

MIKALOR



**MIKALOR**



GRUPO MIKALOR



The Mikalor Group was founded with the aim of ensuring the specialization of each of the member companies and creating synergies in order to maximize our competitive advantage with respect to our competition.

One example of this specialization is that each of the companies in the Group is located in a different town within the province of Barcelona.

Each company has its own range and catalogue of products and can take decisions independently of the other companies in the Group in order to maximize specialization and productivity. The areas of finance and human resources are handled centrally by the Mikalor Group.

The principal member companies of the Mikalor Group are: Mikalor Tools and Engineering, Mikalor Hose Clamps, Mikalor Fastening Solutions and Damesa. Damesa is responsible for the promotion, sales and logistics of all the products manufactured by the different companies which form the Mikalor Group.

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\* Due to continuing technical advances and the evolution of materials used in the manufacture of the products in this catalogue, the Mikalor Group reserves the right to carry out dimensional, structural or other modifications without giving prior notice, with the aim of supplying a better and more efficient product.

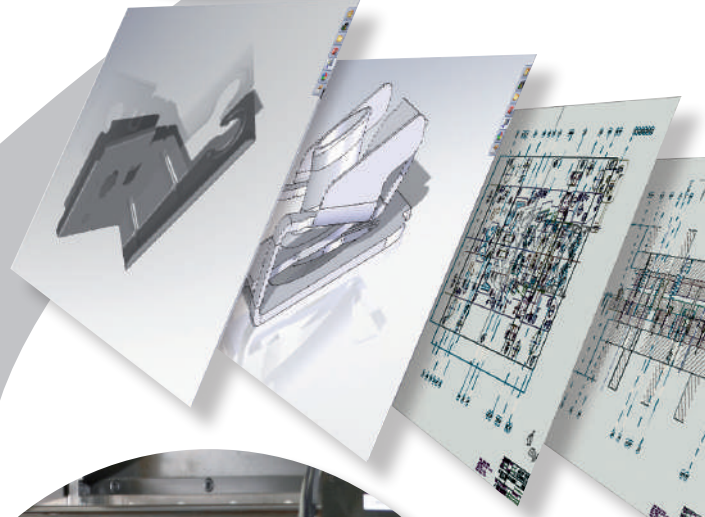
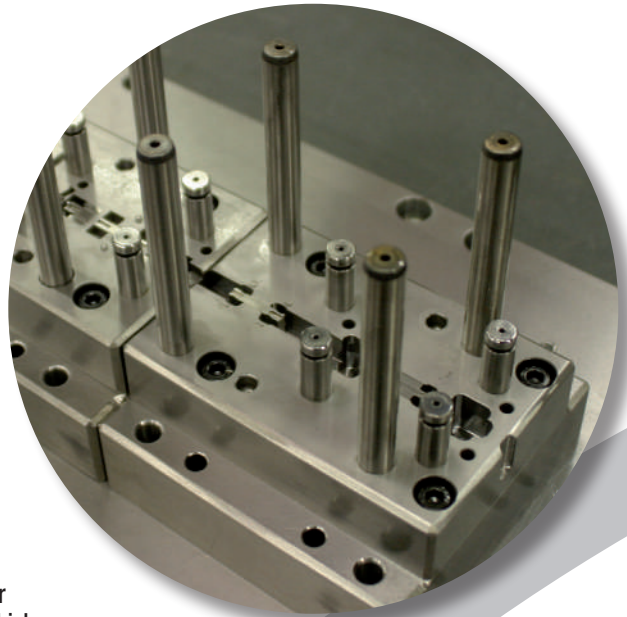
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## MIKALOR

### TOOLS & ENGINEERING

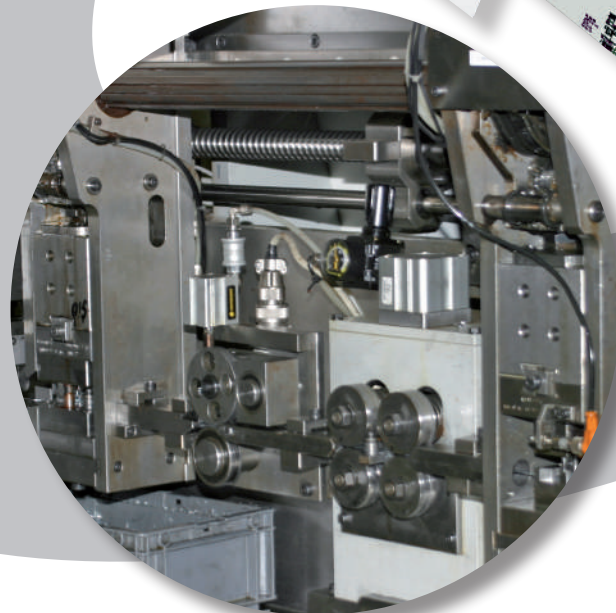
Situated in Sant Quirze del Vallès (Barcelona), MIKALOR Tools and Engineering carries out two different but complementary activities. The first of these is the specialization in the development of technical projects, managed by the engineering department. The second activity is the manufacture of dies, machine tools and machinery which are then used for the manufacture of all MIKALOR products as well as custom made machine tools for the manufacture of special parts according to the specifications of our customers. After manufacture, these machine tools are sent to the MIKALOR factory which specializes in the production of the parts in question.

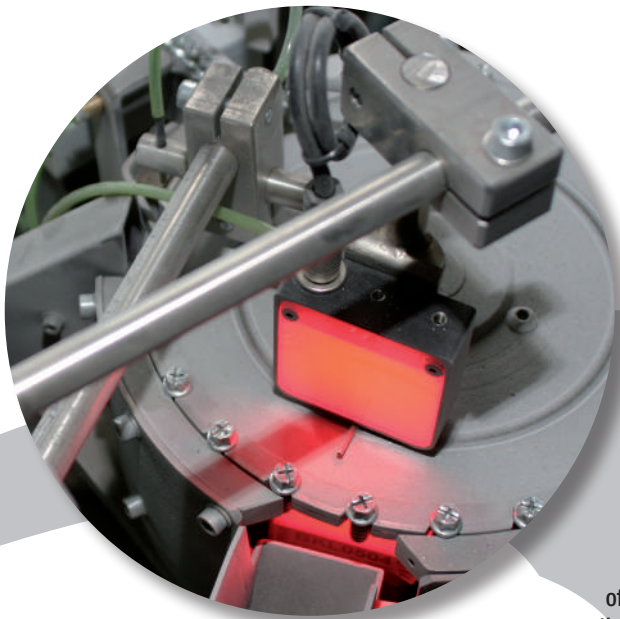


## MIKALOR

### FASTENING SOLUTIONS

Situated in Manresa (Barcelona), MIKALOR Fastening Solutions manufactures our range of standard metal fasteners. Full details on this range can be found in our separate fasteners catalogue. The parts manufactured at MIKALOR Fastening Solutions include DIN 1481 heavy-duty spring pins, washers, cage nuts, U-nuts, chimney nuts and other spring-steel fasteners. MIKALOR Fastening Solutions also manufactures special fasteners according to the specifications of our customers' engineering departments.





## MIKALOR

### HOSE CLAMPS

Situated in Sabadell (Barcelona), MIKALOR Hose Clamps is responsible for the manufacture of the complete range of hose clamps, including special clamps manufactured according to customers' specifications.

In order to ensure top quality in the design and manufacture of our standard and special hose clips and clamps, our engineering department has the most advanced machinery available on the market. We simulate customer applications on our state of the art test benches and carry out trialing and testing of the performance of our clamps, thereby ensuring that our customers' clamps will give optimum performance in their future application.



## damesa

Situated in Castellar del Vallès (Barcelona), Damesa is the branch of the Group specialized in sales, distribution and worldwide after-sales service of all the products manufactured by the member companies of the MIKALOR GROUP.

Our sales department has an in-depth knowledge of the products manufactured by the MIKALOR GROUP and also of the needs of our customer base. This is the key to the success of the MIKALOR GROUP. The sales department is the ideal conduit for new and innovative solutions to existing problems, either by adapting standard products or by developing completely new ones, thereby making sure that the customer receives the best solution at the lowest possible cost.



<b>W1</b> One Ear Clip	Page 10
<b>W4</b> Stainless steel One Ear Clip	Page 11
<b>W1</b> Two Ear Clip	Page 12
<b>W4</b> Stainless steel Two Ear Clip	Page 13
<b>W1</b> One Ear Clip with W4 Inner-Ring	Page 14
<b>W4</b> Stainless steel One Ear Clip with W4 Inner-Ring	Page 15



<b>W4</b> Inner ring for ASFA "L" Worm-Drive Clip	Page 16
<b>W4</b> Inner ring for ASFA "S" Worm-Drive Clip	Page 17
<b>W1</b> Multi Crimp Ring	Page 18
<b>W3</b> Multi Crimp Ring	Page 19



<b>W1</b> DIN 3016 Rubber-lined P-Clip (Form D)	Page 20-21
<b>W4</b> DIN 3016 Rubber-lined P-Clip (Form D)	Page 22-23
<b>W1</b> SMS Rubber-lined P-Clip	Page 24-25



<b>W1</b> Spring Clip	Page 26
<b>W1</b> Wire Clip	Page 27
<b>W1</b> Wire Clip with screw	Page 28



<b>W1</b> "Normal" Mini Clip	Page 29
<b>W2</b> Stainless steel Open Worm-Drive	Page 30
<b>W4</b> ADAPFLEX Endless band and housing	Page 31



<b>W4</b> Stainless steel Cable Tie	Page 36
<b>W1</b> "Stepless" Ear Clamp	Page 37



<b>W4</b> Clip Clamp	Page 38
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<b>W1</b> Fixed diameter "S" Clamp	Page 39
<b>W1</b> DIN 3021 Heavy-duty Spring-Band clip	Page 66
<b>W1</b> Exhaust Clamp	Page 67

# Index



<b>W1</b> ASFA "L" Worm-Drive Clip	Page 40
<b>W2</b> ASFA "L" Worm-Drive Clip	Page 41
<b>W3</b> ASFA "L" Worm-Drive Clip	Page 42
<b>W4</b> ASFA "L" Worm-Drive Clip"	Page 43
<b>W5</b> ASFA "L" Worm-Drive Clip	Page 44
<b>W1</b> ASFA "S" Worm-Drive Clip	Page 45
<b>W2</b> ASFA "S" Worm-Drive Clip	Page 46
<b>W3</b> ASFA "S" Worm-Drive Clip	Page 47
<b>W4</b> ASFA "S" Worm-Drive Clip	Page 48
<b>W5</b> ASFA "S" Worm-Drive Clip	Page 49



<b>W1</b> Super Heavy-Duty Clamp	Page 54-55
<b>W2</b> Supra Heavy-Duty Clamp	Page 56-57
<b>W4</b> Supra Heavy-Duty Clamp	Page 58-59
<b>W5</b> Supra Heavy-Duty Clamp	Page 60-61



<b>W4</b> Stainless Steel Double Bridge Clip	Page 68
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<b>TI</b> ASFA "Ti" Titanium Worm-Drive Clip	Page 69
<b>W3</b> ASFA "L" Worm-Drive Clip (Black Finish)	Page 70
<b>W3</b> ASFA "S" Worm-Drive Clip (Black Finish)	Page 71



<b>W3</b> ASFA "L" CT Constant tension Worm-Drive Clip	Page 72
<b>W4</b> ASFA "L" CT Constant tension Worm-Drive Clip	Page 73
<b>W3</b> ASFA "S" CT Constant tension Worm-Drive Clip	Page 74
<b>W4</b> ASFA "S" CT Constant tension Worm-Drive Clip	Page 75
<b>W2</b> Supra CT Constant tension Heavy-Duty Clamp	Page 76
<b>W4</b> Supra CT Constant tension Heavy-Duty Clamp	Page 77



Worm-Drive and Ear Clip Assortments	Page 82
Hose Clip and Clamp Display Units	Page 83



Hex Socket Flexible Screwdriver	Page 84
Front-closing Ear Clip Pincers	Page 84
Side-closing Ear Clip Pincers	Page 84
Pliers for DIN 3021 Heavy-Duty Spring band Clip	Page 84
Pliers for Clip Clamp	Page 85
Pneumatic tool for Clip Clamp	Page 85
Application tool for Stainless steel Cable Ties	Page 85

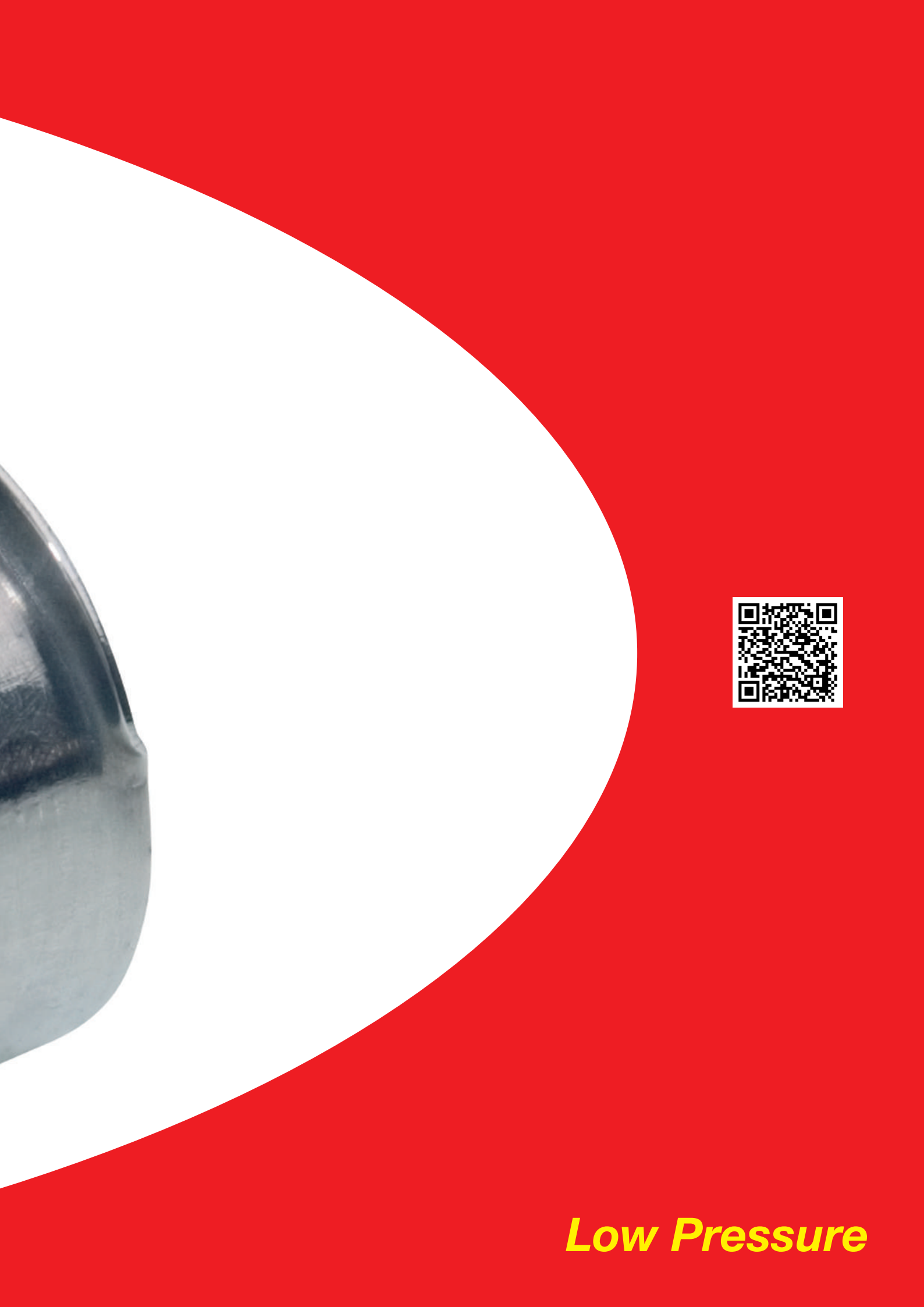


ASFA "L" <b>W1</b> Blister Pack	Page 88
ASFA "S" <b>W5</b> Blister Pack	Page 88
"Normal" Mini Clip <b>W1</b> Blister Pack	Page 89



**MIKALOR**





***Low Pressure***



**W1**

## One Ear Clip

The use of one ear clips is an economical solution for many simple hose assemblies, as they can be used with air or other fluids.

The practical design of ear clips means that they are tamper-proof once mounted.

The edges are rounded to avoid damage to the hose. One ear clips are easy, fast and safe to mount.

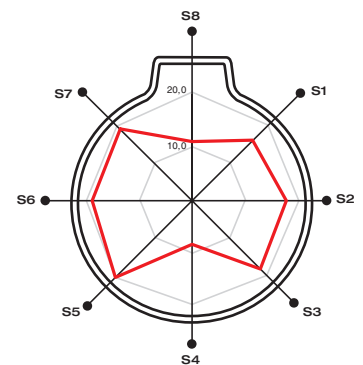
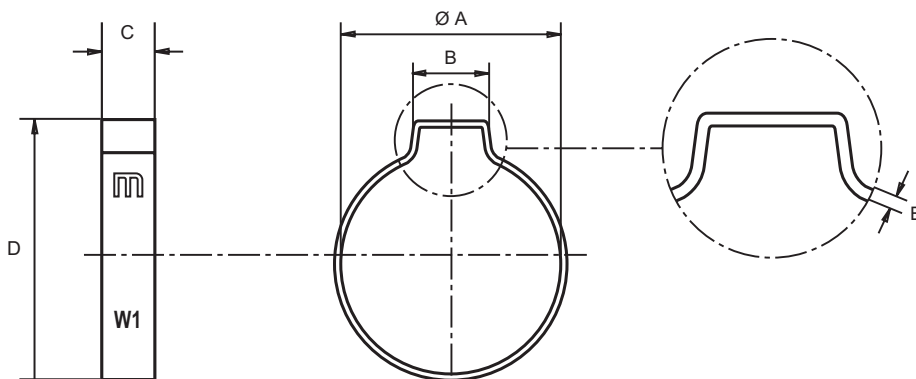
\* Please see pages 84 and 85 for further information regarding application tools.

\* Special diameters available on request.

### One Ear Clip - A10R W1

Application Ø		Part n° W1	A	B	C	D	E	Box Quantity (MOQ)	Packing	Colour
mm min. - max.	inches min. - max.									
7-9	9/32-11/32	03012080	9,3	5,5	6,0	13,0	0,8	1000	8000	SILVER-WHITE
8-10	5/16-13/32	03012072	10,3	6,0	6,0	14,0	0,8	1000	8000	SILVER-WHITE
9-11	11/32-27/16	03012013	11,3	6,5	6,5	15,0	0,8	1000	8000	SILVER-WHITE
10-12	13/32-15/32	03012021	12,3	7,0	6,5	16,0	0,8	500	8000	SILVER-WHITE
11-13	7/16-17/32	03012030	13,3	7,5	6,5	17,0	0,9	500	8000	SILVER-WHITE
12-14	15/32-9/16	03012048	14,3	8,0	7,0	18,5	1,0	500	4000	SILVER-WHITE
14-16	9/16-5/8	03012056	16,3	8,5	7,0	20,5	1,1	500	4000	SILVER-WHITE
16-18	5/8-23/32	03012064	18,5	9,5	7,0	23,0	1,1	500	4000	SILVER-WHITE

**W1 Band:** St 34 steel (DIN 2393 C) **Finish:** Silver-white Cr3 Zinc-Plated



#### Polar diagram

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— Force Kg	16,1	17,8	18,1	8,2	20,4	18,8	19,8	11,2

Torque / Efficiency [ Nm / daN ]



## Stainless Steel One Ear Clip

The use of one ear clips is an economical solution for many simple hose assemblies, used with air or other fluids.

Due to the AISI-304 steel used in the manufacture of these clips, their corrosion resistance is outstanding.

They are recommended especially in outdoor applications.

Like all ear clips, once mounted they are tamper-proof.

\* Please see pages 84 and 85 for further information regarding application tools.

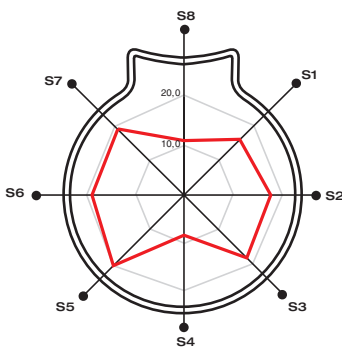
\* Special diameters available on request.

**W4**

### Stainless Steel One Ear Clip - A10R INOX W4

Application Ø		Part n° W4	A	B	C	D	E	Box Quantity (MOQ)	Packing	Colour
mm min. - max.	inches min. - max.									
7-9	9/32-11/32	23012440	9,3	5,5	6,0	13,0	0,8	1000	16000	STAINLESS STEEL
8-10	5/16-13/32	23012087	10,3	6,0	6,0	14,0	0,8	1000	16000	STAINLESS STEEL
9-11	11/32-7/16	23012010	11,3	6,5	6,5	15,0	0,8	1000	8000	STAINLESS STEEL
10-12	13/32-15/32	23012028	12,3	7,0	6,5	16,0	0,8	1000	8000	STAINLESS STEEL
11-13	7/16-17/32	23012036	13,3	7,5	6,5	17,0	0,8	500	8000	STAINLESS STEEL
12-14	15/32-9/16	23012044	14,3	8,0	7,0	18,5	1,0	500	8000	STAINLESS STEEL
13-15	17/32-19/32	23012079	15,3	8,0	7,0	19,5	1,0	500	4000	STAINLESS STEEL
14-16	9/16-5/8	23012052	16,3	8,5	7,0	20,5	1,0	500	4000	STAINLESS STEEL
15-17	19/32-11/16	23012458	17,5	9,0	7,0	22,0	1,0	500	4000	STAINLESS STEEL
16-18	5/8-23/32	23012060	18,5	9,0	7,0	23,0	1,0	500	4000	STAINLESS STEEL
17-19	11/16-3/4	23012423	19,5	9,5	7,5	24,0	1,0	250	2000	STAINLESS STEEL
18-20	5/8-25/32	23012431	20,5	10,0	7,5	25,0	1,0	250	2000	STAINLESS STEEL

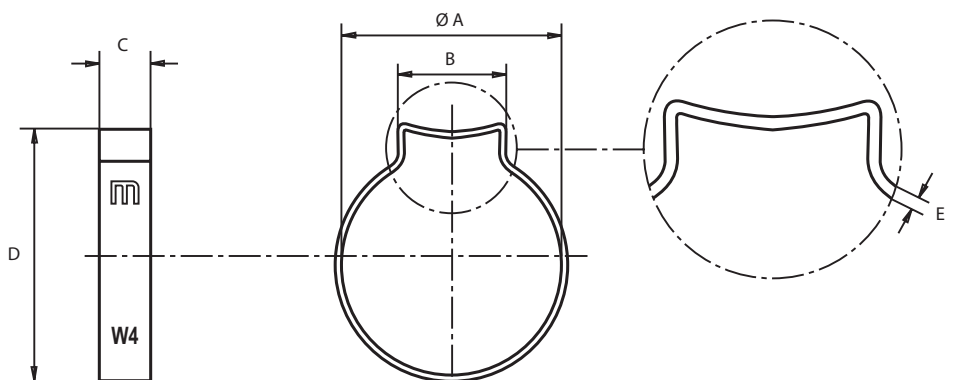
**W4 Band:** Stainless steel (AISI-304) (A2) **Finish:** 100% Stainless steel



#### Polar Diagram

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— Force Kg	16,1	17,8	18,1	8,2	20,4	18,8	19,8	11,2

Torque / Efficiency [ Nm / daN ]





## Two Ear Clip

The use of two ear clips is an economical solution for many simple hose assemblies, used with air or other fluids.

The two ears give the clip extra grip and help to maintain constant pressure around the hose. Fitting is more flexible and exact. The practical design of Two-ear clips means that they clamp firmly on to the assembly and are tamperproof once mounted.

The edges are rounded to avoid damage to the hose. Two ear clips offer great versatility in simple hose assemblies.

\* Please see pages 84 and 85 for further information regarding application tools.

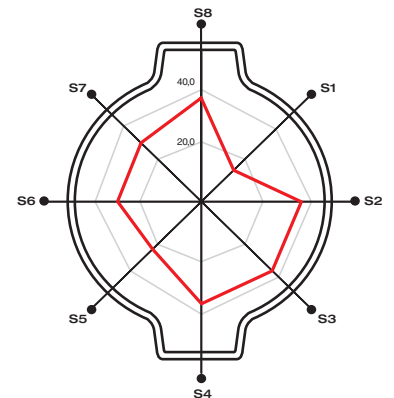
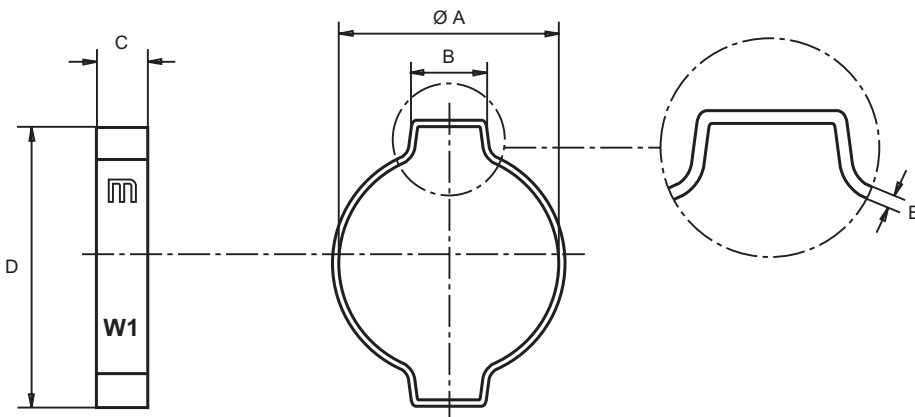
\* Special diameters available on request.

**W1**

### Two Ear Clip - A20R W1

Application Ø		Part n° W1	A	B	C	D	E	Box Quantity (MOQ)	Packing	Colour
mm min. - max.	inches min. - max.									
5-7	3/16-9/32	03012101	7,3	4,3	6,0	11,0	0,6	2000	16000	SILVER-WHITE
7-9	9/32-11/32	03012110	9,3	4,8	6,0	13,5	0,8	1000	16000	SILVER-WHITE
9-11	11/32-7/16	03012128	11,3	5,3	6,5	17,0	0,8	1000	8000	SILVER-WHITE
10-12	13/32-15/32	03012099	12,3	5,5	6,5	18,0	0,9	1000	8000	SILVER-WHITE
11-13	7/16-17/32	03012136	13,3	5,8	6,5	19,0	1,0	500	8000	SILVER-WHITE
13-15	17/32-19/32	03012144	15,3	6,3	7,0	21,5	1,1	500	4000	SILVER-WHITE
14-17	9/16-11/16	03012152	17,5	6,6	7,0	24,0	1,1	500	4000	SILVER-WHITE
15-18	19/32-23/32	03012160	18,5	7,0	7,5	25,0	1,1	500	500	SILVER-WHITE
17-20	11/16-25/32	03012179	20,5	7,6	7,5	27,0	1,1	250	2000	SILVER-WHITE
19-21	3/4-27/32	03012187	21,5	7,9	8,0	28,0	1,1	250	2000	SILVER-WHITE
20-23	11/16-29/32	03012195	23,5	8,5	8,0	31,0	1,1	250	2000	SILVER-WHITE
22-25	7/8-2/2	03012208	25,5	9,1	8,5	33,0	1,3	200	1600	SILVER-WHITE
23-27	29/32-1-1/16	03012216	27,5	9,4	8,5	35,0	1,3	200	1600	SILVER-WHITE
25-28	2/2-1-3/32	03012224	28,5	10,0	9,0	36,0	1,3	200	200	SILVER-WHITE
28-31	1-3/32-1-7/32	03012232	31,5	10,6	9,0	39,0	1,3	100	800	SILVER-WHITE
31-34	1-7/32-1-11/32	03012240	34,5	11,0	9,5	42,0	1,3	100	800	SILVER-WHITE
34-37	1-11/32-1-15/32	03012259	37,5	11,5	9,5	46,0	1,5	100	800	SILVER-WHITE
37-40	1-15/32-1-19/32	03012267	40,5	12,0	10,0	49,0	1,5	100	100	SILVER-WHITE
40-43	1-19/32-1-11/16	03012275	43,5	12,5	10,0	53,0	1,5	75	600	SILVER-WHITE
43-46	1-11/16-1-13/16	03012283	46,5	13,0	10,5	56,0	1,5	75	300	SILVER-WHITE

**W1 Band:** St 34 steel (DIN 2393 C) **Finish:** Silver-white Cr3 Zinc-Plated



**Polar Diagram**

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— Force Kg	15,2	32,6	32,6	33,9	22,2	27,7	28,2	35,1
Min. value	15,2							

Torque / Efficiency [ Nm / daN ]



## Stainless Steel Two Ear Clip

The use of two ear clips is an economical solution for many simple hose assemblies, used with air or other fluids.

The two ears give the clip extra grip and help to maintain constant pressure around the hose. Fitting is more flexible and exact.

The practical design of two ear clips means that they clamp firmly on to the assembly and cannot be removed once mounted. The edges are rounded to avoid damage to the hose. Due to the AISI-304 steel used in the manufacture of these clips, their corrosion resistance is outstanding. They are recommended especially in outdoor applications.

\* Please see pages 84 and 85 for further information regarding application tools.

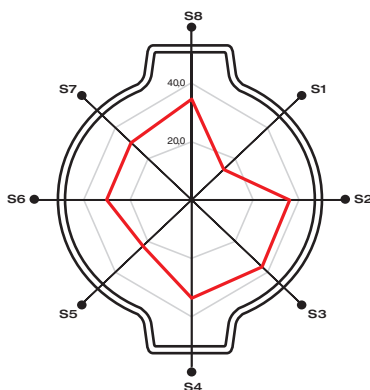
\* Special diameters available on request.

**W4**

### Stainless Steel Two Ear Clip - A20R W4

Application Ø		Part n° W4	A	B	C	D	E	Box Quantity (MOQ)	Packing	Colour
mm min. - max.	inches min. - max.									
5-7	3/16-9/32	23012116	9,3	4,8	6,0	14,5	0,8	1000	16000	STAINLESS STEEL
7-9	9/32-11/32	23012124	11,3	5,3	6,5	16,5	0,8	1000	8000	STAINLESS STEEL
9-11	11/32-7/16	23012132	13,3	5,8	6,5	19,0	0,8	500	8000	STAINLESS STEEL
10-12	13/32-15/32	23012140	15,3	6,3	7,0	21,5	1,0	500	4000	STAINLESS STEEL
11-13	7/16-17/32	23012159	17,5	6,6	7,0	24,0	1,0	500	4000	STAINLESS STEEL
13-15	17/32-19/32	23012167	18,5	7,0	7,5	25,0	1,0	500	4000	STAINLESS STEEL
14-17	9/16-11/16	23012175	20,5	7,6	7,5	27,0	1,0	250	2000	STAINLESS STEEL
15-18	19/32-23/32	23012183	21,5	7,9	8,0	28,5	1,0	250	2000	STAINLESS STEEL
17-20	11/16-25/32	23012191	23,5	8,5	8,0	30,5	1,0	250	2000	STAINLESS STEEL
18-21	3/4-27/32	23012204	25,5	9,1	8,5	33,5	1,2	200	1600	STAINLESS STEEL

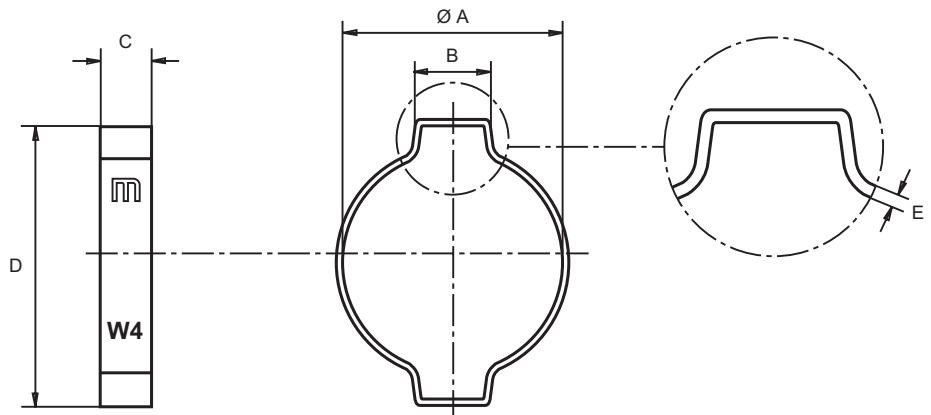
**W4 Band:** Stainless steel (AISI-304) (A2) **Finish:** 100% Stainless steel



#### Polar Diagram

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— Force Kg	15,2	32,6	32,6	33,9	22,2	27,7	28,2	35,1
<i>Min. value 15,2</i>								

Torque / Efficiency [ Nm / daN ]





**W1**

## One Ear Clip with stainless steel inner-ring

The use of one ear clips is an economical solution for many simple hose assemblies, as they can be used with air or other fluids.

The inner-ring means that the clamp fits snugly around the hose, while the beveled edges protect the hose from being pinched during fitting.

The use of one ear clips with inner-ring is recommended when working with delicate hoses

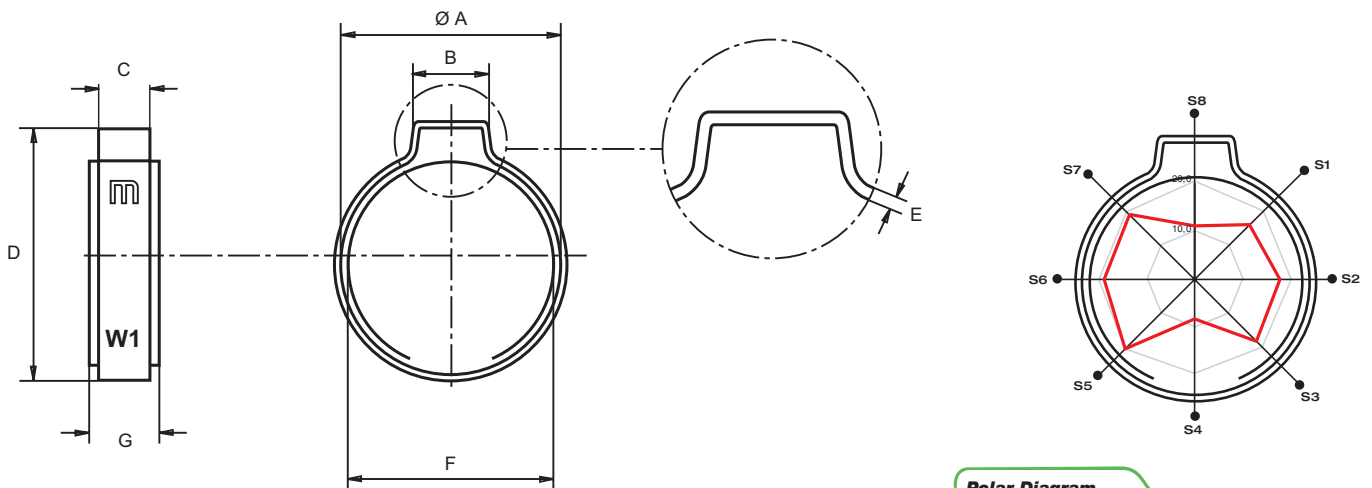
\* Please see pages 84 and 85 for further information regarding application tools.

\* Special diameters available on request.

### One Ear Clip with stainless steel inner-ring W1- A1ORB

Application Ø		Part n° W1	A	B	C	D	E	F	G	Box Quantity (MOQ)	Packing	Colour
mm min. - max.	inches min. - max.											
7,5-8,5	19/64-21/64	03011009	9,3	5,5	6,0	13,0	0,8	8,5	7,8	1000	8000	SILVER-WHITE
8,0-9,5	5/6-3/8	03011010	10,3	6,0	6,0	14,0	0,8	9,5	7,8	1000	8000	SILVER-WHITE
9,0-10,5	23/64-13/32	03011029	11,3	6,5	6,5	15,0	0,8	10,5	7,8	1000	8000	SILVER-WHITE
10,0-11,5	25/64-29/64	03011037	12,3	7,0	6,5	16,0	0,8	11,5	7,8	500	8000	SILVER-WHITE
10,5-12,5	13/32-31/64	03011045	13,3	7,5	6,5	17,0	0,9	12,5	7,8	500	8000	SILVER-WHITE
11,5-13,3	29/64-17/32	03011053	14,3	8,0	7,0	18,5	1,0	13,3	8,8	500	4000	SILVER-WHITE
13,0-15,3	33/64-39/64	03011061	16,3	8,5	7,0	20,5	1,1	15,3	8,8	500	4000	SILVER-WHITE
15,0-17,3	19/32-11/16	03011070	18,5	9,5	7,0	23,0	1,1	17,3	8,8	500	4000	SILVER-WHITE

**W1 Band:** St 34 steel (DIN 2393 C) **Inner-ring:** Stainless steel (AISI-301) **Finish:** Silver-white Cr3 Zinc-Plated



#### Polar Diagram

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— Force Kg	16,1	17,8	18,1	8,2	20,4	18,8	19,8	11,2

Torque / Efficiency [ Nm / daN ]



## Stainless Steel One Ear Clip with stainless steel inner-ring

The use of one ear clips is an economical solution for many simple hose assemblies, as they can be used with air or other fluids.

The inner-ring means that the clamp fits snugly around the hose, while the beveled edges protect the hose from being pinched during fitting. Due to the AISI-304 stainless steel used in the manufacture of these clips, their corrosion resistance is outstanding.

These clips are especially recommended in outdoor and marine applications.

\* Please see pages 84 and 85 for further information regarding application tools.

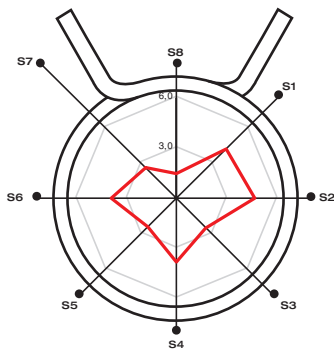
\* Special diameters available on request

**W4**

### Stainless Steel One Ear Clip with stainless steel inner-ring - A10RII W4

Application Ø		Part n° W4	A	B	C	D	E	F	G	Box Quantity (MOQ)	Packing	Colour
mm min. - max.	inches min. - max.											
7,5-8,5	19/64-21/64	23012300	9,3	5,5	6,0	13,0	0,8	8,5	7,8	2000	16000	STAINLESS STEEL
8,2-9,5	21/64-3/8	23012319	10,3	6,0	6,0	14,0	0,8	9,5	7,8	1000	8000	STAINLESS STEEL
9,0-10,5	23/64-13/32	23012327	11,3	6,5	6,5	15,0	0,8	10,5	7,8	1000	8000	STAINLESS STEEL
10,0-11,5	25/64-29/64	23012335	12,3	7,0	6,5	16,0	0,8	11,5	7,8	1000	8000	STAINLESS STEEL
10,5-12,5	13/32-31/64	23012343	13,3	7,5	6,5	17,0	0,8	12,5	7,8	500	8000	STAINLESS STEEL
11,5-13,5	29/64-17/32	23012351	14,3	8,0	7,0	18,5	1,0	13,5	7,8	500	4000	STAINLESS STEEL
12,5-14,5	31/64-37/64	23012360	15,3	8,0	7,0	19,5	1,0	14,5	8,8	500	4000	STAINLESS STEEL
13,0-15,3	33/64-39/64	23012378	16,3	8,5	7,0	20,5	1,0	15,3	8,8	500	4000	STAINLESS STEEL
14,0-16,3	35/64-41/64	23012386	17,5	9,0	7,0	22,0	1,0	16,3	8,8	250	4000	STAINLESS STEEL
15,0-17,3	19/32-11/16	23012394	18,5	9,5	7,0	23,0	1,0	17,3	8,8	250	4000	STAINLESS STEEL
16,0-18,3	5/8-23/32	23012407	19,5	9,5	7,5	24,0	1,0	18,3	9,8	250	2000	STAINLESS STEEL
17,0-19,3	43/64-49/64	23012415	20,5	10,0	7,5	25,0	1,0	19,3	9,8	200	2000	STAINLESS STEEL

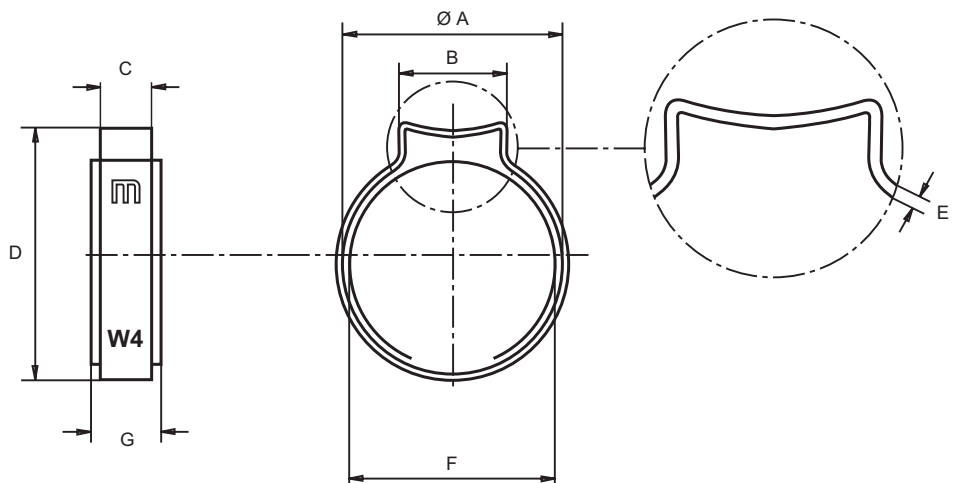
**W4 Band :** Stainless steel (AISI-304) (A2) **Inner-ring :** Stainless steel (AISI-301) **Finish:** 100% Stainless steel



**Polar Diagram**

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— Force Kg	4,2	4,7	2,5	3,8	2,4	3,9	2,6	1,5

Torque / Efficiency [ Nm / daN ]





**W4**

## Inner-Ring for ASFA "L" Worm-Drive Clip

This inner-ring for ASFA "L", worm-drive clip with 9mm bandwidth, was designed to give extra protection to the hose, especially where it enters into contact with the underside of the clamp housing.

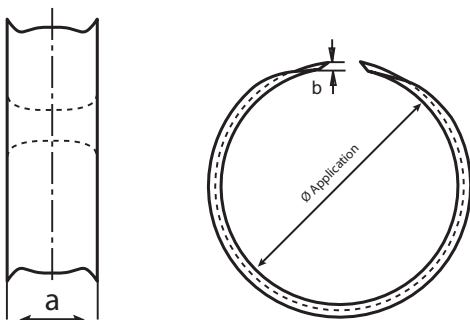
Inner-rings are particularly recommended for use with silicone hoses which are quite fragile and can be cut easily. The inner-ring ensures a good fit, prevents damage to the hose and also contributes to an even distribution of pressure around the hose.

The black coating helps to ensure that the rings adapt correctly to the hose assembly.

### Inner Rings for ASFA "L" worm-drive clip

Application Ø		Part n° Black W4	Part n° Plain W4	a +0,5	b	Box Quantity (MOQ)	Packing
mm min. - max.	inches min. - max.						
16-27	5/8-1-1/16	73031031	03031034	13,5	0,25	100	400
20-32	25/32-1-1/4	73031040	03031042	13,5	0,25	100	400
25-40	1-1-9/16	73031058	03031050	13,5	0,25	100	400
30-45	1-3/16-1-3/4	73031066	03031069	13,5	0,25	100	400
32-50	1-1/4-1-31/32	73031074	03031077	13,5	0,25	100	400
40-60	1-9/16-2-3/8	73031082	03031085	13,5	0,25	100	400
50-70	1-31/32-2-3/4	73031090	03031093	13,5	0,25	100	400
60-80	2-3/8-3-1/8	73031103	03031106	13,5	0,25	100	400
70-90	2-3/4-3-1/2	73031111	03031114	13,5	0,25	50	400
80-100	3-1/8-3-15/16	73031120	03031122	13,5	0,25	50	400
90-110	3-1/2-4-5/16	73031138	03031130	13,5	0,25	25	200
100-120	3-15/16-4-23/32	73031146	03031149	13,5	0,25	25	200
110-130	4-5/16-5-1/8	73031154	03031157	13,5	0,25	25	25
120-140	4-23/32-5-1/2	73031162	03031165	13,5	0,25	25	25
130-150	5-1/8-5-29/32	73031170	03031173	13,5	0,25	25	25
140-160	5-1/2-6-5/16	73031189	03031181	13,5	0,25	25	25

**W4 Band** : Stainless Steel (AISI-301) **Finish**: Black PTFE or Stainless steel







**W4**

## Inner-Ring for ASFA "S" Worm-Drive Clip

This inner-ring for ASFA "S", worm-drive Clip with 12mm bandwidth, was designed to give extra protection to the hose, especially where it enters into contact with the underside of the clamp housing.

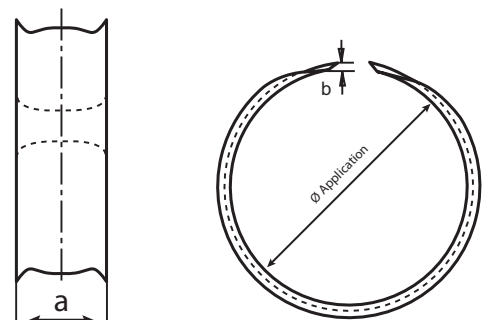
Inner-rings are particularly recommended for use with silicone hoses which are quite fragile and can be cut easily. The inner-ring ensures a good fit, prevents damage to the hose and also contributes to an even distribution of pressure around the hose.

The black coating helps to ensure that the rings adapt correctly to the hose assembly.

### Inner Rings for ASFA "S" worm-drive clip

Application Ø		Part n° Black W4	Part n° Plain W4	a +0,5	b	Box Quantity (MOQ)	Packing
mm min. - max.	inches min. - max.						
16-27	5/8-1-1/16	73031218	03031210	16,5	0,25	100	400
20-32	25/32-1-1/4	73031226	03031228	16,5	0,25	100	400
25-40	1-1-9/16	73031234	03031236	16,5	0,25	100	400
30-45	1-3/16-1-3/4	73031242	03031244	16,5	0,25	100	400
32-50	1-1/4-1-31/32	73031250	03031252	16,5	0,25	100	400
40-60	1-9/16-2-3/8	73031269	03031260	16,5	0,25	100	400
50-70	1-31/32-2-3/4	73031277	03031279	16,5	0,25	100	400
60-80	2-3/8-3-1/8	73031285	03031287	16,5	0,25	100	100
70-90	2-3/4-3-1/2	73031293	03031295	16,5	0,25	50	400
80-100	3-1/8-3-15/16	73031306	03031309	16,5	0,25	50	400
90-110	3-1/2-4-5/16	73031314	03031317	16,5	0,25	25	200
100-120	3-15/16-4-23/32	73031322	03031325	16,5	0,25	25	200
110-130	4-5/16-5-1/8	73031330	03031333	16,5	0,25	25	25
120-140	4-23/32-5-1/2	73031349	03031341	16,5	0,25	25	25
130-150	5-1/8-5-29/32	73031357	03031350	16,5	0,25	25	25
140-160	5-1/2-6-5/16	73031365	03031368	16,5	0,25	25	25
150-170	5-29/32-6-11/16	73031373	03031376	16,5	0,25	25	25
160-180	6-5/16-7-3/32	73031381	03031384	16,5	0,25	25	25
170-190	6-11/16-7-15/32	73031390	03031392	16,5	0,25	10	10
180-200	7-3/32-7-7/8	73031402	03031405	16,5	0,25	10	10
190-210	7-31/64-8-17/64	73031410	03031413	16,5	0,25	10	10
200-220	7-7/8-8-21/32	73031429	03031421	16,5	0,25	10	10
210-230	8-17/64-9-1/16	73031437	03031430	16,5	0,25	10	10
220-240	8-21/32-9-29/64	73031445	03031448	16,5	0,25	10	10

**W4 Band** : Stainless Steel (AISI-301) **Finish**: Black PTFE or Stainless steel





**W1**

## Multi Crimp Ring

Multi crimp rings are designed especially for use in the automotive sector.

They are particularly useful when used as a mandrel in the case of applications using soft hoses. The crimp ring can be fitted inside the hose and used to ensure a leak-proof joint when combined with a standard hose clamp mounted on the outer wall of the hose.

\* Special material, finishes and diameters available on request.

### Multi Crimp Ring W1

Application Ø		Part nº W1	Internal Ø	Thickness	Colour	Box Quantity (MOQ)	Packing
mm	inches						
20	25/32	03036084	20	1,2	SILVER-WHITE	50	400
22	55/64	03036126	22	1,2	SILVER-WHITE	50	400
24	15/16	03036168	24	1,2	SILVER-WHITE	50	400
26	1-1/32	03036200	26	1,2	SILVER-WHITE	50	400
27	1-1/16	03036221	27	1,2	SILVER-WHITE	50	400
28	1-7/64	03036242	28	1,2	SILVER-WHITE	50	400
29	1-9/64	03036263	29	1,2	SILVER-WHITE	50	400
30	1-3/16	03036284	30	1,2	SILVER-WHITE	50	400
31	1-7/32	03036305	31	1,2	SILVER-WHITE	50	400
32	1-17/64	03036326	32	1,2	SILVER-WHITE	50	400
33	1-19/64	03036347	33	1,2	SILVER-WHITE	50	400
34	1-11/32	03036368	34	1,2	SILVER-WHITE	50	400
35	1-3/8	03036389	35	1,2	SILVER-WHITE	50	400
36	1-27/64	03036400	36	1,2	SILVER-WHITE	50	400
37	1-29/64	03036421	37	1,2	SILVER-WHITE	50	400
38	1-1/2	03036442	38	1,2	SILVER-WHITE	50	400
39	1-17/32	03036463	39	1,2	SILVER-WHITE	50	400
40	1-37/64	03036484	40	1,2	SILVER-WHITE	50	400
41	1-39/64	03036505	41	1,2	SILVER-WHITE	50	400
42	1-21/32	03036526	42	1,2	SILVER-WHITE	50	400
43	1-11/16	03036547	43	1,2	SILVER-WHITE	50	400
44	1-47/64	03036568	44	1,2	SILVER-WHITE	50	400
45	1-49/64	03036589	45	1,2	SILVER-WHITE	50	400
46	1-13/16	03036600	46	1,2	SILVER-WHITE	50	400
47	1-27/32	03036621	47	1,2	SILVER-WHITE	50	400
48	1-57/64	03036642	48	1,2	SILVER-WHITE	50	400
49	1-59/64	03036663	49	1,2	SILVER-WHITE	50	400
50	1-31/32	03036684	50	1,2	SILVER-WHITE	50	400

**W1 Ring:** St 34 steel (DIN 2393 C) **Finish:** Silver-white Cr3 Zinc-Plated



## Multi Crimp Ring

Multi crimp rings are designed especially for use in the automotive sector.

They are particularly useful when used as a mandrel in the case of applications using soft hoses. The crimp ring can be fitted inside the hose and used to ensure a leak-proof joint when combined with a standard hose clamp mounted on the outer wall of the hose.

\* Special material, finishes and diameters available on request.

**W3**

### Multi Crimp Ring W3

Application Ø		Part n° W3	Internal Ø	Thickness	Colour	Box Quantity (MOQ)	Packing
mm	inches						
16	5/8	033036001	16	1,2	STAINLESS STEEL	50	400
17	43/64	033036022	17	1,2	STAINLESS STEEL	50	400
18	45/64	033036043	18	1,2	STAINLESS STEEL	50	400
19	3/4	033036064	19	1,2	STAINLESS STEEL	50	400
20	25/32	033036085	20	1,2	STAINLESS STEEL	50	400
21	55/64	033036106	21	1,2	STAINLESS STEEL	50	400
22	15/16	033036127	22	1,2	STAINLESS STEEL	50	400
23	1-1/32	033036148	23	1,2	STAINLESS STEEL	50	400
24	1-1/16	033036169	24	1,2	STAINLESS STEEL	50	400
25	1-7/64	033036180	25	1,2	STAINLESS STEEL	50	400
26	1-9/64	033036201	26	1,2	STAINLESS STEEL	50	400
27	1-3/16	033036222	27	1,2	STAINLESS STEEL	50	400
28	1-7/32	033036243	28	1,2	STAINLESS STEEL	50	400
29	1-17/64	033036264	29	1,2	STAINLESS STEEL	50	400
30	1-19/64	033036285	30	1,2	STAINLESS STEEL	50	400
31	1-11/32	033036306	31	1,2	STAINLESS STEEL	50	400
32	1-3/8	033036327	32	1,2	STAINLESS STEEL	50	400
33	1-27/64	033036348	33	1,2	STAINLESS STEEL	50	400
34	1-29/64	033036369	34	1,2	STAINLESS STEEL	50	400
35	1-1/2	033036380	35	1,2	STAINLESS STEEL	50	400
36	1-17/32	033036401	36	1,2	STAINLESS STEEL	50	400
37	1-37/64	033036422	37	1,2	STAINLESS STEEL	50	400
38	1-1/2	033036443	38	1,2	STAINLESS STEEL	50	400
39	1-17/32	033036464	39	1,2	STAINLESS STEEL	50	400
40	1-37/64	033036485	40	1,2	STAINLESS STEEL	50	400

**W3 Ring:** Stainless Steel (AISI 430) **Finish:** 100% Stainless steel



## DIN 3016 Rubber-lined P-Clip (Form D)

These rubber-lined connecting clamps, also known as "P-Clips" are composed of a zinc-plated mild steel band lined with EPDM rubber.

This rubber lining allows for firm and safe clamping in the application zone and prevents potential damage due to vibration.

The screw holes at either end of the band are reinforced with steel plates to ensure they clamp down firmly.

P-Clips are particularly recommended for mounting pipes, electric cable ducting and hoses in a multitude of different applications.

\* P-Clips can be supplied in bandwidths of up to 25mm and in diameters up to 100 mm.

\* Other models of DIN 3016 P-Clips are also available on request: Forms A, B, C, E and F and also without rubber lining.

\* Other types of rubber lining are also available.

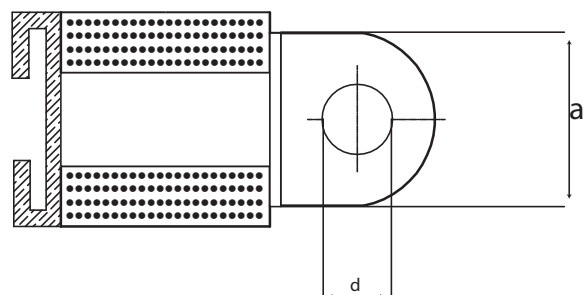
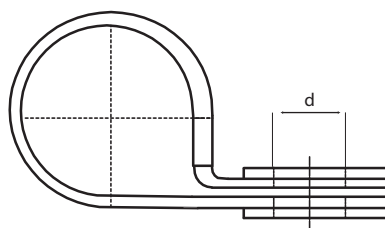
**W1**

### Rubber lined P-Clip DIN 3016 W1

Article	Part n° AGD W1	Application Ø		Band Width a	Metric Screw d	Box Quantity (MOQ)	Packing	Article	Part n° AGD W1	Application Ø		Band Width a	Metric Screw d	Box Quantity (MOQ)	Packing
		mm	inches							mm	inches				
AGD 5/9	03003055	5	13/64	9	M.5	250	1000	AGD 10/15	03004701	10	25/64	15	M.6	200	800
AGD 6/9	03003066	6	15/64	9	M.5	250	1000	AGD 12/15	03004728	12	15/32	15	M.6	200	800
AGD 8/9	03003080	8	5/16	9	M.5	250	1000	AGD 13/15	03004736	13	33/64	15	M.6	200	800
AGD 5/12	03003856	5	13/64	12	M.5	250	1000	AGD 14/15	03004744	14	35/64	15	M.6	200	800
AGD 6/12	03003864	6	15/64	12	M.5	250	1000	AGD 15/15	03004752	15	19/32	15	M.6	200	800
AGD 7/12	03003872	7	9/32	12	M.5	250	1000	AGD 16/15	03004760	16	5/8	15	M.6	200	800
AGD 8/12	03003880	8	5/16	12	M.5	200	1000	AGD 17/15	03004779	17	43/64	15	M.6	200	800
AGD 9/12	03003899	9	23/64	12	M.5	250	1000	AGD 18/15	03004787	18	45/64	15	M.6	200	800
AGD 10/12	03003901	10	25/64	12	M.5	250	1000	AGD 19/15	03004795	19	3/4	15	M.6	200	800
AGD 11/12	03003910	11	7/16	12	M.5	250	1000	AGD 20/15	03004808	20	25/32	15	M.6	200	800
AGD 12/12	03003928	12	15/32	12	M.5	250	1000	AGD 21/15	03004816	21	53/64	15	M.6	100	400
AGD 13/12	03003936	13	33/64	12	M.5	250	1000	AGD 22/15	03004824	22	55/64	15	M.6	100	400
AGD 14/12	03003944	14	35/64	12	M.5	250	1000	AGD 23/15	03004832	23	29/32	15	M.6	100	400
AGD 15/12	03003952	15	19/32	12	M.5	250	1000	AGD 24/15	03004840	24	15/16	15	M.6	100	400
AGD 16/12	03003960	16	5/8	12	M.5	200	800	AGD 26/15	03004867	26	1-1/32	15	M.6	100	400
AGD 17/12	03003979	17	43/64	12	M.5	200	800	AGD 28/15	03004883	28	1-7/64	15	M.6	100	400
AGD 18/12	03003987	18	45/64	12	M.5	200	800	AGD 30/15	03004904	30	1-3/16	15	M.6	100	400
AGD 19/12	03003995	19	3/4	12	M.5	200	800	AGD 32/15	03004920	32	1-17/64	15	M.6	100	400
AGD 20/12	03004007	20	25/32	12	M.5	200	800	AGD 34/15	03004947	34	1-11/32	15	M.6	100	400
AGD 21/12	03004015	21	53/64	12	M.5	200	800	AGD 36/15	03004963	36	1-27/64	15	M.6	100	400
AGD 22/12	03004023	22	55/64	12	M.5	200	800	AGD 38/15	03004980	38	1-1/2	15	M.6	100	400
AGD 23/12	03004031	23	29/32	12	M.5	200	800	AGD 40/15	03005000	40	1-37/64	15	M.6	100	400
AGD 24/12	03004040	24	15/16	12	M.5	200	800	AGD 42/15	03005026	42	1-21/32	15	M.6	50	200
AGD 26/12	03004066	26	1-1/32	12	M.5	200	800	AGD 44/15	03005042	44	1-47/64	15	M.6	50	200
AGD 28/12	03004082	28	1-7/64	12	M.5	200	800	AGD 46/15	03005069	46	1-13/16	15	M.6	50	200
AGD 30/12	03004103	30	1-3/16	12	M.5	100	400	AGD 48/15	03005085	48	1-57/64	15	M.6	50	200
AGD 32/12	03004120	32	1-17/64	12	M.5	100	400	AGD 50/15	03005106	50	1-31/32	15	M.6	50	200
AGD 34/12	03004146	34	1-11/32	12	M.5	100	400	AGD 52/15	03005122	52	2-3/64	15	M.6	50	200
AGD 36/12	03004162	36	1-27/64	12	M.5	50	200	AGD 54/15	03005149	54	2-1/8	15	M.6	50	200
AGD 38/12	03004189	38	1-1/2	12	M.5	50	200	AGD 56/15	03005165	56	2-13/64	15	M.6	50	200
AGD 40/12	03004200	40	1-37/64	12	M.5	50	200	AGD 58/15	03005181	58	2-9/32	15	M.6	50	200
AGD 42/12	03004226	42	1-21/32	12	M.5	50	200	AGD 60/15	03005202	60	2-23/64	15	M.6	50	200
AGD 44/12	03004242	44	1-47/64	12	M.5	50	200	AGD 10/20	03007101	10	25/64	25	M.8	100	400
AGD 46/12	03004269	46	1-13/16	12	M.5	50	200	AGD 11/20	03005510	11	7/16	20	M.8	100	400
AGD 48/12	03004285	48	1-57/64	12	M.5	50	200	AGD 12/20	03005528	12	15/32	20	M.8	100	400
AGD 50/12	03004306	50	1-31/32	12	M.5	50	200	AGD 13/20	03005536	13	33/64	20	M.8	100	400
AGD 52/12	03004322	52	2-3/64	12	M.5	50	200	AGD 14/20	03005544	14	35/64	20	M.8	100	400
AGD 54/12	03004349	54	2-1/8	12	M.5	50	200	AGD 15/20	03005552	15	19/32	20	M.8	100	400
AGD 56/12	03004365	56	2-13/64	12	M.5	50	200	AGD 16/20	03005560	16	5/8	20	M.8	100	400
AGD 58/12	03004381	58	2-9/32	12	M.5	50	200	AGD 17/20	03005562	17	43/64	20	M.8	100	400
AGD 60/12	03004402	60	2-23/64	12	M.5	50	200	AGD 18/20	03005579	18	45/64	20	M.8	100	400
AGD 5/15	03004664	5	13/64	15	M.6	250	1000	AGD 19/20	03005587	19	3/4	20	M.8	50	200
AGD 6/15	03004664	6	15/64	15	M.6	250	1000	AGD 20/20	03005595	20	25/32	20	M.8	50	200
AGD 7/15	03004672	7	9/32	15	M.6	250	1000	AGD 21/20	03005608	21	53/64	20	M.8	50	200
AGD 8/15	03004680	8	5/16	15	M.6	250	1000	AGD 22/20	03005616	22	55/64	20	M.8	50	200
AGD 9/15	03004699	9	23/64	15	M.6	250	1000								

Article	Part n° AGD W1	Application Ø		Band Width a	Metric Screw d	Box Quantity (MOQ)	Packing	Article	Part n° AGD W1	Application Ø		Band Width a	Metric Screw d	Box Quantity (MOQ)	Packing
		mm	inches							mm	inches				
AGD 23/20	03005624	23	29/32	20	M.8	50	200	AGD 18/25	03006379	18	45/64	25	M.10	50	200
AGD 24/20	03005632	24	15/16	20	M.8	50	200	AGD 19/25	03006387	19	3/4	25	M.10	50	200
AGD 26/20	03005659	26	1-1/32	20	M.8	50	200	AGD 20/25	03006395	20	25/32	25	M.10	50	200
AGD 28/20	03005675	28	1-7/64	20	M.8	50	200	AGD 22/25	03006416	22	55/64	25	M.10	50	200
AGD 30/20	03005691	30	1-3/16	20	M.8	50	200	AGD 24/25	03006432	24	15/16	25	M.10	50	200
AGD 32/20	03005712	32	1-17/64	20	M.8	50	200	AGD 26/25	03006459	26	1-1/32	25	M.10	50	200
AGD 34/20	03005739	34	1-11/32	20	M.8	50	200	AGD 28/25	03006475	28	1-7/64	25	M.10	50	200
AGD 36/20	03005755	36	1-27/64	20	M.8	50	200	AGD 30/25	03006491	30	1-3/16	25	M.10	50	200
AGD 38/20	03005771	38	1-1/2	20	M.8	50	200	AGD 32/25	03006512	32	1-17/64	25	M.10	50	200
AGD 40/20	03005798	40	1-37/64	20	M.8	50	200	AGD 34/25	03006539	34	1-11/32	25	M.10	50	200
AGD 42/20	03005819	42	1-21/32	20	M.8	50	200	AGD 36/25	03006555	36	1-27/64	25	M.10	50	200
AGD 44/20	03005835	44	1-47/64	20	M.8	50	200	AGD 38/25	03006571	38	1-1/2	25	M.10	50	200
AGD 46/20	03005851	46	1-13/16	20	M.8	50	200	AGD 40/25	03006598	40	1-37/64	25	M.10	50	200
AGD 48/20	03005878	48	1-57/64	20	M.8	50	200	AGD 42/25	03006619	42	1-21/32	25	M.10	50	200
AGD 50/20	03005894	50	1-31/32	20	M.8	25	100	AGD 44/25	03006635	44	1-47/64	25	M.10	50	200
AGD 52/20	03005915	52	2-3/64	20	M.8	25	100	AGD 46/25	03006651	46	1-13/16	25	M.10	50	200
AGD 54/20	03005931	54	2-1/8	20	M.8	25	100	AGD 48/25	03006678	48	1-57/64	25	M.10	25	100
AGD 56/20	03005958	56	2-13/64	20	M.8	25	100	AGD 50/25	03006694	50	1-31/32	25	M.10	25	100
AGD 58/20	03005974	58	2-9/32	20	M.8	25	100	AGD 52/25	03006715	52	2-3/64	25	M.10	25	100
AGD 60/20	03005990	60	2-23/64	20	M.8	25	100	AGD 54/25	03006731	54	2-1/8	25	M.10	25	100
AGD 62/20	03006010	62	2-7/16	20	M.8	25	100	AGD 56/25	03006758	56	2-13/64	25	M.10	25	100
AGD 64/20	03006037	64	2-33/64	20	M.8	25	100	AGD 58/25	03006774	58	2-9/32	25	M.10	25	100
AGD 66/20	03006053	66	2-19/32	20	M.8	25	100	AGD 60/25	03006790	60	2-23/64	25	M.10	25	100
AGD 68/20	03006070	68	2-43/64	20	M.8	25	100	AGD 62/25	03006811	62	2-7/16	25	M.10	25	100
AGD 15/25	03006344	15	19/32	25	M.10	100	400	AGD 64/25	03006838	64	2-33/64	25	M.10	25	100
AGD 16/25	03006352	16	5/8	25	M.10	100	400	AGD 66/25	03006854	66	2-19/32	25	M.10	25	100
AGD 17/25	03006360	17	43/64	25	M.10	50	200	AGD 68/25	03006870	68	2-43/64	25	M.10	25	100

**W1 Band:** Mild steel with reinforced screw holes at both ends **Finish:** Galvanized and lined with EPDM rubber





## DIN 3016 Rubber-lined P-Clip (Form D)

These rubber-lined connecting clamps, also known as "P-Clips" are composed of an AISI 304 stainless steel band lined with EPDM rubber. This rubber lining allows for firm and safe clamping in the application zone and prevents potential damage due to vibration.

The screw holes at either end of the band are reinforced with steel plates to ensure they clamp down firmly.

P-Clips are particularly recommended for mounting pipes, electric cable ducting and hoses in automotive applications and in industrial machinery.

The fact that this P-Clip is manufactured entirely in AISI-304 stainless steel makes it ideal for marine applications.

\* P-Clips can be supplied in bandwidths of up to 25mm and in diameters up to 100 mm.

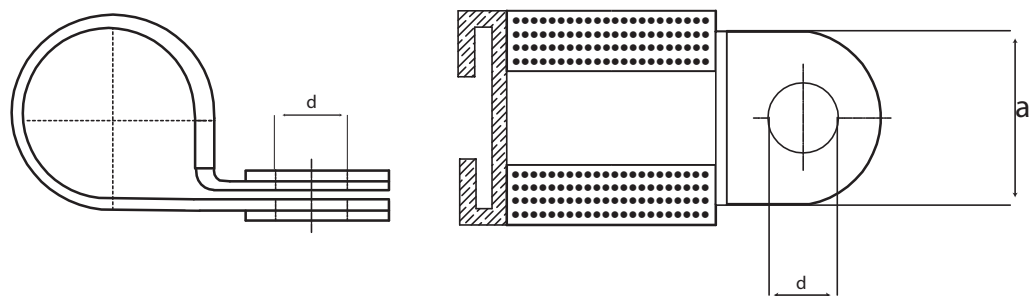
\* Other models of DIN 3016 P-Clips are also available on request: Forms A, B, C, E and F and also without rubber lining.

\* Other types of rubber lining are also available.

**W4**

### Rubber-lined P-Clip DIN 3016 W4

Article	Part n° W4	Application Ø		Bandwidth a	Metric screw d	Box Quantity (MOQ)	Packing
		mm	inches				
AGID 5/12	43003859	5	13/64	12	M.5	250	1000
AGID 6/12	43003867	6	15/64	12	M.5	250	1000
AGID 7/12	43003875	7	9/32	12	M.5	250	1000
AGID 8/12	43003883	8	5/16	12	M.5	250	1000
AGID 9/12	43003891	9	23/64	12	M.5	250	1000
AGID 10/12	43003904	10	25/64	12	M.5	250	1000
AGID 11/12	43003911	11	7/16	12	M.5	250	1000
AGID 12/12	43003920	12	15/32	12	M.5	250	1000
AGID 13/12	43003939	13	33/64	12	M.5	250	1000
AGID 14/12	43003947	14	35/64	12	M.5	250	1000
AGID 15/12	43003955	15	19/32	12	M.5	250	1000
AGID 16/12	43003963	16	5/8	12	M.5	200	800
AGID 17/12	43003971	17	43/64	12	M.5	200	800
AGID 18/12	43003980	18	45/64	12	M.5	200	800
AGID 19/12	43003998	19	3/4	12	M.5	200	800
AGID 20/12	43004000	20	25/32	12	M.5	200	800
AGID 21/12	43004018	21	53/64	12	M.5	100	400
AGID 22/12	43004026	22	55/64	12	M.5	100	400
AGID 23/12	43004034	23	29/32	12	M.5	100	400
AGID 24/12	43004042	24	15/16	12	M.5	100	400
AGID 25/12	43004050	25	63/64	12	M.5	100	400
AGID 10/15	43004704	10	25/64	15	M.6	200	800
AGID 11/15	43004712	11	7/16	15	M.6	200	800
AGID 12/15	43004720	12	15/32	15	M.6	200	800
AGID 13/15	43004739	13	33/64	15	M.6	200	800
AGID 14/15	43004747	14	35/64	15	M.6	200	800
AGID 15/15	43004755	15	19/32	15	M.6	200	800
AGID 16/15	43004763	16	5/8	15	M.6	200	800
AGID 17/15	43004771	17	43/64	15	M.6	200	800
AGID 18/15	43004780	18	45/64	15	M.6	200	800
AGID 19/15	43004798	19	3/4	15	M.6	200	800
AGID 20/15	43004800	20	25/32	15	M.6	200	800
AGID 21/15	43004819	21	53/64	15	M.6	200	800
AGID 22/15	43004827	22	55/64	15	M.6	200	800
AGID 23/15	43004835	23	29/32	15	M.6	100	400
AGID 25/15	43004851	25	63/64	15	M.6	100	400
AGID 26/15	43004860	26	1-1/32	15	M.6	100	400



Article	Part nº W4	Application Ø		Bandwidth a	Metric screw d	Box Quantity (MOQ)	Packing
		mm	inches				
AGID 27/15	43004878	27	1-1/16	15	M.8	100	100
AGID 28/15	43004886	28	1-7/64	15	M.8	100	100
AGID 30/15	43004907	30	1-3/16	15	M.8	100	100
AGID 12/20	43005520	12	15/32	20	M.8	100	100
AGID 13/20	43005539	13	33/64	20	M.8	100	100
AGID 14/20	43005547	14	35/64	20	M.8	100	100
AGID 15/20	43005555	15	19/32	20	M.8	100	100
AGID 16/20	43005563	16	5/8	20	M.8	100	100
AGID 18/20	43005571	18	45/64	20	M.8	100	100
AGID 19/20	43005580	19	3/4	20	M.8	100	100
AGID 20/20	43005598	20	25/32	20	M.8	100	100
AGID 21/20	43005600	21	53/64	20	M.8	100	100
AGID 22/20	43005619	22	55/64	20	M.8	100	100
AGID 23/20	43005627	23	29/32	20	M.8	50	50
AGID 24/20	43005635	24	15/16	20	M.8	50	50
AGID 25/20	43005643	25	63/64	20	M.8	50	50
AGID 27/20	43005661	27	1-1/16	20	M.8	50	50
AGID 28/20	43005670	28	1-7/64	20	M.8	50	50
AGID 29/20	43005688	29	1-9/64	20	M.8	50	50
AGID 30/20	43005696	30	1-3/16	20	M.8	50	50
AGID 32/20	43005715	32	1-17/64	20	M.8	50	50
AGID 34/20	43005731	34	1-11/32	20	M.8	50	50
AGID 36/20	43005758	36	1-27/64	20	M.8	50	50
AGID 38/20	43005774	38	1-1/2	20	M.8	50	50
AGID 40/20	43005790	40	1-37/64	20	M.8	50	50
AGID 42/20	43005811	42	1- 21/32	20	M.8	50	50
AGID 45/20	43005844	45	1-49/64	20	M.8	50	50
AGID 48/20	43005877	48	1-57/64	20	M.8	50	50
AGID 50/20	43005899	50	1-31/32	20	M.8	50	50
AGID 52/20	43005911	52	2-3/64	20	M.8	50	50
AGID 54/20	43005933	54	2-1/8	20	M.8	50	50
AGID 63/20	43006022	63	2-31/64	20	M.8	100	100
AGID 70/20	43006099	70	2-3/4	20	M.8	100	100

**W4 Band:** Stainless steel (AISI-304) (A2) with reinforced screw holes at both ends. **Finish:** EPDM rubber



## SMS Rubber-lined P-Clip

Mikalor SMS P-Clips are ideal for attaching and retaining cable conduits, hoses and tubes in construction, sanitary and particularly in automotive applications.

They are widely used in agricultural machinery, boat-building, commercial vehicles, construction equipment etc.

The anti-vibration EPDM rubber profile helps to hold pipes, hoses and conduits firmly in place without chafing or damage to the clamping area.

In contrast to DIN 3016 P-Clips, SMS P-Clips have one round hole and one oval hole. This unique feature allows for certain flexibility when fixing these clips in place.

Mikalor SMS P-Clips are available in two bandwidths. 12,7mm (with an M6 hole) and 15,9mm (with an M8 hole).

\* Special diameters are available on request.

\* Other types of rubber lining are also available.

W1

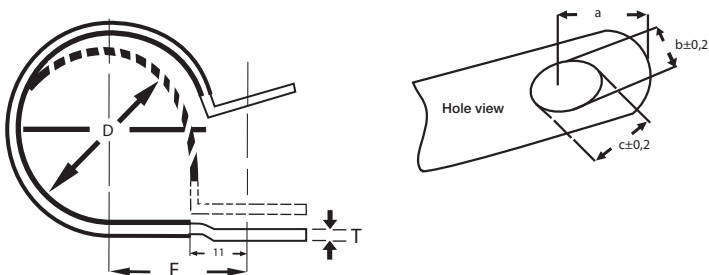
### SMS P-Clip W1

Article	Part n° SMS W1	Application Ø D ±0,4		Bandwidth	E ±0,4	T ± 0,1	Metric Screw b	a	c	Box Quantity (MOQ)	Packing
		mm	inches								
SMS 4,8/12	03025007	4,80	3/16	12,7	15	1	M6	8	8	200	200
SMS 6/12	03025015	6,00	15/64	12,7	16	1	M6	8	8	200	200
SMS 8/12	03025022	8,00	5/16	12,7	17	1	M6	8	8	200	200
SMS 10/12	03025066	10,00	25/64	12,7	18	1	M6	8	8	200	200
SMS 11/12	03025069	11,00	7/16	12,7	19	1	M6	8	8	200	200
SMS 13/12	03025077	13,00	33/64	12,7	19	1	M6	8	8	200	200
SMS 14/12	03025090	14,00	35/64	12,7	20	1	M6	8	8	200	200
SMS 16/12	03025106	16,00	5/8	12,7	21	1	M6	8	8	200	200
SMS 17/12	03025122	17,50	11/16	12,7	22	1	M6	8	8	200	200
SMS 19/12	03025144	19,00	3/4	12,7	23	1	M6	8	8	200	200
SMS 20/12	03025155	20,60	13/16	12,7	23	1	M6	8	8	200	200
SMS 22/12	03025169	22,00	55/64	12,7	24	1	M6	8	8	100	100
SMS 23/12	03025185	23,80	15/16	12,7	25	1	M6	8	8	100	100
SMS 25/12	03025177	25,00	1	12,7	26	1	M6	8	8	100	100
SMS 27/12	03025225	27,00	1-1/16	12,7	27	1	M6	8	8	100	100
SMS 29/12	03025235	29,00	1-9/64	12,7	28	1	M6	8	8	100	100
SMS 30/12	03025255	30,20	1-3/16	12,7	29	1	M6	8	8	100	100
SMS 32/12	03025266	32,00	1-17/64	12,7	29	1	M6	8	8	100	100
SMS 33/12	03025274	33,30	1-5/16	12,7	30	1	M6	8	8	100	100
SMS 35/12	03025293	35,00	1-3/8	12,7	31	1	M6	8	8	100	100
SMS 36/12	03025310	36,50	1-7/16	12,7	32	1	M6	8	8	100	100
SMS 38/12	03025330	38,00	1-1/2	12,7	33	1	M6	8	8	100	100
SMS 41/12	03025360	41,00	1-39/64	12,7	34	1	M6	8	8	100	100
SMS 45/12	03025390	45,00	1-49/64	12,7	36	1	M6	8	8	50	50
SMS 47/12	03025422	47,00	1-27/32	12,7	37	1	M6	8	8	50	50
SMS 51/12	03025466	51,00	2-1/64	12,7	39	1	M6	8	8	50	50
SMS 54/12	03025499	54,00	2-1/8	12,7	42	1	M6	8	8	50	50
SMS 60/12	03025366	60,00	2-23/64	12,7	44	1	M6	8	8	50	50
SMS 65/12	03025377	65,00	2-9/16	12,7	46	1	M6	8	8	50	50
SMS 74/12	03025477	74,00	2-29/32	12,7	50	1	M6	8	8	50	50
SMS 82/12	03025480	82,00	3-15/64	12,7	59	1	M6	8	8	50	50
SMS 110/12	03025500	110,00	4-21/64	12,7	68	1	M6	8	8	50	50
SMS 6/15	03025600	6,40	1/4	15,9	16	1	M8	9	11	200	200
SMS 7/15	03025611	7,90	5/16	15,9	17	1	M8	9	11	200	200
SMS 9/15	03025622	9,50	3/8	15,9	18	1	M8	9	11	200	200



Article	Part n° SMS W1	Application Ø D ±0,4		Bandwidth	E ±0,4	T ± 0,1	Metric Screw b	a	c	Box Quantity (MOQ)	Packing
		mm	inches								
SMS 11/15	03025633	11,10	7/16	15,9	19	1	M8	9	11	200	200
SMS 12/15	03025644	12,70	1/2	15,9	19	1	M8	9	11	200	200
SMS 14/15	03025655	14,30	9/16	15,9	20	1	M8	9	11	200	200
SMS 15/15	03025666	15,90	5/8	15,9	21	1	M8	9	11	200	200
SMS 14/15	03025677	17,50	11/16	15,9	22	1	M8	9	11	200	200
SMS 19/15	03025688	19,00	3/4	15,9	23	1	M8	9	11	200	200
SMS 20/15	03025699	20,60	13/16	15,9	23	1	M8	9	11	200	200
SMS 22/15	03025700	22,20	7/8	15,9	24	1	M8	9	11	100	100
SMS 23/15	03025711	23,80	15/16	15,9	25	1	M8	9	11	100	100
SMS 25/15	03025722	25,40	1	15,9	26	1	M8	9	11	100	100
SMS 27/15	03025733	27,00	1-1/16	15,9	27	1	M8	9	11	100	100
SMS 28/15	03025966	28,60	1-1/8	15,9	28	1	M8	9	11	100	100
SMS 30/15	03025744	30,20	1-3/16	15,9	29	1	M8	9	11	100	100
SMS 31/15	03025755	31,80	1-1/4	15,9	29	1	M8	9	11	100	100
SMS 33/15	03025766	33,30	1-5/16	15,9	30	1	M8	9	11	100	100
SMS 34/15	03025777	34,90	1-3/8	15,9	31	1	M8	9	11	100	100
SMS 36/15	03025788	36,50	1-7/16	15,9	32	1	M8	9	11	100	100
SMS 38/15	03025799	38,10	1-1/2	15,9	33	1	M8	9	11	100	100
SMS 41/15	03025811	41,00	1-39/64	15,9	34	1	M8	9	11	100	100
SMS 45/15	03025833	45,00	1-3/4	15,9	36	1	M8	9	11	50	50
SMS 47/15	03025844	47,00	1-27/32	15,9	37	1	M8	9	11	50	50
SMS 51/15	03025855	51,00	2-1/64	15,9	39	1	M8	9	11	50	50
SMS 55/15	03025866	54,00	2-1/8	15,9	42	1	M8	9	11	50	50
SMS 60/15	03025877	60,00	2-23/64	15,9	44	1	M8	9	11	50	50
SMS 64/15	03025888	64,00	2-33/64	15,9	46	1	M8	9	11	50	50
SMS 75/15	03025899	75,00	2-29/32	15,9	50	1	M8	9	11	50	50
SMS 110/15	03025900	110,00	4-21/64	15,9	68	1	M8	9	11	50	50

**W1 Band:** Hot Dip Galvanized steel (DX51) **Finish:** Galvanized and lined with EPDM rubber





## Spring Clip

Spring clips are designed to distribute pressure uniformly around the application zone.

Their use is recommended when the hose is subject to rapid changes in temperature which cause expansion and contraction of the materials used in the assembly.

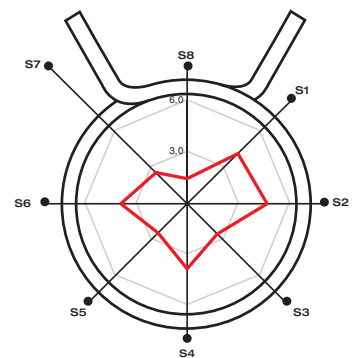
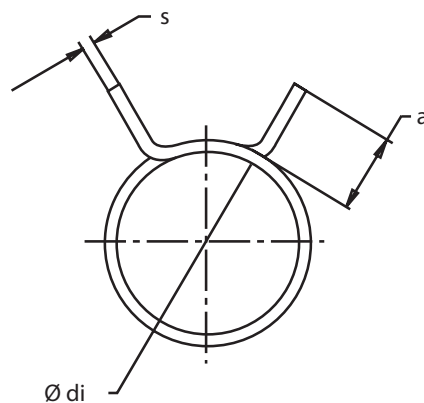
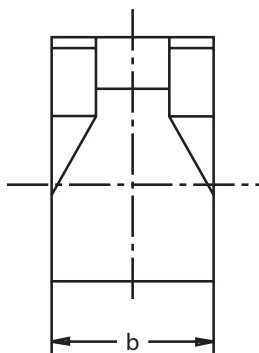
The spring clip maintains pressure during this process, thereby preventing leaks.

**W1**

### Spring Clip AML W1

Nominal Ø		Part n° W1	Application Ø di	b	a ± 0,05	s	Box Quantity (MOQ)	Packing
mm	inches							
6	15/64	02014025	5,5 ±0,1	7	3	0,5	500	8000
7	9/32	02014033	6,4 ±0,1	7	3	0,5	500	8000
8	5/16	02014041	7,4 ±0,15	8	3	0,6	500	8000
9	23/64	02014050	8,4 ±0,15	8	3,5	0,6	500	4000
10	25/64	02014068	9,3 ±0,2	8	3,5	0,7	500	4000
11	7/16	02014076	10,3 ±0,2	8	4	0,7	500	4000
12	15/32	02014084	11,1 ±0,2	8	4	0,7	500	4000
14	35/64	02014092	12,9 ±0,2	8	4	0,8	500	4000
15	19/32	02014105	13,5 ±0,2	8	4,5	0,8	500	4000
17	43/64	02014113	15,6 ±0,2	8	4,5	0,8	500	4000
20	25/32	02014121	18,4 ±0,4	8	5,2	0,8	500	4000

**W1 Band:** Spring steel **Finish:** Silver-white Cr3 Zinc-Plated



#### Polar Diagram

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— Force Kg	4,2	4,7	2,5	3,8	2,4	3,9	2,6	1,5

Torque / Efficiency [ Nm / daN ]



**W1**

## Wire Clip

Wire clips are a competitively priced clamping solution in certain applications.

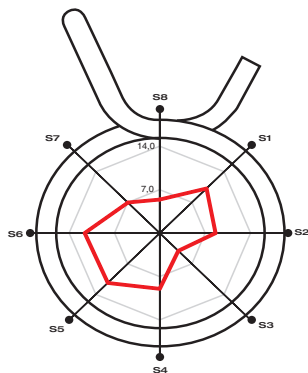
They are used in low-pressure applications and particularly with small diameter sunken spiral hoses.

\* Special diameters are available on request.

### AAL Wire Clip W1

Application Ø			Part n° W1	r1	r2	h max.	Ø s	Box Quantity (MOQ)	Packing
Min.	Nominal	Max.							
7,3	7,6	7,8	02016012	10,7	8,2	5,5	1,0	1000	8000
7,8	8,1	8,3	02016020	10,7	8,3	5,5	1,0	1000	8000
8,3	8,6	8,8	02016039	10,9	8,6	5,5	1,0	1000	8000
8,8	9,1	9,3	02016047	11,0	9,0	5,5	1,0	1000	8000
9,3	9,6	9,9	02016055	11,8	9,0	5,5	1,0	1000	8000
9,8	10,1	10,4	02016063	13,5	10,5	6,3	1,2	1000	8000
10,4	10,7	11,0	02016071	14,8	11,4	6,3	1,2	1000	8000
11,0	11,3	11,6	02016080	14,8	11,9	6,3	1,2	1000	8000
11,6	11,9	12,3	02016098	16,4	12,4	7,3	1,5	1000	4000
12,1	12,8	13,1	02016100	17,2	13,7	7,3	1,5	500	4000
12,9	13,3	13,6	02016119	17,0	14,0	7,3	1,5	500	4000
13,6	14	14,4	02016127	18,0	14,5	7,3	1,5	500	4000
14,4	14,8	15,1	02016135	19,6	16,0	8,4	1,8	500	4000
14,8	15,6	15,9	02016143	21,0	16,4	8,4	1,8	500	4000
15,9	16,4	16,8	02016151	22,0	16,6	8,4	1,8	500	4000
16,8	17,3	17,7	02016160	21,3	16,5	8,4	1,8	500	4000
17,7	18,2	18,7	02016178	22,7	17,7	9,9	2,0	500	2000
18,7	19,2	19,6	02016186	23,3	18,0	9,9	2,0	500	2000
19,6	20,2	20,6	02016194	24,0	18,5	9,9	2,0	500	2000

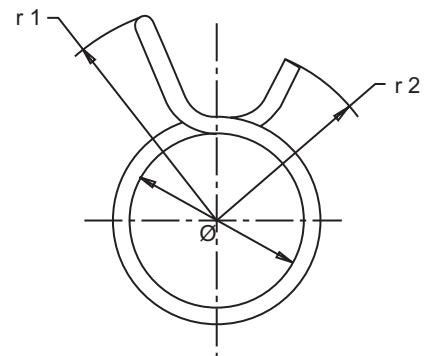
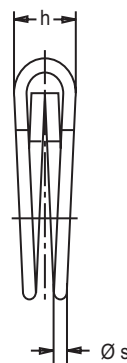
**W1 Band:** Spring steel **Finish:** Silver-white Cr3 Zinc-Plated



#### Polar Diagram

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— Force Kg	10,2	8,6	4,1	9,0	11,4	11,6	7,0	5,4

Torque / Efficiency [ Nm / daN ]





## Wire Clip with screw

This clip was specially designed for use with hoses incorporating an outer helix. It is generally used when installing ventilation ducting or in white goods applications.

The double-wire construction of this clip means that it sits comfortably on either side of the helix and can then be clamped down firmly thanks to the screw-tightening system.

\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.

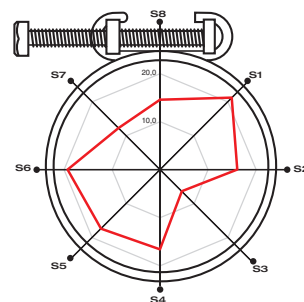
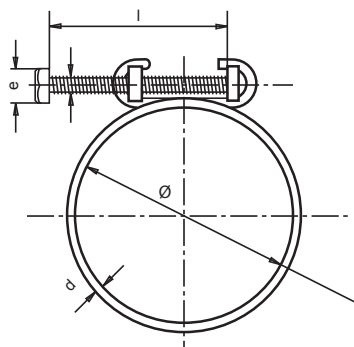
\* Special diameters are available on request

**W1**

### AAT Wire clip with screw W1

Application Ø		Part n° W1	Nominal application Ø	d	e	l	h max	Box quantity (MOQ)	Packing
mm	inches								
9,5-12	3/8-15/32	03030015	11,0	1,5	5,5	20	11,3	500	2000
10,5-13	13/32-33/64	03030023	11,5	1,5	5,5	20	11,3	500	2000
11,5-14	29/64-35/64	03030031	12,5	1,5	5,5	20	11,3	500	2000
12,5-15	31/64-19/32	03030040	13,0	1,5	5,5	20	11,3	500	2000
13,0-16	33/64-5/8	03030058	14,0	1,8	5,5	25	11,3	500	2000
13,5-17	17/32-43/64	03030066	15,0	1,8	5,5	25	11,3	500	2000
15,0-18	19/32-45/64	03030074	16,0	1,8	5,5	25	11,3	500	2000
15,5-19	39/64-3/4	03030082	17,0	1,8	5,5	25	11,3	500	2000
17,0-20	43/64-25/32	03030090	18,0	1,8	5,5	25	11,3	500	2000
17,5-21	11/16-53/64	03030103	18,5	1,8	5,5	25	11,3	500	2000
18,5-22	47/64-55/64	03030111	20,0	2,0	7,0	30	14,3	500	2000
19,0-23	3/4-29/32	03030120	20,5	2,0	7,0	30	14,3	500	2000
21,0-24	53/64-15/16	03030138	22,0	2,0	7,0	30	14,3	500	2000
21,5-25	27/32-63/64	03030146	23,5	2,2	7,0	30	14,3	500	2000
23,5-27	59/64-1-1/16	03030154	25,0	2,2	7,0	30	14,3	500	2000
25,0-29	63/64-1-9/64	03030162	27,0	2,2	7,0	30	14,3	200	800
27,0-31	1-1/16-1-7/32	03030170	29,0	2,2	7,0	30	14,3	200	800
29,0-33	19/64-1-19/64	03030189	31,5	2,2	7,0	30	14,3	200	800
30,5-35	1-13/64-1-3/8	03030197	33,0	2,2	7,0	30	14,3	200	800
33,0-37	1-19/64-1-29/64	03030200	37,0	2,2	7,0	30	14,3	200	800
35,5-40	1-25/64-1-37/64	03030218	38,5	2,2	7,0	30	14,3	200	800
38,5-43	1-33/64-1-11/16	03030226	41,0	2,5	8,0	40	14,3	200	800
41,0-46	1-39/64-1-13/16	03030234	43,5	2,5	8,0	40	15,3	200	800
43,5-49	1-23/32-1-59/64	03030242	46,5	2,5	8,0	40	15,3	200	800
46,5-53	1-53/64-2-3/32	03030250	50,5	2,5	8,0	40	15,3	100	400
50,5-56	1-63/64-2-13/64	03030269	53,5	2,5	8,0	40	15,3	100	400
53,5-60	2-7/64-2-23/64	03030277	56,5	2,8	10,0	50	15,3	100	400
56,5-64	2-7/32-2-33/64	03030285	60,0	2,8	10,0	50	18,6	100	400
60,0-68	2-23/64-2-43/64	03030293	64,0	2,8	10,0	50	18,6	100	400
64,0-72	2-33/64-2-53/64	03030306	68,5	2,8	10,0	50	18,6	100	400
68,5-76	2-45/64-2-63/64	03030314	72,5	3,0	10,0	50	18,6	100	400

**W1 Wire:** Steel wire B-UNI 3823 **Screw:** 6.6 grade steel Cr3 zinc-plated



#### Polar Diagram

● Sectors S1 S2 S3 S4 S5 S6 S7 S8

— 1 21,4 15,8 6,8 17,0 17,3 19,4 12,3 14,5

Torque / Efficiency [ Nm / daN ]



W1

## “Normal” Mini-clip

The use of malleable mild steel in the manufacture of the “Normal” mini-clip means that when tightened, the clip adapts perfectly to the hose, clamping firmly but gently.

This clip is recommended for use with gaseous fluids at low pressure.

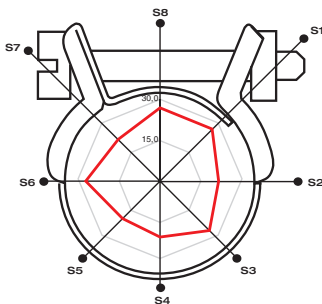
“Normal” also has many applications in the automotive industry

\* The maximum pressure may vary depending on the type of hose and coupling used.

## “Normal” Mini-clip W1

Application Ø		Part n° W1	r	e	a	b	s	Max. values* Torque (Nm)	Max. values* Pressure (Bars)	Box quantity	Packing
mm	inches										
6	15/64	03010510	M3	5	8,4	9	0,5	0,4	15,0	100	1600
8	5/16	03010528	M3	5	9	9	0,5	0,4	14,0	100	1600
9	23/64	03010536	M4	6	10	10	0,5	1,0	15,0	100	1600
9,5-10	3/8-25/64	03010544	M4	6	10	10	0,5	1,0	14,0	100	1600
10-11	25/64 -7/16	03010552	M4	6	10	10	0,5	1,0	13,0	100	1600
12-13	15/32-33/64	03010560	M4	6	10	10	0,5	1,0	12,5	100	1600
13-14	33/64-35/64	03010579	M4	6	10	10	0,5	1,0	12,5	100	1600
14-15	35/64-19/32	03010587	M4	6	10	10	0,5	1,0	12,0	100	1600
15-17	19/32-43/64	03010595	M4	6	10	10	0,5	1,0	12,0	100	1600
16-18	5/8-45/64	03010608	M4	6	10	10	0,5	1,0	11,5	100	1600
18-20	45/64-25/32	03010616	M4	6	10	10	0,5	1,0	10,5	100	1600
19-21	3/4-53/64	03010624	M4	6	10	10	0,5	1,0	10,5	100	800
20-22	25/32-55/64	03010632	M4	6	10	10	0,5	1,0	10,5	100	800
22-25	55/64-63/64	03010640	M4	6	10	10	0,5	1,0	9,5	100	800
23-26	29/32-1-1/32	03010659	M4	6	10	10	0,5	1,0	9,0	100	800
25-28	63/64-1-7/64	03010667	M4	6	10	10	0,5	1,0	8,5	100	800
26-29	1-1/32-1-9/64	03010675	M4	6	10	10	0,5	1,0	8,5	100	800

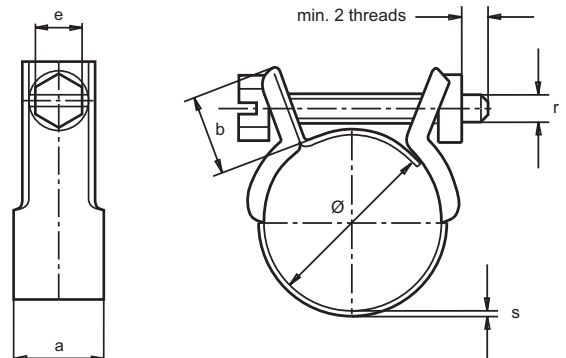
**W1 Screw:** 6.6 strength Grey-white Cr3 zinc-plated **Band:** St 02Z (DIN 1.0226) **Nut:** 6 strength white Cr3 zinc-plated.



### Polar Diagram

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— Force Kg	27,0	21,5	25,6	20,4	19,3	27,2	21,7	26,9

Torque / Efficiency [ Nm / daN ]





**W2**

## Open worm-drive clip

The reduced dimensions of the housing of this clip make it the ideal choice for applications where space is limited.

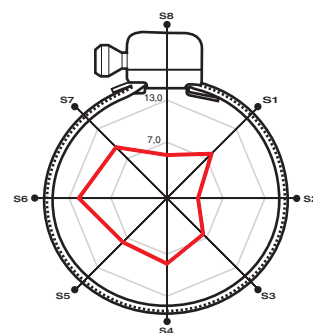
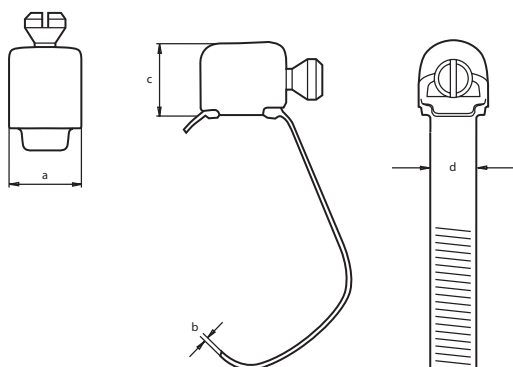
It is especially recommended for clamping small bore thin-walled hoses.

\* The maximum pressure may vary depending on the type of hose and coupling used.

### Open worm-drive clip W2

Application Ø		Part n° W2	a	b	c	d	Max. values Torque (Nm)	Max. values Pressure (Bars)	Box Quantity (MOQ)	Packing
mm min. - max.	inches min. - max.									
7-11	9/32 - 7/16	03016401	7,5	0,4	7	5	1,5	35	100	1600
11-19	7/16 - 3/4	03016410	7,5	0,4	7	5	1,5	35	100	1600

**W2 Screw and housing:** Qst 34-3 Mild Steel (DIN 1.0213) Grey-white Cr3 zinc-plated **Band:** Stainless steel X8CR 17 (DIN 1.4016) (AISI-430)



#### Polar Diagram

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— 1 Nm	8,0	3,4	6,3	8,4	7,9	11,6	9,3	5,2

Torque / Efficiency [ Nm / daN ]

**W4**

## Adapflex Endless Banding and Housing

**Adapflex** perforated banding with separate housings is recommended for occasional use in applications with variable diameters.

The fact that this clamp comes in rolls of 3m and 25m means that you can clamp diameters which standard clamps cannot cover. There is no need to know the application diameter beforehand as you can adjust the clamp to the diameter required on each occasion.

The assembly of this clamp is quick, clean and easy. All you require is a cutting tool and a conventional flat-head screwdriver.

**Adapflex** is available in different material qualities, thicknesses and bandwidths in a variety of different presentations. A practical and user-friendly kit in blister pack has been designed which contains 3m of band and 6 or 8 housings depending on the material quality. For bigger jobs 25m rolls are available as well as sturdy boxes each containing 50 housings.

### ADAPFLEX W2 Banding and Housing

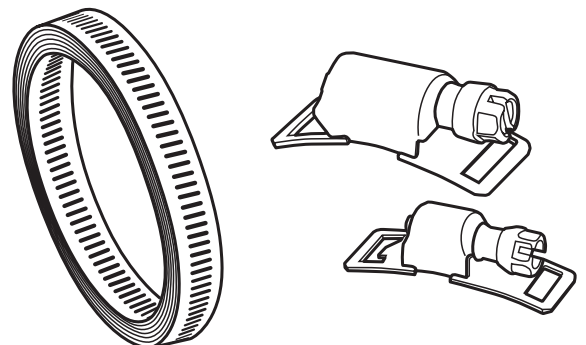
Description	Article	Part n°	Box Quantity (MOQ)	Band width mm	Band thickness mm
Perforated band set + Housings <b>W2</b>	CCP83W2	03035101	3 mts. + 8 housings	8	0,65
Perforated endless band <b>W2</b>	CP825W2	03035111	25 mts.	8	0,65
Housings <b>W2</b>	CCP8W2	03035121	50 pieces	8	0,65
Perforated band set + Housings <b>W2</b>	CCP143W2	03035601	3 mts. + 6 housings	14	0,70
Perforated endless band <b>W2</b>	CP1425W2	03035611	25 mts.	14	0,70
Housings <b>W2</b>	CCP14W2	03035621	50 pieces	14	0,70

**W2 Band and housing:** Stainless steel (AISI-430)

### ADAPFLEX W4 Banding and Housing

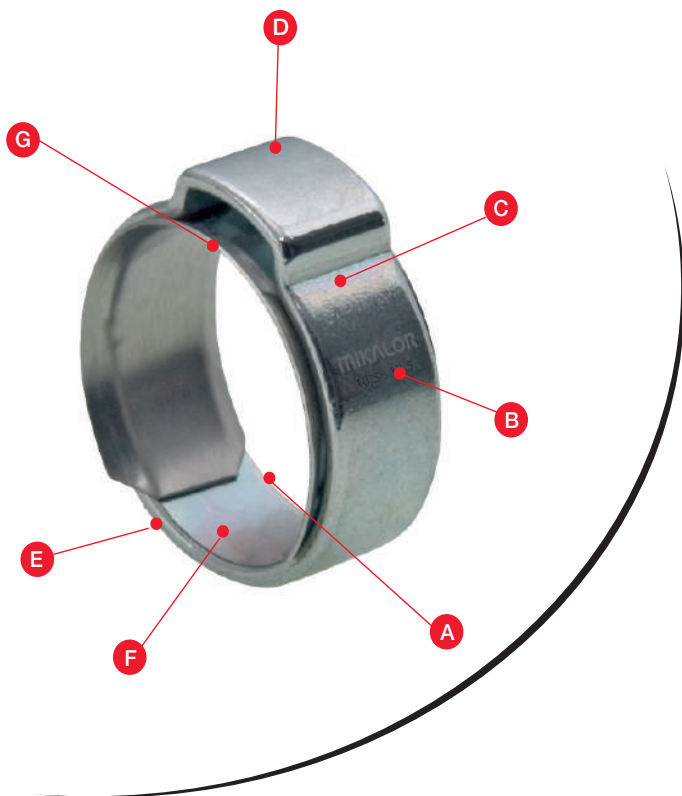
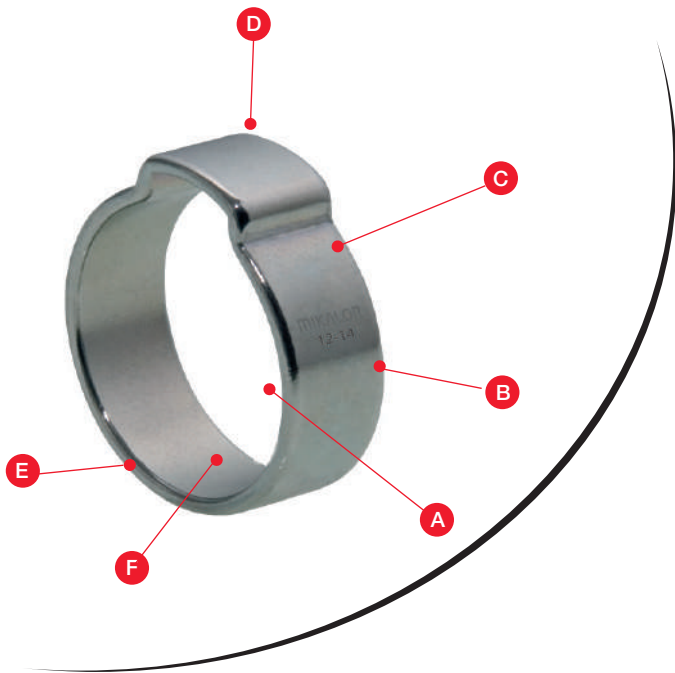
Description	Article	Part n°	Box Quantity (MOQ)	Band width mm	Band thickness mm
Perforated band set + Housings <b>W4</b>	CCP83W4	03035301	3 mts. + 8 housings	8	0,65
Perforated endless band <b>W4</b>	CP825W4	03035311	25 mts.	8	0,65
Housings <b>W4</b>	CCP8W4	03035321	50 pieces	8	0,65
Perforated band set + Housings <b>W4</b>	CCP143W4	03035801	3 mts. + 6 housings	14	0,70
Perforated endless band <b>W4</b>	CP1425W4	03035811	25 mts.	14	0,70
Housings <b>W4</b>	CCP14W4	03035821	50 pieces	14	0,70

**W4 Band and housing:** Stainless steel (AISI-304)



# Technical Information

## Ear Clips

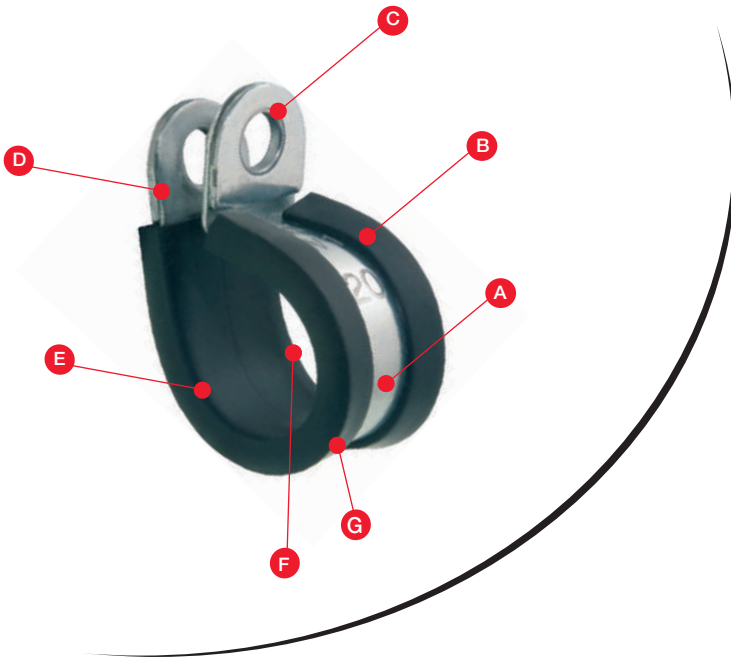


- A** Wide variety of models which cover many applications.
- B** All clips and clamps are marked with the clamping range and the Mikalor logo.
- C** Easy and quick to mount.
- D** Materials free of toxic substances in accordance with current environmental legislation.
- E** Rounded band edges which prevent cutting or damage to the hose.
- F** In order to decide which ear clamp to use, add 1 mm to the OD (outer diameter) of the tube or hose to be clamped.
- G** The inner-ring covers the underside of the ear, thereby ensuring a snug fit around the hose and no pinching.



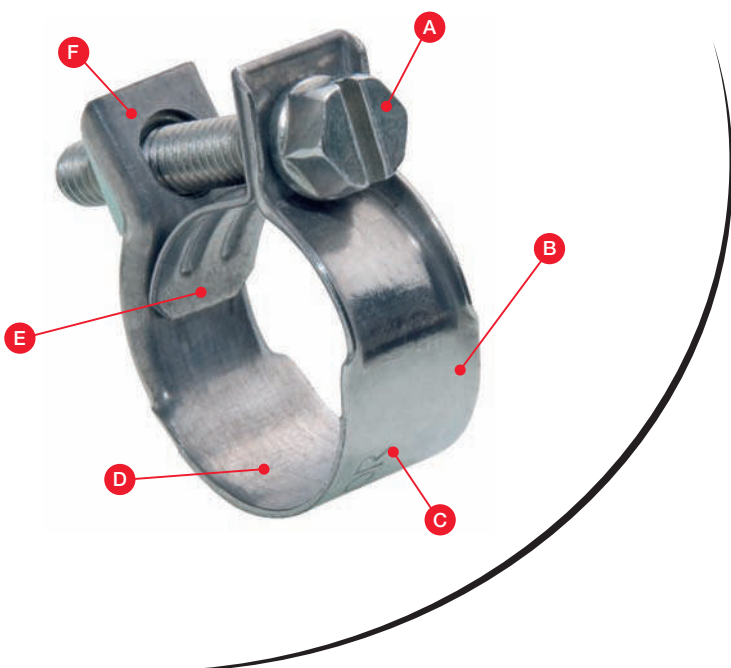
# Technical Information

## Rubber-lined P-Clip DIN 3016



- A** The steel used to manufacture the band is very flexible, meaning that the P-Clip fits snugly into the application zone.
- B** All clips are marked with the application diameter and the Mikalor logo.
- C** The screw holes at either end of the band are reinforced with steel plates to avoid damage to the holes when a lot of force is applied.
- D** The band, reinforcements and band edges are electro zinc-plated, thereby increasing resistance to corrosion.
- E** The rubber lining allows for firm and safe clamping, protecting the application zone and preventing potential damage due to vibration.
- F** Special diameters are also available on request.
- G** Covered with an EPDM rubber lining which absorbs vibration and avoids friction. EPDM is also very resistant to UV light and ozone.

## Normal "Mini Clip"



- A** Nut and bolt tightening system designed for use with a variety of different tools.
- B** Rounded band edges prevent the clamp from digging into and cutting the hose.
- C** All clips are marked with the application diameter and the Mikalor logo.
- D** Materials free of toxic substances in accordance with current environmental legislation
- E** The band end forms a bridge which avoids possible damage to the hose during tightening and allows for a snug fit around the hose.
- F** Unique nut-blocking system makes tightening easy.



**MIKALOR**



***Medium Pressure***



## Stainless Steel Cable Tie

The self-locking mechanism of the cable tie incorporates a stainless steel ball-bearing making it extremely secure once fastened.

Due to its design, the stainless steel cable tie is tamper-proof once it has been mounted.

Two different bandwidths are available, meaning that you can clamp up to 114kg, and in applications up to 300mm in diameter.

\* Please see pages 84 and 85 for further information regarding application tools.

**W4**

### Stainless Steel Cable Tie W4

Application Ø		Part n° W4	Width	Maximum diameter	Length	Strength (Kg).	Box Quantity (MOQ)	Packing
mm	inches							
4,50 x 33	11/64x1-19/64	03002001	4,50	33	130	46	100	8000
4,50 x 50	11/64x1-31/32	03002002	4,50	50	200	46	100	6000
4,50 x 76	11/64x2-63/64	03002003	4,50	76	300	46	100	5000
4,50 x 102	11/64x1-19/67	03002004	4,50	102	370	46	100	4500
4,50 x 156	11/64x6-9/64	03002005	4,50	156	520	46	100	2500
4,50 x 207	11/64x8-5/32	03002006	4,50	207	680	46	100	1000
4,50 x 245	11/64x9-41/64	03002007	4,50	245	840	46	100	4000
7,94 x 50	5/16x1-31/32	03002008	7,94	50	200	114	100	4000
7,94 x 76	5/16x2-63/64	03002009	7,94	76	300	114	100	4000
7,94 x 102	5/16x4-1/64	03002010	7,94	102	370	114	100	3000
7,94 x 135	5/16x5-5/16	03002011	7,94	135	450	114	100	2500
7,94 x 150	5/16x5-29/32	03002012	7,94	150	500	114	100	2500
7,94 x 207	5/16x8-5/32	03002013	7,94	207	680	114	100	2000
7,94 x 312	5/16x12-9/32	03002014	7,94	312	1020	114	100	500

**W4 Band:** Stainless steel (AISI-304) (A2) **Ball:** Stainless steel (AISI-304) (A2)



## “Stepless” Ear Clamp

This clamp was designed for use in assembly lines due to the fast and easy locking system. It is normally mounted where a fixed diameter clamp is required and the application zone is difficult to access.

It is particularly useful in low to medium pressure applications and for air transfer.

Once this clamp has been mounted it is tamper-proof.

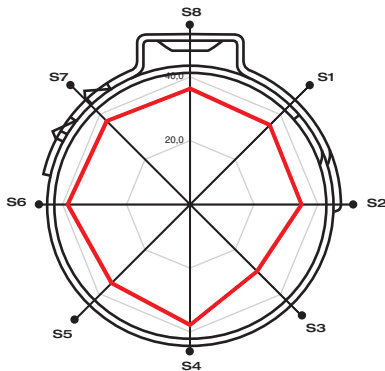
\* This clamp is also available in W4 (AISI-304 Stainless steel) material upon request.

**W1**

### “Stepless” Ear Clamp W1

Nominal Ø D ± 0,3 mm.	Closed Ø D min.	Part n° W1	H max. mm.	S ± 0,3 mm.	a ± 0,15	Box Quantity (MOQ)	Packing
10,0	8,3	03030752	14,0	0,6	7	1000	8000
13,3	10,8	03030760	17,0	0,6	7	1000	8000
15,7	13,2	03030779	20,1	0,6	7	1000	5000
17,5	14,3	03030787	22,5	0,8	7	1000	5000
17,8	14,6	03030795	22,5	0,8	7	1000	5000
18,5	15,3	03030808	23,5	0,8	7	1000	4000
20,5	17,3	03030816	26,0	0,8	7	500	3000
29,5	26,3	03030824	35,5	0,8	7	500	3000
31,6	28,4	03030832	37,5	0,8	7	500	2000
39,6	36,4	03030840	45,5	0,8	7	500	2000
40,5	37,3	03030859	46,5	0,8	7	500	1000
45,5	42,3	03030867	51,5	0,8	7	200	400
47,0	43,8	03030875	53,0	0,8	7	200	400
51,5	48,3	03030883	57,5	0,8	7	100	500
52,5	49,3	03030891	58,5	0,8	7	100	500
65,5	62,3	03030904	71,5	0,8	7	100	500

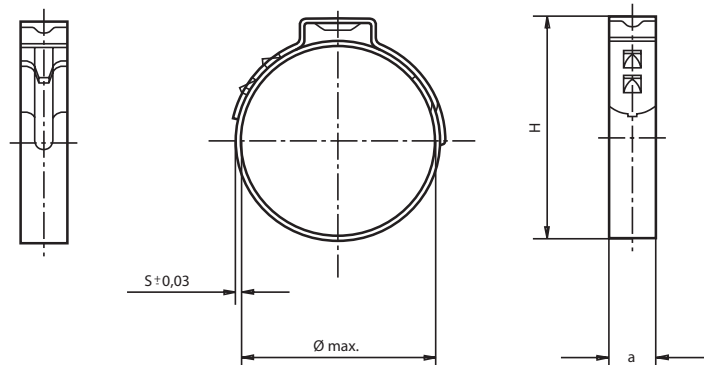
**W1 Band:** Mild Steel Dx51D + AZ 150 (UNI EN 10215)



#### Polar Diagram

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— Force Kg	35,3	35,0	29,6	37,8	34,9	38,5	36,4	37,1

Torque / Efficiency [ Nm / daN ]





# Clip Clamp

The design of the locking mechanism of the Clip Clamp allows for great precision when mounting.

This mechanism, together with the folds in the material confers a spring function to this clamp, meaning that it can maintain constant pressure around the hose.

The rounded band edges avoid damage to the hose.

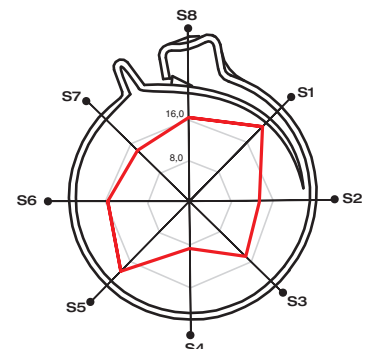
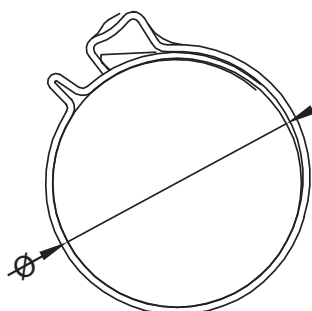
This clamp is especially suited for use in assembly lines and industrial applications due to the ease with which it can be mounted and the AISI-304 Stainless steel material employed in its manufacture.

**W4**

## Clip Clamp W4

Article	Application Ø		Part n° W4	Colour	Bandwidth a	Box Quantity (MOQ)	Packing
	mm. min. - max.	inches min. - max.					
clip 8	8,5-9,5	21/64-3/8	03030410	YELLOW	7	500	8000
clip 9	9,5-10,5	3/8-13/32	03030429	PURPLE	7	500	8000
clip 10	10,5-11,5	13/32-29/64	03030437	NEUTRAL	7	500	4000
clip 11	11,5-12,5	29/64-31/64	03030445	GREEN	7	500	4000
clip 12	12,5-14,0	12,5-35/64	03030453	BLACK	8	500	4000
clip 13	13,5-15,0	1-7/32-19/32	03030461	YELLOW	8	500	2000
clip 14	14,5-16,0	37/64-5/8	03030470	PURPLE	8	250	2000
clip 15	15,5-17,0	39/64-43/64	03030488	NEUTRAL	8	250	2000
clip 16	16,5-18,0	21/32-45/64	03030496	GREEN	8	250	2000
clip 17	17,5-19,0	11/16-3/4	03030509	BLACK	8	250	2000
clip 18	18,5-20,0	47/64-25/32	03030517	YELLOW	8	250	2000
clip 19	19,5-21,0	49/64-53/64	03030525	PURPLE	8	250	2000
clip 20	20,5-22,0	13/16-55/64	03030533	NEUTRAL	8	250	2000
clip 21	21,5-23,0	27/32-29/32	03030541	GREEN	8	250	2000
clip 22	22,5-24,0	57/64-15/16	03030550	BLACK	8	250	2000
clip 23	23,5-25,0	59/64-63/64	03030568	YELLOW	8	250	2000
clip 24	24,5-26,0	31/32-1-1/32	03030576	PURPLE	8	250	2000

**W4 Band:** Stainless Spring Steel (AISI-304) (A2)



Polar Diagram								
● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— Force	19,7	13,4	14,5	9,6	17,6	15,3	14,2	16,2

Torque / Efficiency [ Nm / daN ]



## Fixed diameter "S" Clamp

The fixed diameter "S" clamp was designed to ensure the best possible fit of hose and coupling.

This is achieved due to the fact that once the clamp has been mounted and tightened it fits the desired diameter exactly.

The design of this clamp means that it can be used with hoses mounted on metallic or plastic couplings. It is particularly recommended for certain sectors ranging from medical machinery manufacture to the automotive industry.

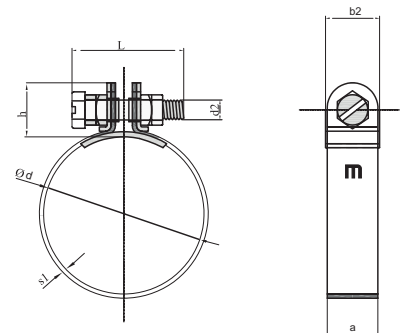
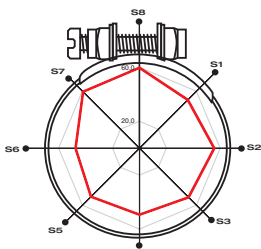
\* This clamp can be supplied in diameters up to 120mm and in bandwidths up to 20mm.

**W1**

### Fixed diameter "S" Clamp W1

Application Ød	Article ADF	Part n° W1	a	L max.	d2	b2	s1 +0,2-0,1	Box Quantity (MOQ)	Packing	
mm	inches									
10	25/64	ADF10/9	03032010	9	31	M.4	10,5	0,4	250	1000
11	7/16	ADF11/9	03032029	9	31	M.4	10,5	0,4	250	1000
12	15/32	ADF12/9	03032037	9	31	M.4	10,5	0,4	250	1000
13	33/64	ADF13/9	03032045	9	31	M.4	10,5	0,4	250	1000
14	35/64	ADF14/9	03032053	9	31	M.4	10,5	0,4	250	1000
15	19/32	ADF15/9	03032061	9	31	M.4	10,5	0,4	250	1000
16	5/8	ADF16/9	03032070	9	31	M.4	10,5	0,4	250	1000
17	43/64	ADF17/9	03032088	9	31	M.4	10,5	0,4	250	1000
18	45/64	ADF18/9	03032096	9	31	M.4	10,5	0,4	250	1000
19	3/4	ADF19/9	03032109	9	31	M.4	10,5	0,4	250	1000
20	25/32	ADF20/9	03032117	9	31	M.4	10,5	0,4	250	1000
21	53/64	ADF21/12	03032740	12	35	M.5	14	0,5	250	1000
22	55/64	ADF22/12	03032758	12	35	M.5	14	0,5	250	1000
23	29/32	ADF23/12	03032766	12	35	M.5	14	0,5	250	1000
24	15/16	ADF24/12	03032774	12	35	M.5	14	0,5	250	1000
25	1	ADF25/12	03032782	12	35	M.5	14	0,5	250	1000
26	1-1/32	ADF26/12	03032790	12	35	M.5	14	0,5	250	1000
27	1-1/16	ADF27/12	03032803	12	35	M.5	14	0,5	250	1000
28	1-7/64	ADF28/12	03032811	12	35	M.5	14	0,5	250	250
29	1-9/64	ADF29/12	03032820	12	35	M.5	14	0,5	250	250
30	1-3/16	ADF30/12	03032838	12	35	M.5	14	0,5	250	250
21	53/64	ADF21/15	03033347	15	40	M.6	17	0,6	250	250
23	29/32	ADF23/15	03033363	15	40	M.6	17	0,6	250	250
25	1	ADF25/15	03033380	15	40	M.6	17	0,6	250	250
26	1-1/32	ADF26/15	03033398	15	40	M.6	17	0,6	100	400
31	1-7/32	ADF31/15	03033443	15	40	M.6	17	0,6	100	400
32	1-17/64	ADF32/15	03033451	15	40	M.6	17	0,6	100	400
33	1-19/64	ADF33/15	03033460	15	40	M.6	17	0,6	100	400
34	1-11/32	ADF34/15	03033478	15	40	M.6	17	0,6	100	400
35	1-3/8	ADF35/15	03033486	15	40	M.6	17	0,6	100	400
36	1-27/64	ADF36/15	03033494	15	40	M.6	17	0,6	100	100
44	1-47/64	ADF 44/15	03033574	15	40	M.6	17	0,6	100	100
46	1-13/16	ADF46/15	03033590	15	40	M.6	17	0,6	100	100

**W1 Screw:** Qst 36-3 Mild steel (DIN 1.0213) Silver-white Cr3 Zinc-Plated **Band and Housing:** Galvanized steel S/EN 10292(DIN 1.0935)



#### Polar Diagram

Sectors	S1	S2	S3	S4	S5	S6	S7	S8
1,5	50,8	55,6	51,6	49,4	51,0	47,5	59,3	59,8

Torque / Efficiency [ Nm / daN ]



W1

## ASFA "L" Worm-Drive Clip

Thanks to the exclusive design of the housing, the ASFA "L" W1 Worm-Drive Clip has excellent performance while being at the same time very compact.

The cold-formed stamped band thread, smoothed on the underside, combined with the beveled band edges protects the hose from any damage.

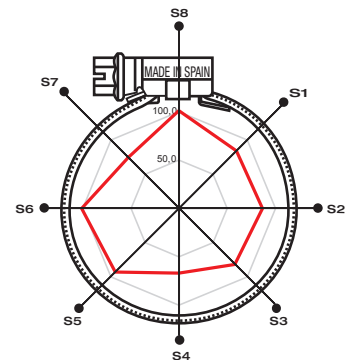
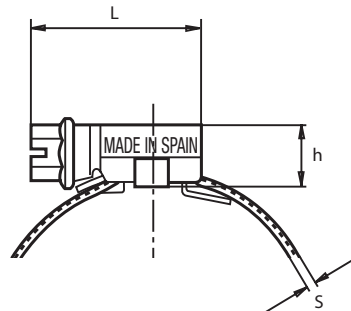
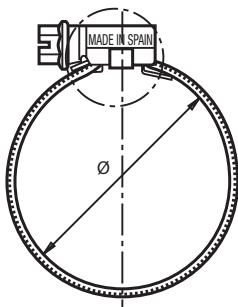
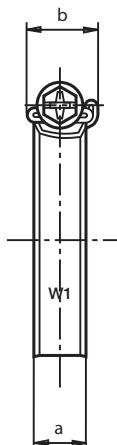
The ASFA "L" W1 hose clip complies fully with the DIN 3017 norm and also with the RoHs directive EU 2002/95/EC dated 1st July 2006. This clip is ideal for general industrial applications.

\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling. **Patented Worldwide.**

### ASFA "L" W1 Worm-Drive Clip (9mm bandwidth)

Application Ø	Part n° W1	L max.	s + 0,1 0	h max.	a + 0,3 a - 0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
8-12	03008745	17,5	0,65	8,4	7	10,9	1,5	30	200	800
8-16	03008753	22,1	0,65	10,5	9	14,0	3,0	45	200	800
12-22	03008761	22,1	0,65	10,5	9	14,0	3,0	45	200	800
16-27	03008770	23,6	0,75	10,5	9	14,0	3,5	42	200	800
20-32	03008788	23,6	0,75	10,5	9	14,0	3,5	36	200	800
25-40	03008796	25,6	0,75	10,5	9	14,0	4,0	32	100	800
30-45	03008809	25,6	0,75	10,5	9	14,0	4,0	28	100	800
32-50	03008817	25,6	0,75	10,5	9	14,0	4,0	24	100	800
40-60	03008825	25,6	0,75	10,5	9	14,0	4,0	19	100	400
50-70	03008833	29,6	0,75	10,5	9	14,0	4,0	17	100	100
60-80	03008841	29,6	0,75	10,5	9	14,0	4,0	15	100	100
70-90	03008850	29,6	0,75	10,5	9	14,0	4,0	13	50	400
80-100	03008868	29,6	0,75	10,5	9	14,0	4,0	11	50	400
90-110	03008876	29,6	0,75	10,5	9	14,0	4,0	10	25	200
100-120	03008884	29,6	0,75	10,5	9	14,0	4,0	9	25	200
110-130	03008892	29,6	0,75	10,5	9	14,0	4,0	8	25	25
120-140	03008905	29,6	0,75	10,5	9	14,0	4,0	7	25	25
130-150	03008913	29,6	0,75	10,5	9	14,0	4,0	6	25	25
140-160	03008921	29,6	0,75	10,5	9	14,0	4,0	5	25	25

**W1 Screw:** Qst 36-3 Mild steel (DIN 1.0213) Silver-white Cr3 Zinc-Plated **Band and Housing:** Galvanized steel S/EN 10292 (DIN 1.0935)



#### Polar Diagram

Sectors	S1	S2	S3	S4	S5	S6	S7	S8
4 Nm	84,1	86,2	81,8	66,8	93,3	100,8	74,8	101,1

Torque / Efficiency [ Nm / daN ]





## ASFA "L" Worm-Drive Clip

Thanks to the exclusive design of the housing, the ASFA "L" W2 hose clip has excellent performance while being at the same time very compact.

The cold stamped band thread, smoothed on the underside, combined with the beveled band edges protects the hose from any damage.

The ASFA "L" W2 hose clip complies fully with the DIN 3017 norm and also with the RoHs directive EU 2002/95/EC dated 1st July 2006. This clip is ideal for general industrial applications.

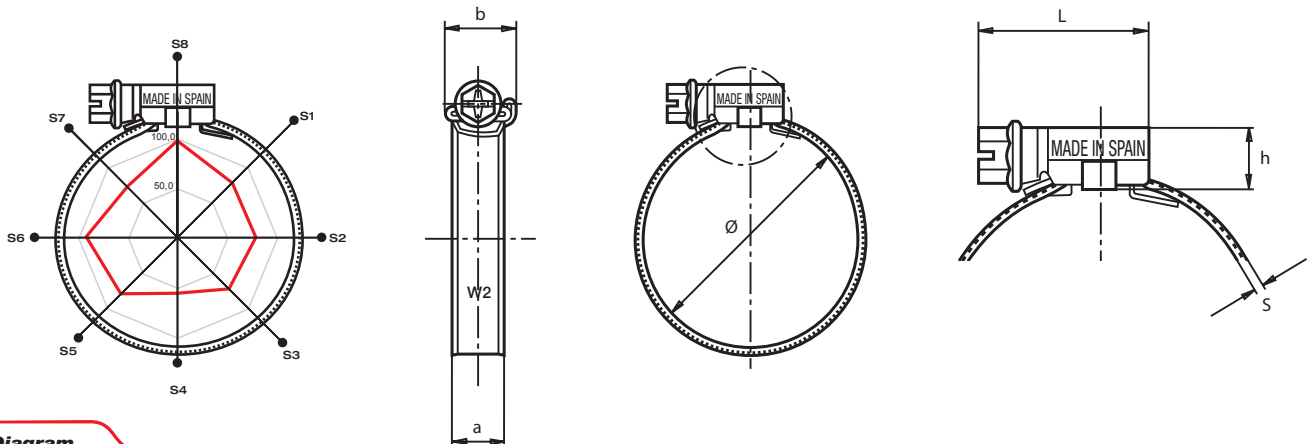
\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling. **Patented Worldwide.**

**W2**

### ASFA "L" W2 Worm-Drive Clip (9mm bandwidth)

Application Ø	Part n°	L max.	s + 0,1 0	h max.	a + 0,3	b max.	Max. Values*	Max. Values*	Box	Packing	
mm	inches	W2			a - 0,2		Torque (Nm)	Pressure (Bars)	Quantity		
									(MOQ)		
8-12	5/16-15/32	03016508	17,5	0,65	8,4	7	10,9	1,5	30	200	1600
8-16	5/16-5/8	03016516	22,1	0,65	10,5	9	14,0	3,0	45	200	800
12-22	15/32-7/8	03016524	22,1	0,65	10,5	9	14,0	3,0	45	200	800
16-27	5/8-1-1/16	03016532	23,6	0,75	10,5	9	14,0	3,5	42	200	800
20-32	25/32-1-1/4	03016540	23,6	0,75	10,5	9	14,0	3,5	36	200	800
25-40	1-1-9/16	03016559	25,6	0,75	10,5	9	14,0	4,0	32	100	800
30-45	1-3/16-1-3/4	03016567	25,6	0,75	10,5	9	14,0	4,0	28	100	800
32-50	1-1/4-1-31/32	03016575	25,6	0,75	10,5	9	14,0	4,0	24	100	800
40-60	1-9/16-2-3/8	03016583	25,6	0,75	10,5	9	14,0	4,0	19	100	400
50-70	1-31/32-2-3/4	03016591	26,6	0,75	10,5	9	14,0	4,0	17	100	100
60-80	2-3/8-3-1/8	03016604	26,6	0,75	10,5	9	14,0	4,0	15	100	100
70-90	2-3/4-3-1/2	03016612	26,6	0,75	10,5	9	14,0	4,0	13	50	400
80-100	3-1/8-3-15/16	03016620	26,6	0,75	10,5	9	14,0	4,0	11	50	400
90-110	3-1/2-4-5/16	03016639	26,6	0,75	10,5	9	14,0	4,0	10	25	200
100-120	3-15/16-4-23/32	03016647	26,6	0,75	10,5	9	14,0	4,0	9	25	200
110-130	4-5/16-5-1/8	03016655	26,6	0,75	10,5	9	14,0	4,0	8	25	25
120-140	4-23/32-5-1/2	03016663	26,6	0,75	10,5	9	14,0	4,0	7	25	25
130-150	5-1/8-5-29/32	03016671	26,6	0,75	10,5	9	14,0	4,0	6	25	25
140-160	5-1/2-6-5/16	03016680	26,6	0,75	10,5	9	14,0	4,0	5	25	25

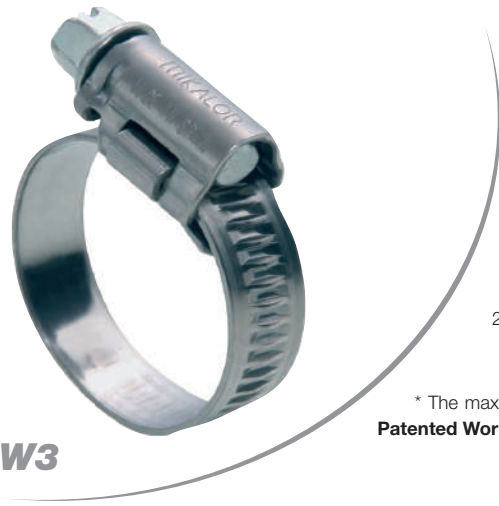
**W2 Screw:** Qst 36-3 Mild steel (DIN 1.0213) Silver-white Cr3 Zinc-Plated **Band and Housing:** X6Cr17 Stainless steel (DIN 1.4016) (AISI-430)



#### Polar Diagram

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— 4 Nm	74,2	76,1	72,3	57,0	81,5	92,8	71,7	99,6

Torque / Efficiency [ Nm / daN ]



## ASFA "L" Worm-Drive Clip

Thanks to the exclusive design of the housing, the ASFA "L" W3 hose clip has excellent performance while being at the same time very compact.

The cold-formed stamped band thread, smoothed on the underside, combined with the beveled band edges protects the hose from any damage.

The ASFA "L" W3 hose clip complies fully with the DIN 3017 norm and also with the RoHs directive EU 2002/95/EC dated 1st July 2006. ASFA "L" W3 is specially recommended for use in the automotive industry.

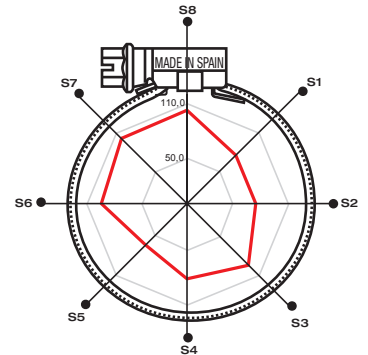
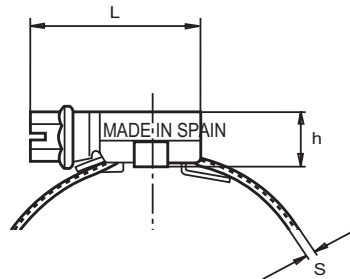
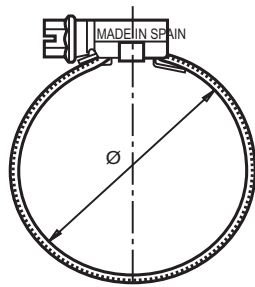
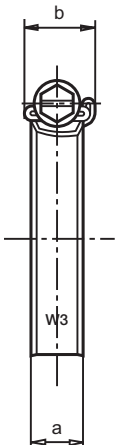
\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.  
**Patented Worldwide.**

W3

### ASFA "L" W3 Worm-Drive Clip (9mm bandwidth)

Application Ø mm inches	Part n° W3	L max.	s + 0,1 0	h max.	a + 0,3 a - 0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing	
8-16	5/16-5/8	03016014	22,1	0,65	10,5	9	14,0	3,0	45	200	800
12-22	15/32-7/8	03016022	22,1	0,65	10,5	9	14,0	3,0	45	200	800
16-27	5/8-1-1/16	03016030	23,6	0,75	10,5	9	14,0	3,5	42	200	800
20-32	25/32-1-1/4	03016049	23,6	0,75	10,5	9	14,0	3,5	36	200	800
25-40	1-1-9/16	03016065	25,6	0,75	10,5	9	14,0	4,0	32	100	800
30-45	1-3/16-1-3/4	03016073	25,6	0,75	10,5	9	14,0	4,0	28	100	800
32-50	1-1/4-1-31/32	03016081	25,6	0,75	10,5	9	14,0	4,0	24	100	800
40-60	1-9/16-2-3/8	03016090	25,6	0,75	10,5	9	14,0	4,0	19	100	400
50-70	1-31/32-2-3/4	03016102	29,6	0,75	10,5	9	14,0	4,0	17	100	100
60-80	2-3/8-3-1/8	03016110	29,6	0,75	10,5	9	14,0	4,0	15	100	100
70-90	2-3/4-3-1/2	03016129	29,6	0,75	10,5	9	14,0	4,0	13	50	400
80-100	3-1/8-3-15/16	03016137	29,6	0,75	10,5	9	14,0	4,0	11	50	400
90-110	3-1/2-4-5/16	03016145	29,6	0,75	10,5	9	14,0	4,0	10	25	200
100-120	3-15/16-4-23/32	03016153	29,6	0,75	10,5	9	14,0	4,0	9	25	200
110-130	4-5/16-5-1/8	03016161	29,6	0,75	10,5	9	14,0	4,0	8	25	25
120-140	4-23/32-5-1/2	03016170	29,6	0,75	10,5	9	14,0	4,0	7	25	25
130-150	5-1/8-5-29/32	03016188	29,6	0,75	10,5	9	14,0	4,0	6	25	25
140-160	5-1/2-6-5/16	03016196	29,6	0,75	10,5	9	14,0	4,0	5	25	25

**W3 Screw:** Stainless steel (AISI 430) **Band and Housing:** Stainless steel X6Cr17 (DIN 1.4016)(AISI-430)



**Polar Diagram**

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— 4 Nm	75,1	74,5	93,6	80,4	63,9	96,3	102,0	103,0

Torque / Efficiency [ Nm / daN ]



# ASFA "L" Worm-Drive Clip

Thanks to the exclusive design of the housing, the ASFA "L" W4 hose clip has excellent performance while being at the same time very compact.

The cold-formed stamped band thread, smoothed on the underside, combined with beveled band-edges protects the hose from damage.

The ASFA "L" W4 hose clip complies fully with the DIN 3017 norm and also with the RoHs directive EU 20032/95/EC dated 1st July 2006. This clip is ideally for use in the marine industry, due to the corrosion resistance offered by the use of AISI-304 stainless steel in its manufacture.

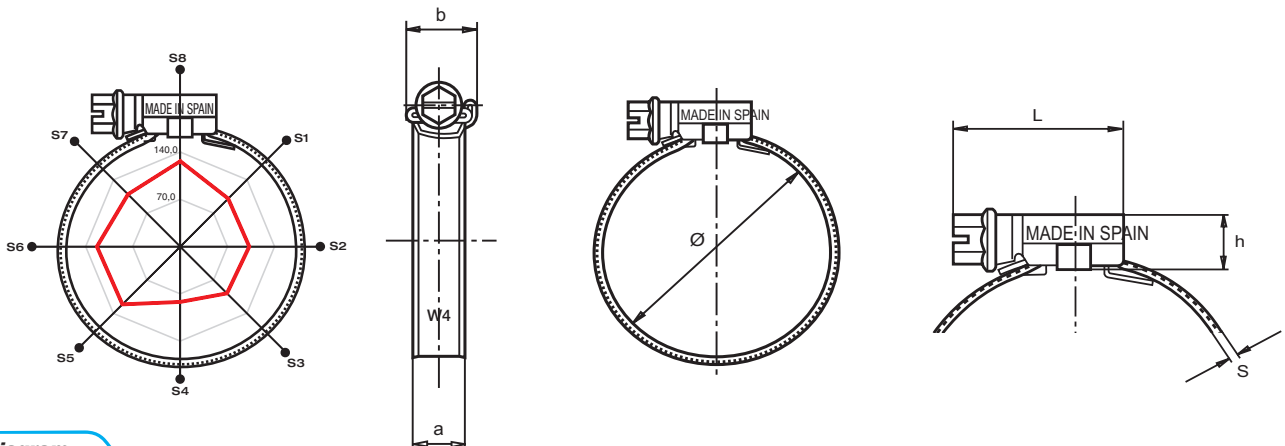
\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.  
**Patented Worldwide.**

**W4**

## ASFA "L" W4 Worm-Drive Clip (9mm bandwidth)

Application Ø		Part n° W4	L max.	s + 0,1 0	h max.	a + 0,3 a - 0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches										
8-12	5/16-15/32	03014000	17,5	0,65	8,4	7	10,9	1,5	30	200	800
8-16	5/16-5/8	03014019	22,1	0,65	10,5	9	14,0	3,0	45	200	800
12-22	15/32-7/8	03014027	22,1	0,65	10,5	9	14,0	3,0	45	200	800
16-27	5/8-1-1/16	03014035	23,6	0,75	10,5	9	14,0	3,5	42	200	800
20-32	25/32-1-1/4	03014043	23,6	0,75	10,5	9	14,0	3,5	36	200	800
25-40	1-1-9/16	03014051	25,6	0,75	10,5	9	14,0	4,0	32	100	800
30-45	1-3/16-1-3/4	03014060	25,6	0,75	10,5	9	14,0	4,0	28	100	800
32-50	1-1/4-1-31/32	03014078	25,6	0,75	10,5	9	14,0	4,0	24	100	800
40-60	1-9/16-2-3/8	03014086	25,6	0,75	10,5	9	14,0	4,0	19	100	400
50-70	1-31/32-2-3/4	03014094	29,6	0,75	10,5	9	14,0	4,0	17	100	100
60-80	2-3/8-3-1/8	03014107	29,6	0,75	10,5	9	14,0	4,0	15	100	100
70-90	2-3/4-3-1/2	03014115	29,6	0,75	10,5	9	14,0	4,0	13	50	400
80-100	3-1/8-3-15/16	03014123	29,6	0,75	10,5	9	14,0	4,0	11	50	400
90-110	3-1/2-4-5/16	03014140	29,6	0,75	10,5	9	14,0	4,0	10	25	200
100-120	3-15/16-4-23/32	03014158	29,6	0,75	10,5	9	14,0	4,0	9	25	200
110-130	4-5/16-5-1/8	03014166	29,6	0,75	10,5	9	14,0	4,0	8	25	25
120-140	4-23/32-5-1/2	03014174	29,6	0,75	10,5	9	14,0	4,0	7	25	25
130-150	5-1/8-5-29/32	03014182	29,6	0,75	10,5	9	14,0	4,0	6	25	25
140-160	5-1/2-6-5/16	03014190	29,6	0,75	10,5	9	14,0	4,0	5	25	25

**W4 Screw:** Stainless steel (AISI-304) Cu (A2) **Band and Housing:** X5CrNi1810 Stainless steel (DIN 1.4301) (AISI-304) (A2)



### Polar Diagram

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— 4 Nm	100,5	102,5	98,1	82,1	121,2	123,5	109,5	126,5

Torque / Efficiency [ Nm / daN ]



**W5**

## ASFA "L" Worm-Drive Clip

Thanks to the exclusive design of the housing, the ASFA "L" W5 hose clip has excellent performance while being at the same time very compact.

The cold-formed stamped band thread, smoothed on the underside, combined with beveled band-edges protects the hose from damage.

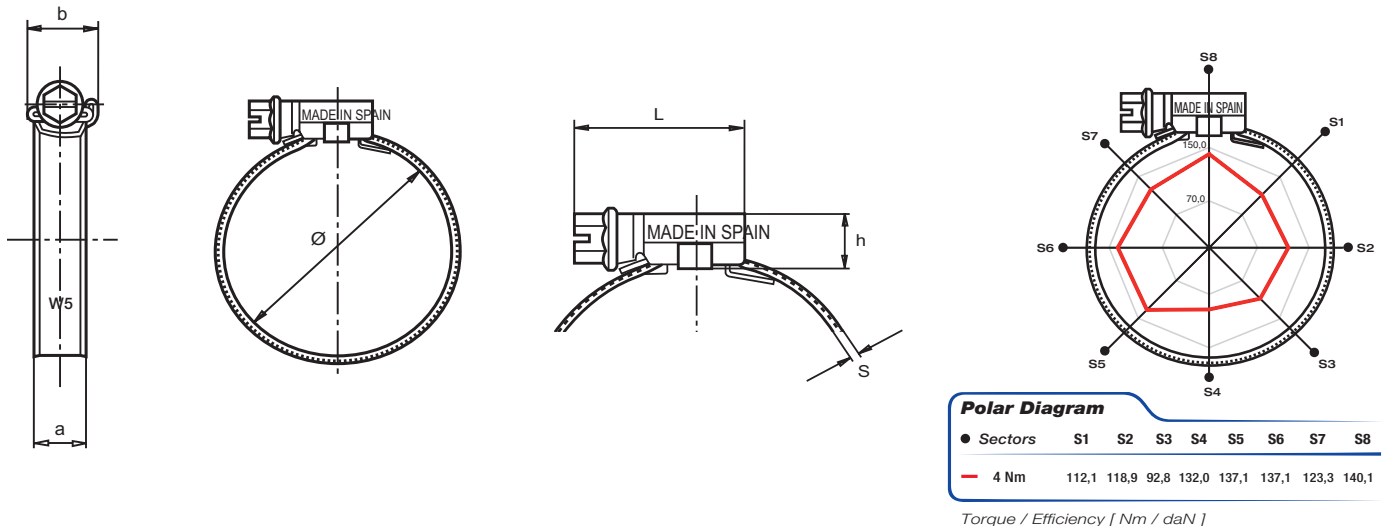
The ASFA "L" W5 hose clip complies fully with the DIN 3017 norm and also with the RoHS directive EU 20032/95/EC dated 1st July 2006. This clip is ideally for use in the petrochemical, foodstuffs and marine industry due to the outstanding corrosion resistance offered by the use of AISI-316 stainless steel in its manufacture.

\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.  
**Patented Worldwide.**

### ASFA "L" W5 Worm-Drive Clip (9mm bandwidth)

Application Ø	Part n°	L max.	s + 0,1 0	h max.	a + 0,3 a - 0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing	
mm	inches										
8-16	5/16-5/8	03015759	22,1	0,65	10,5	9	14,0	3,0	45	200	800
12-22	15/32-7/8	03015767	22,1	0,65	10,5	9	14,0	3,0	45	200	800
16-27	5/8-1-1/16	03015775	23,6	0,75	10,5	9	14,0	3,5	42	200	800
20-32	25/32-1-1/4	03015783	23,6	0,75	10,5	9	14,0	3,5	36	200	800
25-40	1-1-9/16	03015804	25,6	0,75	10,5	9	14,0	4,0	32	100	800
30-45	1-3/16-1-3/4	03015812	25,6	0,75	10,5	9	14,0	4,0	28	100	800
32-50	1-1/4-1-31/32	03015820	25,6	0,75	10,5	9	14,0	4,0	24	100	800
40-60	1-9/16-2-3/8	03015839	25,6	0,75	10,5	9	14,0	4,0	19	100	400
50-70	1-31/32-2-3/4	03015847	29,6	0,75	10,5	9	14,0	4,0	17	100	100
60-80	2-3/8-3-1/8	03015855	29,6	0,75	10,5	9	14,0	4,0	15	100	100
70-90	2-3/4-3-1/2	03015863	29,6	0,75	10,5	9	14,0	4,0	13	50	400
80-100	3-1/8-3-15/16	03015871	29,6	0,75	10,5	9	14,0	4,0	11	50	400
90-110	3-1/2-4-5/16	03015880	29,6	0,75	10,5	9	14,0	4,0	10	25	200
100-120	3-15/16-4-23/32	03015898	29,6	0,75	10,5	9	14,0	4,0	9	25	200
110-130	4-5/16-5-1/8	03015900	29,6	0,75	10,5	9	14,0	4,0	8	25	25
120-140	4-23/32-5-1/2	03015919	29,6	0,75	10,5	9	14,0	4,0	7	25	25
130-150	5-1/8-5-29/32	03015927	29,6	0,75	10,5	9	14,0	4,0	6	25	25
140-160	5-1/2-6-5/16	03015935	29,6	0,75	10,5	9	14,0	4,0	5	25	25

**W5 Screw:** Stainless steel (AISI-316) Cu (A4) **Band and Housing:** X5CrNiMo 17.12.2 Stainless steel (DIN 1.4401) (AISI-316) (A4)





W1

## ASFA "S" Worm-Drive Clip

The ASFA S" W1 hose clip combines an innovative housing designed to take very high torque and a sturdy 12mm band which together make this a top-performance hose clip.

The cold-formed stamped band thread, smoothed on the underside, combined with beveled band-edges protects the hose from any damage.

The ASFA "S" W1 hose clip complies fully with the DIN 3017 norm and also with the RoHs directive EU 20032/95/EC dated 1st July 2006.

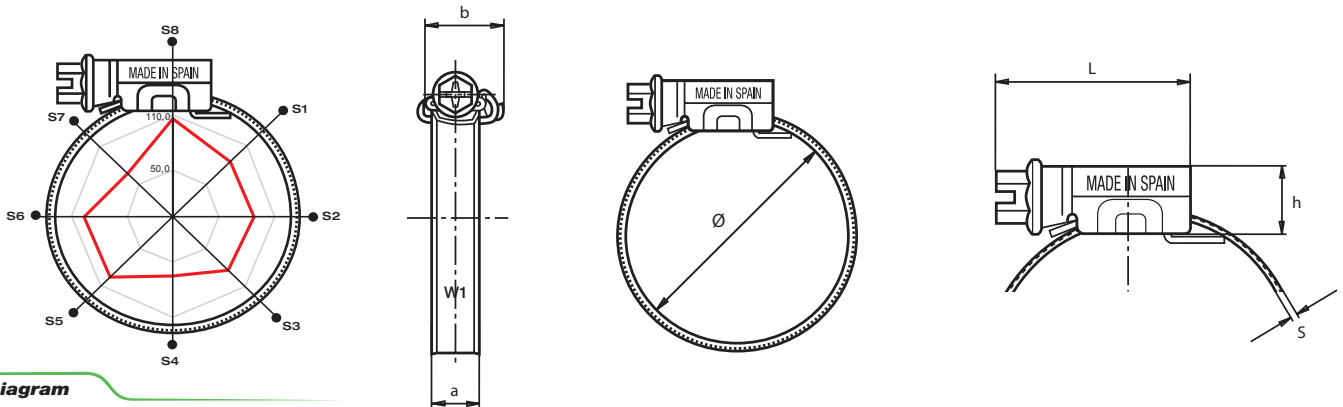
This clip is ideally for use in general industrial applications where a robust and competitively priced clip is called for. The ASFA "S" W1 is especially recommended for use in agriculture and in fluid transfer applications.

\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.  
**Patented Worldwide.**

### ASFA "S" W1 Worm-Drive Clip (12mm bandwidth)

Application Ø		Part n° W1	L max.	s + 0,1 0	h max.	a + 0,3 a - 0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches										
16-27	5/8-1-1/16	03009001	29,6	0,8	11	12,2	18,8	4,2	45,0	50	400
20-32	25/32-1-1/4	03009002	29,6	0,8	11	12,2	18,8	5,2	45,0	50	400
25-40	1-1-9/16	03009003	29,6	0,8	11	12,2	18,8	5,2	40,0	50	400
30-45	1-3/16-1-3/4	03009004	29,6	0,8	11	12,2	18,8	5,2	35,0	50	400
32-50	1-1/4-1-31/32	03009005	29,6	0,8	11	12,2	18,8	6,0	35,0	50	400
40-60	1-9/16-2-3/8	03009006	29,6	0,8	11	12,2	18,8	6,0	30,0	50	400
50-70	1-31/32-2-3/4	03009007	31,6	0,8	11	12,2	18,8	6,8	25,0	50	400
60-80	2-3/8-3-1/8	03009008	31,6	0,8	11	12,2	18,8	6,8	20,0	50	50
70-90	2-3/4-3-1/2	03009009	31,6	0,8	11	12,2	18,8	6,8	17,0	50	50
80-100	3-1/8-3-15/16	03009010	31,6	0,8	11	12,2	18,8	6,8	14,0	25	200
90-110	3-1/2-4-5/16	03009011	31,6	0,8	11	12,2	18,8	6,8	12,0	25	200
100-120	3-15/16-4-23/32	03009012	31,6	0,8	11	12,2	18,8	6,8	10,0	25	200
110-130	4-5/16-5-1/8	03009013	31,6	0,8	11	12,2	18,8	6,8	8,0	25	25
120-140	4-23/32-5-1/2	03009014	34,6	0,8	11	12,2	18,8	6,8	7,0	25	25
130-150	5-1/8-5-29/32	03009015	34,6	0,8	11	12,2	18,8	6,8	6,0	25	25
140-160	5-1/2-6-5/16	03009016	34,6	0,8	11	12,2	18,8	6,8	5,0	25	25
150-170	5-29/32-6-11/16	03009017	34,6	0,8	11	12,2	18,8	6,8	4,0	25	25
160-180	6-5/16-7-3/32	03009018	34,6	0,8	11	12,2	18,8	6,8	3,0	25	25
170-190	6-11/16-7-15/32	03009019	34,6	0,8	11	12,2	18,8	6,8	2,0	10	10
180-200	7-3/32-7-7/8	03009020	34,6	0,8	11	12,2	18,8	6,8	2,0	10	10
190-210	7-31/64-8-17/64	03009021	34,6	0,8	11	12,2	18,8	6,8	1,8	10	10
200-220	7-7/8-8-21/32	03009022	34,6	0,8	11	12,2	18,8	6,8	1,8	10	10
210-230	8-17/64-9-1/16	03009023	34,6	0,8	11	12,2	18,8	6,8	1,6	10	10
220-240	8-21/32-9-29/64	03009024	34,6	0,8	11	12,2	18,8	6,8	1,6	10	10

**W1 Screw:** Qst 36-3 Mild steel (DIN 1.0213) Silver-white Cr3 Zinc-Plated **Band and Housing:** Galvanized steel S/EN 10292 (DIN 1.0935)



**Polar Diagram**

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— 5 Nm	86,6	87,2	83,2	64,9	93,9	96,9	67,6	105,4

Torque / Efficiency [ Nm / daN ]



**W2**

## ASFA "S" Worm-Drive Clip

The ASFA "S" W2 hose clip combines an innovative housing and a sturdy 12mm band which together make this a high-performance hose clip.

The cold-formed stamped band thread, smoothed on the underside, combined with beveled band edges protects the hose from any damage.

The (AISI-430) Stainless steel finish of the band and housing make this a very attractive clip.

The ASFA "S" W2 hose clip complies fully with the DIN3017 norm and also with the RoHS directive EU20032/95/EC dated 1st July 2006. This clip is ideally for use in automotive applications, in agriculture and in fluid transfer applications.

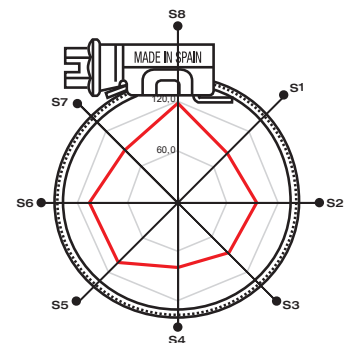
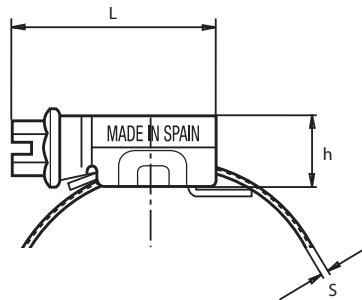
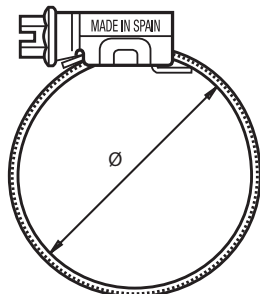
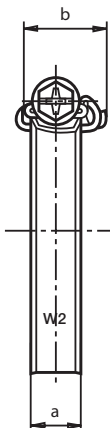
\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.

Patented Worldwide.

### ASFA "S" W2 Worm-Drive Clip (12mm bandwidth)

Application Ø mm	Application Ø inches	Part n° W2	L max.	s + 0,1 0	h max.	a + 0,3 a - 0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
16-27	5/8-1-1/16	03017017	29,6	0,8	11	12,2	18,8	4,2	45,0	50	400
20-32	25/32-1-1/4	03017025	29,6	0,8	11	12,2	18,8	5,2	45,0	50	400
25-40	1-1-9/16	03017033	29,6	0,8	11	12,2	18,8	5,2	40,0	50	400
30-45	1-3/16-1-3/4	03017009	29,6	0,8	11	12,2	18,8	5,2	35,0	50	400
32-50	1-1/4-1-31/32	03017041	29,6	0,8	11	12,2	18,8	6,0	35,0	50	400
40-60	1-9/16-2-3/8	03017050	29,6	0,8	11	12,2	18,8	6,0	30,0	50	400
50-70	1-31/32-2-3/4	03017068	31,6	0,8	11	12,2	18,8	6,8	25,0	50	400
60-80	2-3/8-3-1/8	03017076	31,6	0,8	11	12,2	18,8	6,8	20,0	50	50
70-90	2-3/4-3-1/2	03017084	31,6	0,8	11	12,2	18,8	6,8	17,0	50	50
80-100	3-1/8-3-15/16	03017092	31,6	0,8	11	12,2	18,8	6,8	14,0	25	200
90-110	3-1/2-4-5/16	03017105	31,6	0,8	11	12,2	18,8	6,8	12,0	25	200
100-120	3-15/16-4-23/32	03017113	31,6	0,8	11	12,2	18,8	6,8	10,0	25	200
110-130	4-5/16-5-1/8	03017121	31,6	0,8	11	12,2	18,8	6,8	8,0	25	25
120-140	4-23/32-5-1/2	03017130	34,6	0,8	11	12,2	18,8	6,8	7,0	25	25
130-150	5-1/8-5-29/32	03017148	34,6	0,8	11	12,2	18,8	6,8	6,0	25	25
140-160	5-1/2-6-5/16	03017156	34,6	0,8	11	12,2	18,8	6,8	5,0	25	25
150-170	5-29/32-6-11/16	03017164	34,6	0,8	11	12,2	18,8	6,8	4,0	25	25
160-180	6-5/16-7-3/32	03017172	34,6	0,8	11	12,2	18,8	6,8	3,0	25	25
170-190	6-11/16-7-15/32	03017180	34,6	0,8	11	12,2	18,8	6,8	2,0	10	10
180-200	7-3/32-7-7/8	03017199	34,6	0,8	11	12,2	18,8	6,8	2,0	10	10
190-210	7-31/64-8-17/64	03017201	34,6	0,8	11	12,2	18,8	6,8	1,8	10	10
200-220	7-7/8-8-21/32	03017210	34,6	0,8	11	12,2	18,8	6,8	1,8	10	10
210-230	8-17/64-9-1/16	03017228	34,6	0,8	11	12,2	18,8	6,8	1,6	10	10
220-240	8-21/32-9-9/64	03017236	34,6	0,8	11	12,2	18,8	6,8	1,6	10	10

**W2 Screw:** Qst 36-3 Mild steel (DIN 1.0213) Silver-white Cr3 Zinc-Plated **Band and Housing:** X6Cr17 Stainless steel (DIN 1.4016) (AISI-430)



#### Polar Diagram

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— 5 Nm	83,0	96,3	87,7	80,0	103,9	105,1	88,4	117,3

Torque / Efficiency [ Nm / daN ]



W3

## ASFA "S" Worm-Drive Clip

The ASFA "S" W3 hose clip combines an innovative housing and a sturdy 12mm band (compared with 9mm in the light version) which together make this a high-performance hose clip. The cold-formed stamped band thread, smoothed on the underside, combined with the beveled band edges protects the hose from any damage.

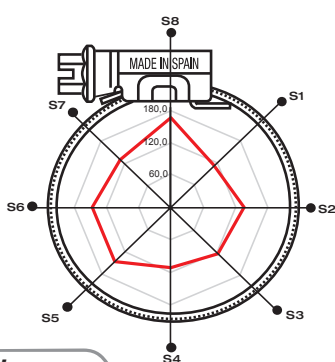
Manufactured in its entirety in AISI-430 stainless steel, the ASFA "S" W3 is a very attractive clip which complies fully with the DIN 3017 norm and also with the RoHs directive EU 2002/95/EC dated 1st July 2006. It is especially recommended for use in automotive, agricultural and fluid transfer applications.

\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.  
**Patented Worldwide.**

### ASFA "S" W3 Worm-Drive Clip (12mm bandwidth)

Application Ø		Part nº W3	L max.	s + 0,1 0	h max.	a + 0,3 a - 0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches										
16-27	5/8-1-1/16	03016209	29,6	0,8	11	12,2	18,8	4,2	45,0	50	400
20-32	25/32-1-1/4	03016217	29,6	0,8	11	12,2	18,8	5,2	45,0	50	400
25-40	1-1-9/16	03016225	29,6	0,8	11	12,2	18,8	5,2	40,0	50	400
30-45	1-3/16-1-3/4	03016233	29,6	0,8	11	12,2	18,8	5,2	35,0	50	400
32-50	1-1/4-1-31/32	03016241	29,6	0,8	11	12,2	18,8	6,0	35,0	50	400
40-60	1-9/16-2-3/8	03016250	29,6	0,8	11	12,2	18,8	6,0	30,0	50	400
50-70	1-31/32-2-3/4	03016268	31,6	0,8	11	12,2	18,8	6,8	25,0	50	400
60-80	2-3/8-3-1/8	03016276	31,6	0,8	11	12,2	18,8	6,8	20,0	50	50
70-90	2-3/4-3-1/2	03016284	31,6	0,8	11	12,2	18,8	6,8	17,0	50	50
80-100	3-1/8-3-15/16	03016292	31,6	0,8	11	12,2	18,8	6,8	14,0	25	200
90-110	3-1/2-4-5/16	03016305	31,6	0,8	11	12,2	18,8	6,8	12,0	25	200
100-120	3-15/16-4-23/32	03016313	31,6	0,8	11	12,2	18,8	6,8	10,0	25	200
110-130	4-5/16-5-1/8	03016321	31,6	0,8	11	12,2	18,8	6,8	8,0	25	25
120-140	4-23/32-5-1/2	03016330	34,6	0,8	11	12,2	18,8	6,8	7,0	25	25
130-150	5-1/8-5-29/32	03016348	34,6	0,8	11	12,2	18,8	6,8	6,0	25	25
140-160	5-1/2-6-5/16	03016356	34,6	0,8	11	12,2	18,8	6,8	5,0	25	25
150-170	5-29/32-6-11/16	03016364	34,6	0,8	11	12,2	18,8	6,8	4,0	25	25
160-180	6-5/16-7-3/32	03016372	34,6	0,8	11	12,2	18,8	6,8	3,0	25	25
170-190	6-11/16-7-15/32	03016380	34,6	0,8	11	12,2	18,8	6,8	2,0	10	10
180-200	7-3/32-7-7/8	03016399	34,6	0,8	11	12,2	18,8	6,8	2,0	10	10
190-210	7-31/64-8-17/64	03016428	34,6	0,8	11	12,2	18,8	6,8	1,8	10	10
200-220	7-7/8-8-21/32	03016436	34,6	0,8	11	12,2	18,8	6,8	1,8	10	10
210-230	8-17/64-9-1/16	03016444	34,6	0,8	11	12,2	18,8	6,8	1,6	10	10
220-240	8-21/32-9-9/64	03016452	34,6	0,8	11	12,2	18,8	6,8	1,6	10	10

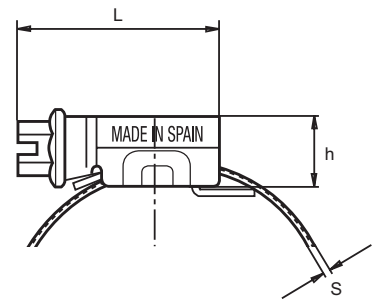
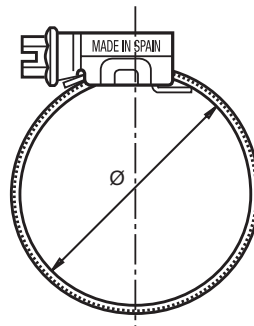
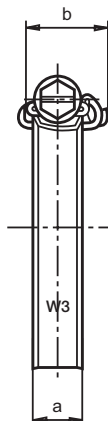
**W3 Screw:** Stainless steel (AISI-430) **Band and Housing:** Stainless steel X6Cr17 (DIN 1.4016) (AISI-430)



**Polar Diagram**

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— 5 Nm	111,7	135,8	122,9	112,4	146,9	146,7	129,4	166,9

Torque / Efficiency [ Nm / daN ]





## ASFA "S" Worm-Drive Clip

The ASFA "S" W4 hose clip combines an innovative housing and a sturdy 12mm. band which together make this a high-performance hose clip.

The cold-formed stamped band thread, smoothed on the underside, combined with beveled band-edges protects the hose from any damage.

The ASFA "S" W4 hose clip complies fully with the DIN 3017 norm and also with the RoHs directive EU 20032/95/EC dated 1st July 2006. Crafted entirely from AISI-304 stainless steel, this clip is ideally for use in marine applications or in any industrial assemblies where high levels of corrosion resistance are required.

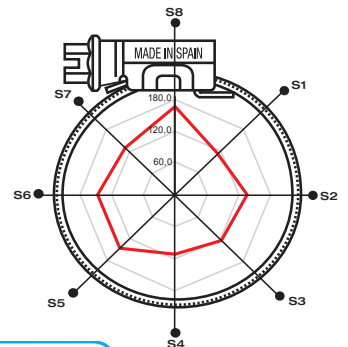
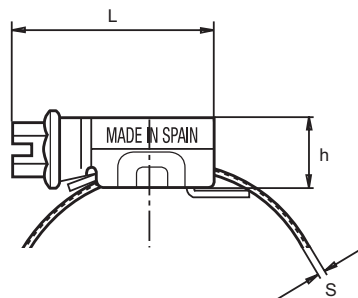
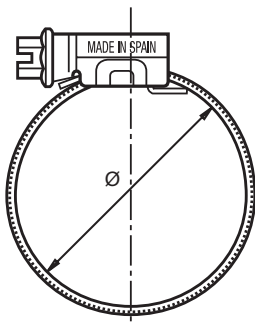
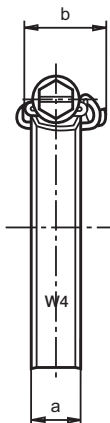
\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.  
**Patented Worldwide.**

**W4**

### ASFA "S" W4 Worm-Drive Clip (12mm bandwidth)

Application Ø	Part n°	L max.	s + 0,1 0	h max.	a + 0,3 a - 0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing	
mm	inches										
16-27	5/8-1-1/16	03014730	29,6	0,8	11	12,2	18,8	4,6	45,0	50	400
20-32	25/32-1-1/4	03014510	29,6	0,8	11	12,2	18,8	5,6	45,0	50	400
25-40	1-1-9/16	03014529	29,6	0,8	11	12,2	18,8	5,6	40,0	50	400
30-45	1-3/16-1-3/4	03014748	29,6	0,8	11	12,2	18,8	5,6	35,0	50	400
32-50	1-1/4-1-31/32	03014537	29,6	0,8	11	12,2	18,8	6,5	35,0	50	400
40-60	1-9/16-2-3/8	03014545	29,6	0,8	11	12,2	18,8	6,5	30,0	50	400
50-70	1-31/32-2-3/4	03014553	31,6	0,8	11	12,2	18,8	7,0	25,0	50	400
60-80	2-3/8-3-1/8	03014561	31,6	0,8	11	12,2	18,8	7,0	20,0	50	50
70-90	2-3/4-3-1/2	03014570	31,6	0,8	11	12,2	18,8	7,0	17,0	50	50
80-100	3-1/8-3-15/16	03014588	31,6	0,8	11	12,2	18,8	7,0	14,0	25	200
90-110	3-1/2-4-5/16	03014596	31,6	0,8	11	12,2	18,8	7,0	12,0	25	200
100-120	3-15/16-4-23/32	03014609	31,6	0,8	11	12,2	18,8	7,0	10,0	25	200
110-130	4-5/16-5-1/8	03014617	31,6	0,8	11	12,2	18,8	7,0	8,0	25	25
120-140	4-23/32-5-1/2	03014625	34,6	0,8	11	12,2	18,8	7,0	7,0	25	25
130-150	5-1/8-5-29/32	03014633	34,6	0,8	11	12,2	18,8	7,0	6,0	25	25
140-160	5-1/2-6-5/16	03014641	34,6	0,8	11	12,2	18,8	7,0	5,0	25	25
150-170	5-29/32-6-11/16	03014650	34,6	0,8	11	12,2	18,8	7,0	4,0	25	25
160-180	6-5/16-7-3/32	03014668	34,6	0,8	11	12,2	18,8	7,0	3,0	25	25
170-190	6-11/16-7-15/32	03014676	34,6	0,8	11	12,2	18,8	7,0	2,0	10	10
180-200	7-3/32-7-7/8	03014684	34,6	0,8	11	12,2	18,8	7,0	2,0	10	10
190-210	7-31/64-8-17/64	03014692	34,6	0,8	11	12,2	18,8	7,0	1,8	10	10
200-220	7-7/8-8-21/32	03014705	34,6	0,8	11	12,2	18,8	7,0	1,8	10	10
210-230	8-17/64-9-1/16	03014713	34,6	0,8	11	12,2	18,8	7,0	1,6	10	10
220-240	8-21/32-9-9/64	03014721	34,6	0,8	11	12,2	18,8	7,0	1,6	10	10

**W4 Screw:** Stainless steel (AISI-304) Cu (A2) **Band and Housing:** X5CrNi1810 Stainless steel (DIN 1.4301) (AISI-304) (A2)



**Polar Diagram**

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— 5 Nm	111,7	135,8	122,9	112,4	146,9	146,7	129,4	166,9

Torque / Efficiency [ Nm / daN ]





## ASFA "S" Worm-Drive Clip

The ASFA "S" W5 hose clip combines an innovative housing, a sturdy 12mm band and is made entirely of AISI-316 stainless steel.

The cold-formed stamped band thread, smoothed on the underside, combined with beveled band edges protects the hose from any damage.

The ASFA "S" W5 hose clip complies fully with the DIN 3017 norm and also with the RoHs directive EU 20032/95/EC dated 1st July 2006. Crafted entirely from AISI-316 stainless steel, this clip is ideally for use in the marine, petrochemical and foodstuffs sectors, where only the highest quality stainless steel is acceptable due to the extreme application conditions.

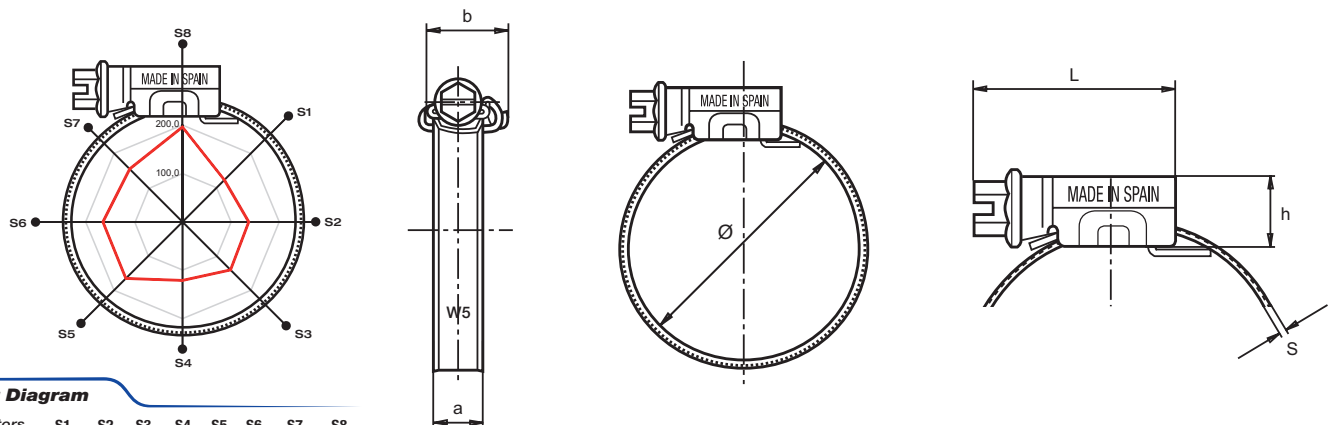
\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.  
**Patented Worldwide.**

**W5**

### ASFA "S" W5 Worm-Drive Clip (12mm bandwidth)

Application Ø	Part n°	L max.	s + 0,1 0	h max.	a + 0,3 a - 0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing	
mm	inches										
16-27	5/8-1-1/16	03017720	29,6	0,8	11	12,2	18,8	4,6	45,0	50	400
20-32	25/32-1-1/4	03017500	29,6	0,8	11	12,2	18,8	5,6	45,0	50	400
25-40	1-1-9/16	03017519	29,6	0,8	11	12,2	18,8	5,6	40,0	50	400
30-45	1-3/16-1-3/4	03017738	29,6	0,8	11	12,2	18,8	5,6	35,0	50	400
32-50	1-1/4-1-31/32	03017527	29,6	0,8	11	12,2	18,8	6,5	35,0	50	400
40-60	1-9/16-2-3/8	03017535	29,6	0,8	11	12,2	18,8	6,5	30,0	50	400
50-70	1-31/32-2-3/4	03017543	31,6	0,8	11	12,2	18,8	7,0	25,0	50	400
60-80	2-3/8-3-1/8	03017551	31,6	0,8	11	12,2	18,8	7,0	20,0	50	50
70-90	2-3/4-3-1/2	03017560	31,6	0,8	11	12,2	18,8	7,0	17,0	50	50
80-100	3-1/8-3-15/16	03017578	31,6	0,8	11	12,2	18,8	7,0	14,0	25	200
90-110	3-1/2-4-5/16	03017586	31,6	0,8	11	12,2	18,8	7,0	12,0	25	200
100-120	3-15/16-4-23/32	03017594	31,6	0,8	11	12,2	18,8	7,0	10,0	25	200
110-130	4-5/16-5-1/8	03017607	31,6	0,8	11	12,2	18,8	7,0	8,0	25	25
120-140	4-23/32-5-1/2	03017615	34,6	0,8	11	12,2	18,8	7,0	7,0	25	25
130-150	5-1/8-5-29/32	03017623	34,6	0,8	11	12,2	18,8	7,0	6,0	25	25
140-160	5-1/2-6-5/16	03017631	34,6	0,8	11	12,2	18,8	7,0	5,0	25	25
150-170	5-29/32-6-11/16	03017640	34,6	0,8	11	12,2	18,8	7,0	4,0	25	25
160-180	6-5/16-7-3/32	03017658	34,6	0,8	11	12,2	18,8	7,0	3,0	25	25
170-190	6-11/16-7-15/32	03017666	34,6	0,8	11	12,2	18,8	7,0	2,0	10	10
180-200	7-3/32-7-7/8	03017674	34,6	0,8	11	12,2	18,8	7,0	2,0	10	10
190-210	7-31/64-8-17/64	03017682	34,6	0,8	11	12,2	18,8	7,0	1,8	10	10
200-220	7-7/8-8-21/32	03017690	34,6	0,8	11	12,2	18,8	7,0	1,8	10	10
210-230	8-17/64-9-1/16	03017703	34,6	0,8	11	12,2	18,8	7,0	1,6	10	10
220-240	8-21/32-9-9/64	03017711	34,6	0,8	11	12,2	18,8	7,0	1,6	10	10

**W5 Screw:** Stainless steel (AISI-316) Cu (A4) **Band and Housing:** X5CrNiMo 17.12.2 Stainless steel (DIN 1.4401) (AISI-316) (A4)



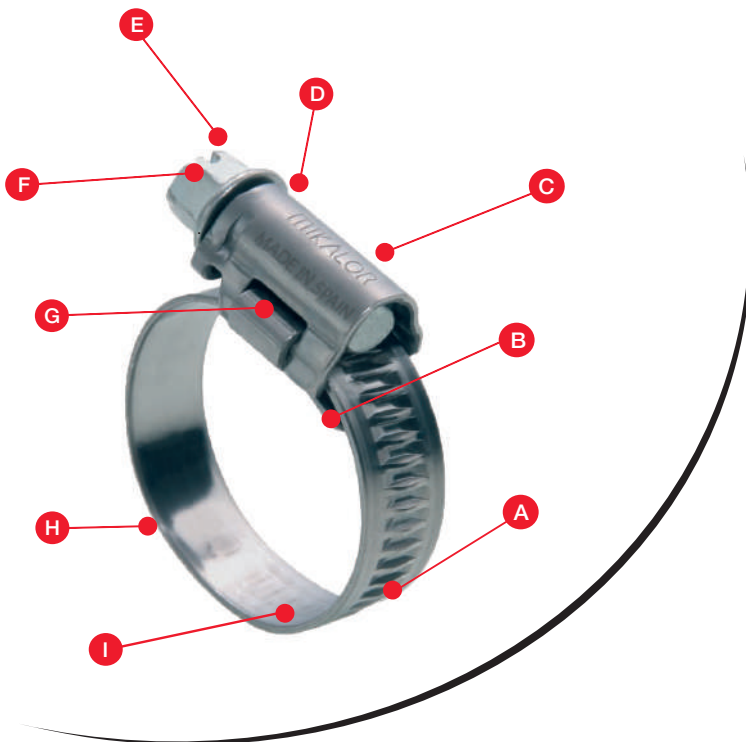
#### Polar Diagram

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— 5 Nm	122,4	137,2	140,6	121,2	165,7	164,6	154,5	196,1

Torque / Efficiency [ Nm / daN ]

# Technical Information

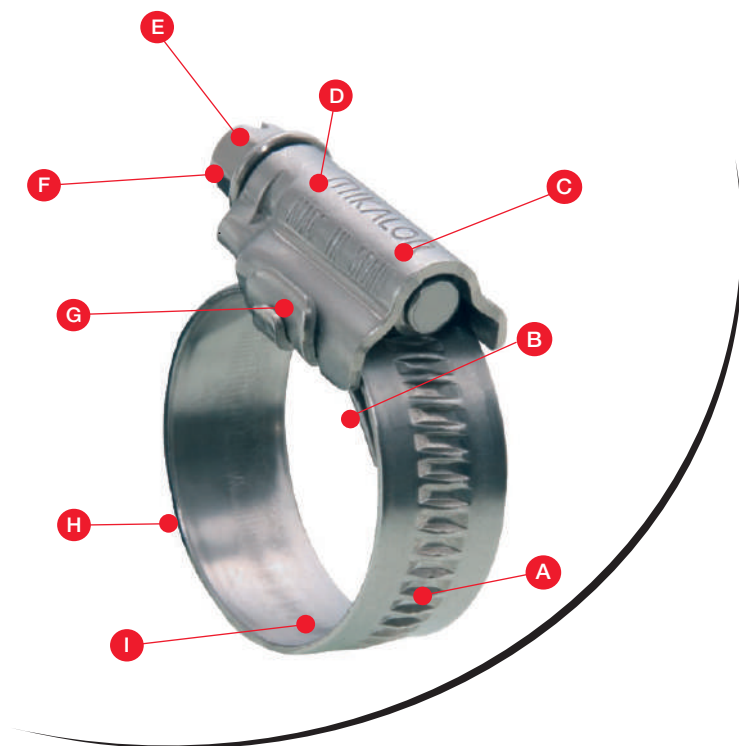
## ASFA<sup>®</sup> "L" Worm-Drive Clips



- A** Cold formed stamped band thread which gives a very good grip due to the fact that the raised thread is deeper than the thickness of the material used.
- B** Inner lip specially designed to guide the band end around the underside of the band. This feature help to avoid leaks and guarantees top performance compared to other clamps and an even distribution of pressure around the band.
- C** All Mikalor hose clips are marked with the application range, material, the Mikalor logo and the country of manufacture in compliance with DIN 3017. ASFA "L" Worm-Drive Clips are Chrome VI free and comply with RoHs, WEEE, and the most recent EU environmental directives.
- D** The compact housing grips the screw preventing lateral movement during tightening.
- E** Manual or automatic assembly. Available in dimensions ranging from 8-12mm up to 140-160mm.
- F** The screw was designed to take a lot of torque and can be tightened using a variety of different. ASFA "L" W1 and W2 have a Phillips screw-drive whereas W3-W4-W5 have the slotted type.
- G** The exclusive design of the housing keeps the screw in firm contact with the band and means that the ASFA "L" gives great performance.
- H** Beveled band edges to avoid the clip cutting into the hose.
- I** Smooth band underside which avoids damage to the hose.

# Technical Information

## ASFA<sup>®</sup> "S" Worm-Drive Clips



- A** Cold formed stamped band thread which gives a very good grip due to the fact that the raised thread is deeper than the thickness of the material used.
- B** Inner lip specially designed to guide the band end around the underside of the band. This feature help to avoid leaks and guarantees top performance compared to other clamps and an even distribution of pressure around the band.
- C** All Mikalor hose clips are marked with the application range, material, the Mikalor logo and the country of manufacture in compliance with DIN 3017. ASFA "S" Worm-Drive Clips are Chrome VI free and comply with RoHs, WEEE, and the most recent EU environmental directives.
- D** The compact housing grips the screw preventing lateral movement during tightening.
- E** Manual or automatic assembly. Available in dimensions ranging from 16-27mm up to 220-240mm.
- F** The screw was designed to take a lot of torque and can be tightened using a variety of different. ASFA "S" W1 and W2 have a Phillips screw-drive whereas W3-W4-W5 have the slotted type.
- G** The exclusive design of the housing keeps the screw in firm contact with the band and means that the ASFA "S" gives great performance.
- H** Beveled band edges to avoid the clip cutting into the hose.
- I** Smooth band underside which avoids damage to the hose.



**MIKALOR**



***High Pressure***



**W1**

## Super Heavy-Duty Hose Clamp

Mikalor was the first company to design and produce a heavy-duty hose clamp, and since then the Super clamp has gone from strength to strength.

The high strength 8.8 grade steel nut and T-bolt mean that Super can be tightened up hard using many different kinds of tools, while the beveled edges protect the hose from harm.

The Super clamp is in its element in agricultural applications, waste water extraction, mining, quarrying or in other sectors where a rugged yet competitively priced heavy-duty clamp is required.

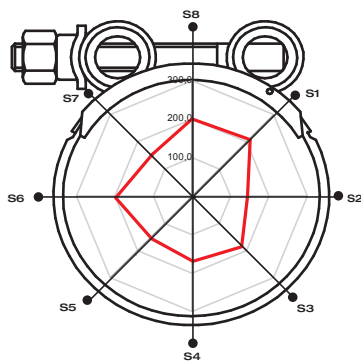
\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.  
**Patented Worldwide.**

### Super W1

Application Ø mm	Application Ø inches	Part n° W1	r	e	a	b	s	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
17-19	11/16-3/4	03018263	M5	8	18 <sup>+02</sup>	19,8	0,6	4,5	48	50	400
20-22	25/32-29/32	03018271	M5	8	18 <sup>+02</sup>	19,8	0,6	4,5	48	50	400
23-25	29/32-1	03018280	M5	8	18 <sup>+02</sup>	19,8	0,6	4,5	45	50	400
26-28	1-1/32-1-7/64	03018298	M5	8	18 <sup>+02</sup>	19,8	0,6	4,5	45	50	400
29-31	1-5/32-1-7/32	03018300	M6	10	20 <sup>+03</sup>	22	0,8	8	42	50	50
32-35	1-17/64-1-3/8	03018319	M6	10	20 <sup>+03</sup>	22	0,8	8	42	50	50
36-39	1-27/64-1-17/32	03018327	M6	10	20 <sup>+03</sup>	22	0,8	8	40	50	50
40-43	1-9/16-1-11/16	03018335	M6	10	20 <sup>+03</sup>	22	0,8	8	40	50	50
44-47	1-47/64-1-27/32	03018010	M7	11	22 <sup>+02</sup>	24,5	1,2	16	44	50	50
48-51	1-57/64-2-1/64	03018028	M7	11	22 <sup>+02</sup>	24,5	1,2	16	44	50	50
52-55	2-3/64-2-11/64	03018036	M7	11	22 <sup>+02</sup>	24,5	1,2	16	40	25	25
56-59	2-13/64-2-21/64	03018044	M7	11	22 <sup>+02</sup>	24,5	1,2	16	40	25	25
60-63	2-23/64-2-31/64	03018052	M7	11	22 <sup>+02</sup>	24,5	1,2	16	36	25	25
64-67	2-33/64-2-41/64	03018060	M7	11	22 <sup>+02</sup>	24,5	1,2	16	36	25	25
68-73	2-11/16-3-7/8	03018079	M8	13	24 <sup>+04</sup>	26,5	1,5	25	28	25	25
74-79	2-29/32-3-7/64	03018087	M8	13	24 <sup>+04</sup>	26,5	1,5	25	28	25	25
80-85	3-5/32-3-11/32	03018095	M8	13	24 <sup>+04</sup>	26,5	1,5	25	28	25	25
86-91	3-25/64-3-37/64	03018108	M8	13	24 <sup>+04</sup>	26,5	1,5	25	20	25	25
92-97	3-5/8-3-13/16	03018116	M8	13	24 <sup>+04</sup>	26,5	1,5	25	20	25	25

Application Ø		Part n° W1	r	e	a	b	s	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches										
98-103	3-55/64-4-1/16	03018124	M8	13	24 <sup>+04</sup>	26,5	1,5	25	20	25	25
104-112	4-3/32-4-3/8	03018132	M8	13	24 <sup>+04</sup>	26,5	1,5	25	12	25	25
113-121	4-29/64-4-49/64	03018140	M8	13	24 <sup>+04</sup>	26,5	1,5	25	12	25	25
122-130	4-51/64-5-1/8	03018159	M8	13	24 <sup>+04</sup>	26,5	1,5	25	12	25	25
131-139	5-5/32-5-15/32	03018167	M10	17	26 <sup>+05</sup>	29	1,7	50	9	10	10
140-148	5-33/64-5-53/64	03018175	M10	17	26 <sup>+05</sup>	29	1,7	50	9	10	10
149-161	5-55/64-6-11/32	03018183	M10	17	26 <sup>+05</sup>	29	1,7	50	9	10	10
162-174	6 3/8-6-7/8	03018191	M10	17	26 <sup>+05</sup>	29	1,7	50	6	10	10
175-187	6-57/64-7-23/64	03018204	M10	17	26 <sup>+05</sup>	29	1,7	50	6	10	10
188-200	7-13/32-7-7/8	03018212	M10	17	26 <sup>+05</sup>	29	1,7	50	6	10	10
201-213	7-29/32-8-25/64	03018220	M10	17	26 <sup>+05</sup>	29	1,7	50	3	10	10
214-226	8-27/64-8-57/64	03018239	M10	17	26 <sup>+05</sup>	29	1,7	50	3	10	10
227-239	8-15/16-9-13/32	03018247	M10	17	26 <sup>+05</sup>	29	1,7	50	3	10	10
240-252	9-29/64-9-59/64	03018255	M10	17	26 <sup>+05</sup>	29	1,7	50	3	10	10

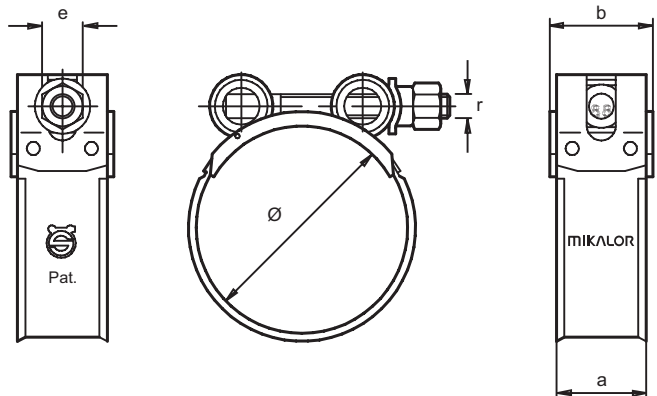
**W1 Screw:** 8.8 grade steel, white zinc-plated **Band, Bridge, Washer and Trunions:** Mild steel white zinc-plated



**Polar Diagram**

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— 35 Nm	207,0	144,0	192,0	168,0	155,0	198,0	145,0	194,0

Torque / Efficiency [ Nm / daN ]





**W2**

## Supra Heavy-Duty Hose Clamp Stainless Steel

The Supra range is the natural evolution of the Super W1 Clamp. Due to its revolutionary swiveling bridge, Supra W2 can be mounted in the most awkward applications without having to remove the hose. It can be opened up and fastened again when in place without dislodging any other parts of the clamp, making assembly much easier.

Thanks to the beveled edges, the hose is protected from damage. The Supra W2 clamp complies fully with the RoHS directive EU 20032/95/EC dated 1st July 2006. The high-strength bolt, designed and manufactured by Mikalor specifically for this clamp, together with the captive nut and spacer system allow you to clamp the most demanding of hose assemblies. This is the clamp of choice for professionals in the industrial hose, automotive and agricultural machinery sectors as well as in all industrial applications where an outstanding and above all reliable heavy-duty clamp is required.

\* Special dimensions are available on request.

\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.

**Patented Worldwide.**

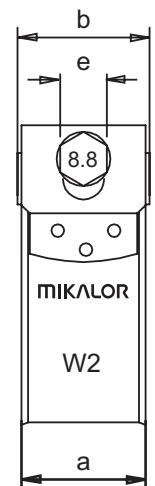
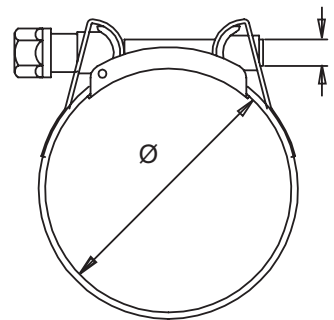
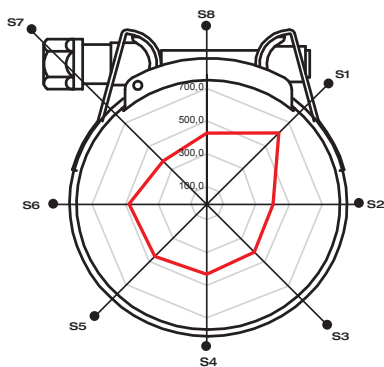
### Supra W2

Application Ø		Part n° W2	r	e	a	b	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches									
17-19	11/16-3/4	03019012	M6	8	18 <sup>+02</sup>	20	10	45	50	400
19-21	3/4-53/64	03019020	M6	8	18 <sup>+02</sup>	19,8	10	45	50	400
21-23	53/64-29/32	03019039	M6	8	18 <sup>+02</sup>	20	10	45	50	400
23-25	29/32-1	03019047	M6	8	18 <sup>+02</sup>	19,8	10	45	50	400
25-27	1-1-1/16	03019055	M6	8	18 <sup>+02</sup>	20	10	45	50	400
27-29	1-1/16-15/32	03019063	M6	8	18 <sup>+02</sup>	19,8	10	45	50	200
29-31	1-5/32-1-7/32	03019071	M7	10	20 <sup>+03</sup>	22	13	40	50	50
31-34	17/32-1-11/32	03019080	M7	10	20 <sup>+03</sup>	22	13	40	50	50
34-37	1-11/32-1-29/64	03019098	M7	10	20 <sup>+03</sup>	22	13	40	50	50
37-40	1-29/64-19/16	03019100	M7	10	20 <sup>+03</sup>	22	13	40	50	50
40-43	1-9/16-1-11/16	03019119	M7	10	20 <sup>+03</sup>	22	13	40	50	50
43-47	1-11/16-1-27/32	03019127	M7	10	20 <sup>+03</sup>	22	16	36	50	50
47-51	1-27/32-2-1/64	03019135	M7	10	20 <sup>+03</sup>	22	16	36	50	50
51-55	2-1/64-2-11/64	03019143	M7	10	20 <sup>+03</sup>	22	16	36	25	25
55-59	2-11/64-2-21/64	03019151	M7	10	20 <sup>+03</sup>	22	16	36	25	25
59-63	2-21/64-2-31/64	03019160	M7	10	20 <sup>+03</sup>	22	16	36	25	25
63-68	2-31/64-2-11/16	03019178	M7	10	20 <sup>+03</sup>	22	16	36	25	25
68-73	2-11/16-3-7/8	03019186	M8	13	25 <sup>+04</sup>	27,5	30	28	25	25
73-79	3-7/8-3-7/64	03019194	M8	13	25 <sup>+04</sup>	28	30	28	25	25
79-85	3-7/64-3-11/32	03019207	M8	13	25 <sup>+04</sup>	27,5	30	28	25	25
85-91	3-11/32-3-37/64	03019215	M8	13	25 <sup>+04</sup>	27,5	30	20	25	25
91-97	3-37/64-3-13/16	03019223	M8	13	25 <sup>+04</sup>	27,5	30	20	25	25
97-104	3-13/16-4-3/32	03019231	M8	13	25 <sup>+04</sup>	27,5	30	20	25	25
104-112	4-3/32-4-3/8	03019240	M8	13	25 <sup>+04</sup>	27,5	30	12	25	25
112-121	4-3/8-4-49/64	03019258	M8	13	25 <sup>+04</sup>	27,5	30	12	25	25
121-130	4-49/64-5-1/8	03019266	M8	13	25 <sup>+04</sup>	27,5	30	12	25	25
130-140	5-1/8-5-33/64	03019274	M10	15	28 <sup>+04</sup>	31	45	9	10	10
140-150	5-33/64-5-29/32	03019282	M10	15	28 <sup>+04</sup>	31	45	9	10	10
150-162	5-29/32-6-3/8	03019290	M10	15	28 <sup>+04</sup>	31	45	9	10	10
162-174	6-3/8-6-7/8	03019303	M10	15	28 <sup>+04</sup>	31	45	6	10	10
174-187	6-7/8-7-23/64	03019311	M10	15	28 <sup>+04</sup>	31	45	6	10	10
187-200	7-23/64-7-7/8	03019320	M10	15	28 <sup>+04</sup>	31	45	6	10	10



Application Ø		Part n° W2	r	e	a	b	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches									
200-213	7-7/8-8-25/64	03019338	M10	15	28 <sup>+04</sup>	31	45	3	10	10
213-226	8-25/64-8-57/64	03019346	M10	15	28 <sup>+04</sup>	31	45	3	10	10
226-239	8-57/64-9-13/32	03019354	M10	15	28 <sup>+04</sup>	31	45	3	10	10
239-252	9-13/32-9-59/64	03019362	M10	15	28 <sup>+04</sup>	31	45	3	10	10
252-265	9-59/64-10-7/16	03019370	M10	15	28 <sup>+04</sup>	31	45	3	10	10
265-278	10-7/16-10-151/6	03019477	M10	15	28 <sup>+04</sup>	31	45	3	10	10
278-291	10-15/16-11-29/64	03019392	M10	15	28 <sup>+04</sup>	31	45	3	10	10
291-304	11-29/64-11-31/32	03019403	M10	15	28 <sup>+04</sup>	31	45	3	10	10
304-317	11-31/32-12-31/64	03019411	M10	15	28 <sup>+04</sup>	31	45	3	10	10
317-330	12-31/64-12-63/64	03019485	M10	15	28 <sup>+04</sup>	31	45	3	10	10
330-343	12-63/64-13-1/2	03019422	M10	15	28 <sup>+04</sup>	31	45	3	10	10
343-356	13-1/2-14-1/64	03019433	M10	15	28 <sup>+04</sup>	31	45	3	10	10
356-369	14-1/64-14-17/32	03019444	M10	15	28 <sup>+04</sup>	31	45	3	10	10
369-382	14-17/32-15-3/64	03019455	M10	15	28 <sup>+04</sup>	31	45	3	10	10
382-395	15-3/64-15-35/64	03019499	M10	15	28 <sup>+04</sup>	31	45	3	10	10
395-408	15-35/64-16-1/16	03019500	M10	15	28 <sup>+04</sup>	31	45	3	10	10

**W2 Band and Bridge:** X6Cr17 Stainless steel (DIN 1.4016)(AISI-430) **Bolt:** Qst 36-3 Mild steel (DIN 1.0213) Silver-white Cr3 Zinc-plated



**Polar Diagram**

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— 35 Nm	611,0	404,0	410,0	435,0	456,0	472,0	372,0	428,0

Torque / Efficiency [ Nm / daN ]



**W4**

## Supra Heavy-Duty Hose Clamp Stainless Steel

The Supra range is the natural evolution of the Super W1 Clamp. Due to its revolutionary swiveling bridge, Supra W4 can be mounted in the most awkward applications without having to remove the hose. It can be opened up and fastened again when in place without dislodging any other parts of the clamp, making assembly much easier.

Thanks to the beveled edges, the hose is protected from damage. The Supra W4 clamp complies fully with the RoHS directive EU 20032/95/EC dated 1st July 2006.

The stainless steel bolt together with the captive nut and spacer system allow you to clamp the most demanding of hose assemblies. Supra W4 is a full stainless steel clamp, destined for demanding applications where high corrosion resistance is vital. This top of the range heavy-duty clamp is ideal for marine applications and the foodstuffs industry, as well as for countless industrial applications where AISI-304 stainless steel is specified.

\* Special dimensions are available on request.

\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.

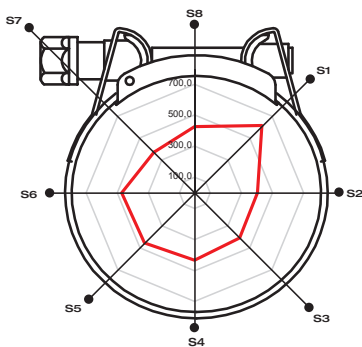
**Patented Worldwide.**

### Supra W4

Application Ø		Part n° W4	r	e	a	b	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches									
17-19	11/16-3/4	03013016	M6	8	18 <sup>+02</sup>	19,8	10	40	50	400
19-21	3/4-53/64	03013024	M6	8	18 <sup>+02</sup>	19,8	10	40	50	400
21-23	53/64-29/32	03013032	M6	8	18 <sup>+02</sup>	19,8	10	40	50	400
23-25	29/32-1	03013040	M6	8	18 <sup>+02</sup>	19,8	10	40	50	400
25-27	1-1-1/16	03013059	M6	8	18 <sup>+02</sup>	19,8	10	40	50	400
27-29	1-1/16-15/32	03013067	M6	8	18 <sup>+02</sup>	19,8	10	40	50	200
29-31	1-5/32-1-7/32	03013075	M7	11	20 <sup>+03</sup>	22	12	35	50	50
31-34	17/32-1-11/32	03013083	M7	11	20 <sup>+03</sup>	22	12	35	50	50
34-37	1-11/32-1-29/64	03013091	M7	11	20 <sup>+03</sup>	22	12	35	50	50
37-40	1-29/64-19/16	03013104	M7	11	20 <sup>+03</sup>	22	12	35	50	50
40-43	1-9/16-1-11/16	03013112	M7	11	20 <sup>+03</sup>	22	12	35	50	50
43-47	1-11/16-1-27/32	03013120	M7	11	20 <sup>+03</sup>	22	12	35	50	50
47-51	1-27/32-2-1/64	03013139	M7	11	20 <sup>+03</sup>	22	16	30	50	50
51-55	2-1/64-2-11/64	03013147	M7	11	20 <sup>+03</sup>	22	16	30	25	25
55-59	2-11/64-2-21/64	03013155	M7	11	20 <sup>+03</sup>	22	16	30	25	25
59-63	2-21/64-2-31/64	03013163	M7	11	20 <sup>+03</sup>	22	16	30	25	25
63-68	2-31/64-2-11/16	03013171	M7	11	20 <sup>+03</sup>	22	16	30	25	25
68-73	2-11/16-3-7/8	03013180	M8	13	25 <sup>+04</sup>	27,5	30	20	25	25
73-79	3-7/8-3-7/64	03013198	M8	13	25 <sup>+04</sup>	27,5	30	20	25	25
79-85	3-7/64-3-11/32	03013200	M8	13	25 <sup>+04</sup>	27,5	30	20	25	25
85-91	3-11/32-3-37/64	03013219	M8	13	25 <sup>+04</sup>	27,5	30	15	25	25
91-97	3-37/64-3-13/16	03013227	M8	13	25 <sup>+04</sup>	27,5	30	15	25	25
97-104	3-13/16-4-3/32	03013235	M8	13	25 <sup>+04</sup>	27,5	30	15	25	25
104-112	4-3/32-4-3/8	03013243	M8	13	25 <sup>+04</sup>	27,5	30	10	25	25
112-121	4-3/8-4-49/64	03013251	M8	13	25 <sup>+04</sup>	27,5	30	10	25	25
121-130	4-49/64-5-1/8	03013260	M8	13	25 <sup>+04</sup>	27,5	30	10	25	25
130-140	5-1/8-5-33/64	03013278	M10	15	28 <sup>+04</sup>	31	45	6	10	10
140-150	5-33/64-5-29/32	03013286	M10	15	28 <sup>+04</sup>	31	45	6	10	10
150-162	5-29/32-6-3/8	03013294	M10	15	28 <sup>+04</sup>	31	45	6	10	10
162-174	6-3/8-6-7/8	03013307	M10	15	28 <sup>+04</sup>	31	45	3	10	10
174-187	6-7/8-7-23/64	03013315	M10	15	28 <sup>+04</sup>	31	45	3	10	10
187-200	7-23/64-7-7/8	03013323	M10	15	28 <sup>+04</sup>	31	45	3	10	10

Application Ø		Part n° W4	r	e	a	b	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches									
200-213	7-7/8-8-25/64	03013331	M10	15	28 <sup>+04</sup>	31	45	3	10	10
213-226	8-25/64-8-57/64	03013340	M10	15	28 <sup>+04</sup>	31	45	3	10	10
226-239	8-57/64-9-13/32	03013358	M10	15	28 <sup>+04</sup>	31	45	3	10	10
239-252	9-13/32-9-59/64	03013366	M10	15	28 <sup>+04</sup>	31	45	3	10	10
252-265	9-59/64-10-7/16	03013374	M10	15	28 <sup>+04</sup>	31	45	3	10	10
265-278	10-7/16-10-151/6	03013390	M10	15	28 <sup>+04</sup>	31	45	3	10	10
278-291	10-15/16-11-29/64	03013422	M10	15	28 <sup>+04</sup>	31	45	3	10	10
291-304	11-29/64-11-31/32	03013433	M10	15	28 <sup>+04</sup>	31	45	3	10	10
304-317	11-31/32-12-31/64	03013444	M10	15	28 <sup>+04</sup>	31	45	3	10	10
317-330	12-31/64-12-63/64	03013403	M10	15	28 <sup>+04</sup>	31	45	3	10	10
330-343	12-63/64-13-1/2	03013455	M10	15	28 <sup>+04</sup>	31	45	3	10	10
343-356	13-1/2-14-1/64	03013466	M10	15	28 <sup>+04</sup>	31	45	3	10	10
356-36*9	14-1/64-14-17/32	03013477	M10	15	28 <sup>+04</sup>	31	45	3	10	10
369-382	14-17/32-15-3/64	03013488	M10	15	28 <sup>+04</sup>	31	45	3	10	10
382-395	15-3/64-15-35/64	03013499	M10	15	28 <sup>+04</sup>	31	45	3	10	10
395-408	15-35/64-16-1/16	03013500	M10	15	28 <sup>+04</sup>	31	45	3	10	10

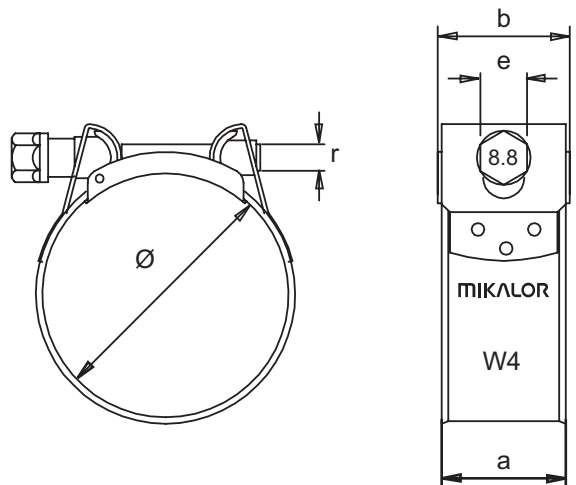
**W4 Band and Bridge:** X5CrNi 1810 Stainless steel (DIN 1.4301)(AISI-304) (A2) **Bolt:** (AISI-302) Cu Stainless steel



**Polar Diagram**

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— 35 Nm	611,0	404,0	410,0	435,0	456,0	472,0	372,0	428,0

Torque / Efficiency [ Nm / daN ]





**W5**

## Supra Heavy-Duty Hose Clamp AISI-316 Stainless Steel

The Supra range is the natural evolution of the Super W1 clamp. Due to its revolutionary swiveling bridge, the Supra W5 clamp can be mounted in the most awkward applications without having to remove the hose. Once mounted, it can be opened up and fastened again without dislodging or losing any of the other components of the clamp, making assembly much easier.

Thanks to the beveled edges, the hose is protected from damage. The Supra W5 clamp complies fully with RoHS directive EU 2002/95/EC dated 1st July 2006. The AISI 316 stainless steel bolt together with the captive nut and spacer system allow you to clamp the most demanding of assemblies. Supra W5 is a full stainless steel clamp destined for demanding applications where very high corrosion resistance is vital. This top of the range heavy-duty clamp is ideal for marine applications, foodstuff manufacture, pharmaceutical and petrochemical industries and other applications where AISI 316 stainless steel fittings are required.

\* Special dimensions are available on request.

\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.

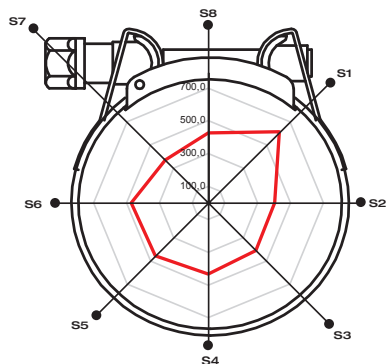
**Patented Worldwide.**

### Supra W5

Application Ø		Part n° W5	r	e	a	b	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches									
17-19	11/16-3/4	03013614	M6	8	18 <sup>+02</sup>	19,8	10	40	50	400
19-21	3/4-53/64	03013622	M6	8	18 <sup>+02</sup>	19,8	10	40	50	400
21-23	53/64-29/32	03013630	M6	8	18 <sup>+02</sup>	19,8	10	40	50	400
23-25	29/32-1	03013649	M6	8	18 <sup>+02</sup>	19,8	10	40	50	400
25-27	1-1-1/16	03013657	M6	8	18 <sup>+02</sup>	19,8	10	40	50	400
27-29	1-1/16-15/32	03013665	M6	8	18 <sup>+02</sup>	19,8	10	40	50	200
29-31	1-5/32-1-7/32	03013673	M7	11	20 <sup>+03</sup>	22	12	35	50	50
31-34	17/32-1-11/32	03013681	M7	11	20 <sup>+03</sup>	22	12	35	50	50
34-37	1-11/32-1-29/64	03013690	M7	11	20 <sup>+03</sup>	22	12	35	50	50
37-40	1-29/64-19/16	03013702	M7	11	20 <sup>+03</sup>	22	12	35	50	50
40-43	1-9/16-1-11/16	03013710	M7	11	20 <sup>+03</sup>	22	12	35	50	50
43-47	1-11/16-1-27/32	03013729	M7	11	20 <sup>+03</sup>	22	12	35	50	50
47-51	1-27/32-2-1/64	03013737	M7	11	20 <sup>+03</sup>	22	16	30	50	50
51-55	2-1/64-2-11/64	03013745	M7	11	20 <sup>+03</sup>	22	16	30	25	25
55-59	2-11/64-2-21/64	03013753	M7	11	20 <sup>+03</sup>	22	16	30	25	25
59-63	2-21/64-2-31/64	03013761	M7	11	20 <sup>+03</sup>	22	16	30	25	25
63-68	2-31/64-2-11/16	03013770	M7	11	20 <sup>+03</sup>	22	16	30	25	25
68-73	2-11/16-3-7/8	03013788	M8	13	25 <sup>+04</sup>	27,5	30	20	25	25
73-79	3-7/8-3-7/64	03013796	M8	13	25 <sup>+04</sup>	27,5	30	20	25	25
79-85	3-7/64-3-11/32	03013809	M8	13	25 <sup>+04</sup>	27,5	30	20	25	25
85-91	3-11/32-3-37/64	03013817	M8	13	25 <sup>+04</sup>	27,5	30	15	25	25
91-97	3-37/64-3-13/16	03013825	M8	13	25 <sup>+04</sup>	27,5	30	15	25	25
97-104	3-13/16-4-3/32	03013833	M8	13	25 <sup>+04</sup>	27,5	30	15	25	25
104-112	4-3/32-4-3/8	03013841	M8	13	25 <sup>+04</sup>	27,5	30	10	25	25
112-121	4-3/8-4-49/64	03013850	M8	13	25 <sup>+04</sup>	27,5	30	10	25	25
121-130	4-49/64-5-1/8	03013868	M8	13	25 <sup>+04</sup>	27,5	30	10	25	25
130-140	5-1/8-5-33/64	03013876	M10	15	28 <sup>+04</sup>	31	45	6	10	10
140-150	5-33/64-5-29/32	03013884	M10	15	28 <sup>+04</sup>	31	45	6	10	10
150-162	5-29/32-6-3/8	03013892	M10	15	28 <sup>+04</sup>	31	45	6	10	10
162-174	6-3/8-6-7/8	03013905	M10	15	28 <sup>+04</sup>	31	45	3	10	10
174-187	6-7/8-7-23/64	03013913	M10	15	28 <sup>+04</sup>	31	45	3	10	10
187-200	7-23/64-7-7/8	03013921	M10	15	28 <sup>+04</sup>	31	45	3	10	10

Application Ø		Part n° W5	r	e	a	b	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches									
200-213	7-7/8-8-25/64	03013930	M10	15	28 <sup>+04</sup>	31	45	3	10	10
213-226	8-25/64-8-57/64	03013948	M10	15	28 <sup>+04</sup>	31	45	3	10	10
226-239	8-57/64-9-13/32	03013956	M10	15	28 <sup>+04</sup>	31	45	3	10	10
239-252	9-13/32-9-59/64	03013964	M10	15	28 <sup>+04</sup>	31	45	3	10	10
252-265	9-59/64-10-7/16	03013971	M10	15	28 <sup>+04</sup>	31	45	3	10	10
265-278	10-7/16-10-151/6	03013981	M10	15	28 <sup>+04</sup>	31	45	3	10	10
278-291	10-15/16-11-29/64	03013982	M10	15	28 <sup>+04</sup>	31	45	3	10	10
291-304	11-29/64-11-31/32	03013983	M10	15	28 <sup>+04</sup>	31	45	3	10	10
304-317	11-31/32-12-31 /64	03013984	M10	15	28 <sup>+04</sup>	31	45	3	10	10
317-330	12-31/64-12-63/64	03013985	M10	15	28 <sup>+04</sup>	31	45	3	10	10
330-343	12-63/64-13-1/2	03013986	M10	15	28 <sup>+04</sup>	31	45	3	10	10
343-356	13-1/2-14-1/64	03013991	M10	15	28 <sup>+04</sup>	31	45	3	10	10
356-36*9	14-1/64-14-17/32	03013992	M10	15	28 <sup>+04</sup>	31	45	3	10	10
369-382	14-17/32-15-3/64	03013993	M10	15	28 <sup>+04</sup>	31	45	3	10	10
382-395	15-3/64-15-35/64	03013994	M10	15	28 <sup>+04</sup>	31	45	3	10	10
395-408	15-35/64-16-1/16	03013995	M10	15	28 <sup>+04</sup>	31	45	3	10	10

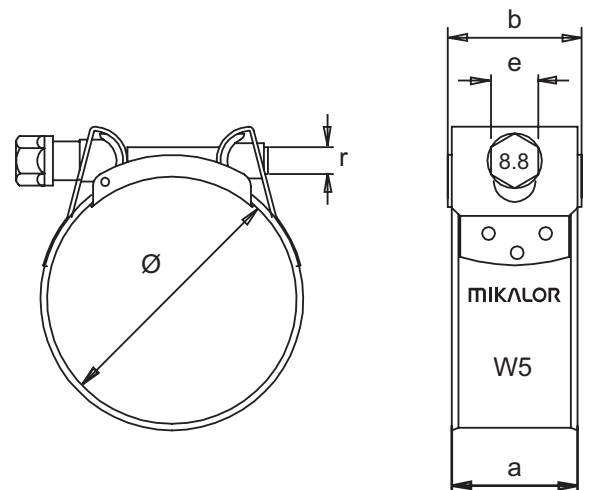
**W5 Band and Bridge:** X5 Cr Ni MO 17.12.2 (DIN 1.4401) (AISI-316) (A4) **Bolt:** (AISI-316) Cu (A4) Stainless steel



**Polar Diagram**

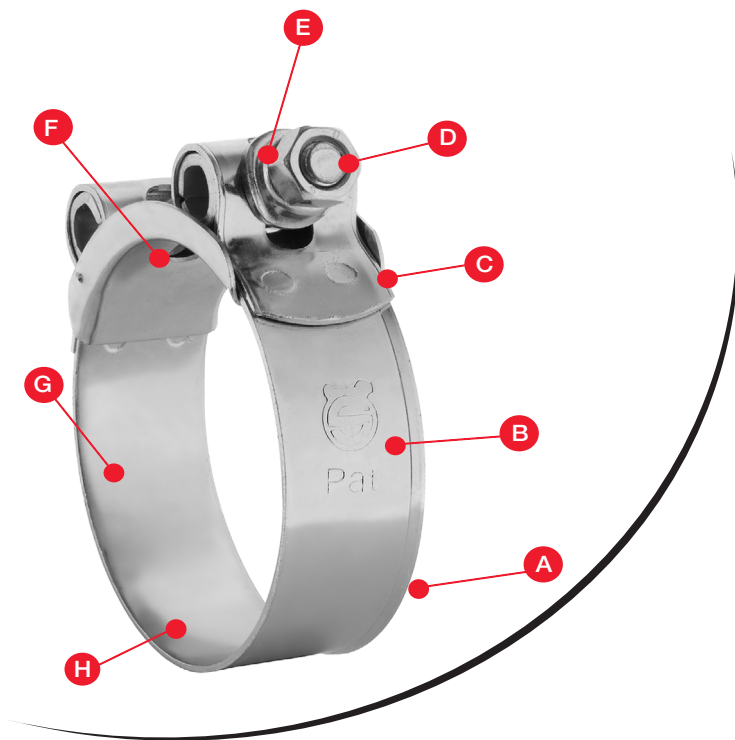
● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— 35 Nm	611,0	404,0	410,0	435,0	456,0	472,0	372,0	428,0

Torque / Efficiency [ Nm / daN ]



# Technical Information

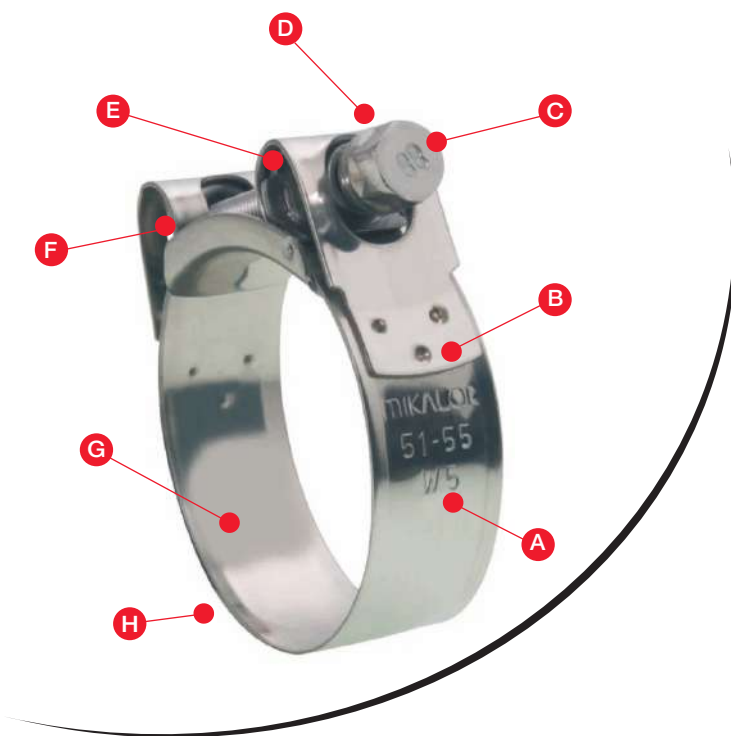
## Super<sup>®</sup> Heavy-Duty Hose Clamp



- A** Cr VI-free white zinc-plated.
- B** Mikalor logo.
- C** Two spot-welds guarantee excellent response in applications requiring very high torque.
- D** T-bolt and hex nut in high impact grade 8.8 steel.
- E** Washer specially designed to separate trunion and nut.
- F** Protective bridge designed to avoid friction between the bolt and the hose and to ensure a leak-proof assembly.
- G** Clamp identified with the Mikalor logo and the application diameter.
- H** Beveled band edges protect the hose from damage.

# Technical Information

## Supra<sup>®</sup> Heavy-Duty Hose Clamp



- A** All Supra clamps are marked with the application range, material quality and the Mikalor logo.
- B** Three spot welds with protuberances guarantee excellent response in applications which require very high torque.
- C** Bolt custom-manufactured by Mikalor for the Supra range.
- D** Manual or automatic assembly.
- E** This revolutionary design feature makes it impossible for the captive nut or trunions to be dislodged.
- F** The swiveling bridge makes it easy to assemble and remove the Supra clamp. It also prevents deformation of the bridge during application.
- G** Supra complies with DIN 3017-3 and the EC directive 2002/95/EC dated 1st July 2006.
- H** Beveled band edges protect the hose from damage.



**MIKALOR**





***Special Clips and Clamps***



# DIN 3021 Heavy-duty Spring-Band Clip

This heavy-duty spring-band clamp is manufactured according to DIN 3021. It is especially recommended for applications where temperature can vary from -40°C to +120°C.

The design of this clamp means that it can maintain the same radial force despite these changes in temperature. It is fast and easy to mount and is also reusable.

\* S= thickness before surface treatment.

\* Also available in 15 mm bandwidth.

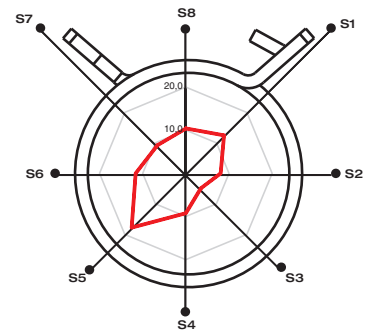
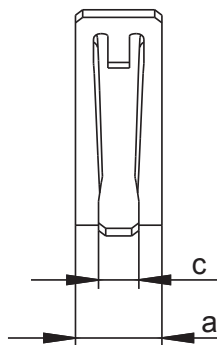
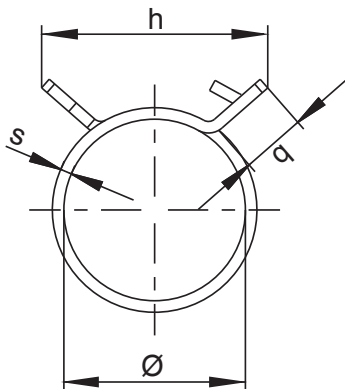
\* Please see pages 84 and 85 for further information regarding application tools.

W1

## DIN 3021 W1

Nominal Ø	Ø min	Ø max	Part n° W1	Bandwidth a ± 0,3	h	b	c ± 0,7	S + 0,08 S - 0,02	Opening Force N	Box Quantity	Packing	
mm	inches	mm								(MOQ)		
17	11/16	15,6	18,5	03031501	12	40	10	5,8	0,8	160	200	800
19	3/4	17,8	20,2	03031510	12	40	10	5,8	1,3	300	200	800
20	25/32	18,4	21,6	03031528	12	40	10	5,8	1,3	200	200	800
21	27/32	19,5	22,5	03031536	12	40	10	5,8	1,3	200	200	800
22	7/8	20,5	24,2	03031538	12	40	10	5,8	1,3	200	200	800
23	29/32	21,0	24,7	03031544	12	40	10	5,8	1,3	320	200	800
24	15/16	22,0	26,0	03031552	12	40	10	5,8	1,3	230	200	800
25	2/2	23,5	26,8	03031560	12	40	10	5,8	1,3	260	200	800
26	1-1/32	24,3	28,0	03031579	12	60	10	5,8	1,7	270	200	800
27	1-1/16	25,2	29,2	03031587	12	60	10	5,8	1,7	280	200	800
29	1-9/64	27,0	31,5	03031595	12	60	10	5,8	1,7	300	200	800
32	1-17/64	29,3	34,5	03031616	12	60	10	5,8	1,7	300	200	800
35	1-3/8	31,5	38,0	03031624	12	60	10	5,8	1,7	300	200	800
36	1-27/64	32,5	39,0	03031632	12	60	10	5,8	1,7	300	200	800
38	1-1/12	34,5	41,5	03031640	12	60	10	5,8	1,7	300	200	800
40	1-19/32	35,5	42,5	03031667	12	60	10	5,8	1,7	300	200	800
41	1-39/64	36,5	43,5	03031669	12	60	10	5,8	1,7	320	100	400
42	1-21/32	37,2	44,5	03031675	12	60	10	5,8	2,1	340	100	400
44	1-47/64	38,5	46,5	03031691	12	60	10	5,8	2,1	340	100	400
46	1-13/16	40,5	48,5	03031704	12	60	10	5,8	2,1	350	100	400
47	1-27/32	41,4	50,0	03031712	12	60	10	5,8	2,1	380	100	400
49	1-59/64	42,5	52,0	03031719	12	72	10	5,8	2,1	390	100	400
50	1-31/32	43,5	53,0	03031720	12	72	10	5,8	2,1	410	100	400
51	2-1/64	44,0	54,0	03031739	12	72	10	5,8	2,1	410	100	400
53	2-3/32	46,0	55,8	03031747	12	72	10	5,8	2,1	410	100	400
55	2-11/64	46,8	58,0	03031755	12	72	10	5,8	2,1	430	100	400

W1 Band: 50 CRV4 Steel



Polar Diagram

Sectors	S1	S2	S3	S4	S5	S6	S7	S8
Force Kg	12,5	8,1	4,9	9,2	17,8	11,7	9,3	10,4

Torque / Efficiency [ Nm / daN ]



**W1**

## Exhaust Clamp

This clamp was designed specifically for use in automotive applications as its name suggests.

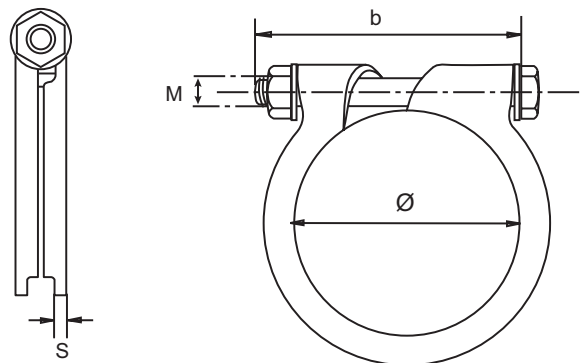
It is used to join safely and securely two metal tubes subject to constant high temperatures and vibration, thereby avoiding leaks of exhaust fumes.

The edges of the clamp are rounded in order to avoid damage to the exhaust system. The exhaust clamp is easy to assemble and provides uniform clamping force around the circumference of the tube.

### Exhaust Clamp W1

Article	Application Ø		Part n° W1	Mxb	S + 0,2	Box Quantity (MOQ)	Packing
	mm	inches					
ATE 30	27,0-30,0	1-1/16-1-3/16	03002765	M8x55	1,5	250	250
ATE 33	30,0-33,0	1-3/16-1-19/64	03002773	M8x55	1,5	250	250
ATE 36	33,0-36,0	1-19/64-1-27/64	03002781	M8x60	2,0	250	250
ATE 39	36,5-39,5	1-7/16-1-9/16	03002785	M8x65	2,0	250	250
ATE 42	39,0-42,0	1-17/32-1-21/32	03002790	M8x60	2,5	100	100
ATE 43	40,5-43,5	1-19/32-1-23/32	03002791	M8x65	2,5	100	100
ATE 45	42,0-45,0	1-21/32-1-49/64	03002802	M8x65	2,5	100	100
ATE 48	45,0-48,0	1-49/64-1-57/64	03002810	M8x80	2,5	100	100
ATE 50	47,5-50,0	1-7/8-1-31/32	03002829	M8x60	2,5	100	100
ATE 51	48,0-51,0	1-57/64-2-1/64	03002837	M8x60	2,5	50	50
ATE 52	49,0-52,0	1-59/64-2-3/64	03002845	M8x65	2,5	50	50
ATE 54	52,0-54,1	2-3/64-2-1/8	03002853	M8x65	2,5	50	50
ATE 56	53,0-56,0	2-3/32-2-13/64	03002861	M8x65	2,5	50	50
ATE 58	55,0-58,0	2-11/64-2-9/32	03002870	M8x70	2,5	50	50
ATE 59	57,0-59,1	2-1/4-2-21/64	03002888	M8x70	2,5	50	50
ATE 61	58,0-61,0	2-9/32-2-13/32	03002896	M8x80	2,5	50	50
ATE 64	61,0-64,0	2-13/32-2-33/64	03002909	M8x80	2,5	50	50
ATE 71	67,0-71,0	2-41/64-2-51/64	03002917	M10x90	3,0	50	50

**W1 Bolt:** 8.8 grade steel white zinc-plated **Band:** St34 (DIN 2393C) Steel





**W4**

## Stainless Steel Double Bridge Clip

The Double Bridge clip was developed by the Mikalor R&D Department due to requirements from the ventilation sector and also for applications involving fume, woodchip and dust extraction for a clamp suitable for spiral hose incorporating an outer helix.

This is just one example of how we put our engineering know-how at the service of our customers. We work together with our customers to design and craft the solution to their needs in each case. The Double-Bridge clip is manufactured in AISI-304 stainless steel.

\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling. **Patented Worldwide.**

\* Also available in **W2**, **W3** and **W5** on request.

\* This clamp can also be supplied with a single bridge.

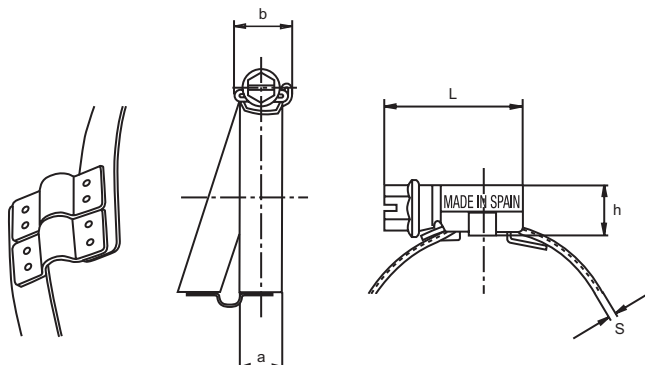
### ASFA "L" W4 Double Bridge Clip (9mm bandwidth)

Application Ø		a+0,3 a-0,2	S + 0,10	b Max.	L	h	Box Quantity (MOQ)	Packing
mm	inches							
50-70	1-31/32-2-3/4	9	0,65	14	25,6	10	100	100
60-80	2-23/64-3-5/32	9	0,65	14	25,6	10	100	100
70-90	2-3/4-3-35/64	9	0,65	14	25,6	10	100	100
80-100	3-5/32-3-15/16	9	0,65	14	25,6	10	50	50
100-120	3-15/16-4-23/32	9	0,65	14	25,6	10	25	50
120-140	4-23/32-5-33/64	9	0,65	14	25,6	10	25	50
140-160	5-33/64-6-19/64	9	0,65	14	25,6	10	25	50

### ASFA "S" W4 Double Bridge Clip (12mm bandwidth)

Application Ø		a+0,3 a-0,2	S + 0,10	b Max.	L	h	Box Quantity (MOQ)	Packing
mm	inches							
150-170	5-29/32-6-11/16	12,2	0,8	18	34,6	11	100	100
150-170	5-29/32-6-11/16	12,2	0,8	18	34,6	11	25	25
160-180	6-5/16-7-3/32	12,2	0,8	18	34,6	11	25	25
170-190	6-11/16-7-15/32	12,2	0,8	18	34,6	11	10	10
180-200	7-3/32-7-7/8	12,2	0,8	18	34,6	11	10	10
190-210	7-31/64-8-17/64	12,2	0,8	18	34,6	11	10	10
200-220	7-7/8-8-21/32	12,2	0,8	18	34,6	11	10	10
210-230	8-17/64-9-1/16	12,2	0,8	18	34,6	11	10	10
220-240	8-21/32-9-9/64	12,2	0,8	18	34,6	11	10	10

**W4 Screw:** Stainless steel (AISI-304) Cu (A2) **Band and Housing:** X5CrNi 1810 Stainless steel (DIN 1.4301) (AISI-304) (A2)





# ASFA "S"- "Ti" Titanium Worm-Drive Clip

The fact that this clamp is manufactured entirely in titanium, combined with the innovative design of the housing and the 12mm bandwidth mean that this clamp gives the best comparative weight, performance and corrosion resistance ratio of any worm-drive clip in the world. We use revolutionary manufacturing processes in order to manufacture dimensions ranging from 16-27mm up to 220-240mm. Due to the exceptional characteristics of this clamp, it is suitable for use in high performance automotive applications, offshore, aeronautics and in the chemical industry, especially in applications involving acids. Each clamp is subject to individual quality control before packing.

Conforms to all current EU directives and norms.

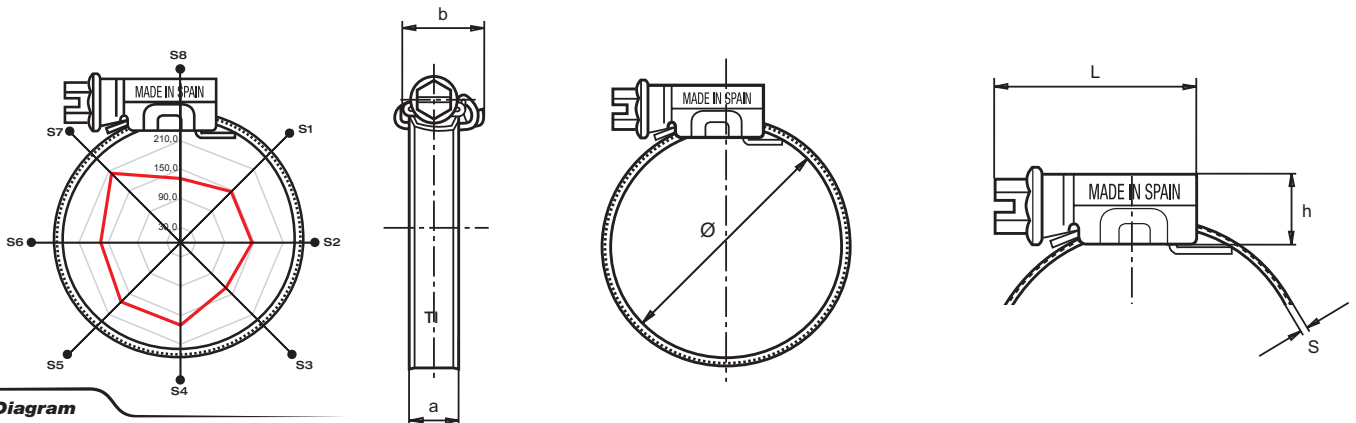
\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling. **Patented Worldwide.**

**TI**

## 100% Titanium Worm-Drive Clip (12mm bandwidth)

Application Ø mm	Application Ø inches	Part n° TI	L max.	s +0,1 0	h	a + 0,4 a - 0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
16-27	5/8-1-1/16	03009502	29,6	1,0	11	12,2	16,6	4,5	47,0	4	4
20-32	25/32-1-1/4	03009510	29,6	1,0	11	12,2	16,6	5,5	47,0	4	4
25-40	1-1-9/16	03009529	29,6	1,0	11	12,2	16,6	5,5	42,0	4	4
30-45	1-3/16-1-3/4	03009537	29,6	1,0	11	12,2	16,6	5,5	37,0	4	4
32-50	1-1/4-1-31/32	03009545	29,6	1,0	11	12,2	16,6	6,5	37,0	4	4
40-60	1-9/16-2-3/8	03009553	29,6	1,0	11	12,2	16,6	6,5	32,0	4	4
50-70	1-31/32-2-3/4	03009561	29,6	1,0	11	12,2	16,6	7,0	26,0	4	4
60-80	2-23/64-3-5/32	03009570	29,6	1,0	11	12,2	16,6	7,0	21,0	4	4
70-90	2-3/4-3-35/64	03009588	29,6	1,0	11	12,2	16,6	7,0	18,0	4	4
80-100	3-5/32-3-15/16	03009596	29,6	1,0	11	12,2	16,6	7,0	15,0	4	4
90-110	3-15/16-4-23/32	03009609	29,6	1,0	11	12,2	16,6	7,0	13,0	4	4
100-120	4-23/32-5-33/64	03009617	29,6	1,0	11	12,2	16,6	7,0	11,0	4	4
110-130	5-33/64-6-19/64	03009625	29,6	1,0	11	12,2	16,6	7,0	8,5	4	4
120-140	5-29/32-6-11/16	03009633	29,6	1,0	11	12,2	16,6	7,0	7,4	4	4
130-150	5-29/32-6-11/16	03009641	29,6	1,0	11	12,2	16,6	7,0	6,3	4	4
140-160	6-5/16-7-3/32	03009650	29,6	1,0	11	12,2	16,6	7,0	6,3	4	4
150-170	6-11/16-7-15/32	03009668	29,6	1,0	11	12,2	16,6	7,0	5,3	4	4
160-180	7-3/32-7-7/8	03009676	29,6	1,0	11	12,2	16,6	7,0	4,2	4	4
170-190	7-31/64-8-17/64	03009684	29,6	1,0	11	12,2	16,6	7,0	3,2	4	4
180-200	7-7/8-8-21/32	03009692	34,6	1,0	11	12,2	18,0	7,0	2,1	4	4
190-210	8-17/64-9-1/16	03009705	34,6	1,0	11	12,2	18,0	7,0	1,9	4	4
200-220	8-21/32-9-9/64	03009713	34,6	1,0	11	12,2	18,0	7,0	1,9	4	4
210-230	8-17/64-9-1/16	03009721	34,6	1,0	11	12,2	18,0	7,0	1,7	4	4
220-240	8-21/32-9-9/64	03009730	34,6	1,0	11	12,2	18,0	7,0	1,7	4	4

**TI Screw:** Ti-3 (3.7055) S/ ASTM B 265-79 **Band:** Ti-2 (3.7035) S/ ASTM B 265-79 **Housing:** Ti-1 (3.7025) S/ ASTM B 265-79  
**Surface Treatment:** PTFE



**Polar Diagram**

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— 5 Nm	131,4	147,0	149,2	131,5	169,8	173,5	164,5	200,7

Torque / Efficiency [ Nm / daN ]



W3

## ASFA "L" Worm-Drive Clip (Black Finish)

Thanks to the exclusive design of the housing, the ASFA "L" W3 hose clip has excellent performance while being at the same time very compact.

The cold-formed stamped band thread, smoothed on the underside, combined with the beveled band edges protects the hose from any damage.

The ASFA "L" W3 hose clip complies fully with the DIN 3017 norm and also with the RoHs directive EU 2002/95/EC dated 1st July 2006.

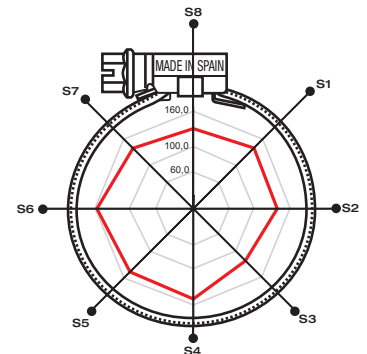
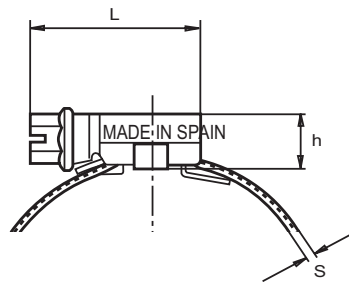
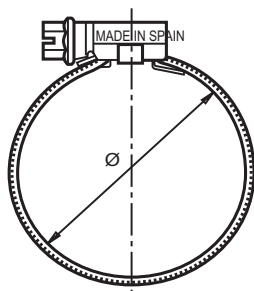
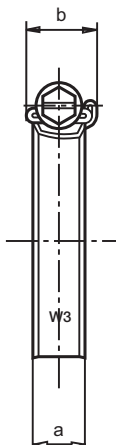
The special black finish gives added corrosion resistance and makes this clip very popular in automotive and defense applications, as well as in the manufacture of agricultural and construction machinery.

\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.  
**Patented Worldwide.**

### ASFA "L" W3 Worm-Drive Clip (9mm bandwidth)

Application Ø		Part n° W3	L max.	s + 0,1 0	h max.	a -0,2	b Max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches										
8-16	5/16-5/8	73016011	22,1	0,65	10,5	9	14,0	3,0	45	200	800
12-22	15/32-7/8	73016020	22,1	0,65	10,5	9	14,0	3,0	45	200	800
16-27	5/8-1-1/16	73016038	23,6	0,75	10,5	9	14,0	3,5	42	200	800
20-32	25/32-1-1/4	73016046	23,6	0,75	10,5	9	14,0	3,5	36	200	800
25-40	1-1-9/16	73016062	25,6	0,75	10,5	9	14,0	4,0	32	100	800
30-45	1-3/16-1-3/4	73016070	25,6	0,75	10,5	9	14,0	4,0	28	100	800
32-50	1-1/4-1-31/32	73016089	25,6	0,75	10,5	9	14,0	4,0	24	100	800
40-60	1-9/16-2-3/8	73016095	25,6	0,75	10,5	9	14,0	4,0	19	100	400
50-70	1-31/32-2-3/4	73016100	26,6	0,75	10,5	9	14,0	4,0	17	100	100
60-80	2-3/8-3-1/8	73016118	26,6	0,75	10,5	9	14,0	4,0	15	100	100

**W3 Screw:** Stainless steel (AISI-430) **Band and housing:** Stainless steel X6Cr-17 (DIN 1.4016) (AISI-430) **Finish:** Black



#### Polar Diagram

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— 4 Nm	131,2	141,5	139,3	122,4	145,9	147,6	157,9	138,5

Torque / Efficiency [ Nm / daN ]



W3

## ASFA "S" Worm-Drive Clip (Black Finish)

Thanks to the exclusive design of the housing, the ASFA "S" W3 hose clip has excellent performance while being at the same time very compact.

The cold-formed stamped band thread, smoothed on the underside, combined with the beveled band edges protects the hose from any damage.

The ASFA "S" W3 hose clip complies fully with the DIN 3017 norm and also with the RoHs directive EU 2002/95/EC dated 1st July 2006.

The special black finish gives added corrosion resistance and makes this clip very popular in automotive and defense applications, as well as in the manufacture of agricultural and construction machinery.

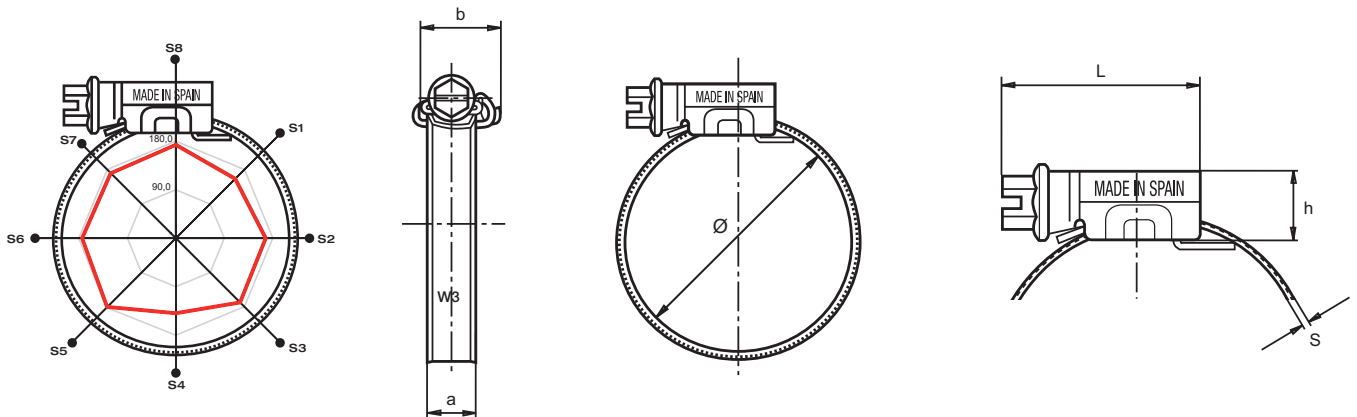
\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.

Patented Worldwide.

### ASFA "S" W3 Worm-Drive Clip (12mm bandwidth)

Application Ø		Part n° W3	L max.	s + 0,1 0	h max.	a -0,2	b Max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches										
16-27	5/8-1-1/16	73016206	29,6	0,8	11	12,2	18,8	4,2	45	50	400
20-32	25/32-1-1/4	73016214	29,6	0,8	11	12,2	18,8	5,2	45	50	400
25-40	1-1-9/16	73016222	29,6	0,8	11	12,2	18,8	5,2	40	50	400
30-45	1-3/16-1-3/4	73016230	29,6	0,8	11	12,2	18,8	5,2	35	50	400
32-50	1-1/4-1-31/32	73016249	29,6	0,8	11	12,2	18,8	6,0	35	50	400
40-60	1-9/16-2-3/8	73016257	29,6	0,8	11	12,2	18,8	6,0	30	50	400
50-70	1-31/32-2-3/4	73016265	31,6	0,8	11	12,2	18,8	6,8	25	50	400
60-80	2-3/8-3-1/8	73016273	31,6	0,8	11	12,2	18,8	6,8	20	50	50

W3 Screw: Stainless steel (AISI-430) Band and housing: Stainless steel X6Cr-17 (DIN 1.4016) (AISI-430) Finish: Black



#### Polar Diagram

● Sectors	S1	S2	S3	S4	S5	S6	S7	S8
— 5 Nm	156,0	166,9	168,7	139,2	180,4	173,9	170,7	173,2

Torque / Efficiency [ Nm / daN ]



## ASFA "L" CT Constant Tension Worm-Drive Clip

Constant tension worm-drive clips are designed to be used primarily in the automotive sector. The main difference between the W3 constant tension worm-drive and the standard Mikalor worm-drive is to be found in the spring-loaded insert.

This spring-loaded insert maintains constant pressure around the hose in case of variations in temperature and /or vibration thereby guaranteeing performance far superior to conventional worm-drives. For this reason constant tension worm-drive clips are used mainly with tubes or hoses carrying hot air or on engine refrigeration systems.

Moreover, the cold-formed stamped band thread, smoothed on the underside, combined with the beveled band edges protects the hose from any damage.

ASFA W3 CT worm-drive clips are manufactured entirely from stainless steel (AISI 430) thereby ensuring good corrosion resistance.

This clip complies fully with the DIN 3017 norm and also with the RoHs directive EU/2002/95/EC dated 1st July 2006.

\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.

\* The Nominal Ø "A" does not take into account the spring-loaded insert.

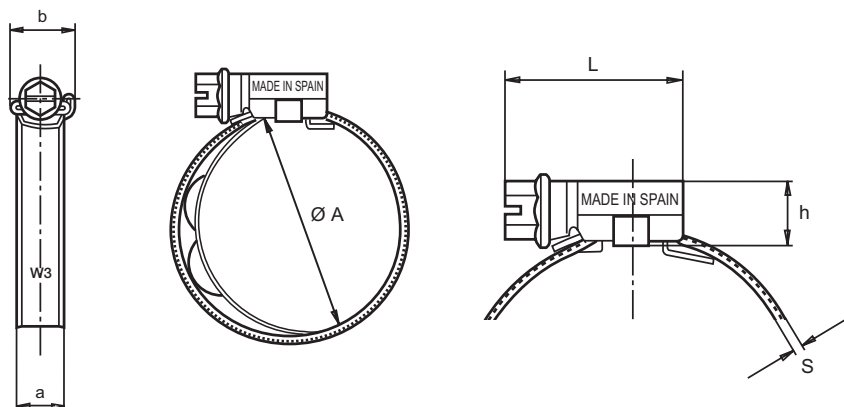
W3

### ASFA "L" W3 CT Constant Tension Worm-Drive Clip (9mm bandwidth)

Nominal Ø A		Part n° W3	Application Ø	L max.	s + 0,1 0	h max.	a + 0,3 a - 0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches											
20-32	25/32-1-1/4	03017950	17-28	23,6	0,75	10,5	9	14	3,5	36	50	400
25-40	1-1-9/16	03017951	22-36	25,6	0,75	10,5	9	14	3,5	32	50	400
30-45	1-3/16-1-3/4	03017952	27-41	25,6	0,75	10,5	9	14	3,5	28	50	400
32-50	1-1/4-1-31/32	03017953	29-46	25,6	0,75	10,5	9	14	4,0	24	50	200
40-60	1-9/16-2-3/8	03017954	37-56	25,6	0,75	10,5	9	14	4,0	19	50	400
50-70	1-31/32-2-3/4	03017955	47-66	29,6	0,75	10,5	9	14	4,0	17	50	400
60-80	2-23/64-3-5/32	03017956	57-76	29,6	0,75	10,5	9	14	4,0	15	50	50
70-90	2-3/4-3-35/64	03017957	67-86	29,6	0,75	10,5	9	14	4,0	13	50	50
80-100	3-5/32-3-15/16	03017958	77-96	29,6	0,75	10,5	9	14	4,0	11	25	200
90-110	3-15/16-4-23/32	03017959	87-106	29,6	0,75	10,5	9	14	4,0	10	25	200
100-120	4-23/32-5-33/64	03017960	97-116	29,6	0,75	10,5	9	14	4,0	9	25	200
110-130	5-33/64-6-19/64	03017961	107-126	29,6	0,75	10,5	9	14	4,0	8	25	25

**W3 Screw:** Stainless steel (AISI-430) **Band and Housing:** X6Cr-17 Stainless steel (DIN 1.4016) (AISI 430)

**Spring-loaded insert:** Stainless steel (AISI-301)







## ASFA "L" CT Constant Tension Worm-Drive Clip

Constant tension worm-drive clips are designed to be used primarily in the automotive sector. The main difference between the W4 constant tension worm-drive and the standard Mikalor worm-drive is to be found in the spring-loaded insert.

This spring-loaded insert maintains constant pressure around the hose in case of variations in temperature and /or vibration thereby guaranteeing performance far superior to conventional worm-drives. For this reason constant tension worm-drive clips are used mainly with tubes or hoses carrying hot air or on engine refrigeration systems.

Moreover, the cold-formed stamped band thread, smoothed on the underside, combined with the beveled band edges protects the hose from any damage.

ASFA -W4 CT worm-drive clips are manufactured entirely from stainless steel (AISI 304) thereby ensuring excellent corrosion resistance.

This clip complies fully with the DIN 3017 norm and also with the RoHs directive EU/2002/95/EC dated 1st July 2006.

\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.

\* The Nominal  $\varnothing$  "A" does not take into account the spring-loaded insert.

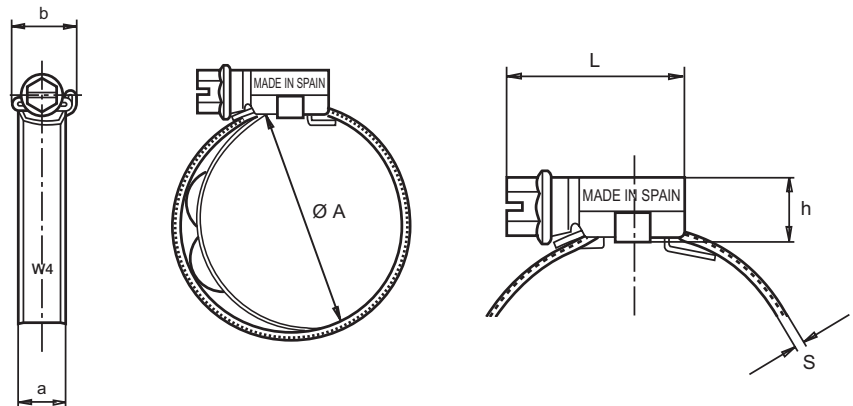
**W4**

### ASFA "L" W4 CT Constant Tension Worm-Drive Clip (9mm bandwidth)

Nominal $\varnothing$ A		Part n° W3	Application $\varnothing$	L max.	s + 0,10	h max.	a + 0,3 a - 0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches											
20-32	25/32-1-1/4	03017970	17-28	23,6	0,75	10,5	9	14	3,5	36	50	400
25-40	1-1-9/16	03017971	22-36	25,6	0,75	10,5	9	14	3,5	32	50	400
30-45	1-3/16-1-3/4	03017972	27-41	25,6	0,75	10,5	9	14	3,5	28	50	400
32-50	1-1/4-1-31/32	03017973	29-46	25,6	0,75	10,5	9	14	4,0	24	50	200
40-60	1-9/16-2-3/8	03017974	37-56	25,6	0,75	10,5	9	14	4,0	24	50	400
50-70	1-31/32-2-3/4	03017975	47-66	29,6	0,75	10,5	9	14	4,0	19	50	400
60-80	2-23/64-3-5/32	03017976	57-76	29,6	0,75	10,5	9	14	4,0	17	50	50
70-90	2-3/4-3-35/64	03017977	67-86	29,6	0,75	10,5	9	14	4,0	15	50	50
80-100	3-5/32-3-15/16	03017978	77-96	29,6	0,75	10,5	9	14	4,0	13	25	200
90-110	3-15/16-4-23/32	03017979	87-106	29,6	0,75	10,5	9	14	4,0	11	25	200
100-120	4-23/32-5-33/64	03017980	97-116	29,6	0,75	10,5	9	14	4,0	10	25	200
110-130	5-33/64-6-19/64	03017981	107-126	29,6	0,75	10,5	9	14	4,0	9	25	25

**W4 Screw:** Stainless steel (AISI-304) **Band and Housing:** X5CrNi1810 Stainless steel (DIN 1.4301) (AISI-304)

**Spring-loaded insert:** Stainless steel (AISI-301)





## ASFA "S" CT Constant Tension Worm-Drive Clip

Constant tension worm-drive clips are designed to be used primarily in the automotive sector. The main difference between the W3 constant tension worm-drive and the standard Mikalor worm-drive is to be found in the spring-loaded insert.

This spring-loaded insert maintains constant pressure around the hose in case of variations in temperature and /or vibration thereby guaranteeing performance far superior to conventional worm-drives. For this reason constant tension worm-drive clips are used mainly with tubes carrying hot air in turbo compressor applications or on engine refrigeration systems.

Moreover, the cold-formed stamped band thread, smoothed on the underside, combined with the beveled band edges protects the hose from any damage.

ASFA -W3 CT worm-drive clips are manufactured entirely from stainless steel (AISI 430) thereby ensuring good corrosion resistance.

This clip complies fully with the DIN 3017 norm and also with the RoHs directive EU/2002/95/EC dated 1st July 2006.

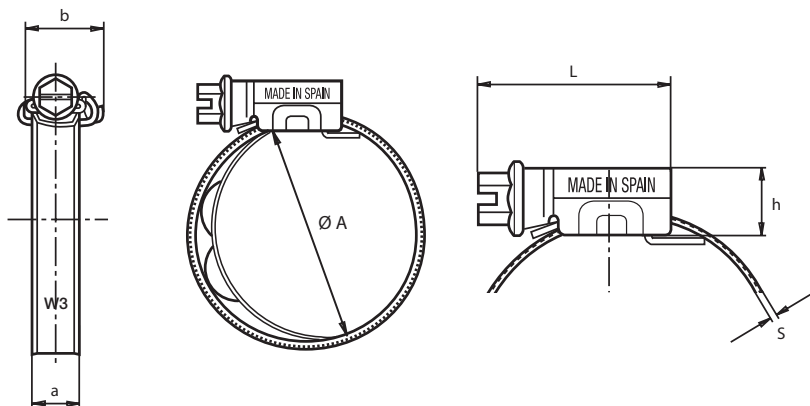
- \* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.
- \* The Nominal  $\varnothing$  "A" does not take into account the spring-loaded insert.

**W3**

### ASFA "S" W3 CT Constant Tension Worm-Drive Clip (12mm bandwidth)

Nominal $\varnothing$ A		Part n° W3	Application $\varnothing$	L max.	s + 0,1 0	h max.	a + 0,3 a -0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches											
20-32	25/32-1-1/4	03017818	17-28	29,6	0,8	11	12,2	18,8	5,0	47	50	400
25-40	1-1-9/16	03017826	22-36	29,6	0,8	11	12,2	18,8	5,0	42	50	400
30-45	1-3/16-1-3/4	03017834	27-41	29,6	0,8	11	12,2	18,8	5,0	37	50	400
32-50	1-1/4-1-31/32	03017842	29-46	29,6	0,8	11	12,2	18,8	5,5	37	50	200
40-60	1-9/16-2-3/8	03017850	37-56	29,6	0,8	11	12,2	18,8	5,5	32	50	400
50-70	1-31/32-2-3/4	03017869	47-66	31,6	0,8	11	12,2	18,8	6,5	27	50	400
60-80	2-23/64-3-5/32	03017877	57-76	31,6	0,8	11	12,2	18,8	6,5	22	50	50
70-90	2-3/4-3-35/64	03017885	67-86	31,6	0,8	11	12,2	18,8	6,5	18	50	50
80-100	3-5/32-3-15/16	03017893	77-96	31,6	0,8	11	12,2	18,8	6,5	15	25	200
90-110	3-15/16-4-23/32	03017906	87-106	31,6	0,8	11	12,2	18,8	6,5	13	25	200
100-120	4-23/32-5-33/64	03017914	97-116	31,6	0,8	11	12,2	18,8	6,5	11	25	200
110-130	5-33/64-6-19/64	03017922	107-126	31,6	0,8	11	12,2	18,8	6,5	9	25	25

**W3 Screw:** Stainless steel (AISI-301) **Band and Housing:** X6Cr-17 Stainless steel (DIN 1.4016) (AISI-430)  
**Spring-loaded insert:** Stainless steel (AISI-301)





## ASFA "S" CT Constant Tension Worm-Drive Clip

Constant tension worm-drive clips are designed to be used primarily in the automotive sector. The main difference between the W4 constant tension worm-drive and the standard Mikalor worm-drive is to be found in the spring-loaded insert.

This spring-loaded insert maintains constant pressure around the hose in case of variations in temperature and /or vibration thereby guaranteeing performance far superior to conventional worm-drives. For this reason constant tension worm-drive clips are used mainly with tubes carrying hot air in turbo compressor applications or on engine refrigeration systems.

Moreover, the cold-formed stamped band thread, smoothed on the underside, combined with the beveled band edges protects the hose from any damage.

ASFA W4 CT worm-drive clips are manufactured entirely from stainless steel (AISI 304) thereby ensuring excellent corrosion resistance.

This clip complies fully with the DIN 3017 norm and also with the RoHs directive EU/2002/95/EC dated 1st July 2006.

\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.

\* The Nominal  $\varnothing$  "A" does not take into account the spring-loaded insert.

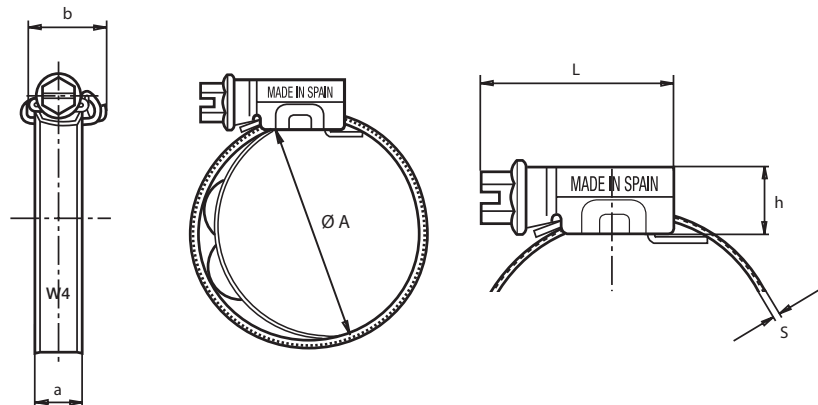
**W4**

### ASFA "S" W4 CT Constant Tension Worm-Drive Clip (12mm bandwidth)

Nominal $\varnothing$ A		Part nº W4	Application $\varnothing$	L max.	s + 0,1 0	h max.	a + 0,3 a -0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches											
20-32	25/32-1-1/4	03017930	17-28	29,6	0,8	11	12,2	18,8	5,0	47	50	400
25-40	1-1-9/16	03017931	22-36	29,6	0,8	11	12,2	18,8	5,0	42	50	400
30-45	1-3/16-1-3/4	03017932	27-41	29,6	0,8	11	12,2	18,8	5,0	37	50	400
32-50	1-1/4-1-31/32	03017933	29-46	29,6	0,8	11	12,2	18,8	5,5	37	50	200
40-60	1-9/16-2-3/8	03017934	37-56	29,6	0,8	11	12,2	18,8	5,5	32	50	400
50-70	1-31 /32-2-3/4	03017935	47-66	31,6	0,8	11	12,2	18,8	6,5	27	50	400
60-80	2-23/64-3-5/32	03017936	57-76	31,6	0,8	11	12,2	18,8	6,5	22	50	50
70-90	2-3/4-3-35/64	03017937	67-86	31,6	0,8	11	12,2	18,8	6,5	18	50	50
80-100	3-5/32-3-15/16	03017938	77-96	31,6	0,8	11	12,2	18,8	6,5	15	25	200
90-110	3-15/16-4-23/32	03017939	87-106	31,6	0,8	11	12,2	18,8	6,5	13	25	200
100-120	4-23/32-5-33/64	03017940	97-116	31,6	0,8	11	12,2	18,8	6,5	11	25	200
110-130	5-33/64-6-19/64	03017941	107-126	31,6	0,8	11	12,2	18,8	6,5	9	25	25

**W4 Screw:** Stainless steel (AISI-304) **Band and Housing:** X5CrNi1810 Stainless steel (DIN 1.4301) (AISI-304)

**Spring-loaded insert:** Stainless steel (AISI-301)





**W2**

## Supra CT Constant tension Heavy-Duty Clamp

The Supra CT clamp incorporates a series of AISI-304 Stainless steel spring washers to the outstanding Supra W2 clamp. This specialized version of the Supra W2 is used in applications subject to vibration and/or great variations in temperature and which cause the components of a hose assembly to expand and contract. Thanks to the spring washer system, the Supra CT maintains constant pressure around the hose and prevents leakage. The beveled edges protect the hose from damage.

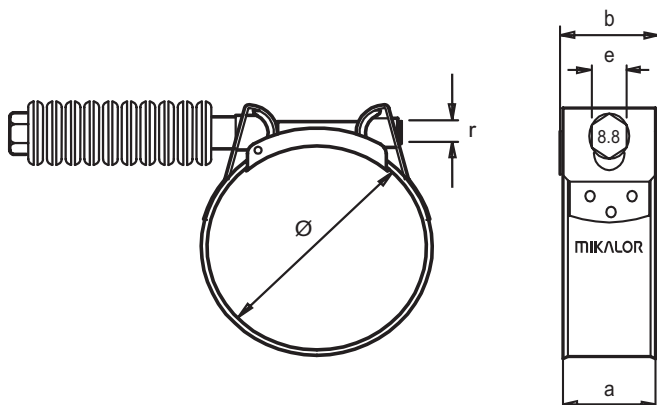
The Supra CT clamp complies fully with the RoHS directive EU 20032/95/EC dated 1st July 2006. This clamp is generally fitted in high-powered diesel engines in construction machinery, trucks, buses, marine engines, military vehicles and diesel-powered generators as well as in various other industrial applications where expansion and contraction cause assemblies using standard clamps to leak.

\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.  
Patented Worldwide.

### Supra CT Heavy-Duty Clamp W2

Application Ø		Part n° W2	r	e	a	b	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches									
25-27	1-1-1/16	03020142	M6	10	18 <sup>+02</sup>	19,8	4,5	45	50	400
27-29	1-1/16-15/32	03020150	M6	10	18 <sup>+02</sup>	19,8	4,5	45	50	200
29-31	1-5/32-1-7/32	03020169	M7	11	20 <sup>+03</sup>	22,0	8,0	42	50	50
31-34	17/32-1-11/32	03020177	M7	11	20 <sup>+03</sup>	22,0	8,0	42	50	50
34-37	1-11/32-1-29/64	03020185	M7	11	20 <sup>+03</sup>	22,0	8,0	40	50	50
37-40	1-29/64-1-9/16	03020193	M7	11	20 <sup>+03</sup>	22,0	8,0	40	50	50
40-43	1-9/16-1-11/16	03020206	M7	11	20 <sup>+03</sup>	22,0	8,0	38	50	50
43-47	1-11/16-1-27/32	03020214	M7	11	20 <sup>+03</sup>	22,0	10,0	38	50	50
47-51	1-27/32-2-1/64	03020222	M7	11	20 <sup>+03</sup>	22,0	10,0	36	50	50
51-55	2-1/64-2-11/64	03020230	M7	11	20 <sup>+03</sup>	22,0	10,0	36	25	25
55-59	2-11/64-2-21/64	03020249	M7	11	20 <sup>+03</sup>	22,0	10,0	34	25	25
59-63	2-21/64-2-31/64	03020257	M7	11	20 <sup>+03</sup>	22,0	10,0	34	25	25
63-68	2-31/64-2-11/16	03020265	M7	11	20 <sup>+03</sup>	22,0	10,0	34	25	25
68-73	2-11/16-3-7/8	03020273	M8	13	25 <sup>+04</sup>	27,5	25,0	28	25	25
73-79	3-7/8-3-7/64	03020281	M8	13	25 <sup>+04</sup>	27,5	25,0	28	25	25
79-85	3-7/64-3-11/32	03020290	M8	13	25 <sup>+04</sup>	27,5	25,0	28	25	25
85-91	3-11/32-3-37/64	03020302	M8	13	25 <sup>+04</sup>	27,5	25,0	20	25	25
91-97	3-37/64-3-13/16	03020310	M8	13	25 <sup>+04</sup>	27,5	25,0	20	25	25
97-104	3-13/16-4-3/32	03020329	M8	13	25 <sup>+04</sup>	27,5	25,0	20	25	25
104-112	4-3/32-4-3/8	03020337	M8	13	25 <sup>+04</sup>	27,5	25,0	12	25	25
112-121	4-3/8-4-49/64	03020345	M8	13	25 <sup>+04</sup>	27,5	25,0	12	25	25
121-130	4-49/64-5-1/8	03020353	M8	13	25 <sup>+04</sup>	27,5	25,0	12	25	25
130-140	5-1/8-5-33/64	03020361	M10	17	28 <sup>+04</sup>	31,0	50,0	9	10	10
140-150	5-33/64-5-29/32	03020370	M10	17	28 <sup>+04</sup>	31,0	50,0	9	10	10
150-162	5-29/32-6-3/8	03020388	M10	17	28 <sup>+04</sup>	31,0	50,0	9	10	10
162-174	6-3/8-6-7/8	03020396	M10	17	28 <sup>+04</sup>	31,0	50,0	6	10	10
174-187	6-7/8-7-23/64	03020409	M10	17	28 <sup>+04</sup>	31,0	50,0	6	10	10
187-200	7-23/64-7-7/8	03020417	M10	17	28 <sup>+04</sup>	31,0	50,0	6	10	10
200-213	7-7/8-8-25/64	03020425	M10	17	28 <sup>+04</sup>	31,0	50,0	3	10	10
213-226	8-25/64-8-57/64	03020433	M10	17	28 <sup>+04</sup>	31,0	50,0	3	10	10

**W2 Band and Bridge:** X6Cr17 Stainless steel (DIN 1.4016) (AISI-430) **Screw:** 8.8 grade steel Silver-white Cr3 Zinc-Plated **Washers and Trunions:** Stainless steel (AISI-304)





**W4**

## Supra CT Constant tension Heavy-Duty Clamp

The Supra CT clamp incorporates a series of AISI-304 Stainless steel spring washers to the outstanding Supra W4 clamp. This specialized version of the Supra W4 is used in applications subject to vibration and/or great variations in temperature and which cause the components of a hose assembly to expand and contract. Thanks to the spring washer system, the Supra CT maintains constant pressure around the hose and prevents leakage. The beveled edges protect the hose from damage.

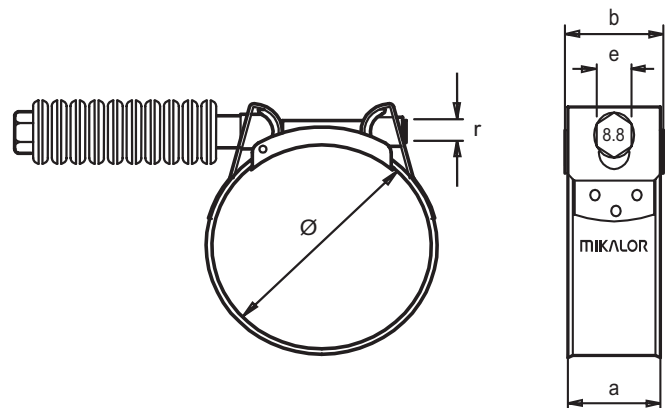
The Supra CT clamp complies fully with the RoHS directive EU 20032/95/EC dated 1st July 2006. This clamp is generally fitted in high-powered diesel engines in construction machinery, trucks, buses, marine engines, military vehicles and diesel-powered generators as well as in various other industrial applications where expansion and contraction cause assemblies using standard clamps to leak.

\* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.  
**Patented Worldwide.**

### Supra CT Heavy-Duty Clamp W4

Application Ø		Part n° W4	r	e	a	b	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity (MOQ)	Packing
mm	inches									
25-27	1-1-1/16	43013059	M6	10	18 <sup>+02</sup>	19,8	4,5	45	50	400
27-29	1-1/16-15/32	43013067	M6	10	18 <sup>+02</sup>	19,8	4,5	45	50	200
29-31	1-5/32-1-7/32	43013075	M7	11	20 <sup>+03</sup>	22,0	8,0	42	50	50
31-34	17/32-1-11/32	43013083	M7	11	20 <sup>+03</sup>	22,0	8,0	42	50	50
34-37	1-11/32-1-29/64	43013091	M7	11	20 <sup>+03</sup>	22,0	8,0	40	50	50
37-40	1-29/64-1-9/16	43013104	M7	11	20 <sup>+03</sup>	22,0	8,0	40	50	50
40-43	1-9/16-1-11/16	43013112	M7	11	20 <sup>+03</sup>	22,0	8,0	38	50	50
43-47	1-11/16-1-27/32	43013120	M7	11	20 <sup>+03</sup>	22,0	10,0	38	50	50
47-51	1-27/32-2-1/64	43013139	M7	11	20 <sup>+03</sup>	22,0	10,0	36	50	50
51-55	2-1/64-2-11/64	43013147	M7	11	20 <sup>+03</sup>	22,0	10,0	36	25	25
55-59	2-11/64-2-21/64	43013155	M7	11	20 <sup>+03</sup>	22,0	10,0	34	25	25
59-63	2-21/64-2-31/64	43013163	M7	11	20 <sup>+03</sup>	22,0	10,0	34	25	25
63-68	2-31/64-2-11/16	43013171	M7	11	20 <sup>+03</sup>	22,0	10,0	34	25	25
68-73	2-11/16-3-7/8	43013180	M8	13	25 <sup>+04</sup>	27,5	25,0	28	25	25
73-79	3-7/8-3-7/64	43013198	M8	13	25 <sup>+04</sup>	27,5	25,0	28	25	25
79-85	3-7/64-3-11/32	43013200	M8	13	25 <sup>+04</sup>	27,5	25,0	28	25	25
85-91	3-11/32-3-37/64	43013219	M8	13	25 <sup>+04</sup>	27,5	25,0	20	25	25
91-97	3-37/64-3-13/16	43013227	M8	13	25 <sup>+04</sup>	27,5	25,0	20	25	25
97-104	3-13/16-4-3/32	43013235	M8	13	25 <sup>+04</sup>	27,5	25,0	20	25	25
104-112	4-3/32-4-3/8	43013243	M8	13	25 <sup>+04</sup>	27,5	25,0	12	25	25
112-121	4-3/8-4-49/64	43013251	M8	13	25 <sup>+04</sup>	27,5	25,0	12	25	25
121-130	4-49/64-5-1/8	43013260	M8	13	25 <sup>+04</sup>	27,5	25,0	12	25	25
130-140	5-1/8-5-33/64	43013278	M10	17	28 <sup>+04</sup>	31,0	50,0	9	10	10
140-150	5-33/64-5-29/32	43013286	M10	17	28 <sup>+04</sup>	31,0	50,0	9	10	10
150-162	5-29/32-6-3/8	43013294	M10	17	28 <sup>+04</sup>	31,0	50,0	9	10	10
162-174	6-3/8-6-7/8	43013307	M10	17	28 <sup>+04</sup>	31,0	50,0	6	10	10
174-187	6-7/8-7-23/64	43013315	M10	17	28 <sup>+04</sup>	31,0	50,0	6	10	10
187-200	7-23/64-7-7/8	43013323	M10	17	28 <sup>+04</sup>	31,0	50,0	6	10	10
200-213	7-7/8-8-25/64	43013331	M10	17	28 <sup>+04</sup>	31,0	50,0	3	10	10
213-226	8-25/64-8-57/64	43013340	M10	17	28 <sup>+04</sup>	31,0	50,0	3	10	10

**W4 Band and Bridge:** X5CrNi 1810 Stainless steel (DIN 1.4301) (AISI-304) (A2) **Screw:** Stainless steel (AISI-304) **Washers and Trunions:** Stainless steel (AISI-304)



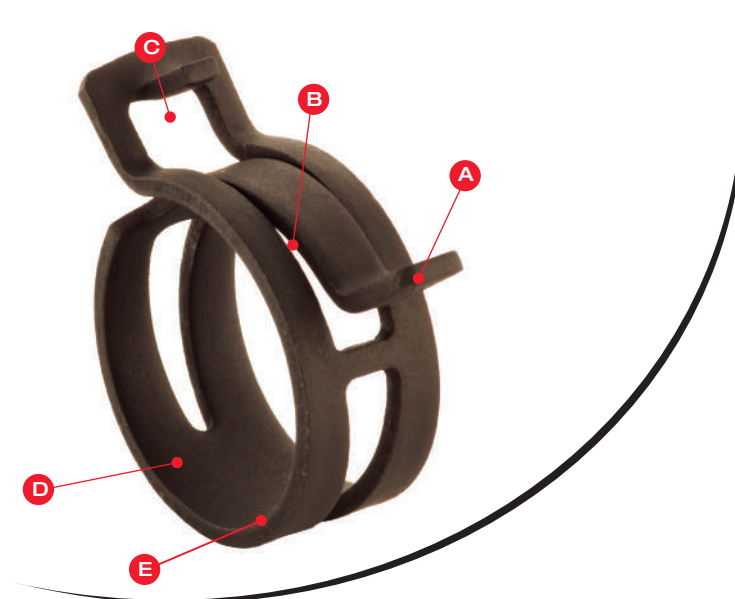
# Technical Information

## ASFA "S"- "Ti" Titanium Worm-Drive Clip



- A** Cold formed stamped band thread which gives a very good grip due to the fact that the raised thread is deeper than the thickness of the material used.
- B** Manufactured in 100% Titanium, this clamp offers the greatest resistance to pressure and corrosion of any equivalent clamp on the market, as well as being the lightest of its kind.
- C** All ASFA "S"- "Ti" hose clips are marked with the application range, material, the Mikalor logo and the country of manufacture.
- D** The compact housing grips the screw preventing lateral movement during tightening.
- E** The screw is also manufactured in Titanium and can take a great deal of torque.
- F** Beveled band edges to avoid the clip cutting into the hose.
- G** Smooth band underside which avoids damage to the hose.

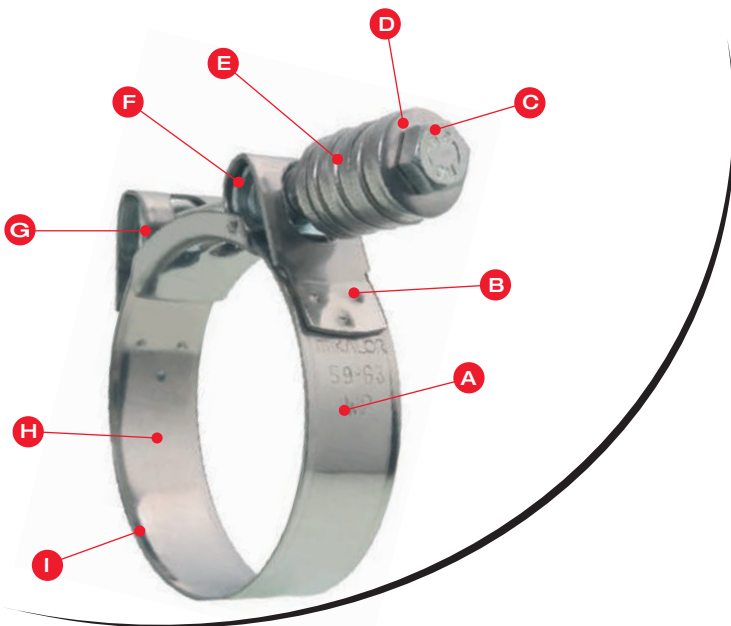
## DIN 3021 Heavy-duty Spring-Band clip



- A** Marked with the nominal application diameter.
- B** Quick and easy to mount.
- C** Safety feature to avoid excessive pressure when mounting which could damage the clamp.
- D** Materials free of toxic substances in accordance with current environmental legislation.
- E** In order to determine which dimension of this clamp should be fitted, add 1mm to the outer diameter of the hose in question.

# Technical Information

## Supra CT Constant tension Heavy-Duty Clamp



- A** All Supra Clamps are marked with the application range, material and the Mikalor logo.
- B** The welding spots at both band ends guarantee a perfect bond meaning that Supra gives excellent response in applications which require very high torque.
- C** High resistance bolt designed to take a lot of torque.
- D** Manual or automatic assembly.
- E** The Supra CT incorporates a series of stainless steel spring washers which allow the clamp to maintain constant pressure around the hose despite extreme variations of temperature and pressure.
- F** The revolutionary design makes it impossible to dislodge the nut and trunions.
- G** Swiveling bridge makes it easy to mount and dismount Supra.
- H** Flexible material allows Supra to adapt to the application zone, thereby guaranteeing a leak-proof assembly.
- I** Beveled band edges protect the hose from damage.

## ASFA CT Constant Tension Worm-Drive Clip



- A** The spring-loaded insert maintains constant pressure around the hose in case of sudden variations in temperature and /or pressure thereby avoiding leaks.
- B** Cold-formed stamped band thread
- C** Marked with the application range, material and the country of manufacture.
- D** High impact screw.
- E** Compact housing.
- F** The compact housing grips the screw preventing lateral movement during tightening.
- G** Exclusive design of the housing which keeps the screw in firm contact with the band.
- H** Beveled band edges.
- I** Smooth band underside which prevents damage to the hose.



**ø 12-22 mm.**



**ø 16-27 mm.**



**MIKALOR**





***Assortment Boxes and Display Units***



## Assortment Boxes

In order to provide you with the hose clip which most adequately suits your needs, we have developed a wide range of hose clip assortment boxes.

The different diameters of clip are arranged in individual compartments, making it easy to find the appropriate size.

The sturdy plastic case is also very convenient for transporting the product. All Mikalor assortment boxes include the appropriate tool for assembling the clip in question. In the case of the worm-drive assortments, each case contains a flexible hex-socket screwdriver which can be used to tighten Mikalor worm-drive clips in all sorts of application zones.

The two ear clip assortment boxes contain a pair of side-closing ear clip pincers.

### Contents of the ASFA "L" assortments

Part n°	Ø 8-16 Units	Ø 12-22 Units	Ø 16-27 Units	Ø 0-32 Units	Ø 25-40 Units	Ø 30-45 Units	Ø 32-50 Units	Ø 40-60 Units	Ø 50-70 Units	Ø 60-80 Units	Ø 70-90 Units	Flexidriver	Bandwidth	Material
03503010	60	40	40	20	20	20	10	10	6	-	-	1	9 mm	W1
03503028	60	40	40	20	20	20	10	10	6	-	-	1	9 mm	W2
03503044	60	40	40	20	20	20	10	10	6	-	-	1	9 mm	W4
03503060	60	40	40	20	20	20	10	10	6	-	-	1	9mm/12mm	W5

**Case:** Yellow PVC **Insert:** High impact red polypropylene

### Contents of the ASFA "S" assortments

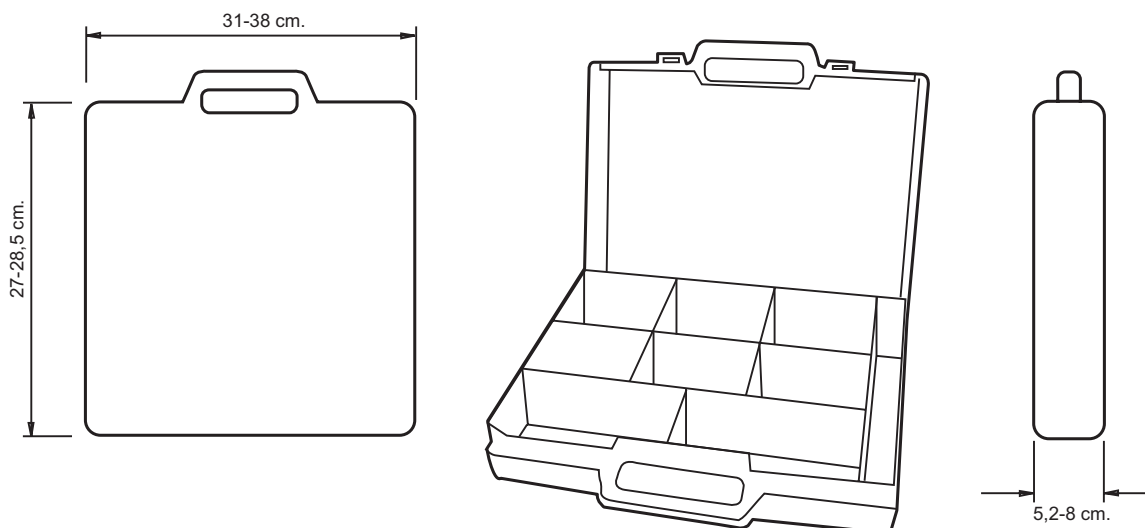
Part n°	Ø 8-16 Units	Ø 12-22 Units	Ø 16-27 Units	Ø 0-32 Units	Ø 25-40 Units	Ø 30-45 Units	Ø 32-50 Units	Ø 40-60 Units	Ø 50-70 Units	Ø 60-80 Units	Ø 70-90 Units	Flexidriver	Bandwidth	Material
03503087	-	-	25	20	12	-	8	6	6	5	5	1	12 mm	W1
03503095	-	-	25	20	12	-	8	6	6	5	5	1	12 mm	W2
03503108	-	-	25	20	12	-	8	6	6	5	5	1	12 mm	W4

**Case:** Yellow PVC **Insert:** High impact red polypropylene

### Contents of the Two Ear Clip assortments

Part n°	Ø 5-7 Units	Ø 7-9 Units	Ø 9-11 Units	Ø 11-13 Units	Ø 13-15 Units	Ø 15-18 Units	Ø 17-20 Units	Ø 20-23 Units	Ø 22-25 Units	Pincers	Model	Material
03503116	50	50	50	50	50	50	30	25	20	1	TWO EAR	W1
03503124	50	50	50	50	50	50	30	25	20	1	TWO EAR	W4

**Case:** Black PVC with clear plastic lid **Insert:** High impact black polypropylene





## Display Units

Our range of display units is one of the most complete on the market, meaning that you can choose the one which most suits your needs and the space at your disposal.

The design of these easy to use displays, which are both attractive and well-organized, makes them ideal for use in sales counters where space is often at a premium.

### Contents of the ASFA "L" wall display units

Part n°	Ø 8-16 Units	Ø 12-22 Units	Ø 16-27 Units	Ø 20-32 Units	Ø 25-40 Units	Ø 32-50 Units	Ø 40-60 Units	Ø 50-70 Units	Ø 70-90 Units	Bandwidth	Material
02500191	200	200	200	200	100	100	100	100	-	9mm	W1
02500079	200	200	200	200	100	100	100	100	-	9mm	W2
02500087	200	200	200	200	100	100	100	100	-	9mm	W4

### Contents of the ASFA "S" wall display units

Part n°	Ø 8-16 Units	Ø 12-22 Units	Ø 16-27 Units	Ø 20-32 Units	Ø 25-40 Units	Ø 32-50 Units	Ø 40-60 Units	Ø 50-70 Units	Ø 70-90 Units	Bandwidth	Material
02500140	-	-	-	50	50	50	50	50	50	12mm	W1
02500167	-	-	-	50	50	50	50	50	50	12mm	W2
02500183	-	-	-	50	50	50	50	50	50	12mm	W4

### Contents of the ASFA "L" counter-top display units

Part n°	Ø 8-16 Units	Ø 12-22 Units	Ø 16-27 Units	Ø 20-32 Units	Ø 25-40 Units	Ø 30-45 Units	Ø 32-50 Units	Ø 40-60 Units	Ø 50-70 Units	Ø 60-80 Units	Flexidriver	Bandwidth	Material
02500010	200	200	200	200	100	100	100	100	100	100	12	9mm	W1
02500044	200	200	200	200	100	100	100	100	100	100	12	9mm	W2
02500028	200	200	200	200	100	100	100	100	100	100	12	9mm	W4

### Contents of the Super Heavy-Duty Clamp display unit

Part n°	Ø ≥17-19 ≤27-29 Units	Ø ≥29-31 ≤47-51 Units	Ø ≥51-55 ≤73-79 Units	Ø ≥79-85 ≤121-130 Units	Model	Material
02500124	50	50	50	50	SUPER	W1

### Contents of the Supra Heavy-Duty Clamp display unit

Part n°	Ø ≥17-19 ≤29-31 Units	Ø ≥32-35 ≤48-51 Units	Ø ≥52-55 ≤74-79 Units	Ø ≥80-85 ≤122-130 Units	Model	Material
02500108	50	50	50	50	SUPRA	W2

## Tools



### **Flexidriver**

This 7mm flexible hex-socket screwdriver is used mainly for ASFA "L" and ASFA "S" worm-drive clips.

Article	Part n°	Box Quantity (MOQ)	Packing
7mm flexible hex-socket screwdriver	03091036	12	120



### **Front-closing Ear Clip Pincers**

These pincers can be used to fasten all types of ear clip. The front-closing model is fast and easy to use. It is also known as the "Russian" model.

Article	Part n°	Box Quantity (MOQ)	Packing
Front-closing Ear Clip Pincers	03011088	1	1



### **Side-closing Ear Clip Pincers**

This model was designed to be used in application zones which are difficult to access. It can be used both frontally and laterally.

Article	Part n°	Box Quantity (MOQ)	Packing
Side-closing Ear Clip Pincers	03011096	1	1



### **Pliers for DIN 3021 Heavy-Duty Spring band Clip**

These pliers were specially designed in order to grip the DIN 3021 clip firmly during assembly.

Article	Part n°	Box Quantity (MOQ)	Packing
Pliers for DIN 3021 Heavy-Duty Spring band Clip	03031499	1	1

## Pliers for Clip clamp

Pliers for the complete Clip Clamp range.

Article	Part n°	Box Quantity (MOQ)	Packing
Pliers for Clip Clamp	03030390	1	1

## Pneumatic tool for Clip Clamp

Pneumatic pliers for use with the complete range of Clip Clamps. Ideal for use on assembly lines. Working pressure: 5 bars. Total weight : 650grs.

Article	Part n°	Box Quantity (MOQ)	Packing
Pneumatic tool for Clip Clamp	03030402	1	1

## Application tool for Stainless steel cable ties

This tool is very easy to use. It incorporates a function which regulates tension in the band and cuts the band end automatically after tightening.

Article	Part n°	Box Quantity (MOQ)	Packing
Application tool for Stainless steel cable ties	03002015	1	1



**MIKALOR**



***Blister Packs***



**W1**

## ASFA "L" Worm-Drive Clip

The ASFA "L" W1 worm-drive clip comes in a sealed plastic blister-pack. This guarantees an ideal presentation of the product and also protects it from damage. Packs contain 2, 4 and 6 units depending on the dimension.

Ideal for sales counters or display racks.

Specially recommended for industrial applications.



### ASFA "L" W1 Blister Pack

Application Ø		Part nº W1	Bandwidth	Box Quantity	Packing
mm	inches				
8-16	5/16-5/8	B3008753	9	6	20
12-22	15/32-7/8	B3008761	9	6	20
16-27	5/8-1-1/16	B3008770	9	4	20
20-32	25/32-1-1/4	B3008778	9	4	20
25-40	1-1-9/16	B3008796	9	2	20
30-45	1-3/16-1-3/4	B3008809	9	2	20
32-50	1-1/4-1-31/32	B3008817	9	2	20
40-60	1-9/16-2-3/8	B3008825	9	2	20

**W1 Screw:** Qst 36-3 Mild steel (DIN 1.0213) Silver-white Cr3 Zinc-Plated **Band and Housing:** Galvanized steel S/EN 10292 (DIN 1.0935)



**W5**

## ASFA "L" Worm-Drive Clip

The ASFA "L" W5 worm-drive clip comes in a sealed plastic blister-pack. This guarantees an ideal presentation of the product and also protects it from damage. Packs contain 2, 4 and 6 units depending on the dimension.

Ideal for sales counters or display racks.

Specially recommended for industrial applications.



### ASFA "L" W5 Blister Pack

Application Ø		Part nº W5	Bandwidth	Box Quantity	Packing
mm	inches				
8-16	5/16-5/8	B3015759	9	6	20
12-22	15/32-7/8	B3015767	9	6	20
16-27	5/8-1-1/16	B3015775	9	4	20
20-32	25/32-1-1/4	B3015783	9	4	20
25-40	1-1-9/16	B3015804	9	2	20
30-45	1-3/16-1-3/4	B3015812	9	2	20
32-50	1-1/4-1-31/32	B3015820	9	2	20
40-60	1-9/16-2-3/8	B3015839	9	2	20

**W5 Screw:** Stainless steel (AISI-316) Cu (A4) **Band and Housing:** X5CrNiMo 17.12.2 Stainless steel (DIN 1.4401) (AISI-316) (A4)





**W1**

## “Normal” Mini-clip

The “Normal” Mini Clip comes in a sealed plastic blister-pack. This guarantees an ideal presentation of the product and also protects it from damage.

Ideal for sales counters or display racks.

Specially recommended for industrial applications.



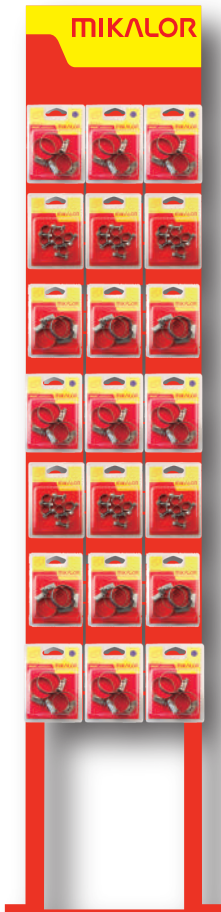
### “Normal” Mini Clip W1 Blister Pack

Application Ø		Part n° W1	Bandwidth	Box Quantity	Packing
mm	inches				
12-13	15/32-33/64	B3010560	10	6	20
14-15	35/64-19/32	B3010587	10	6	20
15-17	19/32-43/64	B3010595	10	6	20
16-18	5/8-45/64	B3010608	10	6	20
20-22	25/32-55/64	B3010632	10	6	20

**W1 Screw:** 6.6 strength Grey-white Cr3 zinc-plated **Band:** St 02Z (DIN 1.0226) **Nut:** 6 strength white Cr3 zinc-plated Cr3

### Blister Pack Display Unit

Part n°	Units (Packs)	Height	Depth	Width
02500212	105	180	40	35



#### Asfa “L” W1 DIN 3017



#### Asfa “L” W5 DIN 3017



#### “Normal” Mini Clip





MIKALOR



***Videos***

## ***Mikalor - How to assemble a hose clip***



MIKALOR demonstrates in this video how to mount a MIKALOR ASFA worm-drive hose clip. One of the most important aspects which can be seen in the video is the versatility of the ASFA worm-drive. It can be tightened using a variety of different tools, both manual and automatic.

This is possible thanks to the design of the screw-head. At the end of the video we have a look at the MIKALOR catalogue and our wide range of different models of hose clamps and clips.



## ***Mikalor - Blow off Test***



This video shows a comparative Blow-off test between a MIKALOR ASFA Hose Clamp and a standard hose clip after applying 2 Nm of torque.

The end of the video demonstrates the leak resistance of the MIKALOR ASFA Clamp.



## ***The Mikalor Group***



The MIKALOR Group came into being with the aim of ensuring the specialization of each of the member companies.

One of the most noteworthy aspects of this video is the opportunity to see the state of the art technology used and the quality of the products manufactured by MIKALOR Tools & Engineering, MIKALOR Hose Clamps, MIKALOR Fastening Solutions, and Damesa.



## ***Mikalor - P.V.T. test bench***



In this video MIKALOR Hose Clamps show how a P.V.T. trial is carried out using MIKALOR ASFA worm-drive clamps. P.V.T trials (Pressure, vibration and temperature, simultaneously) are required in particular by the automotive industry in order to simulate the most extreme applications which the product may encounter before approval for use on the assembly line.

The MIKALOR R&D department is one of the few worldwide which has the equipment necessary to carry out P.V.T. tests. In the video you can observe how MIKALOR clamps are subjected to temperatures lower than  $-40^{\circ}\text{C}$  up to  $150^{\circ}\text{C}$  with vibration and constant changes in fluid pressure without any leakage or material fatigue.



## Mikalor - Comparative Application



In this video, MIKALOR demonstrates the results obtained in a comparative application using a MIKALOR worm-drive hose clip and two different standard hose clips. In the central section of the video you will see the damage caused by standard hose clips.

This damage, combined with vibration, eventually causes loss of fluid over time.

In comparison, the MIKALOR hose clip guarantees a leak-proof assembly without damage to the hose thanks to the smooth underside of the band, rounded band edges and the locking mechanism on the side of the housing.



## Mikalor - Polar Diagram



This video shows a comparative Polar Diagram Test between a MIKALOR ASFA Hose Clamp and an average hose clamp after applying 5 Nm of torque.

The end of the video demonstrates the big difference between the MIKALOR ASFA Clamp and an average hose clamp (e.g. with the same torque the MIKALOR clamp's performance doubles that of the average clamp).



## Mikalor - Supra Clamp



Here you can see the competitive advantages of the world-famous MIKALOR Heavy-Duty Hose Clamp.

The advantages of Supra are patented worldwide.



## Follow Mikalor on:



On Facebook you will find all the news about new products as well as advertising campaigns.



On our channel on YouTube MikalorCompany you will find all the audiovisual material relating to our products, which is made available as soon as it is published. Follow us on YouTube and keep up to date with all developments.



## MATERIAL SPECIFICATION CHART ACCORDING TO DIN AND AISI NORMS

Mikalor material specification		DIN	AISI	EN	UNI
W1	Screw	1.0213	Qst 36-3 Steel white zinc-plated Cr3	Qst 36-3 Steel white zinc-plated Cr3	-
	Band and Housing	1.0935	Zinc-plated steel Cr3	Zinc-plated steel Cr3	
W2	Screw	1.0213	Qst 36-3 Steel white zinc-plated Cr3	Qst 36-3 Steel white zinc-plated Cr3	-
	Band and Housing	1.4016	430	X6Cr17	
W3	Screw	1.4016	430	X6Cr17	X8Cr 17
	Band and Housing				
W4	Screw	1.4031	304	X5CrNi1810	X5 CrNi1810
	Band and Housing				
W5	Screw	1.4571	316	X6CrNiMoTi17122	X6 CrNiMo Ti17 12
	Band and Housing	1.4401		X5CrNiMo17122	X5 CrNiMo 17 12

### OUR COMMITMENT

Our management processes are based on the following norms:

- To promote awareness amongst all our staff, suppliers and customers of the fact that continuous improvement in management systems is a key competitive factor.
- To establish processes of continuous improvement which satisfy all those involved and which at the same time help to develop competitive, ethical and socially responsible practices in the workplace.
- To generate internationally recognized research and innovation in harmony with economic, social and human development.
- To prioritize the implementation of quality in every process and to stimulate the knowledge and establishment of Total Quality Management applying the criteria thereof to all our production units.

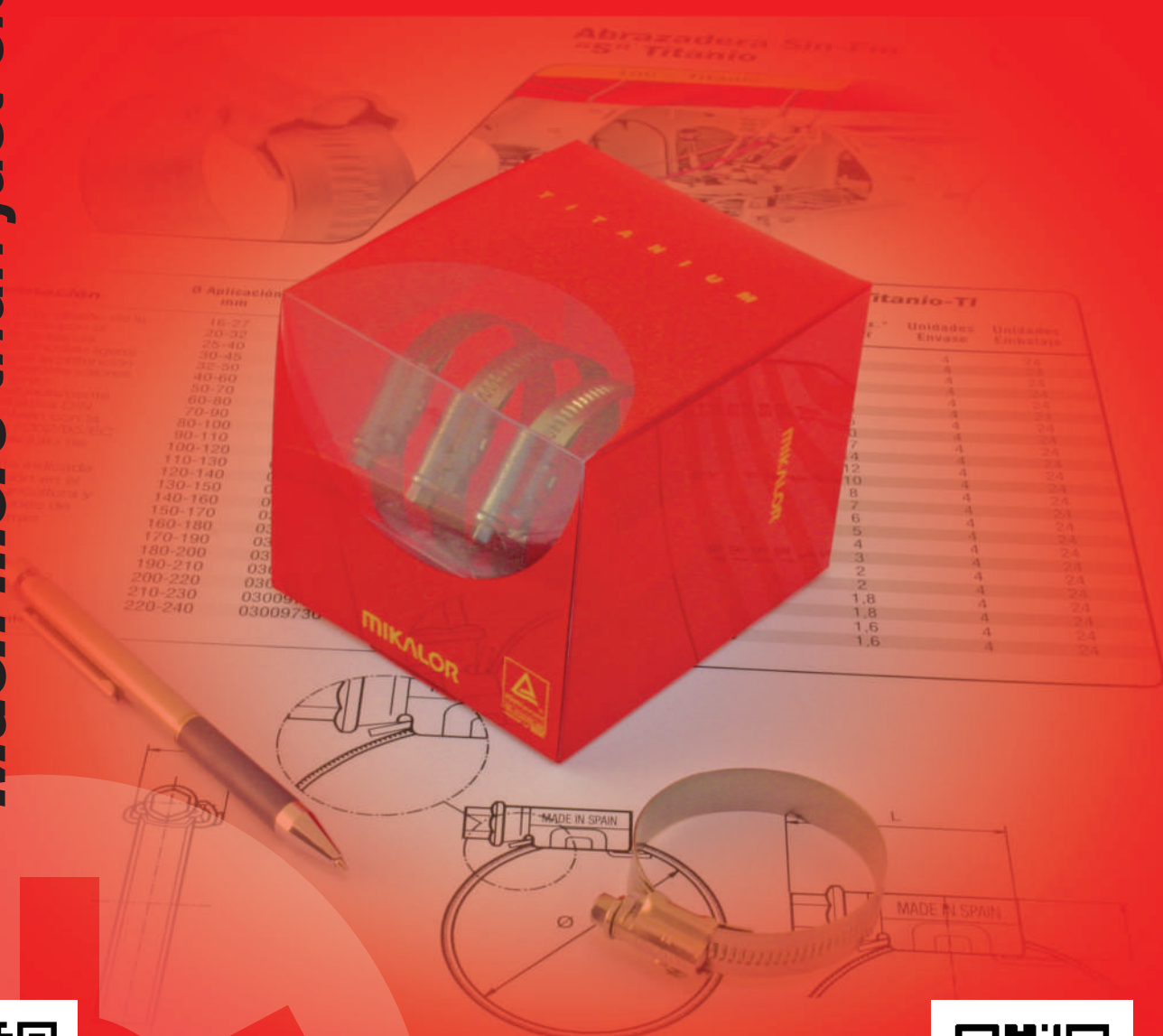
Our management processes are based on the following norms: ISO 9001:2008, ISO 14001 and ISO-TS 16949:2009.





**MIKALOR**

**Much more than just clamps**  
**Much more than just clamps**



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