

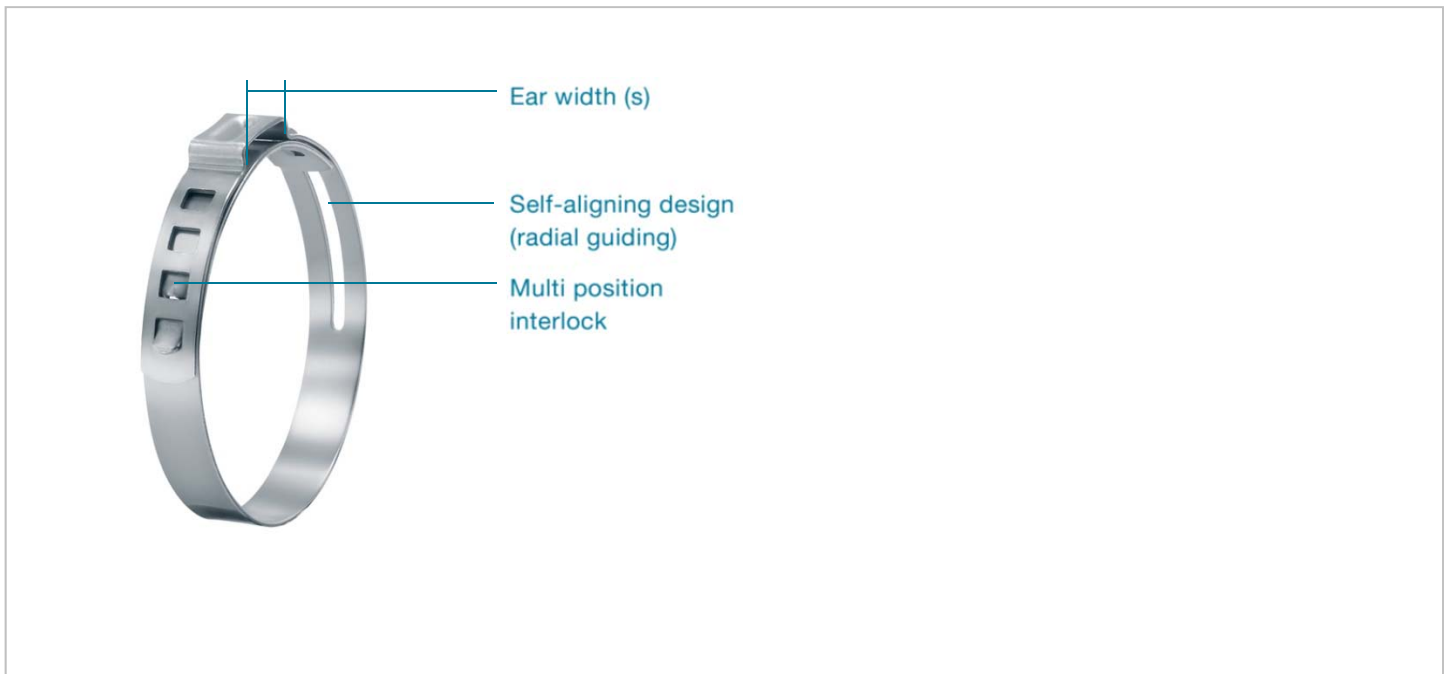
Technical Data Sheet

Adjustable Clamps with radial guiding

Product Group PG 113



Connecting Technology



Choice of engagement positions: clamp can be adjusted to several nominal diameters

Material: **very cost effective**

Inner ring with radial guidance: **effective and powerful all-round sealing**

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

Burr-free strip edges: **reduced risk of damage to parts being clamped**

Connecting technology: **ideal for soft materials**

Adjustable Clamps with radial guiding Product Group 113

Material

PG 113 **High strength steel, material no. 1.0934**

Coating: **zinc plated**

Corrosion resistance according to DIN EN ISO 9227

PG 113 **≥ 96 hours**

Size range	width x thickness
30.0 – 116.0 mm	7.0 x 0.6 mm
72.0 – 132.0 mm	9.0 x 0.6 mm

Some sizes are only available if an appropriate minimum quantity is ordered.

Clamp ear (closing element)

Using tools designed by Oetiker, the clamp is closed by drawing together the lower radii of the “ear”. The maximum diameter reduction is proportional to the open “ear” width (s). The theoretical maximum reduction in diameter is given by the formula:

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

Multi-position interlock

The interlock consists of one load-retaining hook that withstands tensile loading during closure and a lock tab designed to hold the hooks in their windows prior to closure. With this design the interlock can be engaged in several positions within the published range. This feature allows a single part to cover a range of diameters.

Radial guiding (self-aligning design)

A tab formed on the inner portion of the clamp locates in a slot in the outer band surface. During assembly and closure, the tab slides in the slot and so avoids any step around the inner circumference of the clamp.

Assembly Recommendations

The clamp can be installed axially on the application prior to assembly or alternatively, radially around the assembled components. For either method, it is important that the hooks and lock tab are engaged in windows giving the smallest possible diameter, so that the maximum clearance between the assembled components and the inside diameter of the clamp before closure is no greater than 1.5 mm. Each incremental step of the interlock reduces the diameter before closure by 1.6 mm on the “3-step” series, and by 1.05 mm on the “6- step” design.

Closing force

The closing force must be chosen to give the required material compression or surface pressure and should be qualified by dimensional evaluation and experiment. The resistance against the clamp equals the applied force, so the closing force is greatly reduced when compressing a soft material. The table below gives the maximum applied closing force for clamp and material dimensions.

Important

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

Installation data

Material dimension	Size range	Maximum closing force	Hand pincer	Installation tools force-monitored		
				Manual	Pneumatic	Cordless
7 x 0.6 mm	30.0 – 116.0 mm	1400 N	14100082	HMK 01 / S01	HO ME 2000	CP 01
9 x 0.6 mm	72.0 – 132.0 mm	2200 N	14100082	HMK 01 / S01	HO ME 3000	CP 01

For more details regarding hand pincers please see our catalogue on page 104.

Item No.	Ref. size*	Diameter range (mm)	Diameter range (inch)
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3 adjustment positions

Band width 7 mm, thickness 0.6 mm, Ear width 10 mm

11300020	30	23.6 – 30.0	0.929 – 1.181
11300000	32	25.6 – 32.0	1.008 – 1.260
11300001	35	28.6 – 35.0	1.126 – 1.378
11300002	37	30.6 – 37.0	1.205 – 1.457
11300003	40	33.6 – 40.0	1.323 – 1.575
11300004	45	38.6 – 45.0	1.520 – 1.772
11300021	50	43.6 – 50.0	1.717 – 1.969

6 adjustment positions

Band width 7 mm, thickness 0.6 mm, Ear width 10 mm

11300028	56	47.5 – 56.0	1.870 – 2.205
11300017	62	53.5 – 62.0	2.106 – 2.441
11300029	68	59.5 – 68.0	2.343 – 2.677
11300018	74	65.5 – 74.0	2.579 – 2.913
11300005	80	71.5 – 80.0	2.815 – 3.150
11300006	86	77.5 – 86.0	3.051 – 3.386
11300007	92	83.5 – 92.0	3.287 – 3.622
11300008	94	85.5 – 94.0	3.366 – 3.701
11300009	98	89.5 – 98.0	3.524 – 3.858
11300010	104	95.5 – 104.0	3.760 – 4.094
11300030	107	98.5 – 107.0	3.878 – 4.213
11300011	110	101.5 – 110.0	3.996 – 4.331
11300019	116	107.5 – 116.0	4.232 – 4.567

4 adjustment positions

Band width 9 mm, thickness 0.6 mm, Ear width 10 mm

11300022	72	64.0 – 72.0	2.520 – 2.835
11300023	78	70.0 – 78.0	2.756 – 3.071
11300024	84	76.0 – 84.0	2.992 – 3.307
11300012	90	82.0 – 90.0	3.228 – 3.543
11300013	96	88.0 – 96.0	3.465 – 3.780
11300014	102	94.0 – 102.0	3.701 – 4.016
11300015	108	100.0 – 108.0	3.937 – 4.252
11300016	114	106.0 – 114.0	4.173 – 4.488
11300025	120	112.0 – 120.0	4.409 – 4.724
11300026	126	118.0 – 126.0	4.645 – 4.961
11300027	132	124.0 – 132.0	4.882 – 5.197

* Ref. size = Condition as supplied

The Oetiker Group: www.oetiker.com

Headquarters Switzerland

Hans Oetiker AG
Maschinen- und Apparatefabrik
Oberdorfstrasse 21
CH-8810 Horgen (Zürich)
T +41 44 728 55 55
info@ch.oetiker.com

Austria

Hans Oetiker
Maschinen- und Apparatebau
Ges.m.b.H.
Eduard-Klinger-Strasse 19
A-3423 St. Andrä-Wördern
T +43 2242 33 994-0
info@at.oetiker.com

Brazil

Oetiker do Brasil Imp. e Com. Ltda.
Av. Hugo Fumagali, nr. 586 - Sala B
07220-080 Cid. Industrial Satélite
Guarulhos (SP)
T +55 11 2303 7486
info@br.oetiker.com

Canada

Oetiker Limited
203 Dufferin Street South
P.O. Box 5500
Alliston, Ontario L9R 1W7
T +1 705 435 4394
info@ca.oetiker.com

P. R. China

Oetiker Industries (Tianjin) Ltd.
10 Shuangchenzhong Road
Beichen High Tech Industrial Park
Tianjin 300400
T +86 22 2697 1183
info@cn.oetiker.com

Czech Republic

Hans Oetiker spol. s r. o.
Videňská 116
CZ-37833 Nová Bystřice
T +420 384 386513
info@cz.oetiker.com

France

Oetiker Sarl
Parc d'activités du Bel Air
1, rue Charles Cordier
77164 Ferrières-en-Brie
T +33 1 79 74 10 90
info@fr.oetiker.com

Germany

Hans Oetiker
Metallwaren- & Apparatefabrik GmbH
Üsenbergerstrasse 13
D-79346 Edingen a. K.
T +49 76 42 6 84-0
info@de.oetiker.com

Kurt Allert GmbH & Co. KG

Postfach 1160
Austrasse 36
D-78727 Oberndorf a. N.
T +49 74 23 87 70-0
info@allert.oetiker.com

Hong Kong

Oetiker Far East Limited
2210 Tuen Mun Central Square
22 Hoi Wing Road
Tuen Mun NT
T +852 2459 8211
info@hk.oetiker.com

Hungary

Oetiker Hungaria KFT
Vasvári P. U. 11
H-9800 Vasvár
T +36 94 370 630
info@hu.oetiker.com

India

Oetiker India Private Ltd.
N-14, Additional Patalganga
Industrial Area
Village Chavane, Khalapur
Rasayani 410 220
Dist. Raigad, Maharastra
T +91 2192 250107-12
info@in.oetiker.com

Japan

Oetiker Japan Co. Ltd.
Kaneko Bldg. A
5-3-5 Nakamachi-dai, Tsuzuki-ku
Yokohama 224-0041, Kanagawa
T +81 45 949 3151
info@jp.oetiker.com

Mexico

Oetiker Servicios S de RL de CV
Ave. José María Pino Suárez 853 Nte.
Col. Centro, CP 64000
Monterrey, Nuevo León
T +52 81 8390 0237
info@mx.oetiker.com

Netherlands

Oetiker Benelux B. V.
Hertzstraat 38
NL-6716 BT Ede
T +31 318 63 71 71
info@nl.oetiker.com

Spain

Oetiker España, S. A.
Pol. Ind. Las Salinas
C/Puente, 18
E-11500 El Puerto
de Santa María (Cádiz)
T +34 956 86 04 40
info@es.oetiker.com

South Korea

Oetiker Far East Limited
Korea Liaison Office
Postal Zip Code 135-880
1401 LG Twintel 1-Cha 157-8
Samseong 1-dong
Gangnam-gu, Seoul
T +82 2 2191 6100
info@kr.oetiker.com

United Kingdom

Oetiker UK Limited
Foundry Close
GB-Horsham, Sussex RH13 5TX
T +44 1403 26 04 78
info@uk.oetiker.com

USA

Oetiker, Inc.
6317 Euclid Street
Marlette, Michigan 48453-0217
T +1 989 635 3621
800 959 0398 (toll-free)
info@us.oetiker.com

www.oetiker.com

