volume assembly of Multi Crimp Rings

- Available interlocking swaging segments guarantee uninterrupted 360° compression
- Fully reliable assembly process
- Electronic process data tracking capability

Fastener Assembly Stationary Tools

For assembly of WingGuard® Strap Clamps 270

- Fast assembly process
- Easy to maintain
- Safe & reliable closure
- Controlled assembly process

Test Equipment

Calibrator CAL 01

- Ensures uniform, reproducible process quality
- Used to adjust and verify the applied closing force

Calibrator CAL 02

- Mechanical alternative to CAL 01
- High accuracy, especially suitable for mechanical tools

Closing Force Gauges SKM 00, 01, 02

- Economical solutions for verifying the closing forces
- Uniform and reproducible process quality

Hand Tube Cutters

Pro Spec Hand Tube Cutter

- Tool cuts PEX, PE-RT, Poly tubing, and HDPE up to 1"
- Unique cutting cavity design provides straight cuts
- Replaceable hollow ground blade cuts quickly and easily

Radial Hand Tubing Cutter

- For PEX tube, plastic conduit and gas pipe up to 1"
- Provides square cut with 1 1/2 to 2 rotations – no need to debur
- Compact tool – only 4 1/4" long

Disassembly Tools

Hand Clamp Cutters HCC 2000

- "No-Crimp™" jaws, designed to remove Oetiker Ear clamps, clamp cutting only
- Safest method of clamp removal
- Cuts: Stainless Steel Band up to 7.0 x 0.8 or 9.0 x 0.6 mm; Steel Band up to 9.0 x 0.8 mm (width x thickness)

Heavy Duty Hand Clamp Cutter HCC 7000

- "No-Crimp™" jaws, designed to remove Oetiker Ear Clamps, clamp cutting only
- Safest method of clamp removal
- Cuts: Stainless Steel/Steel Band up to 10.0 x 1.0 mm (width x thickness)

Hand Installation Pincers

Hand Installation Pincers for Ear Clamps, Compound Action and Single Action options available

Hand Installation Pincer for Ear Clamps requiring closing force ≥ 2000 N

Hand Installation Pincers with Force Control for Ear Clamps HMK 01, S01

Hand Installation Pincer, Sensor Monitored Assembly Repair Tool (Oetiker SMART)

Hand Installation Pincers for StepLess® Low Profile Clamps 168, Compound Action and Single Action options available

Hand Installation Pincers for StepLess® Low Profile Clamps 192

Hand Installation Pincers for ToothLock® Clamps 292 & 293

Hand Installation Pincers for Multi Crimp Rings 150 & 250

Hand Installation Pincers for Reusable Low Profile Clamps 268

Hand Installation Pincers for PEXGrip® and Standard PEX Clamps 167

Hand Installation Pincer for Clamps ER 194

Hand Installation Pincer for pre-assembly of 1-Ear "Open End" Clamps 195

Trusted.
Verifiable.
Traceable.

Genuine Oetiker tools are engineered to work with Oetiker clamps to provide consistent, leak-free connections for your mission critical applications.

SIMPLE AND EASY INSTALLATION
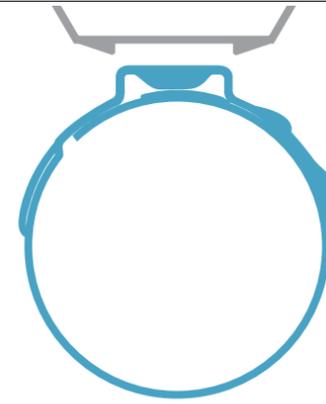
1. Position clamp on the application
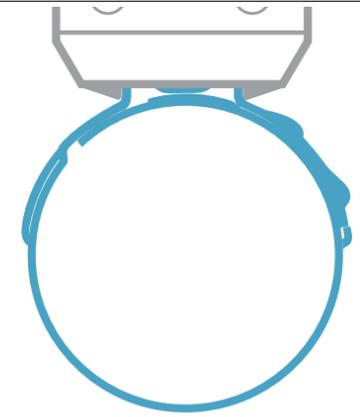
2. Align the jaw tips of the pincer with the ear of the clamp
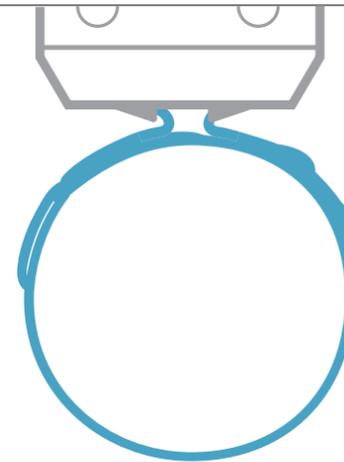
3. Squeeze the ear

4. Clamp is closed

For further information and product support, please contact us at **oetiker.com**
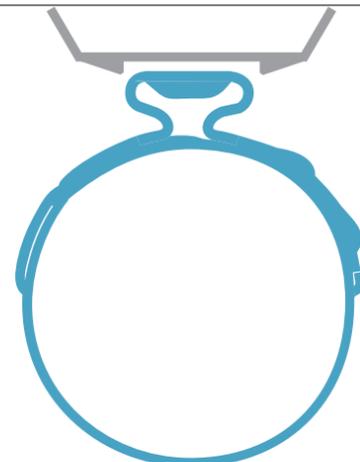
360° solution approach
Driving innovation

Oetiker helps customers drive innovation through all phases of development by utilizing our 360° solution approach.

Global Customer Services

Connecting Solutions

Assembly Solutions

360°
Solution Approach

Proven Connections
Clamps, Rings, Straps and Quick Connectors

Reliable Assembly
Mechatronic power tool systems, Pneumatic pincers, Manual pincers, Swaging devices and Test equipment

1 Technical Analysis & Consulting
Oetiker experts conduct a detailed review of customer parts and requirements

2 Application Engineering
Experienced professionals provide options for optimum connecting and assembly solutions

3 Testing & Validation
A series of tests with detailed reporting and recommendations are performed in accordance with customer requirements

4 Commissioning & Training
Oetiker global teams provide on-site training and setup

5 Maintenance & Service
Assembly tool and maintenance support are managed through dedicated in-house service teams

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