

1-Ear Clamps 251

Cross Welded

Recommended for vehicle and industrial applications

Benefits

- Robust and high performing clamp solution for various applications
- Simple, fast and secure installation with manual or pneumatic pincers
- High quality stainless steel provides high corrosion resistance
- Cost-efficient welded one-piece clamp solution
- Flexible ordering volumes for welded clamps
- Non serviceable for warranty verification



Compact one-piece clamps: for robust and secure connections

Clamp ear: fast and simple installation, visible deformation provides evidence of proper closure

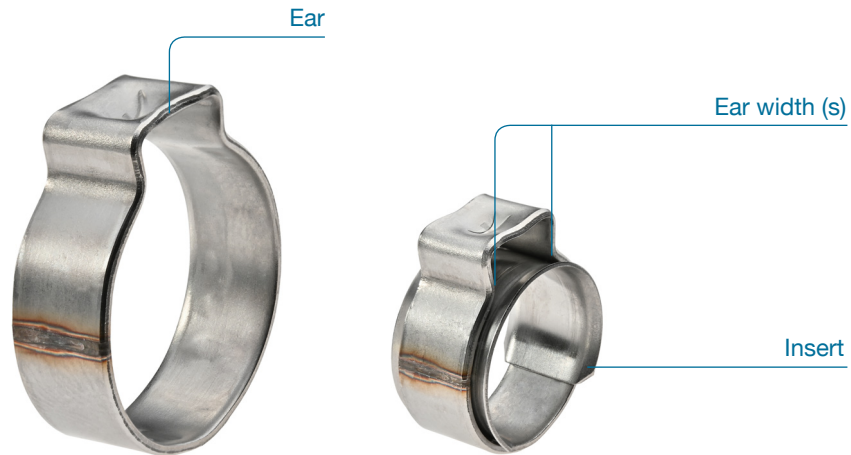
Deburred edges: reduced risk of damage to parts being clamped

High performance: clamp design provides high radial load on clamped goods

High sustainability: made from low energy consuming production process

Version with insert: pre-shaped insert – effective and powerful all-round seal

FEATURES



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TECHNICAL DATA OVERVIEW

Material
Clamp

Stainless Steel, Material no. 1.4307 +2B / UNS S30403 2B

Clamp insert

Stainless Steel, Material no. 1.4310/UNS S30100

Corrosion resistance according to DIN EN ISO 9227

Corrosion testing according to ISO 9227 NSS: 800 h*

*No loss of tensile strength and expansion resistance,
<10% of surface corrosion possible

Size range
Without insert

	Width × thickness	Ear width
11.8 – 13.8	6.0 × 0.8	6.5
14.6 – 16.8	6.0 × 0.8	7
24.1 – 27.0	7.0 × 1.0	9.5

With insert

	Width	Ear width
11.1 – 13.1	8.2	6.5
23.3 – 26.3	9.2	9.5

PRODUCT DESCRIPTION

Technology

Oetiker 1-Ear Clamps 251 are featured by the cross welding technology, which is an innovative welding technology, that combines flexible production of various sizes with a highly robust welding seam connection of the stainless steel band ends.

Field of application

Oetiker 1-Ear Clamps 251 are universally applicable. They are especially suitable for Medical, Industrial Equipment, Appliances, Food & Beverage and other industrial applications as well as for vehicle applications like for example Fuel Line and Occupant Safety.

Oetiker 1-Ear Clamps with insert

This type of clamp combines the geometry and properties of the 1-Ear Clamp with an insert made of stainless steel. These clamps are ideal for demanding applications involving soft or hard rubbers and plastics. The thin-walled insert ring (up to 0.3 mm thick), with an oval protrusion that locates in the ear space, bridges the ear gap and ensures almost uniform compression around the whole circumference of a clamp.

Edge condition

The band edges are deburred during the manufacturing process providing reduced risk of damage to parts being clamped.

Clamp ear (closing element)

Using tools designed or endorsed by Oetiker, the clamp is closed by drawing together the lower radii of the “ear”.
 The ear should be closed by at least 40% of the original ear width.
 The maximum diameter reduction is proportional to the open “ear” width. The maximum reduction in diameter is given by the formula:

$$\text{Max. diameter reduction} = \frac{\text{Ear width (s)}}{\pi}$$

! Important

Single tool stroke closure only, do not apply secondary crimping force.

INSTALLATION DATA

Material dimensions (mm)	Size range (mm)	Closing force max (N)	Installation tools force-monitored ¹			
			Manual	Pneumatic	Cordless	Electronically controlled
6.0 × 0.8	11.8 – 13.8	2800	HIP 1000/2000	HO ME 3000	CP 10	HO EL 3000
6.0 × 0.8	11.1 – 13.1	2800	HIP 1000/2000	HO ME 3000	CP 10	HO EL 3000
6.0 × 0.8	14.6 – 16.8	3000	HIP 7000	HO ME 3000	CP 10	HO EL 3000
7.0 × 1.0	24.1 – 27.0	4000	HIP 7000	HO ME 4000	CP 10	HO EL 4000
7.0 × 1.0	23.3 – 26.3	4000	HIP 7000	HO ME 4000	CP 10	HO EL 4000

For alternatives, see Oetiker TDS of hand tools or power tools
¹Further information on www.oetiker.com

! Important note

These figures are intended as a guide, they may vary depending on the type and tolerances of parts being clamped. To ensure optimum clamp selection, we recommend making functional tests with several assemblies.

ORDER INFORMATION

Item No.	Ref. No.	Clamp width (mm)	Ear width inside (mm)	Size range (mm)
25100003	013.8RX	6.0	6.5	11.8 – 13.8
25100005	013.8RXER	8.2	6.5	11.1 – 13.1
25100001	016.8RX	6.0	7.0	14.6 – 16.8
25100000	027.0RX	7.0	9.5	24.1 – 27.0
25100002	027.0RXER	9.2	9.5	23.3 – 26.3