

# Technical Data Sheet

## Screw Clamps and Universal Clamps

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Connecting Technology



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

Narrow Band: concentrated transmission of clamping force, complies with SAE J1508 Type SSPC

360° Stepless®: uniform compression, or uniform surface pressure.

Burr-free strip edges: reduced risk of damage to the part being clamped

Self-tensioning: compensates for thermal cycle diameter changes

## Stepless® Screw Clamps Product Group 178

### Material

PG 178 Band, spacer, retaining elements (D-nut):

Stainless Steel, Material no. 1.4301/UNS S30400

Screw: Stainless Steel, Material no. 1.4319/UNS S30200

Spring: 17-7PH (aerospace quality)

### Series

Size range	width x thickness
18.0 – 255.0 mm	9.0 x 0.6 mm

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

Oetiker Stepless® Screw Clamps are available in two versions: Oetiker Stepless® Screw Clamps and Self-Tensioning Stepless® Screw Clamps.

### Material thickness

Oetiker Stepless® Screw Clamps and Self-Tensioning Stepless® Screw Clamps are made from strip material 9 mm wide and 0.6 mm thick. The dimensions of the strip ensure optimum sealing with EPDM rubber and silicone hoses, while taking into account the necessary radial force, the compressibility of the hose, the sealing/retaining properties and the environmental conditions.

### Interlock

The closure is a mechanical interlock whose function is to provide secure retention of the round clamp geometry. The interlock can be opened to permit radial installation of the clamp, and at the same time provides a simple way of relocating the interlock features to obtain alternative diameters prior to tightening.

## Positions for diameter changes

## Sizes 24–42 mm

- 3 different positions
- diameter change for each step 1.6 mm

## Sizes 45–55 mm

- 3 different positions
- diameter change for each step 2.1 mm

## Sizes 60–255 mm

- 5 different positions
- diameter change for each step 2.0 mm

Screw: M4 x 0.7

Screw head: combination of hexagon head with cross-socket

## Assembly Recommendations

1. Turn screw anti-clockwise until it stops at the “D” nut.
2. For radial installation or change of diameter, unlatch the interlock.
3. Position the open clamp around the hose. Locate the tongue in the groove and position the apertures of the mechanical interlock over the mating features. Engage the interlock at the smallest possible diameter.
4. Tighten the screw to the required torque. Do not exceed the maximum permissible tightening torque.
5. A gap of > 3 mm should exist between the D-nuts. This ensures that there is sufficient movement for the clamp to reduce in diameter when the spring of the self-tensioning clamp expands during contraction of the hose. If the gap between the D-nuts is less than the recommended 3 mm, proceed to step 6. (Only applicable to Self-Tensioning Spring Screw Clamps).
6. Turn the screw anti-clockwise to loosen the Self-Tensioning Screw Clamp.
7. Relocate the interlock in the next smaller diameter position.
8. Tighten the screw to the required torque. Do not exceed the maximum permissible tightening torque.

## Maximum average, static torque guide:

Spring without color identification (sizes 24.0–31.0 mm):

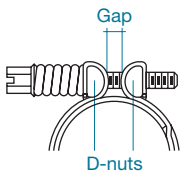
90–100 Ncm Max (8–9 inch pound-force max.)

Green spring (sizes 32.0 mm and larger):

135–200 Ncm Max (12–18 inch pound-force max.)

The values indicated above are based on maximum clamp torque capacity and common hose materials. Low durometer hardness hoses may require alternative or lower torque values and should be verified by means of product compatibility investigations.

For Stepless® Screw Clamps the minimum gap between D-nuts should be > 3mm.



## Tolerance compensation with Stepless® Screw Clamps

Oetiker Stepless® Screw Clamps and Self-Tensioning Stepless® Screw Clamps should be tightened to the optimum torque as specified in the guide. This torque takes into account the required degree of compression, the necessary radial force, and the maximum torque resistance of the screw and clamp band. By using a defined and constant torque at installation, compensation for component tolerances will always be available and the radial force will remain approximately the same.

The spring on Oetiker Self-Tensioning Stepless® Screw Clamp serves as a compensation element to accommodate changes in diameter resulting from thermal expansion and contraction or vibration. This feature gives Screw Clamps optimum sealing performance even in applications where there are strong thermal influences.

## Order information

Item No.*	Ref. No.*	Item No.**	Ref. No.**	Size range (mm)
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Band width 9 mm, thickness 0.6 mm

17800120	024-9	17800170	024S9	18 – 24
17800122	028-9	17800172	028S9	22 – 28
17800124	032-9	17800174	032S9	26 – 32
17800125	036-9	17800175	036S9	30 – 36
17800126	040-9	17800176	040S9	34 – 40
17800127	045-9	17800177	045S9	37.5 – 45
17800128	050-9	17800178	050S9	42.5 – 50
17800129	055-9	17800179	055S9	47.5 – 55
17800130	060-9	17800180	060S9	49 – 60
17800131	065-9	17800181	065S9	54 – 65
17800132	070-9	17800182	070S9	59 – 70
17800133	075-9	17800183	075S9	64 – 75
17800134	080-9	17800184	080S9	69 – 80
17800135	085-9	17800185	085S9	74 – 85
17800136	090-9	17800186	090S9	79 – 90
17800137	095-9	17800187	095S9	84 – 95
17800138	100-9	17800188	100S9	89 – 100
17800139	105-9	17800189	105S9	94 – 105
17800140	110-9	17800190	110S9	99 – 110

\* Stepless® Screw Clamps

\*\* Self-Tensioning Screw Clamps

For Self-Tensioning Stepless® Screw Clamps, the minimum diameter of the clamping range is 1 mm larger than that given in the above table.

Alternative diameters on request.



Toggle lock with intermediate position: fast and simple installation, high tightening torque

Visual overload protection: protects against excessive tightening

Hexagon socket screw SW5: fast and safe installation

Alternative with wing screw: tool integrated in the clamp

## Worm Drive Clamps Product Group 180

### Material

180 W4 Band and fastener: Stainless Steel,

Material no. 1.4301/UNS S30400

Screw: Stainless Steel, Material no. 1.4305/UNS S30300

### Series

Size range width x thickness

30.0 – 500.0 mm 12.2 x 0.9 mm

Special sizes up to 1000 mm diameter available on request.

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

### Screw Clamp design

#### Flap lock

After opening the body, the band can be formed by hand to approximately the clamping diameter. The flap can then be closed, and the clamp tightened by turning the screw. As a result, the screw only has to be turned for the last part of the clamping operation.

#### Intermediate stop

The flap is secured by an intermediate stop. Even when loosely installed, clamps cannot open on their own accord.

#### Visual overload protection

The housing incorporates a web which distorts visibly above a tightening torque of 4–5 Nm (35–44 in-lbs). This visual feature indicates that a Worm Drive Clamp is optimally tightened and still has an adequate factor of safety to the maximum tightening torque.

**Worm Drive Clamps with wing screw**

The Worm Drive Clamp with wing screw can be installed entirely without tools. The integral, torsionally-stiff wing provides optimum grip. The dimensions correspond to the standard design with the exception of the wing screw.

**Oetiker Universal Clamp Band**

The universal tension band is available in 8 or 12 mm band width, each on rolls with lengths of 10, 20, or 30 m, with a suitable lock for band widths of 8 or 12 mm.



Stainless steel universal tension band and lock.

**Assembly Recommendations**

For safe tightening of screw clamps without wing screws, we recommend use of a 5A/F hexagon wrench. The maximum static tightening torque is 6 Nm (53 in-lb).

**Installing an Universal Worm Drive Clamp**

Measure the circumference to be clamped and cut off the band to that length. Pass the end of the band, from above, through the slit in the closing element, and fold it back at least 40 mm below the band. Pass the second end of the band through the slit in the perforated part of the closing element and fold it back at least 40 mm. Lay the band around the part to be clamped, push the band end with perforation below the flap lock and close.



Tighten the clamp with a 5 A/F hexagon wrench. This system may not be entirely suitable for soft and flexible components.

**Order information****Item No.****Clamping range D (mm)****Screw Clamps**

Band width 12 mm, thickness 0.9 mm

18000206	30 – 60
18000205	50 – 80
18000206	80 – 110
18000207	110 – 140
18000208	140 – 170
18000209	170 – 200
18000300	200 – 230
18000301	230 – 260
18000302	260 – 290
18000303	290 – 320
18000304	320 – 350

**Screw Clamps with wing screw**

18000207	30 – 60
18000136	50 – 80
18000137	80 – 110
18000135	110 – 140
18000168	140 – 170
18000143	170 – 200
18000169	200 – 230
18000174	230 – 260
18000175	260 – 290
18000176	290 – 320
18000177	320 – 350

**Item No.****Clamping range D (mm)****Universal Clamp Band**

Band width 8 mm, thickness 0.5 mm

18000211	Closing element for stainless steel
18000213	Universal clamp band, roll 10 m
18000214	Universal clamp band, roll 20 m
18000215	Universal clamp band, roll 30 m

Band width 12 mm, thickness 0.5 mm

18000211	Closing element for stainless steel
18000216	Universal clamp band, roll 10 m
18000217	Universal clamp band, roll 20 m
18000218	Universal clamp band, roll 30 m

Worm Drive Clamps are available for a clamping range from 30 mm up to 1000 mm. Up to diameter 200 mm, Worm Drive Clamps are delivered pre-shaped, above diameter 200 mm they are supplied flat. Customer-specific sizes are available on request.



- Compact design: Minimal space requirement, miniature sizes
- Cylindrical screw head: fast, simple and safe installation
- Embossed band strip: reduced risk of damage to the part being clamped
- Alternative with wing screw: tool integrated in the clamp

## Worm Drive Clamps Mini Product Group 180

### Material type R PG 180

- W2 Band: Rust-resistant chromium steel,  
Material no. 1.4016/UNS S43000
- Screw and housing: Steel, zinc-plated, blue chromate finish

### Material type Mini R+S 180

- W4 Band and fastener: Stainless Steel,  
Material no. 1.4301/UNS S30400
- Screw: Stainless Steel,  
Material no. 1.4305/UNS S30300

### Series

Size range	width x thickness		
7.0 – 19.0 mm	5.0 x 0.4 mm	Type R <sup>1</sup>	
7.0 – 219.0 mm	5.0 x 0.4 mm	Type R+S <sup>2</sup>	

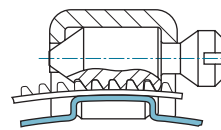
Some sizes are only available if an appropriate minimum quantity is ordered.

<sup>1</sup> R = stainless

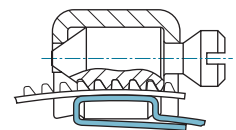
<sup>2</sup> R+S = stainless and acid-proof

### Clamp Design

#### Oetiker Mini R+S Worm Drive Clamps



Mini R+S  
Sizes 1–7 band overlapping



Mini R+S  
Above size 8, band reverse-bent

## Oetiker Mini R Worm Drive Clamps



Optionally, these clamps can be supplied open.

## Assembly Recommendations

For safe tightening of screw clamps without wing screws, we recommend to use a suitable standard screwdriver.

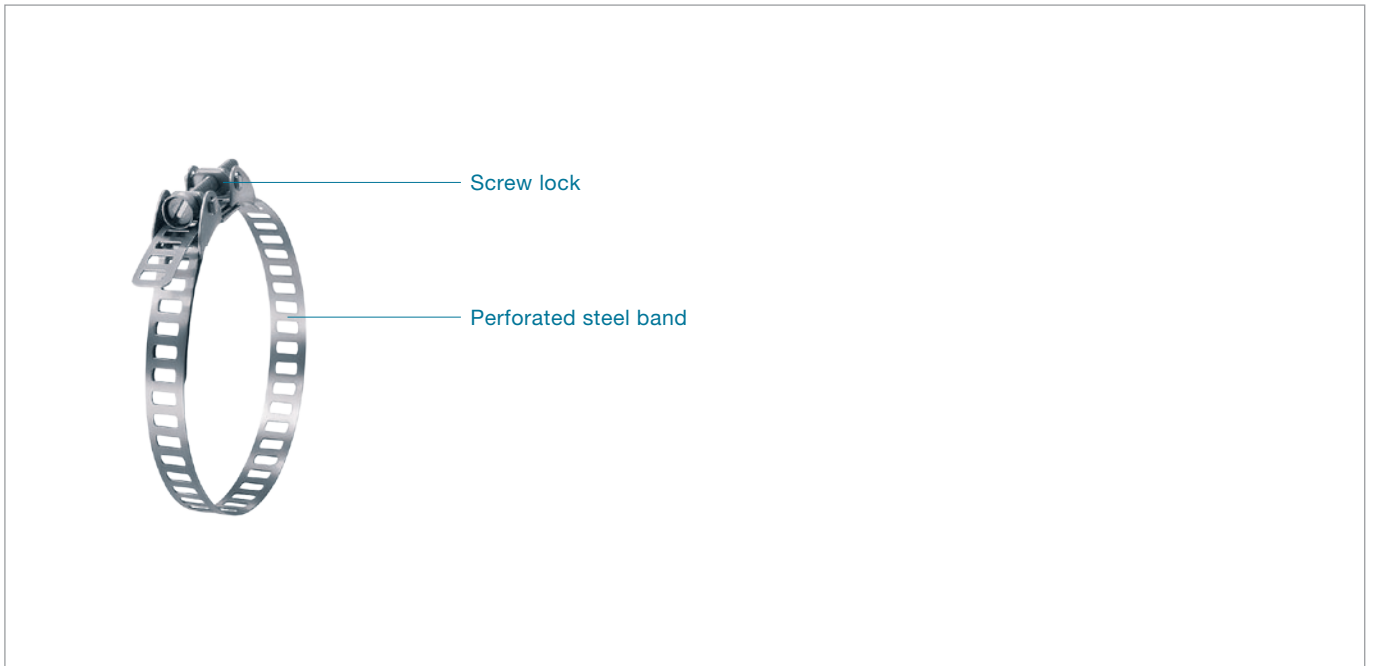
Maximum static tightening torques:

Mini R 70 Ncm (6 in-lb)

Mini R+S/wing screw 120 Ncm (10 in-lb)

## Order information

Item No.	Type	Clamping range D (mm)	Item No.	Type	Clamping range D (mm)
Worm Drive Clamp Mini R Band width 5 mm, thickness 0.4 mm			Worm Drive Clamps with wing screw Mini R+S Band width 5 mm, thickness 0.4 mm		
18000000	MINI R 1	6 – 11	18000183	MINI R+S F 1	7 – 11
18000001	MINI R 1.5	7 – 15	18000184	MINI R+S F 2	11 – 19
18000002	MINI R 2	11 – 19	18000185	MINI R+S F 3	18 – 29
18000248	MINI R 1 GZ	6 – 11	18000186	MINI R+S F 4	28 – 39
18000249	MINI R 2 GZ	9 – 19	18000187	MINI R+S F 5	38 – 49
18000252	MINI 1 S	6 – 11	18000188	MINI R+S F 6	48 – 59
18000254	MINI 2 S	11 – 19	18000189	MINI R+S F 7	58 – 69
18000255	MINI 1 GS	6 – 11	18000190	MINI R+S F 8	68 – 79
18000256	MINI 2 GS	9 – 19	18000191	MINI R+S F 9	78 – 89
GZ = rolled with cylindrical screw head S = open with hexagon-head screw GS = rolled with hexagon-head screw			18000192	MINI R+S F 10	88 – 99
Worm Drive Clamps with cylindrical screw head Mini R+S Band width 5 mm, thickness 0.4 mm			18000193	MINI R+S F 11	98 – 109
18000003	MINI R+S 1	7 – 11	18000194	MINI R+S F 12	108 – 119
18000004	MINI R+S 2	11 – 19	18000195	MINI R+S F 13	118 – 129
18000005	MINI R+S 3	18 – 29	18000196	MINI R+S F 14	128 – 139
18000006	MINI R+S 4	28 – 39	18000197	MINI R+S F 15	138 – 149
18000007	MINI R+S 5	38 – 49	18000198	MINI R+S F 16	148 – 159
18000008	MINI R+S 6	48 – 59	18000199	MINI R+S F 17	158 – 169
18000009	MINI R+S 7	58 – 69	18000200	MINI R+S F 18	168 – 179
18000010	MINI R+S 8	68 – 79	18000201	MINI R+S F 19	178 – 189
18000011	MINI R+S 9	78 – 89	18000202	MINI R+S F 20	188 – 199
18000012	MINI R+S 10	88 – 99	18000203	MINI R+S F 21	198 – 209
18000013	MINI R+S 11	98 – 109	18000204	MINI R+S F 22	208 – 219
18000014	MINI R+S 12	108 – 119			
18000015	MINI R+S 13	118 – 129			
18000016	MINI R+S 14	128 – 139			
18000017	MINI R+S 15	138 – 149			
18000018	MINI R+S 16	148 – 159			
18000019	MINI R+S 17	158 – 169			
18000020	MINI R+S 18	168 – 179			
18000021	MINI R+S 19	178 – 189			
18000022	MINI R+S 20	188 – 199			
18000023	MINI R+S 21	198 – 209			
18000024	MINI R+S 22	208 – 219			



Perforated band: [universally applicable for various diameters and widths](#)

Ratchet lock: [installation and removal without tools](#)

Screw lock: [simple installation, high holding force](#)

Various supply options: [kit format, bulk or to customer specification](#)

## Universal Clamps Product Group 174

### Material

PG 174 All parts are stainless steel, Material no. 1.4301/

UNS S30400

Optional alternative materials

### Series

Size range	width x thickness
≥ 35.0 mm	10.0 x 0.5 mm
≥ 80.0 mm	18.0 x 0.8 mm*
≥ 80.0 mm	30.0 x 0.7 mm**

\* For use with 18 mm screw lock

\*\* For use with 30 mm screw lock

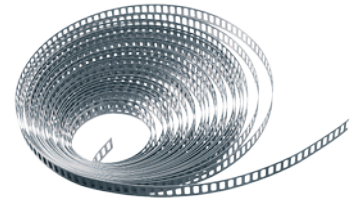




Screw lock 18 mm



Ratchet lock



Perforated steel band

## Clamp Design

### Concept

Individual closure mechanism (screw or ratchet lock) combined with perforated steel band – clamps can be round or have an irregular form. Available as kits, in bulk or to customer's specification. Special versions are available with integral tolerance compensation and non-perforated band.

Universal clamps are available in standard widths and thicknesses. The band dimensions should be chosen to give the necessary radial force (clamping force) to ensure the required retention properties under the anticipated ambient conditions.

## Assembly Recommendations

For installation of the Screw Lock, we recommend to use a suitable flat blade screwdriver, or a socket wrench.

### Static tightening torque

Screw lock for band width 10 mm: max. 3 Nm

Screw lock for band width 18 mm: max. 10 Nm

Screw lock for band width 30 mm: max. 20 Nm

Assembly instructions

Screw lock type



Determine the clamp length, e.g. wrap around object to be clamped and add approx. 50 mm.



Cut off band to required length. To avoid possible injury remove sharp edges with a file and trim corners at an angle.



Insert approximately 30 mm of band material through the top of the retaining slot and fold backwards underneath the remaining strip.



Position clamp over object. Insert free end of the band over the hooks and under the screw, protruding past the body of the screw lock. Engage the hooks in the perforations at the tightest possible position.



Tighten the clamp with a screwdriver or hexagon wrench.

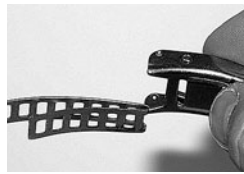
Ratchet lock type



Determine the clamp length, e.g. wrap around object to be clamped and add approx. 50 mm.



Cut off band to required length. To avoid possible injury remove sharp edges with a file and trim corners at an angle.



Insert approximately 30 mm of band material through the top of the retaining slot and fold backwards underneath the remaining strip.



Place lever in open position, pre-form the end of the band to match the curvature of lock. Pass free end under tongue and through slot, so that the end extends beyond the lock body.



Position clamp over object. With minimal force, press free end of band steel down and ratchet the lever back and fourth until tight. Firmly lock the lever down in the final retained position. "Securing dimple" prevents unintentional opening.

Order information

Item No.	Ref. No.	Size range (mm)	Item No.	Ref. No.	Band length (m)
<b>Screw lock</b>			<b>Perforated steel band</b>		
Compatible with band width 10 mm			Width 10 mm, material thickness 0.5 mm		
17400003	540R/10-	40 - 100	17400067	501R/10	10
17400002	540R/10+	100 - ...	17400081	501R/20	20
Compatible with band width 18 mm			Width 18 mm, material thickness 0.8 mm		
17400005	540R/18-	80 - 150	17400077	518R/10	10
17400004	540R/18+	150 - ...	17400079	518R/20	20
Compatible with band width 30 mm			<b>Steel band</b>		
17400006	540R/30+	80 - 150	Width 30 mm, material thickness 0.7 mm		
17400007	540R/30-	150 - ...	17400101	530R/10	10
<b>Ratchet lock</b>			17400102	530R/20	20
Compatible with band width 10 mm					
17400063	504R/60-	35 - 60			
17400064	504R/60+	60 - ...			



Comply with DIN 3017: Embossed clamp band, large clamping range, high holding force

Short housing saddle: uniform radial load with good seal

Weld-free body connection: secure connection, good corrosion resistance

Specially formed strip edges: reduced risk of damage to parts being clamped

## Worm Drive Clamps conform to DIN<sup>1</sup> 3017 Product Group 126 & 177

### Material PG 126

W2 Band and housing: stainless steel

Material No. 1.4016/UNS S43000

Hexagon-head screw: steel, zinc-plated

### Material PG 177

W4 All parts: stainless steel

Material No. 1.4301/UNS S30400

### Series

Diameter range	width x thickness
8.0 – 160.0 mm	9.0 x 0.6 mm
16.0 – 160.0 mm	12.0 x 0.7 mm

Other material qualities and diameter ranges on request.

### Clamp design

Oetiker Worm Drive Clamps are technically advanced, multi-range hose clamps, which cover a very wide range of clamping diameters. Hoses of differing diameters can be securely connected with a single size.

Manufactured by cold-forming, the bands of these worm drive clamps have a slightly curved form. The depth of the thread impressions reduces to each side – the thread impressions have their full depth in the middle.

Worm drive clamps in material quality W2 have a 7 A/F hexagon-head screw with cross recess (Phillips). Clamps in material quality W4 have a hexagon-head screw (7 A/F) with a standard screwdriver slot.

### Recommended installation

For professional installation, we recommend using a flexible screwdriver. This tool ensures safe installation even in hard-to-reach locations. For series installation requiring high process reliability, electronically monitored Oetiker controlled-torque screwdrivers should be used.

<sup>1</sup> DIN = Deutsches Institut für Normung

## Static tightening torque:

Clamping range	B = 9	B = 12
8 – 20	2 + 0.5 Nm	
From 12 – 160	3 + 0.5 Nm	
From 16 – 160		5 + 0.5 Nm

## Static test torque:

Clamping range	B = 9	B = 12
8 – 20	max. 2.6 Nm	
From 12 – 160	max. 4 Nm	
From 16 – 160		max. 6.5 Nm

## Order information

Item No.	Ref. No.	Size range (mm)	Item No.	Ref. No.	Size range (mm)
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## Worm Drive Clamps W2

Band width 9 mm, thickness 0.6 mm

12600257	WD9 8-12 C7 W2	8 – 12
12600258	WD9 10-16 C7 W2	10 – 16
12600260	WD9 12-22 C7 W2	12 – 22
12600262	WD9 16-27 C7 W2	16 – 27
12600263	WD9 20-32 C7 W2	20 – 32
12600265	WD9 25-40 C7 W2	25 – 40
12600266	WD9 30-45 C7 W2	30 – 45
12600268	WD9 40-60 C7 W2	40 – 60
12600269	WD9 50-70 C7 W2	50 – 70
12600270	WD9 60-80 C7 W2	60 – 80
12600271	WD9 70-90 C7 W2	70 – 90
12600272	WD9 80-100 C7 W2	80 – 100
12600273	WD9 90-110 C7 W2	90 – 110
12600274	WD9 100-120 C7 W2	100 – 120
12600275	WD9 110-130 C7 W2	110 – 130
12600276	WD9 120-140 C7 W2	120 – 140
12600277	WD9 130-150 C7 W2	130 – 150
12600278	WD9 140-160 C7 W2	140 – 160

## Worm Drive Clamps W4

Band width 9 mm, thickness 0.6 mm

17700188	WD9 8-12 C7 W4	8 – 12
17700189	WD9 10-16 C7 W4	10 – 16
17700191	WD9 12-22 C7 W4	12 – 22
17700193	WD9 16-27 C7 W4	16 – 27
17700194	WD9 20-32 C7 W4	20 – 32
17700196	WD9 25-40 C7 W4	25 – 40
17700197	WD9 30-45 C7 W4	30 – 45
17700199	WD9 40-60 C7 W4	40 – 60
17700200	WD9 50-70 C7 W4	50 – 70
17700201	WD9 60-80 C7 W4	60 – 80
17700202	WD9 70-90 C7 W4	70 – 90
17700203	WD9 80-100 C7 W4	80 – 100
17700204	WD9 90-110 C7 W4	90 – 110
17700205	WD9 100-120 C7 W4	100 – 120
17700206	WD9 110-130 C7 W4	110 – 130
17700207	WD9 120-140 C7 W4	120 – 140
17700208	WD9 130-150 C7 W4	130 – 150
17700209	WD9 140-160 C7 W4	140 – 160

## Worm Drive Clamps W2

Band width 12 mm, thickness 0.7 mm

12600298	WD12 16-27 C7 W2	16 – 27
12600299	WD12 20-32 C7 W2	20 – 32
12600301	WD12 25-40 C7 W2	25 – 40
12600302	WD12 30-45 C7 W2	30 – 45
12600304	WD12 40-60 C7 W2	40 – 60
12600305	WD12 50-70 C7 W2	50 – 70
12600306	WD12 60-80 C7 W2	60 – 80
12600307	WD12 70-90 C7 W2	70 – 90
12600308	WD12 80-100 C7 W2	80 – 100
12600309	WD12 90-110 C7 W2	90 – 110
12600310	WD12 100-120 C7 W2	100 – 120
12600311	WD12 110-130 C7 W2	110 – 130
12600312	WD12 120-140 C7 W2	120 – 140
12600313	WD12 130-150 C7 W2	130 – 150
12600314	WD12 140-160 C7 W2	140 – 160

## Worm Drive Clamps W4

Band width 12 mm, thickness 0.7 mm

17700229	WD12 16-27 C7 W4	16 – 27
17700230	WD12 20-32 C7 W4	20 – 32
17700232	WD12 25-40 C7 W4	25 – 40
17700233	WD12 30-45 C7 W4	30 – 45
17700235	WD12 40-60 C7 W4	40 – 60
17700236	WD12 50-70 C7 W4	50 – 70
17700237	WD12 60-80 C7 W4	60 – 80
17700238	WD12 70-90 C7 W4	70 – 90
17700239	WD12 80-100 C7 W4	80 – 100
17700240	WD12 90-110 C7 W4	90 – 110
17700241	WD12 100-120 C7 W4	100 – 120
17700242	WD12 110-130 C7 W4	110 – 130
17700243	WD12 120-140 C7 W4	120 – 140
17700244	WD12 130-150 C7 W4	130 – 150
17700245	WD12 140-160 C7 W4	140 – 160

## Worm Drive Clamps W2B, W3, W5

Band width 9 mm and 12 mm

On request

North America: PG 126

North America: PG 177



Conforms to SAE J1508 Type “F” (only for the North American market):

Perforated band, large clamping range

Short housing saddling: even radial load

Robust housing connection: high radial loads

High quality materials: good corrosion resistance

## Worm Drive Clamps North America conform to SAE<sup>1</sup> J1508 Type “F” Product Group 126 & 177

### Material 126

Band and housing are stainless steel materials

UNS 201/301, respectively

Hex-head screw is carbon steel, zinc-plated

### Material 177

Band and housing are stainless steel materials

UNS 201/301, respectively

Hex-head screw is stainless steel, UNS 410

### Series

Diameter range	width x thickness
3/8 – 7.0 in	1/2 x 0.025 in
10 – 178 mm	12.7 x 0.63 mm

Other material qualities and diameter ranges on request.

Oetiker Worm Drive Clamps are suitable for numerous applications, for example for agricultural and forestry machinery, on ship and marine applications, in maintenance, repair and operations industries, etc. As a result of the generous clamping range, the same size of clamp can be used for several joint diameters.

A choice of materials to suit the application makes them a practical solution for the low and medium pressure ranges. Oetiker Worm-Drive Clamps comply fully with the requirements of SAE J1508 for Type “F” clamps.

### Recommended installation

For professional installation, we recommend use of a flexible screwdriver. This tool ensures safe installation even in hard-to-reach locations.

In series production where there are high process reliability requirements, use of an electronically-monitored Oetiker torque screwdriver should be considered.

<sup>1</sup> SAE = Society of Automotive Engineers

Item No.	Installation tool
14100316	Flexible screwdriver 5/16"

## Recommended installation torque

Product Group	Torque (in-lb/Nm)
126	max. 30/max. 3.4
177	max. 35/max. 4.0

## Minimum ultimate torque

Product Group	Torque (in-lb/Nm)
126	min. 60/min. 6.9
177	min. 60/min. 6.9

## Order information

Item No.	SAE Size No.	Diameter range (in)	Diameter range (mm)	Item No.	SAE Size No.	Diameter range (in)	Diameter range (mm)
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## Worm Drive Clamps PG 126

Band width 1/2 in (12.7 mm), thickness 0.025 in (0.63 mm)

12600359	6	3/8 – 7/8	9 – 22
12600374	8	7/16 – 1	11 – 25
12600375	10	1/2 – 1 1/16	13 – 27
12600376	12	9/16 – 1 1/4	14 – 32
12600377	16	11/16 – 1 1/2	17 – 38
12600378	20	3/4 – 1 3/4	19 – 44
12600379	24	1 – 2	25 – 51
12600380	28	1 1/4 – 2 1/4	32 – 57
12600381	32	1 1/2 – 2 1/2	38 – 63
12600382	36	1 13/16 – 2 3/4	46 – 70
12600383	40	2 – 3	52 – 76
12600384	44	2 1/4 – 3 1/4	57 – 82
12600385	48	2 1/2 – 3 1/2	65 – 89
12600386	52	2 3/4 – 3 3/4	70 – 95
12600387	56	3 – 4	78 – 101
12600388	60	3 1/4 – 4 1/4	83 – 108
12600389	64	2 1/2 – 4 1/2	64 – 114
12600390	72	3 – 5	76 – 127
12600391	80	3 1/2 – 5 1/2	89 – 140
12600392	88	4 – 6	102 – 152
12600393	96	4 1/2 – 6 1/2	114 – 165
12600394	104	5 – 7	127 – 178

## Worm Drive Clamps PG 177

Band width 1/2 in (12.7 mm), thickness 0.025 in (0.63 mm)

17700338	6	3/8 – 7/8	9 – 22
17700339	8	7/16 – 1	11 – 25
17700340	10	1/2 – 1 1/16	13 – 27
17700341	12	9/16 – 1 1/4	14 – 32
17700342	16	11/16 – 1 1/2	17 – 38
17700343	20	3/4 – 1 3/4	19 – 44
17700344	24	1 – 2	25 – 51
17700345	28	1 1/4 – 2 1/4	32 – 57
17700346	32	1 1/2 – 2 1/2	38 – 63
17700347	36	1 13/16 – 2 3/4	46 – 70
17700348	40	2 – 3	52 – 76
17700349	44	2 1/4 – 3 1/4	57 – 82
17700350	48	2 1/2 – 3 1/2	65 – 89
17700351	52	2 3/4 – 3 3/4	70 – 95
17700352	56	3 – 4	78 – 101
17700353	60	3 1/4 – 4 1/4	83 – 108
17700354	64	2 1/2 – 4 1/2	64 – 114
17700355	72	3 – 5	76 – 127
17700356	80	3 1/2 – 5 1/2	89 – 140
17700357	88	4 – 6	102 – 152
17700358	96	4 1/2 – 6 1/2	114 – 165
17700359	104	5 – 7	127 – 178

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