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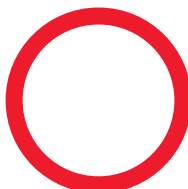
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Mikalor, S.A.

Mikalor has been present on the international fasteners market since 1943 with a wide range of top-quality products which provide fastening solutions adapted to the needs of modern industry. The Mikalor Group is made up of 6 companies, including Mikalor S.A.

Damesa is responsible for all the distribution and commercialization of the products manufactured by the different companies which form the Mikalor Group.

The main manufacturing unit, where our range of hose clips and clamps is manufactured, is situated in Sabadell, a city about 25 km from Barcelona. Our state of the art manufacturing processes, certified to ISO 9001 and ISO 14001, guarantee the best range of hose clips and clamps in the world.

Our use of high-tech manufacturing processes has given Mikalor an important presence in international automotive, white-goods and general industrial sectors.



Mikalor Products

Our aim is to fulfill the highest expectations of industrial clients offering the widest possible range of solutions, working at all times to maintain and improve our competitive position in the market. Environmental concerns are forefront in our minds at all stages of the manufacturing process.

Mikalor is the only company in the world at this time to have launched a range of 100% Titanium worm-drive hose clips, designed to meet the needs of the most demanding of industrial applications.

Our R&D department has also pioneered products such as the famous SUPER heavy-duty hose clamp, the benchmark by which all other heavy-duty clamps are judged.



Mikalor Technology

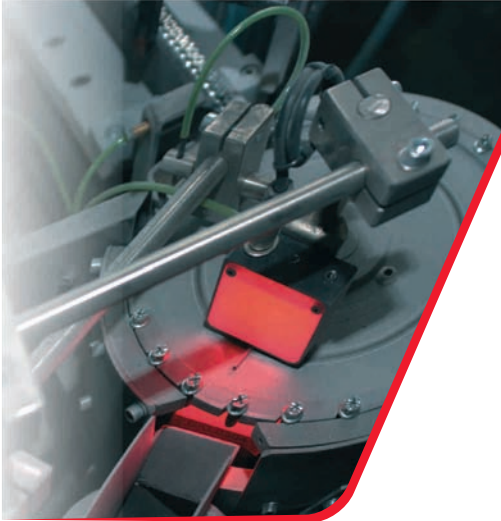
Our technological capacity means that we can offer our clients optimum fastening solutions tailored to their particular needs.

One of the main factors which makes Mikalor stand out from the rest is the role of I+D+i. Our I+D department is the motor of the Mikalor Group, constantly pushing the boundaries of the range of solutions we can provide to our clients.

Development projects are coordinated from the beginning to the end of the life cycle of a product as solutions are trialed and tested during all phases of product design, development, CAE, prototypes and tooling manufacture.

We work hand in hand with the engineering departments of our clients in the search for the appropriate fastening solution for each particular case.

The majority of the products designed and manufactured by Mikalor are patented worldwide.



Our Commitment

We are committed to the promotion of a corporate culture whose aim is the total satisfaction of our clients' expectations. In order to fulfill this commitment, Mikalor invests continuously in technology and human resources in order to ensure the quality of our products and processes.

All the different processes involved in the manufacture of Mikalor products are carried out by companies which are members of the Group. Rather than outsourcing manufacturing processes, we prefer to have full control of the entire process from the design of the product right up to the moment it is delivered to our client.

This commitment means that we can guarantee top quality products which have been manufactured in optimum conditions.



The future for Mikalor

Here at Mikalor we are working towards the future, in solid partnership with our clients, and with total respect for current environmental legislation.

Mikalor and the rest of the companies in the group are already working and will continue to work tirelessly to rise to the challenges which lie ahead.

This dedication to the pursuit of excellence, which has been a constant aspect of our activities since Mikalor was founded in 1943, has led to the supreme quality of our product range and the unparalleled worldwide reputation of the Mikalor brand.

Material Specification Chart according to international norms

		DIN (Germany)	AISI (United States)	EN (EU)	AFNOR (France)	UNI (Italy)
W1	SCREW	1.0213		Qst 36-3 Steel white zinc-plated Cr3		
	BAND AND HOUSING	1.0935		Zinc-plated steel Cr3		
W2	SCREW	1.0213		Qst 36-3 Steel white zinc-plated Cr3		
	BAND AND HOUSING	1.4016	430	X6Cr17		
W3	SCREW	1.4016	430	X6Cr17	Z8C 17	X8Cr 17
	BAND AND HOUSING	1.4016	430	X6Cr17	430 S 17	X8Cr 17
W4	SCREW	1.4031	304	X5CrNi1810	Z7CN 18-09	X5 CrNi1810
	BAND AND HOUSING	1.4031	304	X5CrNi1810	304 S 16 304 S 31	X5 CrNi1810
W5	SCREW	1.4571	316	X6CrNiMoTi17122	Z6CNDT 17-12 320 S 31	X6 CrNiMo Ti17 12
	BAND AND HOUSING	(1.4401)	316	(X5CrNiMo17122)	(Z7 CDN 17-12-02)	(X5 CrNiMo 17 12)



MIKALOR



Low Pressure

W1

One-ear clip

Zinc-plated mild steel

One Ear Clip - A10R W1

Information	Ø Application		Reference W1	A	B	C	D	E	Box Quantity	Packing	Colour
	min.	max.									
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.	7	9	03012080	9,3	5,5	6,0	13,0	0,8	1000	8000	WHITE
	8	10	03012072	10,3	6,0	6,0	14,0	0,8	1000	8000	WHITE
	9	11	03012013	11,3	6,5	6,5	15,0	0,8	1000	8000	WHITE
	10	12	03012021	12,3	7,0	6,5	16,0	0,8	500	8000	WHITE
	11	13	03012030	13,3	7,5	6,5	17,0	0,9	500	8000	WHITE
	12	14	03012048	14,3	8,0	7,0	18,5	1,0	500	4000	WHITE
	14	16	03012056	16,3	8,5	7,0	20,5	1,1	500	4000	WHITE
	16	18	03012064	18,5	9,5	7,0	23,0	1,2	500	4000	WHITE

* Please see pages 68 and 69 for further information regarding application tools.

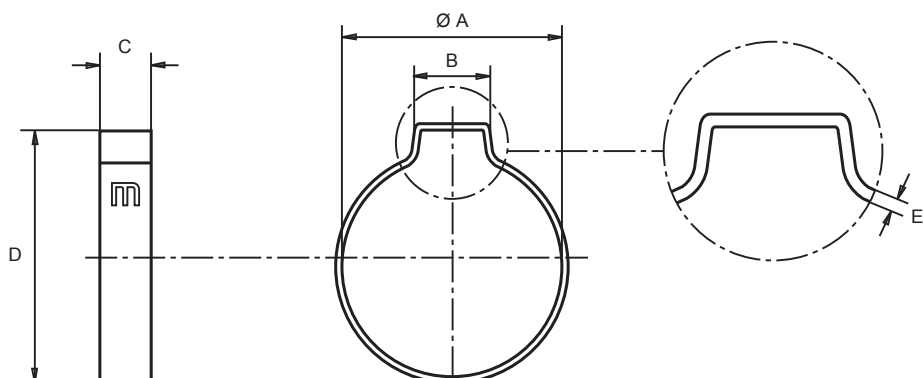
W1 Materials

Band:

St 34 steel (DIN 2393 C)

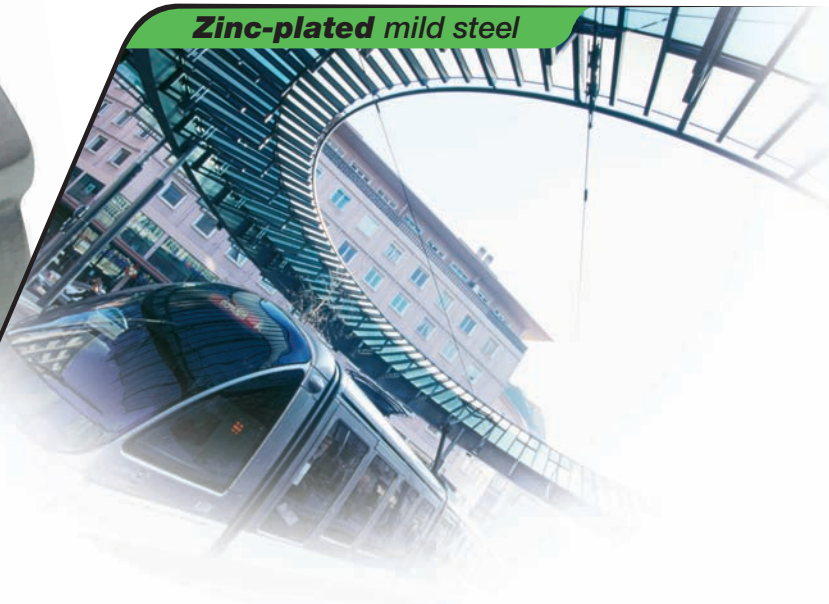
Finish:

Silver-white Cr3 Zinc-Plated





Zinc-plated mild steel



Two-ear Clip - A20R W1

Information	Ø Application		Reference W1	A	B	C	D	E	Box Quantity	Packing	Colour
	min.	max.									
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 tamper-proof once mounted. The edges are rounded to avoid damage to the hose	5	7	03012101	7,3	4,3	6,0	11,0	0,6	2000	16000	WHITE
	7	9	03012110	9,3	4,8	6,0	13,5	0,8	1000	16000	WHITE
	9	11	03012128	11,3	5,3	6,5	17,0	0,8	1000	8000	WHITE
	10	12	03012099	12,3	5,5	6,5	18,0	0,9	1000	8000	WHITE
	11	13	03012136	13,3	5,8	6,5	19,0	0,9	500	8000	WHITE
	13	15	03012144	15,3	6,3	7,0	21,5	1,0	500	4000	WHITE
	14	17	03012152	17,5	6,6	7,0	24,0	1,2	500	4000	WHITE
	15	18	03012160	18,5	7,0	7,5	25,0	1,2	500	500	WHITE
	17	20	03012179	20,5	7,6	7,5	27,0	1,2	250	2000	WHITE
	18	21	03012187	21,5	7,9	8,0	28,0	1,2	250	2000	WHITE
	20	23	03012195	23,5	8,5	8,0	31,0	1,3	250	2000	WHITE
	22	25	03012208	25,5	9,1	8,5	33,0	1,4	200	1600	WHITE
	23	27	03012216	27,5	9,4	8,5	35,0	1,4	200	1600	WHITE
	25	28	03012224	28,5	10,0	9,0	36,0	1,4	200	200	WHITE
	28	31	03012232	31,5	10,6	9,0	39,0	1,4	100	800	WHITE
	31	34	03012240	34,5	11,0	9,5	42,0	1,4	100	800	WHITE
34	37	03012259	37,5	11,5	9,5	46,0	1,6	100	800	WHITE	
37	40	03012267	40,5	12,0	10,0	49,0	1,6	100	100	WHITE	
40	43	03012275	43,5	12,5	10,0	53,0	1,6	75	600	WHITE	
43	46	03012283	46,5	13,0	10,5	56,0	1,6	75	75	WHITE	

* Please see pages 68 and 69 for further information regarding application tools.

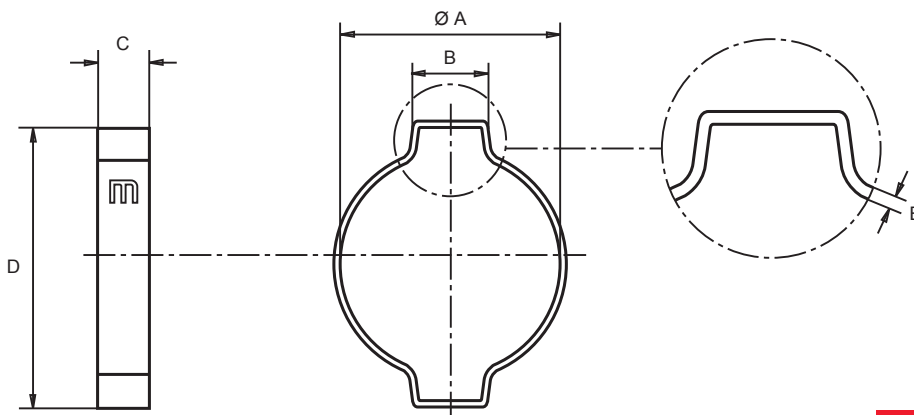
W1 Materials

Band:

St 34 steel (DIN 2393 C)

Finish:

Silver-white Cr3 Zinc-Plated



W4

Stainless-steel One-ear clip

**AISI-304 Stainless steel (A2)**

One-ear Clip - A10R INOX W4

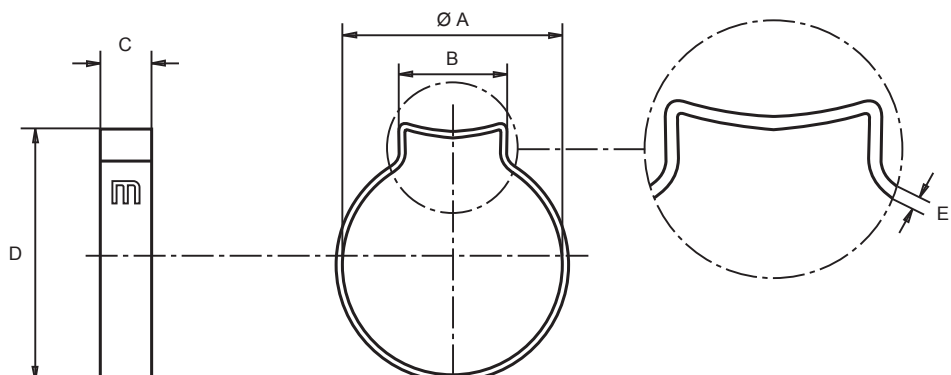
Information	Ø Application		Reference W4	A	B	C	D	E	Box Quantity	Packing	Colour
	min.	max.									
The use of One-ear clips is an economical solution for many simple hose assemblies, used with air or other fluids. Due to the AISI-304 steel used in the manufacture of these clips, their corrosion resistance is outstanding. They are recommended especially in outdoor applications. Like all ear clips, once mounted they are tamper-proof.	7	9	23012440	9,3	5,5	6,0	13,0	0,8	1000	16000	INOX
	8	10	23012087	10,3	6,0	6,0	14,0	0,8	1000	16000	INOX
	9	11	23012010	11,3	6,5	6,5	15,0	0,8	1000	8000	INOX
	10	12	23012028	12,3	7,0	6,5	16,0	0,8	1000	8000	INOX
	11	13	23012036	13,3	7,5	6,5	17,0	0,8	500	8000	INOX
	12	14	23012044	14,3	8,0	7,0	18,5	1,0	500	8000	INOX
	13	15	23012079	15,3	8,0	7,0	19,5	1,0	500	4000	INOX
	14	16	23012052	16,3	8,5	7,0	20,5	1,0	500	4000	INOX
	15	17	23012458	17,5	9,0	7,0	22,0	1,0	500	4000	INOX
	16	18	23012060	18,5	9,0	7,0	23,0	1,0	500	4000	INOX
	17	19	23012423	19,5	9,5	7,5	24,0	1,0	250	2000	INOX
	18	20	23012431	20,5	10,0	7,5	25,0	1,0	250	2000	INOX

* Please see pages 68 and 69 for further information regarding application tools.

W4 Materials

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

100% Stainless steel



W4

Stainless-steel Two-ear clip

**AISI-304 Stainless steel (A2)**

Two-ear Clip - A20R INOX W4

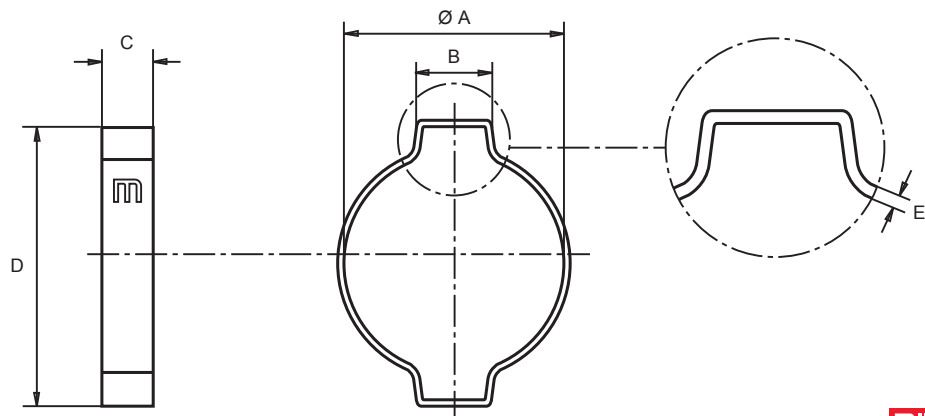
Information	Ø Application		Reference W4	A	B	C	D	E	Box Quantity	Packing	Colour
	min.	max.									
<p>The use of Two-ear clips is an economical solution for many simple hose assemblies, used with air or other fluids. The two ears give the clip extra grip and help to maintain constant pressure around the 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.</p> <p>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.</p>	5	7	23012108	7,3	4,3	6,0	11,5	0,6	2000	16000	INOX
	7	9	23012116	9,3	4,8	6,0	14,5	0,8	1000	16000	INOX
	9	11	23012124	11,3	5,3	6,5	16,5	0,8	1000	8000	INOX
	11	13	23012132	13,3	5,8	6,5	19,0	0,8	500	8000	INOX
	13	15	23012140	15,3	6,3	7,0	21,5	1,0	500	4000	INOX
	14	17	23012159	17,5	6,6	7,0	24,0	1,0	500	4000	INOX
	15	18	23012167	18,5	7,0	7,5	25,0	1,0	500	4000	INOX
	17	20	23012175	20,5	7,6	7,5	27,0	1,0	250	2000	INOX
	18	21	23012183	21,5	7,9	8,0	28,5	1,0	250	2000	INOX
	20	23	23012191	23,5	8,5	8,0	30,5	1,0	250	2000	INOX
	22	25	23012204	25,5	9,1	8,5	33,5	1,2	200	1600	INOX

* Please see pages 68 and 69 for further information regarding application tools.

W4 Materials

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

100% Stainless steel



W1

One-ear clip

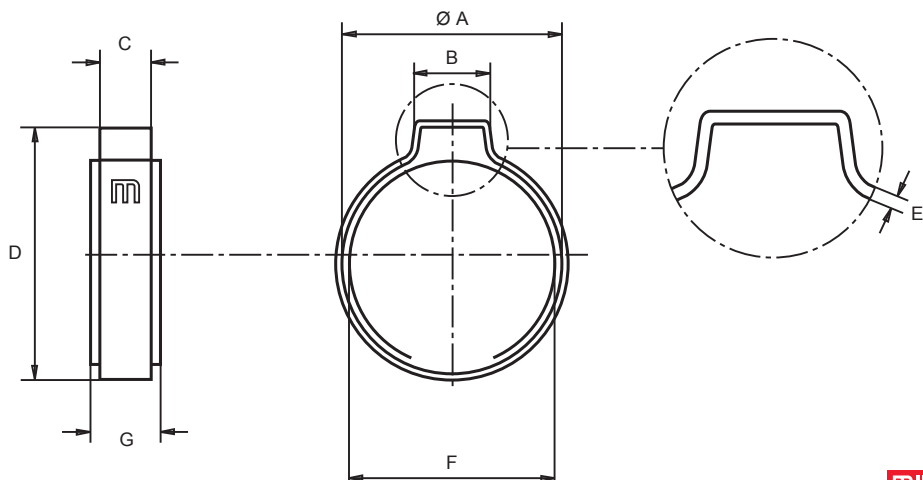
**With Stainless steel Inner-Ring**

One Ear Clip - A10RB W1

Information	Ø Application		Reference W1	A	B	C	D	E	F	G	Box Quantity	Packing	Colour
	min.	max.											
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.	7,5	8,5	03011009	9,3	5,5	6,0	13,0	0,8	8,5	7,8	1000	8000	WHITE
	8,0	9,5	03011010	10,3	6,0	6,0	14,0	0,8	9,5	7,8	1000	8000	WHITE
	9,0	10,5	03011029	11,3	6,5	6,5	15,0	0,8	10,5	7,8	1000	8000	WHITE
	10,0	11,5	03011037	12,3	7,0	6,5	16,0	0,8	11,5	7,8	500	8000	WHITE
	10,5	12,5	03011045	13,3	7,5	6,5	17,0	0,9	12,5	7,8	500	8000	WHITE
	11,5	13,3	03011053	14,3	8,0	7,0	18,5	1,0	13,3	8,8	500	4000	WHITE
	13,0	15,3	03011061	16,3	8,5	7,0	20,5	1,1	15,3	8,8	500	4000	WHITE
	15,0	17,3	03011070	18,5	9,5	7,0	23,0	1,2	17,3	8,8	500	4000	WHITE

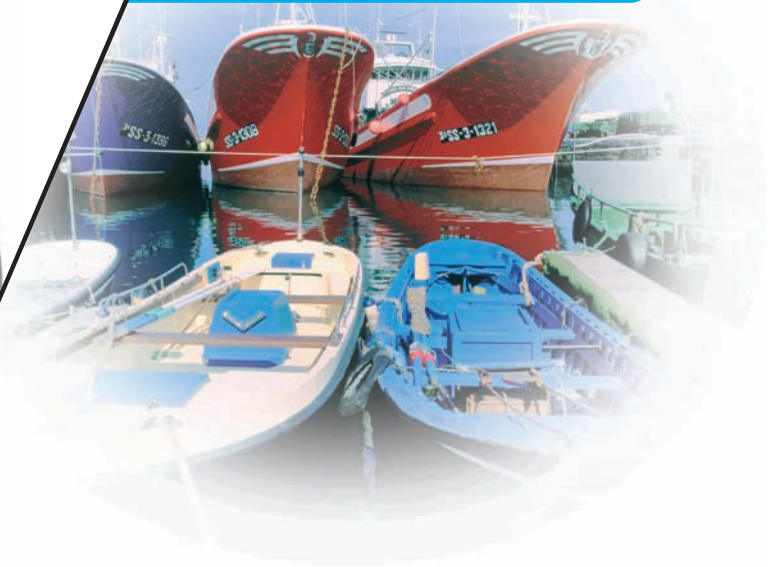
* Please see pages 68 and 69 for further information regarding application tools.

W1 Materials

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

W4

Stainless steel One-ear clip

**With Stainless steel Inner-Ring**

One Ear Clip - A10RI W4

Information	Ø Application		Reference W4	A	B	C	D	E	F	G	Box Quantity	Packing	Colour
	min.	max.											
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 steel used in the manufacture of these clips, their corrosion resistance is outstanding. These clips are especially recommended in outdoor and marine applications.	7,5	8,5	23012300	9,3	5,5	6,0	13,0	0,8	8,5	7,8	2000	16000	INOX
	8,2	9,5	23012319	10,3	6,0	6,0	14,0	0,8	9,5	7,8	1000	8000	INOX
	9,0	10,5	23012327	11,3	6,5	6,5	15,0	0,8	10,5	7,8	1000	8000	INOX
	10,0	11,5	23012335	12,3	7,0	6,5	16,0	0,8	11,5	7,8	1000	8000	INOX
	10,5	12,5	23012343	13,3	7,5	6,5	17,0	0,8	12,5	7,8	500	8000	INOX
	11,5	13,5	23012351	14,3	8,0	7,0	18,5	1,0	13,5	7,8	500	4000	INOX
	12,5	14,5	23012360	15,3	8,0	7,0	19,5	1,0	14,5	8,8	500	4000	INOX
	13,0	15,3	23012378	16,3	8,5	7,0	20,5	1,0	15,3	8,8	500	4000	INOX
	14,0	16,3	23012386	17,5	9,0	7,0	22,0	1,0	16,3	8,8	250	4000	INOX
	15,0	17,3	23012394	18,5	9,5	7,0	23,0	1,0	17,3	8,8	250	4000	INOX
	16,0	18,3	23012407	19,5	9,5	7,5	24,0	1,0	18,3	9,8	250	2000	INOX
	17,0	19,3	23012415	20,5	10,0	7,5	25,0	1,0	19,3	9,8	200	2000	INOX

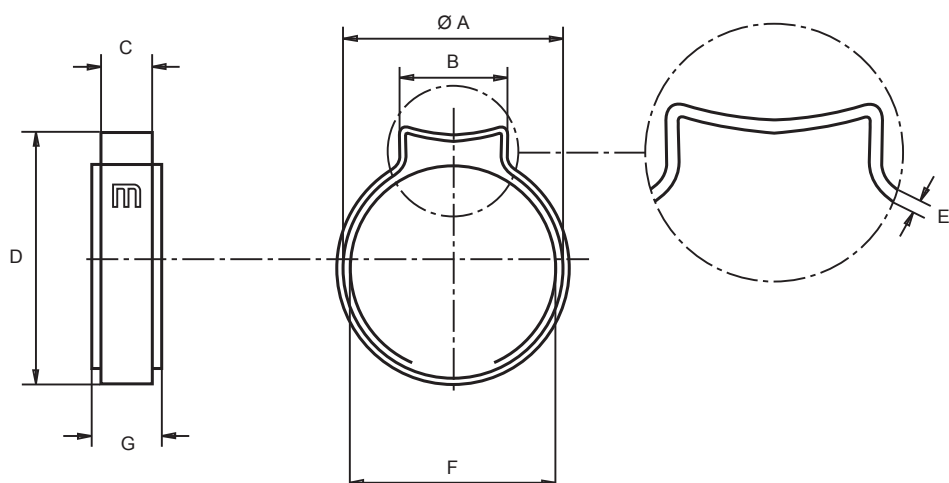
* Please see pages 68 and 69 for further information regarding application tools.

W4 Materials

Band:
AISI-304
Stainless steel (A2)

Finish:
100% Stainless steel

Inner-ring:
AISI-301
Stainless steel



W1

Rubber-lined P-Clip

DIN: 3016

Rubber lined P-Clip W1

Information		Article	Reference AGD	Diameter Application	Band-width a	d	Metric screw	Box Quantity	Packing
These rubber-lined connecting clamps, known in the market 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.	AGD 5/12	03003856	5	12	5,3	M.5	200	200	
	AGD 6/12	03003864	6	12	5,3	M.5	200	200	
	AGD 8/12	03003880	8	12	5,3	M.5	200	200	
	AGD 10/12	03003901	10	12	5,3	M.5	200	200	
	AGD 12/12	03003928	12	12	5,3	M.5	200	200	
	AGD 13/12	03003936	13	12	5,3	M.5	200	200	
	AGD 14/12	03003944	14	12	5,3	M.5	200	200	
	AGD 15/12	03003952	15	12	5,3	M.5	200	200	
	AGD 16/12	03003960	16	12	5,3	M.5	200	200	
	AGD 17/12	03003979	17	12	5,3	M.5	200	200	
	AGD 18/12	03003987	18	12	5,3	M.5	200	200	
	AGD 19/12	03003995	19	12	5,3	M.5	200	200	
	AGD 20/12	03004007	20	12	5,3	M.5	200	200	
	AGD 21/12	03004015	21	12	5,3	M.5	100	100	
	AGD 22/12	03004023	22	12	5,3	M.5	100	100	
	AGD 23/12	03004031	23	12	5,3	M.5	100	100	
	AGD 24/12	03004040	24	12	5,3	M.5	100	100	
	AGD 25/12	03004058	25	12	5,3	M.5	100	100	
	AGD 26/12	03004066	26	12	5,3	M.5	100	100	
	AGD 27/12	03004074	27	12	5,3	M.5	100	100	
	AGD 28/12	03004082	28	12	5,3	M.5	100	100	
	AGD 6/15	03004664	6	15	6,4	M.6	200	200	
	AGD 8/15	03004680	8	15	6,4	M.6	200	200	
	AGD 10/15	03004701	10	15	6,4	M.6	200	200	
	AGD 12/15	03004728	12	15	6,4	M.6	200	200	
	AGD 13/15	03004736	13	15	6,4	M.6	200	200	
	AGD 14/15	03004744	14	15	6,4	M.6	200	200	
	AGD 15/15	03004752	15	15	6,4	M.6	200	200	
	AGD 16/15	03004760	16	15	6,4	M.6	200	200	
	AGD 17/15	03004779	17	15	6,4	M.6	200	200	
	AGD 18/15	03004787	18	15	6,4	M.6	200	200	
	AGD 19/15	03004795	19	15	6,4	M.6	200	200	
	AGD 20/15	03004808	20	15	6,4	M.6	200	200	
AGD 21/15	03004816	21	15	6,4	M.6	100	100		
AGD 22/15	03004824	22	15	6,4	M.6	100	100		



Rubber lined **P-Clip W1**

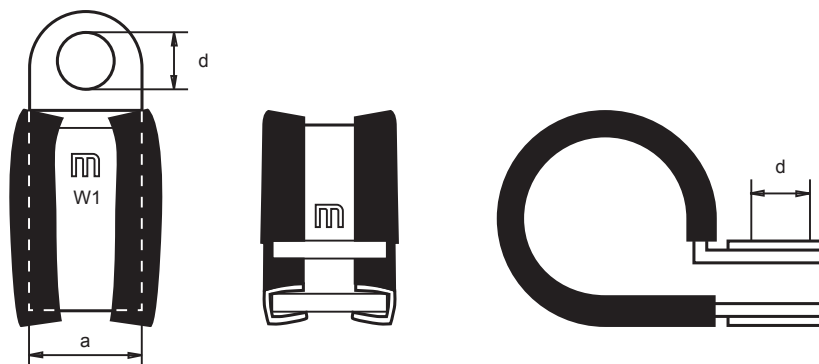
Article	Reference AGD	Diameter Application	Band-width a	d	Metric screw	Box Quantity	Packings
AGD 23/15	03004832	23	15	6,4	M.6	100	100
AGD 25/15	03004859	25	15	6,4	M.6	100	100
AGD 26/15	03004867	26	15	6,4	M.6	100	100
AGD 28/15	03004883	28	15	6,4	M.6	100	100
AGD 30/15	03004904	30	15	6,4	M.6	100	100
AGD 32/15	03004920	32	15	6,4	M.6	100	100
AGD 34/15	03004947	34	15	6,4	M.6	100	100
AGD 35/15	03004955	35	15	6,4	M.6	100	100
AGD 37/15	03004971	37	15	6,4	M.6	100	100
AGD 38/15	03004980	38	15	6,4	M.6	100	100
AGD 40/15	03005000	40	15	6,4	M.6	100	100
AGD 11/20	03005510	11	20	8,4	M.8	100	100
AGD 12/20	03005528	12	20	8,4	M.8	100	100
AGD 13/20	03005536	13	20	8,4	M.8	100	100
AGD 14/20	03005544	14	20	8,4	M.8	100	100
AGD 15/20	03005552	15	20	8,4	M.8	100	100
AGD 16/20	03005560	16	20	8,4	M.8	100	100
AGD 18/20	03005579	18	20	8,4	M.8	100	100
AGD 19/20	03005587	19	20	8,4	M.8	100	100
AGD 20/20	03005595	20	20	8,4	M.8	100	100
AGD 21/20	03005608	21	20	8,4	M.8	50	50
AGD 22/20	03005616	22	20	8,4	M.8	50	50
AGD 23/20	03005624	23	20	8,4	M.8	50	50
AGD 24/20	03005632	24	20	8,4	M.8	50	50
AGD 25/20	03005640	25	20	8,4	M.8	50	50
AGD 27/20	03005667	27	20	8,4	M.8	50	50
AGD 28/20	03005675	28	20	8,4	M.8	50	50
AGD 30/20	03005691	30	20	8,4	M.8	50	50
AGD 32/20	03005712	32	20	8,4	M.8	50	50
AGD 34/20	03005739	34	20	8,4	M.8	50	50
AGD 35/20	03005747	35	20	8,4	M.8	50	50
AGD 36/20	03005755	36	20	8,4	M.8	50	50
AGD 38/20	03005771	38	20	8,4	M.8	50	50
AGD 40/20	03005798	40	20	8,4	M.8	50	50

* 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 B, C, E and F and also without rubber lining).

W1 Materials

Band:
Mild steel reinforced at both ends

Finish:
Galvanized and lined with EPDM rubber



DIN: 3016



Rubber lined P-Clip W4

Information	Article	Reference AGD	Diameter Application	Band-width a	d	Metric screw	Box Quantity	Packing
These rubber-lined connecting clamps, known in the market 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 tight. P-Clips are particularly recommended for mounting pipes, electric cable ducting and hoses in automotive and marine applications and in industrial machinery.	AGID 5/12	43003859	5	12	5,3	M.5	200	200
	AGID 6/12	43003867	6	12	5,3	M.5	200	200
	AGID 8/12	43003883	8	12	5,3	M.5	200	200
	AGID 10/12	43003904	10	12	5,3	M.5	200	200
	AGID 12/12	43003920	12	12	5,3	M.5	200	200
	AGID 13/12	43003939	13	12	5,3	M.5	200	200
	AGID 14/12	43003947	14	12	5,3	M.5	200	200
	AGID 15/12	43003955	15	12	5,3	M.5	200	200
	AGID 16/12	43003963	16	12	5,3	M.5	200	200
	AGID 17/12	43003971	17	12	5,3	M.5	200	200
	AGID 18/12	43003980	18	12	5,3	M.5	200	200
	AGID 19/12	43003998	19	12	5,3	M.5	200	200
	AGID 20/12	43004000	20	12	5,3	M.5	200	200
	AGID 21/12	43004018	21	12	5,3	M.5	100	100
	AGID 22/12	43004026	22	12	5,3	M.5	100	100
	AGID 23/12	43004034	23	12	5,3	M.5	100	100
	AGID 24/12	43004042	24	12	5,3	M.5	100	100
	AGID 25/12	43004050	25	12	5,3	M.5	100	100
	AGID 26/12	43004069	26	12	5,3	M.5	100	100
	AGID 27/12	43004077	27	12	5,3	M.5	100	100
	AGID 28/12	43004085	28	12	5,3	M.5	100	100
	AGID 6/15	43004667	6	15	6,4	M.6	200	200
AGID 8/15	43004683	8	15	6,4	M.6	200	200	
AGID 10/15	43004704	10	15	6,4	M.6	200	200	
AGID 12/15	43004720	12	15	6,4	M.6	200	200	
AGID 13/15	43004739	13	15	6,4	M.6	200	200	
AGID 14/15	43004747	14	15	6,4	M.6	200	200	
AGID 15/15	43004755	15	15	6,4	M.6	200	200	
AGID 16/15	43004763	16	15	6,4	M.6	200	200	
AGID 17/15	43004771	17	15	6,4	M.6	200	200	
AGID 18/15	43004780	18	15	6,4	M.6	200	200	
AGID 19/15	43004798	19	15	6,4	M.6	200	200	
AGID 20/15	43004800	20	15	6,4	M.6	200	200	
AGID 21/15	43004819	21	15	6,4	M.6	100	100	
AGID 22/15	43004827	22	15	6,4	M.6	100	100	



Rubber lined **P-Clip W4**

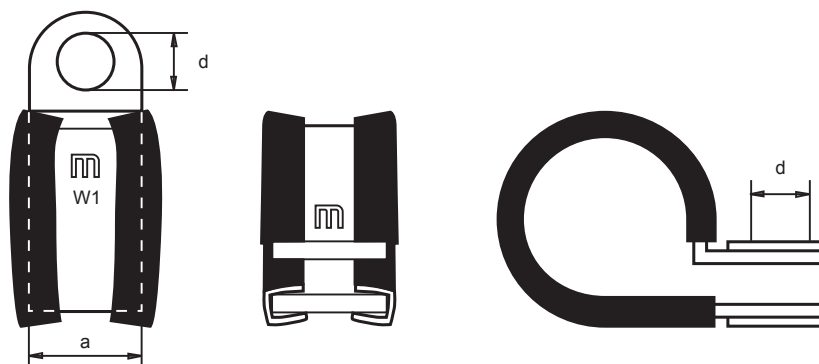
Article	Reference AGD	Diameter Application	Band-width a	d	Metric screw	Box Quantity	Packing
AGID 23/15	43004835	23	15	6,4	M.6	100	100
AGID 25/15	43004851	25	15	6,4	M.6	100	100
AGID 26/15	43004860	26	15	6,4	M.6	100	100
AGID 28/15	43004886	28	15	6,4	M.6	100	100
AGID 30/15	43004907	30	15	6,4	M.6	100	100
AGID 32/15	43004923	32	15	6,4	M.6	100	100
AGID 34/15	43004940	34	15	6,4	M.6	100	100
AGID 35/15	43004958	35	15	6,4	M.6	100	100
AGID 36/15	43004966	37	15	6,4	M.6	100	100
AGID 37/15	43004974	38	15	6,4	M.6	100	100
AGID 38/15	43004982	40	15	6,4	M.6	100	100
AGID 40/15	43005002	11	20	8,4	M.8	100	100
AGID 11/20	43005512	12	20	8,4	M.8	100	100
AGID 12/20	43005520	13	20	8,4	M.8	100	100
AGID 13/20	43005539	14	20	8,4	M.8	100	100
AGID 14/20	43005547	15	20	8,4	M.8	100	100
AGID 15/20	43005555	16	20	8,4	M.8	100	100
AGID 16/20	43005563	18	20	8,4	M.8	100	100
AGID 18/20	43005571	19	20	8,4	M.8	100	100
AGID 19/20	43005580	20	20	8,4	M.8	100	100
AGID 20/20	43005598	21	20	8,4	M.8	50	50
AGID 21/20	43005600	22	20	8,4	M.8	50	50
AGID 22/20	43005619	23	20	8,4	M.8	50	50
AGID 23/20	43005627	24	20	8,4	M.8	50	50
AGID 24/20	43005635	25	20	8,4	M.8	50	50
AGID 25/20	43005643	27	20	8,4	M.8	50	50
AGID 27/20	43005661	28	20	8,4	M.8	50	50
AGID 28/20	43005670	30	20	8,4	M.8	50	50
AGID 29/20	43005688	32	20	8,4	M.8	50	50
AGID 30/20	43005696	34	20	8,4	M.8	50	50
AGID 32/20	43005715	35	20	8,4	M.8	50	50
AGID 34/20	43005731	36	20	8,4	M.8	50	50
AGID 35/20	43005740	38	20	8,4	M.8	50	50
AGID 36/20	43005758	40	20	8,4	M.8	50	50
AGID 38/20	43005774						
AGID 40/20	43005790						

* 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 B, C, E and F and also without rubber lining.)

W4 Materials

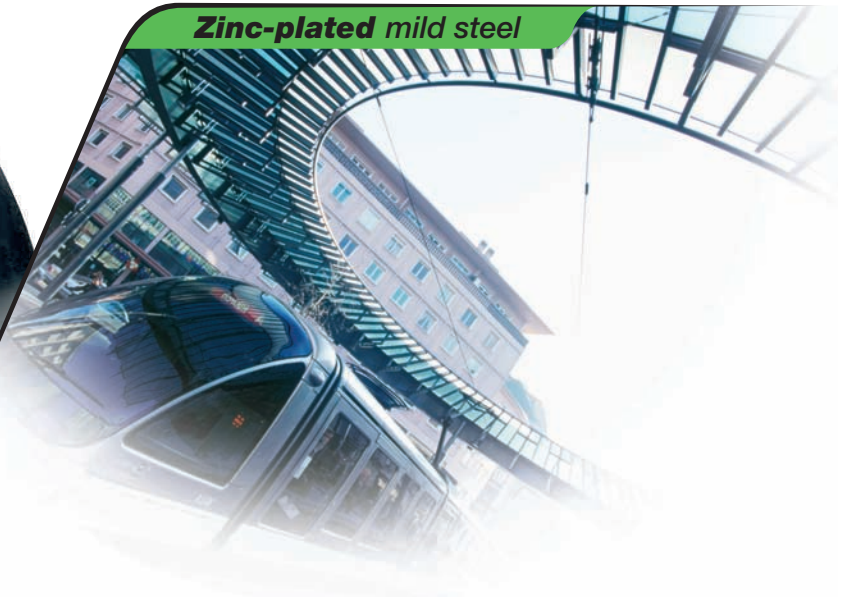
Band:
 AISI 304 stainless steel (A2)
 with reinforced screw holes

Lining:
 EPDM rubber



W1

Spring Clip

Zinc-plated mild steel

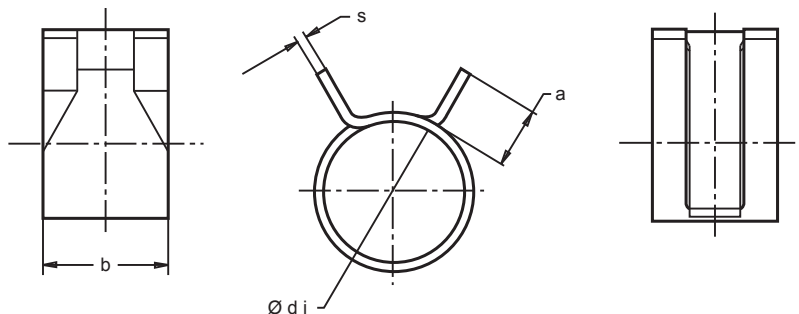
Spring Clip **AML W1**

Information	Nominal diameter Ø	Reference W1	Ø di	b	a ± 0,05	s	Box Quantity	Packing
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.	6	02014025	5,5 ^{±0,1}	7	3	0,5	500	8000
	7	02014033	6,4 ^{±0,1}	7	3	0,5	500	8000
	8	02014041	7,4 ^{±0,15}	8	3	0,6	500	8000
	9	02014050	8,4 ^{±0,15}	8	3,5	0,6	500	4000
	10	02014068	9,3 ^{±0,2}	8	3,5	0,7	500	4000
	11	02014076	10,3 ^{±0,2}	8	4	0,7	500	4000
	12	02014084	11,1 ^{±0,2}	8	4	0,7	500	4000
	14	02014092	12,9 ^{±0,2}	8	4	0,8	500	4000
	15	02014105	13,5 ^{±0,2}	8	4,5	0,8	500	4000
	17	02014113	15,6 ^{±0,2}	8	4,5	0,8	500	4000
	20	02014121	18,4 ^{±0,4}	8	3,2	0,8	500	4000

W1 Materials

Band:
Spring steel

Finish:
Silver-white
Cr3 Zinc-Plated



W1

Wire Clip

**Zinc-plated mild steel**

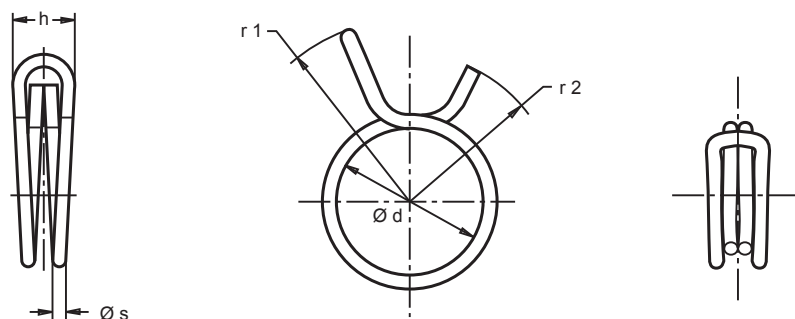
Spring Clip AAL W1

Information	Ø Application			Reference W1	r1	r2	h max.	Øs	Box Quantity	Packing
	min.	nominal	max.							
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.	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	15,5	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 Materials

Band:
Spring steel

Finish:
Cr3 Zinc-Plated



W1

Wire Clip with screw

Zinc-plated mild steel

AAT W1 wire clip with screw

Information	d Ø Application mm	Application	d Ø Application nominal mm	d	e	l	h max	Box quantity	Packing
This clip was specially designed for use with hoses incorporating an outer helix. It is generally used when installing ventilation ducting. 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.	9,5-12	03030015	11,0	1,5	5,5	20	11	500	2000
	10,5-13	03030023	11,5	1,5	5,5	20	11	500	2000
	11,5-14	03030031	12,5	1,5	5,5	20	11	500	2000
	12,5-15	03030040	13,0	1,5	5,5	20	11	500	2000
	13,0-16	03030058	14,0	1,8	5,5	25	11	500	2000
	13,5-17	03030066	15,0	1,8	5,5	25	11	500	2000
	15,0-18	03030074	16,0	1,8	5,5	25	11	500	2000
	15,5-19	03030082	17,0	1,8	5,5	25	11	500	2000
	17,0-20	03030090	18,0	1,8	5,5	25	11	500	2000
	17,5-21	03030103	18,5	1,8	5,5	25	11	500	2000
	18,5-22	03030111	20,0	2,0	7,0	30	13	500	2000
	19,0-23	03030120	20,5	2,0	7,0	30	13	500	2000
	21,0-24	03030138	22,0	2,0	7,0	30	13	500	2000
	21,5-25	03030146	23,5	2,2	7,0	30	13	500	2000
	23,5-27	03030154	25,0	2,2	7,0	30	13	500	2000
	25,0-29	03030162	27,0	2,2	7,0	30	13	200	800
	27,0-31	03030170	29,0	2,2	7,0	30	13	200	800
	29,0-33	03030189	31,5	2,2	7,0	30	13	200	800
	30,5-35	03030197	33,0	2,2	7,0	30	13	200	800
	33,0-37	03030200	37,0	2,2	7,0	30	13	200	800
	35,5-40	03030218	38,5	2,2	7,0	30	13	200	800
	38,5-43	03030226	41,0	2,5	8,0	40	15	200	800
	41,0-46	03030234	43,5	2,5	8,0	40	15	200	800
	43,5-49	03030242	46,5	2,5	8,0	40	15	200	800
	46,5-53	03030250	50,5	2,5	8,0	40	15	100	400
	50,5-56	03030269	53,5	2,5	8,0	40	15	100	400
	53,5-60	03030277	56,5	2,8	10,0	50	18	100	400
	56,5-64	03030285	60,0	2,8	10,0	50	18	100	400
60,0-68	03030293	64,0	2,8	10,0	50	18	100	400	
64,0-72	03030306	68,5	2,8	10,0	50	18	100	400	
68,5-76	03030314	72,5	3,0	10,0	50	18	100	400	
72,5-80	03030322	76,5	3,0	10,0	50	18	100	400	
76,5-84	03030330	80,0	3,0	10,0	50	18	100	400	

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

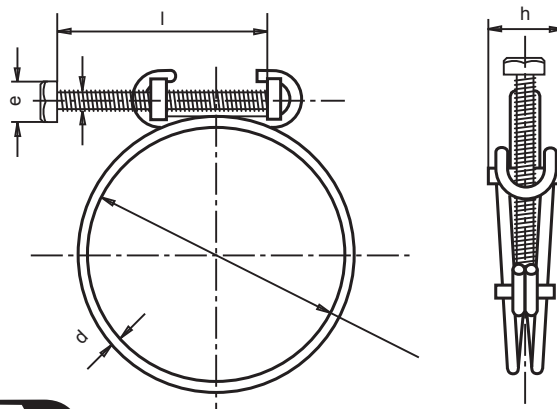
W1 Materials

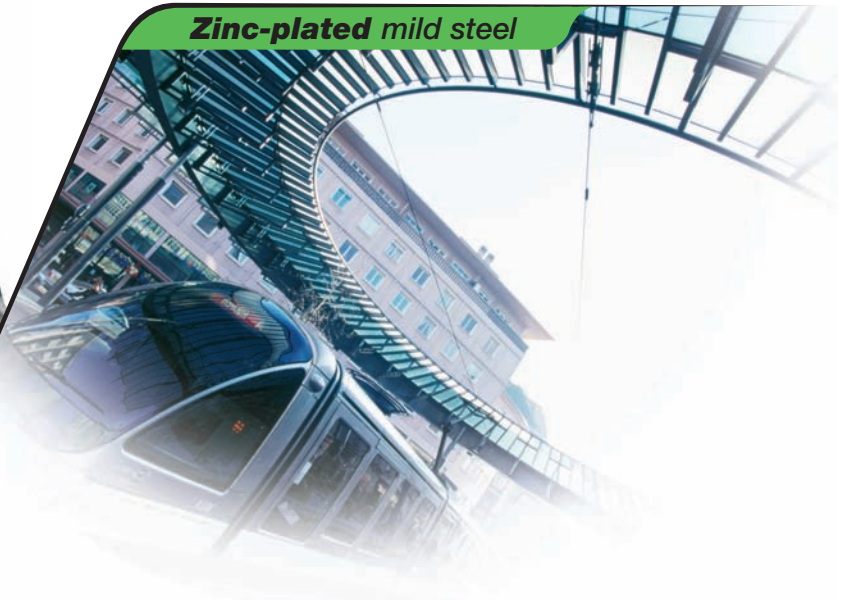
Wire:

Steel wire
B-UNI 3823

Screw:

6.6 grade steel Cr3
zinc-plated



W1**“Normal” Mini-clip****Zinc-plated mild steel****“Normal” Mini-clip W1**

Information	d Ø Application mm	Reference W1	r	e	a	b	s	Max. values* Torque Nm	Max. values* Pressure (Bars)	Box Quantity	Packing
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.	6	03010510	M3	5	8,4	9	0,5	0,4	15,0	100	1600
	8	03010528	M3	5	9	9	0,5	0,4	14,0	100	1600
	9	03010536	M4	6	10	10	0,5	1,0	15,0	100	1600
	9,5-10	03010544	M4	6	10	10	0,5	1,0	14,0	100	1600
	10-11	03010552	M4	6	10	10	0,5	1,0	13,0	100	1600
	12-13	03010560	M4	6	10	10	0,5	1,0	12,5	100	1600
	13-14	03010579	M4	6	10	10	0,5	1,0	12,5	100	1600
	14-15	03010587	M4	6	10	10	0,5	1,0	12,0	100	1600
	15-17	03010595	M4	6	10	10	0,5	1,0	12,0	100	1600
	16-18	03010608	M4	6	10	10	0,5	1,0	11,5	100	1600
	18-20	03010616	M4	6	10	10	0,5	1,0	10,5	100	1600
	19-21	03010624	M4	6	10	10	0,5	1,0	10,5	100	800
	20-22	03010632	M4	6	10	10	0,5	1,0	10,5	100	800
	22-25	03010640	M4	6	10	10	0,5	1,0	9,5	100	800
	23-26	03010659	M4	6	10	10	0,5	1,0	9,0	100	800
25-28	03010667	M4	6	10	10	0,5	1,0	8,5	100	800	
26-29	03010675	M4	6	10	10	0,5	1,0	8,5	100	800	
29-32	03010683	M4	6	10	10	0,5	1,0	8,0	100	800	

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

W1 Materials**Screw:**

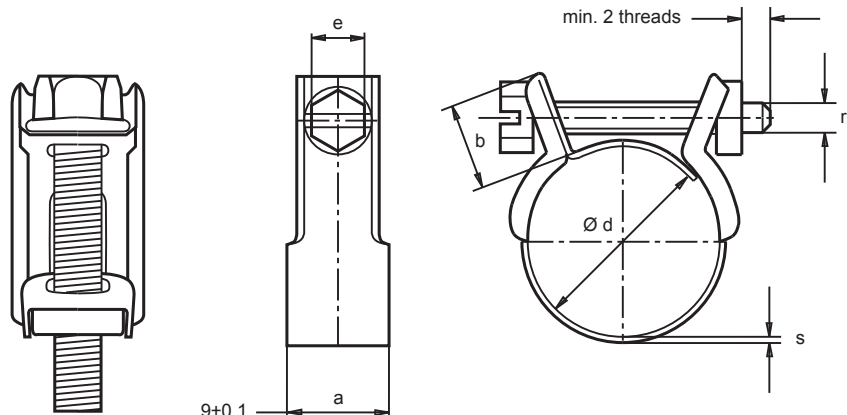
6.6 strength
Grey-white Cr3 zinc-plated

Nut:

6 strength
White Cr3 zinc-plated

Band:

St 02Z (DIN 1.0226)



W2**Open worm-drive clip****Open Light series****Open worm-drive clip W2****Information**

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.

Ø Application mm	Reference W2	a	b	c	d	Max. values Torque Nm	Max. values Pressure (Bars)	Box Quantity	Packing
7-11	03016401	7,5	0,4	7	5	1,5	35	100	1600
11-19	03016410	7,5	0,4	7	5	1,5	35	100	1600

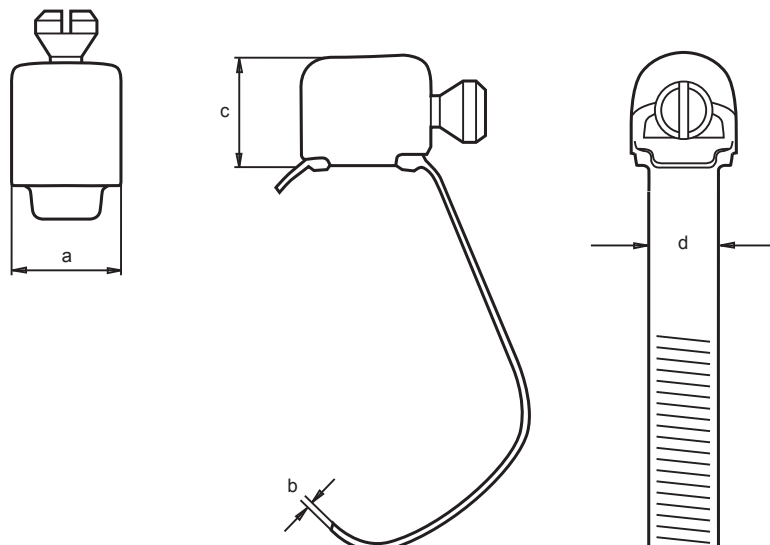
* The maximum pressure may vary depending on the type of hose and coupling used.

W2 Materials**Screw and housing:**

Qst 34-3 Mild Steel (DIN 1.0213)
Grey-white Cr3 zinc-plated

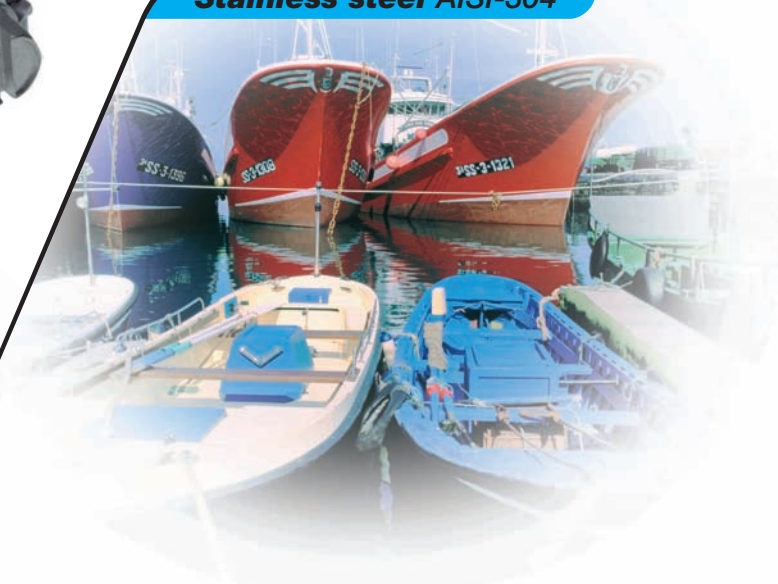
Band:

Stainless steel X8CR 17 (DIN 1.4016) (AISI-430)



**W4**

Endless worm-drive band and housing

**Stainless steel AISI-304**

Endless worm-drive Band and separate housing W4

Information

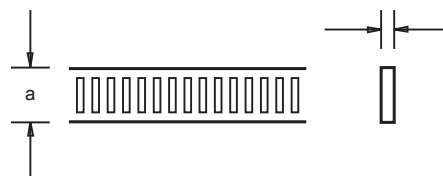
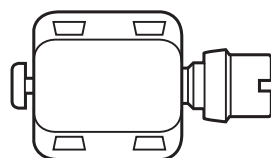
Endless banding with comes in rolls which are between 2m to 30m long, allowing you to clamp just about any assembly without knowing the diameter in advance. The housings are supplied separately and can be fitted easily where and when they are needed. With an endless band and a box of buckles you can cover just about any eventuality. Ideally suited for the client with temporary or occasional clamping needs.

Description	Article CT/CP/CC	Reference	Bandwidth (mm) a	Minimum band thickness b	Packing	Material
Stamped Band	CT 7-25	03011109	7	0,6	25 mts.	AISI-304 Stainless steel
Stamped Band	CT 7-2	03011117	7	0,6	2 mts.	AISI-304 Stainless steel
Housing (A)	CCT 7	03011125	-	-	100 unid.	AISI-302 Cu Stainless steel
Stamped Band	CT 11-30	03011168	11	0,6	30 mts.	AISI-304 Stainless steel
Stamped Band	CT 11-3	03011176	11	0,6	3 mts.	AISI-304 Stainless steel
Housing (A)	CCT 11-A	03011184	-	-	100 unid.	AISI-302 Cu Stainless steel
Perforated Band	CP 14-30	03012961	14	0,6	30 mts.	AISI-304 Stainless steel
Perforated Band	CP 14-5	03011192	14	0,6	5 mts.	AISI-304 Stainless steel
Housing (B)	CCP 14-10	03011205	-	-	10 unid.	AISI-302 Cu Stainless steel
Housing (B)	CCP 14-50	03012970	-	-	50 unid.	AISI-302 Cu Stainless steel

W4 Materials

Band:
AISI-304
Stainless steel (A2)

Housing:
AISI-3025
(Cu Stainless steel)



Technical Information



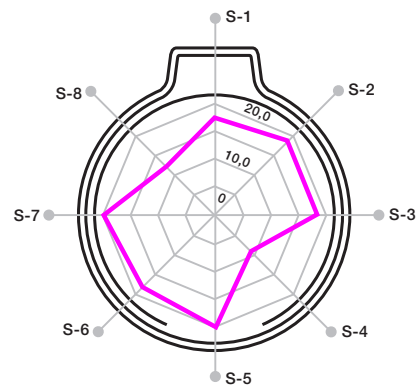
One Ear clips with W4 Inner-Ring

- A** The inner-ring protects the underside of the ear, thereby ensuring a snug fit around the hose.
- B** Materials free of toxic substances in accordance with current environmental legislation.
- C** Easy and quick to mount.
- D** Rounded band edges which prevent cutting or damage to the hose.
- E** All clips and clamps are marked with the clamping range and the Mikalor logo.
- F** Wide variety of models which cover many applications.
- G** In order to decide which ear clamp to use, add 1 mm to the OD of the tube or hose to be clamped.

Polar Diagram

Sectors	S1	S2	S3	S4	S5	S6	S7	S8	Average
Force Kg	16,1	17,8	18,1	8,2	20,4	18,8	19,8	11,2	16,3

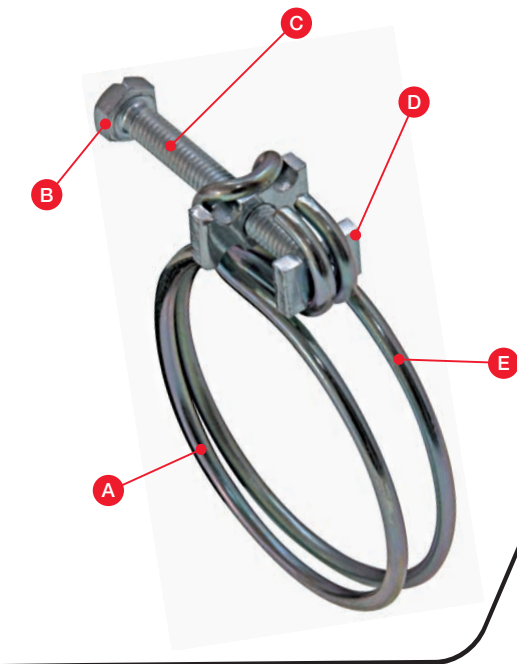
Torque / Efficiency [Nm / daN]



Rubber-lined P-Clip

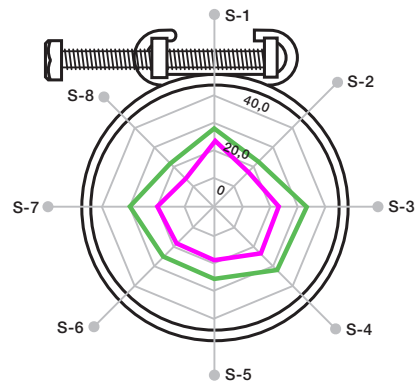
- A** The rubber lining allows for firm and safe clamping, protecting the application zone and preventing potential damage due to vibration.
- B** The screw holes at either end of the band are reinforced with steel plates to avoid damage to the holes when a lot of force is applied.
- C** The steel used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

Technical Information



Wire Clip with screw

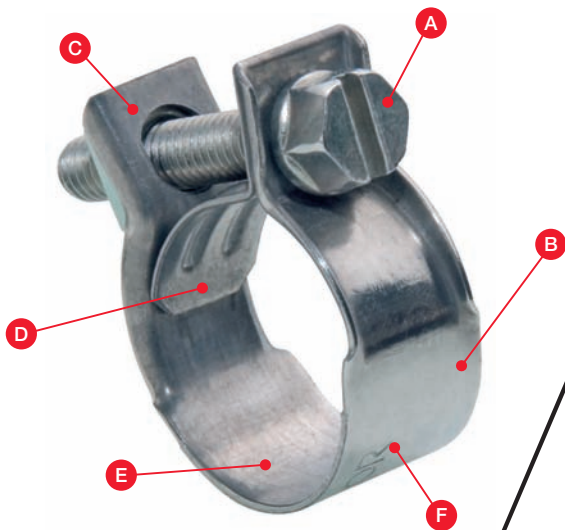
- A** The steel wire used in the manufacture of this clip is free from burrs and sharp edges which could cut into the hose or ducting.
- B** Possibility of manual or automatic mounting.
- C** Screw-tightening system ensures effective clamping.
- D** Double-wire construction sits comfortably on either side of the helix.
- E** Materials free of toxic substances in accordance with current environmental legislation.



Polar Diagram

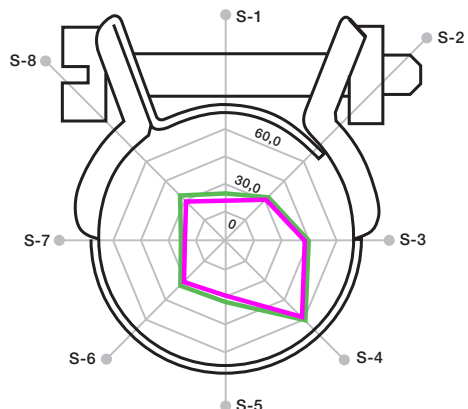
Sectors	S1	S2	S3	S4	S5	S6	S7	S8	Average
1,2 Nm	23,0	17,4	22,8	22,8	17,6	18,2	21,6	14,2	19,7
1,6 Nm	28,0	21,6	32,8	30,4	24,6	24,4	29,2	22,8	26,7

Torque / Efficiency [Nm / daN]



« 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** Unique nut-blocking system makes tightening easy.
- D** The band end forms a bridge which avoids possible damage to the hose during tightening and allows for a snug fit around the hose.
- E** Materials free of toxic substances in accordance with current environmental legislation.
- F** All clips are marked with the application diameter and the Mikalor logo.



Polar Diagram

Sectors	S1	S2	S3	S4	S5	S6	S7	S8	Average
1 Nm	23,0	31,5	43,0	60,0	29,5	32,5	22,5	30,5	34,1
1,4 Nm	25,7	33,0	44,4	62,5	33,0	34,2	23,9	35,0	36,5

Torque / Efficiency [Nm / daN]



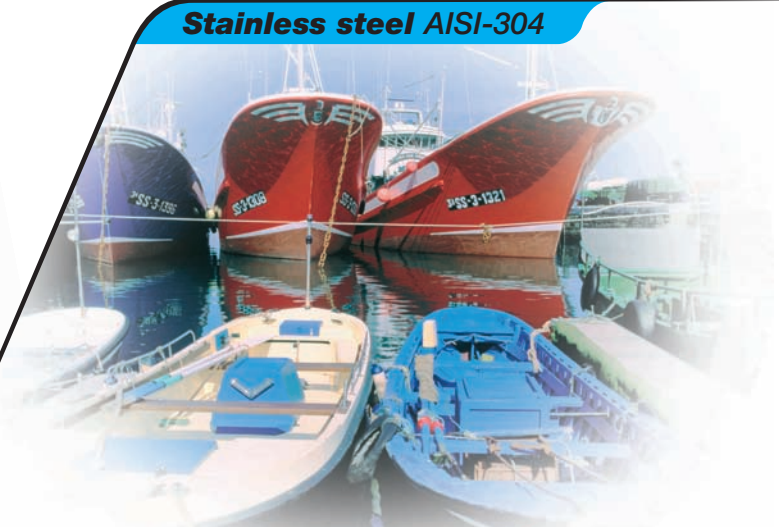
MIKALOR



**Medium
Pressure**

W4

Stainless steel Preformed Clamp

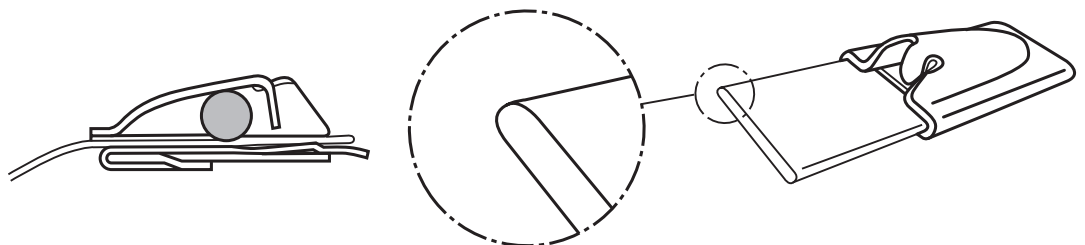
**Stainless steel AISI-304**

Stainless Steel Preformed Clamp W4

Information	Ø Application mm	Reference W4	Width	Maximum diameter	Length	Strength (Kg)	Box Quantity	Packing
The housing of the preformed clamp incorporates a stainless steel ball-bearing making it extremely tough once fastened. Due to its design, the preformed clamp 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.	4,50 x 33	03002001	4,50	33	130	46	100	8000
	4,50 x 50	03002002	4,50	50	200	46	100	6000
	4,50 x 76	03002003	4,50	76	300	46	100	5000
	4,50 x 102	03002004	4,50	102	370	46	100	4500
	4,50 x 156	03002005	4,50	156	520	46	100	100
	4,50 x 207	03002006	4,50	207	680	46	100	100
	4,50 x 245	03002007	4,50	245	840	46	100	100
	7,94 x 50	03002008	7,94	50	200	114	100	4500
	7,94 x 76	03002009	7,94	76	300	114	100	4000
	7,94 x 102	03002010	7,94	102	370	114	100	3000
	7,94 x 135	03002011	7,94	135	450	114	100	2000
	7,94 x 150	03002012	7,94	150	500	114	100	2500
	7,94 x 207	03002013	7,94	207	680	114	100	100
	7,94 x 312	03002014	7,94	312	1020	114	100	100

* Please see pages 68 and 69 for further information regarding application tools.

W4 Materials

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

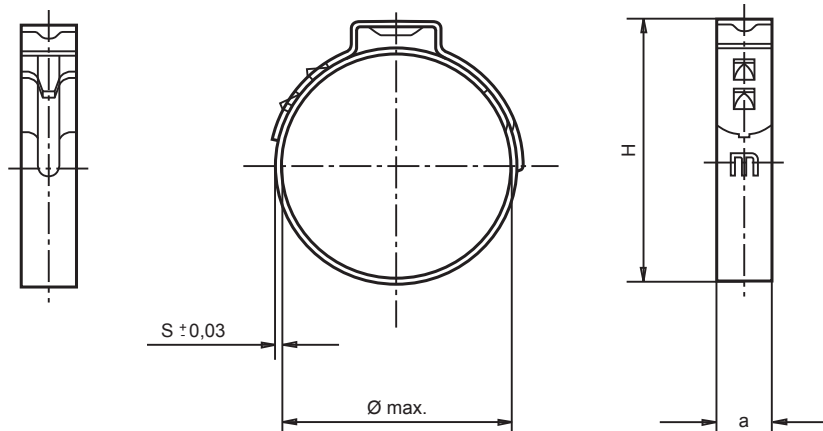
**W1****« Stepless » Ear Clamp****Mild steel****« Stepless » Ear Clamp W1**

Information	Ø Nominal mm	Ø Application min. max.	Ref.	H max. mm	S (mm)	a ± 0,15	Box Quantity	Packing
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.	10,0	8,3 9,5	03030752	14,0	0,6	7	1000	8000
	13,3	10,8 12,8	03030760	17,0	0,6	7	1000	8000
	15,7	13,2 15,2	03030779	20,1	0,6	7	1000	5000
	17,5	14,3 17,0	03030787	22,5	0,8	7	1000	5000
	17,8	14,6 17,3	03030795	22,5	0,8	7	1000	5000
	18,5	15,3 18,0	03030808	23,5	0,8	7	1000	4000
	20,5	17,3 20,0	03030816	26,0	0,8	7	500	3000
	29,5	26,3 29,0	03030824	35,5	0,8	7	500	3000
	31,6	28,4 31,1	03030832	37,5	0,8	7	500	2000
	39,6	36,4 39,1	03030840	45,5	0,8	7	500	2000
	40,5	37,3 40,0	03030859	46,5	0,8	7	500	1000
	45,5	42,3 45,0	03030867	51,5	0,8	7	200	400
	47,0	43,8 46,5	03030875	53,0	0,8	7	200	400
	51,5	48,3 51,0	03030883	57,5	0,8	7	100	500
52,5	49,3 52,0	03030891	58,5	0,8	7	100	500	
65,5	62,3 65,0	03030904	71,5	0,8	7	100	500	

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

W1 Materials

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





Stainless Steel AISI-304

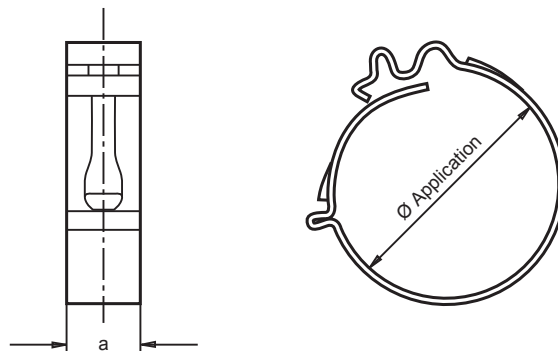


Clip Clamp W4

Information	Article	Ø Application		Reference	Bandwidth a	Box Quantity	Packing
		min.	max.				
<p>The design of the locking device of the Clip Clamp allows for great precision when mounting. This device, 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 material employed in its manufacture.</p>	clip 8	8,5	9,5	03030410	7	1000	4000
	clip 9	9,5	10,5	03030429	7	1000	4000
	clip 10	10,5	11,5	03030437	7	1000	4000
	clip 11	11,5	12,5	03030445	7	1000	4000
	clip 12	12,5	14,0	03030453	8	1000	4000
	clip 13	13,5	15,0	03030461	8	1000	4000
	clip 14	14,5	16,0	03030470	8	500	2000
	clip 15	15,5	17,0	03030488	8	500	2000
	clip 16	16,5	18,0	03030496	8	500	2000
	clip 17	17,5	19,0	03030509	8	500	2000
	clip 18	18,5	20,0	03030517	8	500	2000
	clip 19	19,5	21,0	03030525	8	500	2000
	clip 20	20,5	22,0	03030533	8	500	2000
	clip 21	21,5	23,0	03030541	8	500	2000
	clip 22	22,5	24,0	03030550	8	500	2000
	clip 23	23,5	25,0	03030568	8	500	2000
	clip 24	24,5	26,0	03030576	8	500	2000

W4 Materials

Band:
AISI 304 (A2)
Stainless Spring Steel



**W1**

Fixed diameter "S" Clamp

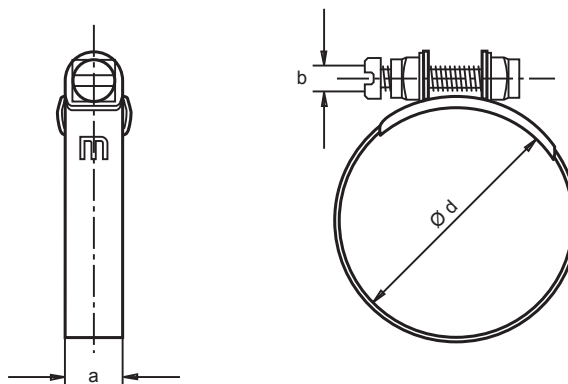
Zinc-plated mild steel

Fixed diameter "S" Clamp W1

Information	Ø Application d	Article ADF	Reference	a	Box quantity	Packing
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.	10	ADF10/9	03032010	9	200	1000
	11	ADF11/9	03032029	9	200	1000
	12	ADF12/9	03032037	9	200	1000
	13	ADF13/9	03032045	9	200	1000
	14	ADF14/9	03032053	9	200	1000
	15	ADF15/9	03032061	9	200	1000
	16	ADF16/9	03032070	9	200	1000
	17	ADF17/9	03032088	9	200	1000
	18	ADF18/9	03032096	9	200	1000
	19	ADF19/9	03032109	9	200	1000
	20	ADF20/9	03032117	9	200	1000
	21	ADF21/12	03032740	12	200	1000
	22	ADF22/12	03032758	12	200	1000
	23	ADF23/12	03032766	12	200	1000
	24	ADF24/12	03032774	12	200	1000
	25	ADF25/12	03032782	12	200	1000
	26	ADF26/12	03032790	12	200	1000
	27	ADF27/12	03032803	12	100	400
	28	ADF28/12	03032811	12	100	400
	29	ADF29/12	03032820	12	100	400
	30	ADF30/12	03032838	12	100	400
	31	ADF31/15	03033443	15	100	400
	32	ADF32/15	03033451	15	100	400
	33	ADF33/15	03033460	15	100	400
	34	ADF34/15	03033478	15	100	400
	35	ADF35/15	03033486	15	100	400
	36	ADF36/15	03033494	15	100	400

* This clamp can be supplied in diameters up to 120mm and in bandwidths up to 30mm.

W1 Materials

Band:
Mild steel DIN 1.0935**Screw:**
6.6 grade Cr3 white
zinc-plated mild steel**Nut:**
6.6 grade Cr3 white
zinc-plated mild steel

**W1**

9mm L-band Worm-drive Hose clip

DIN: 3017 Light series

Asfa-L W1 Hose Clip (9mm bandwidth)

Information

	Ø Application mm	Reference W1	L max.	s + 0,1 0	h max.	a ± 0,3 0,2	b max.	Max. Values* Torque Nm	Max. Values* Pressure (Bars)	Box Quantity	Packing
Thanks to the exclusive design of the housing, the ASFA LW1 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.	8-16	03008753	22,1	0,6	10	9	14	3,0	45	200	800
	12-22	03008761	22,1	0,6	10	9	14	3,0	45	200	800
	16-27	03008770	23,6	0,7	10	9	14	3,5	42	200	800
	20-32	03008788	23,6	0,7	10	9	14	3,5	36	200	800
	25-40	03008796	25,6	0,7	10	9	14	4,0	32	100	800
	30-45	03008809	25,6	0,7	10	9	14	4,0	28	100	800
	32-50	03008817	25,6	0,7	10	9	14	4,0	24	100	800
	40-60	03008825	25,6	0,7	10	9	14	4,0	19	100	400
	50-70	03008833	29,6	0,7	10	9	14	4,0	17	100	100
	60-80	03008841	29,6	0,7	10	9	14	4,0	15	100	100
	70-90	03008850	29,6	0,7	10	9	14	4,0	13	50	400
	80-100	03008868	29,6	0,7	10	9	14	4,0	11	50	400
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.	90-110	03008876	29,6	0,7	10	9	14	4,0	10	25	200
	100-120	03008884	29,6	0,7	10	9	14	4,0	9	25	200
	110-130	03008892	29,6	0,7	10	9	14	4,0	8	25	25
	120-140	03008905	29,6	0,7	10	9	14	4,0	7	25	25
	130-150	03008913	29,6	0,7	10	9	14	4,0	6	25	25
	140-160	03008921	29,6	0,7	10	9	14	4,0	5	25	25

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.

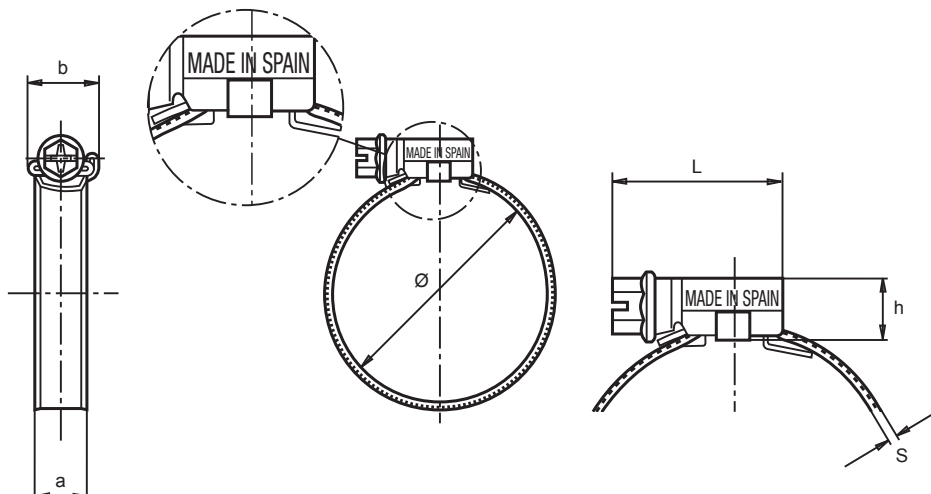
W1 Materials

Screw:

Qst 36-3 Mild steel
(DIN 1.0213)
Silver-white Cr3 Zinc-Plated

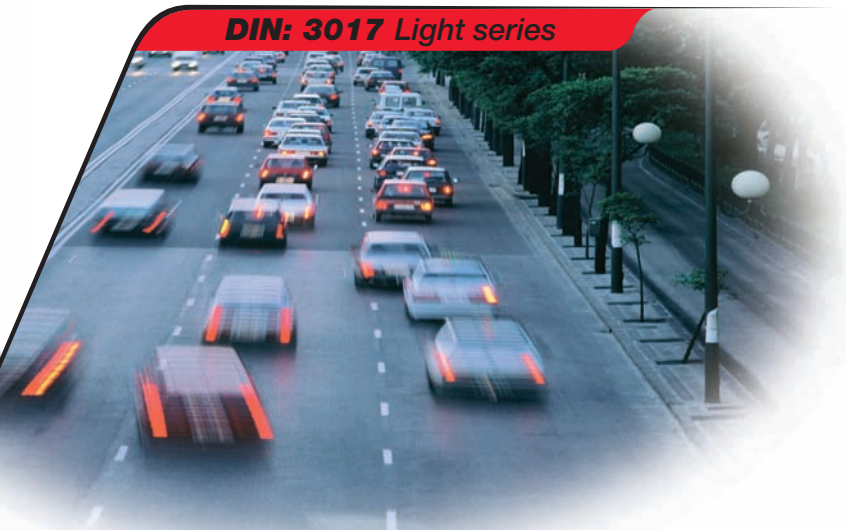
Band and Housing:

Galvanized steel
S/EN 10292
(DIN 1.0935)



**W2**

9mm L-band Worm-drive Hose clip

DIN: 3017 Light series

Asfa-L W2 Hose Clip (9 mm bandwidth)

Information

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-formed stamped band thread, smoothed on the underside, combined with beveled band-edges protects the hose from damage. The AISI-430 Stainless steel finish of the band and housing make this a very attractive clip. The ASFA-L W2 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 very popular in the hardware and domestic markets and in automotive applications.

Ø Application mm	Reference W2	L max.	s + 0,1 0	h max.	a ± 0,3 0,2	b max.	Max. Values* Torque Nm	Max. Values* Pressure (Bars)	Box Quantity	Packing
8-12	03016508	18,0	0,6	9,5	7,5	11,5	1,5	40	200	1600
8-16	03016516	22,1	0,6	10	9	14	3,0	45	200	800
12-22	03016524	22,1	0,6	10	9	14	3,0	45	200	800
16-27	03016532	23,6	0,7	10	9	14	3,5	42	200	800
20-32	03016540	23,6	0,7	10	9	14	3,5	36	200	800
25-40	03016559	25,6	0,7	10	9	14	4,0	32	100	800
30-45	03016567	25,6	0,7	10	9	14	4,0	28	100	800
32-50	03016575	25,6	0,7	10	9	14	4,0	24	100	800
40-60	03016583	25,6	0,7	10	9	14	4,0	19	100	400
50-70	03016591	26,6	0,7	10	9	14	4,0	17	100	100
60-80	03016604	26,6	0,7	10	9	14	4,0	15	100	100
70-90	03016612	26,6	0,7	10	9	14	4,0	13	50	400
80-100	03016620	26,6	0,7	10	9	14	4,0	11	50	400
90-110	03016639	26,6	0,7	10	9	14	4,0	10	25	200
100-120	03016647	26,6	0,7	10	9	14	4,0	9	25	200
110-130	03016655	26,6	0,7	10	9	14	4,0	8	25	25
120-140	03016663	26,6	0,7	10	9	14	4,0	7	25	25
130-150	03016671	26,6	0,7	10	9	14	4,0	6	25	25
140-160	03016680	26,6	0,7	10	9	14	4,0	5	25	25

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

Patented Worldwide

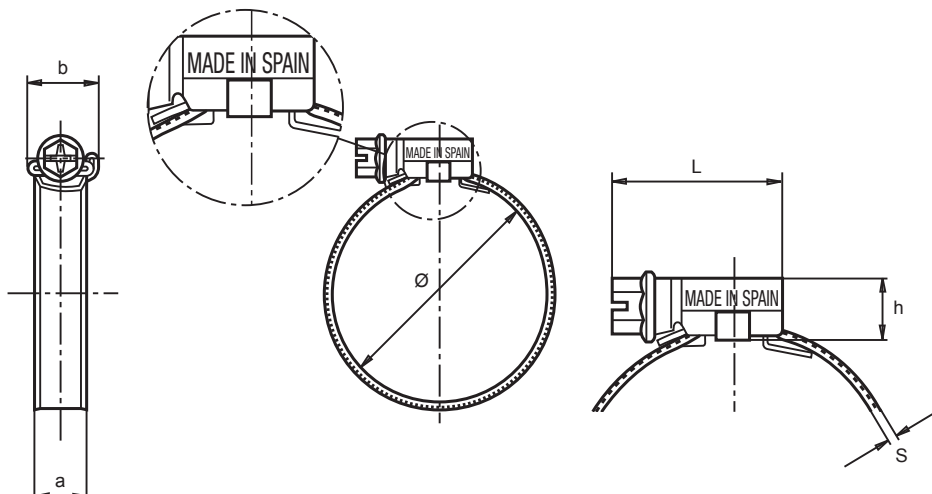
W2 Materials

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)



**W3**

9mm L-band Worm-drive Hose clip

DIN: 3017 Light series

Hose Clip **Asfa-L W3** (9mm bandwidth)

Information

Thanks to the exclusive design of the housing, the ASFA LW3 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 LW3 is specially recommended for use in the automotive industry.

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

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

Patented Worldwide.

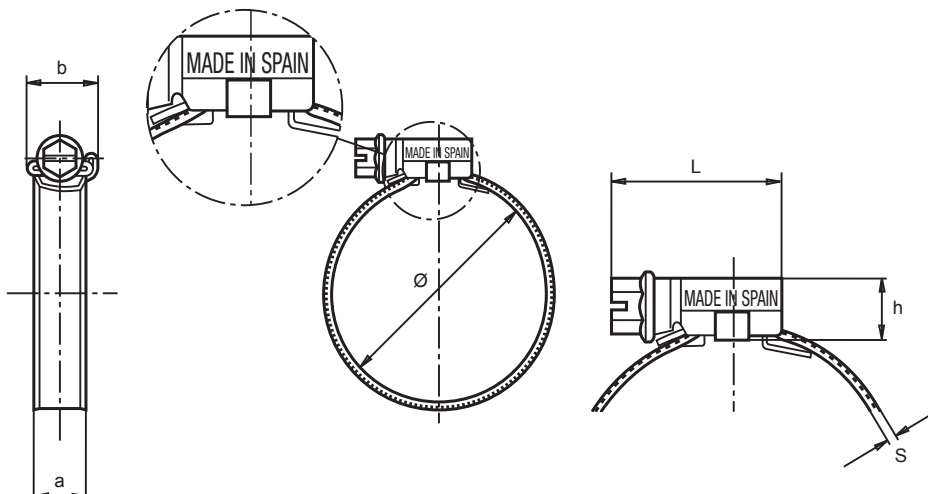
W3 Materials

Screw:

AISI 430
Stainless steel

Band and housing:

Stainless steel
X6Cr17 (DIN 1.4016)
(AISI-430)



**W4**

9mm L-band Worm-drive Hose clip

DIN: 3017 Light series

Asfa-L W4 Hose Clip (9 mm bandwidth)

Information	Ø Application mm	Reference W4	L max.	s ± 0,05	h max.	a ± 0,3 0,2	b max.	Max. Values* Torque Nm	Max. Values* Pressure (Bars)	Box Quantity	Packing
<p>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.</p> <p>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.</p> <p>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.</p>	8-12	03014000	18,0	0,6	9,5	7,5	11,5	1,5	40	200	800
	8-16	03014019	22,1	0,6	10	9	14	3,0	45	200	800
	12-22	03014027	22,1	0,6	10	9	14	3,0	45	200	800
	16-27	03014035	23,6	0,7	10	9	14	3,5	42	200	800
	20-32	03014043	23,6	0,7	10	9	14	3,5	36	200	800
	25-40	03014051	25,6	0,7	10	9	14	4,0	32	100	800
	30-45	03014060	25,6	0,7	10	9	14	4,0	28	100	800
	32-50	03014078	25,6	0,7	10	9	14	4,0	24	100	800
	40-60	03014086	25,6	0,7	10	9	14	4,0	19	100	400
	50-70	03014094	29,6	0,7	10	9	14	4,0	17	100	100
	60-80	03014107	29,6	0,7	10	9	14	4,0	15	100	100
	70-90	03014115	29,6	0,7	10	9	14	4,0	13	50	400
	80-100	03014123	29,6	0,7	10	9	14	4,0	11	50	400
	90-110	03014140	29,6	0,7	10	9	14	4,0	10	25	200
	100-120	03014158	29,6	0,7	10	9	14	4,0	9	25	200
	110-130	03014166	29,6	0,7	10	9	14	4,0	8	25	25
120-140	03014174	29,6	0,7	10	9	14	4,0	7	25	25	
130-150	03014182	29,6	0,7	10	9	14	4,0	6	25	25	
140-160	03014190	29,6	0,7	10	9	14	4,0	5	25	25	

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

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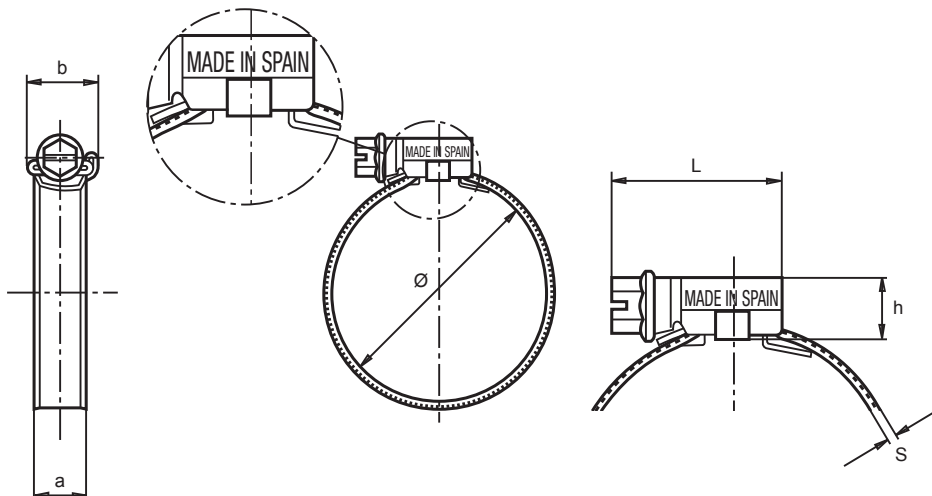
W4 Materials

Screw:

AISI-304 Cu (A2)
Stainless steel

Band and Housing:

X5CrNi1810
Stainless steel
(DIN 1.4301)
(AISI-304) (A2)



**W5**

9mm L-band Worm-drive Hose clip

DIN: 3017 Light series

Asfa-L W5 Hose Clip (9 mm bandwidth)

Information

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.

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Ø Application mm	Reference W5	L max.	s ± 0,05	h max.	a +0,3 -0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity	Packing
8-16	03015759	22,1	0,6	10	9	14	3,0	45	200	800
12-22	03015767	22,1	0,6	10	9	14	3,0	45	200	800
16-27	03015775	23,6	0,7	10	9	14	3,5	42	200	800
20-32	03015783	23,6	0,7	10	9	14	3,5	36	200	800
25-40	03015804	25,6	0,7	10	9	14	4,0	32	100	800
30-45	03015812	25,6	0,7	10	9	14	4,0	28	100	800
32-50	03015820	25,6	0,7	10	9	14	4,0	24	100	800
40-60	03015839	25,6	0,7	10	9	14	4,0	19	100	400
50-70	03015847	29,6	0,7	10	9	14	4,0	17	100	100
60-80	03015855	29,6	0,7	10	9	14	4,0	15	100	100
70-90	03015863	29,6	0,7	10	9	14	4,0	13	50	400
80-100	03015871	29,6	0,7	10	9	14	4,0	11	50	400
90-110	03015880	29,6	0,7	10	9	14	4,0	10	25	200
100-120	03015898	29,6	0,7	10	9	14	4,0	9	25	200
110-130	03015900	29,6	0,7	10	9	14	4,0	8	25	25
120-140	03015919	29,6	0,7	10	9	14	4,0	7	25	25
130-150	03015927	29,6	0,7	10	9	14	4,0	6	25	25
140-160	03015935	29,6	0,7	10	9	14	4,0	5	25	25

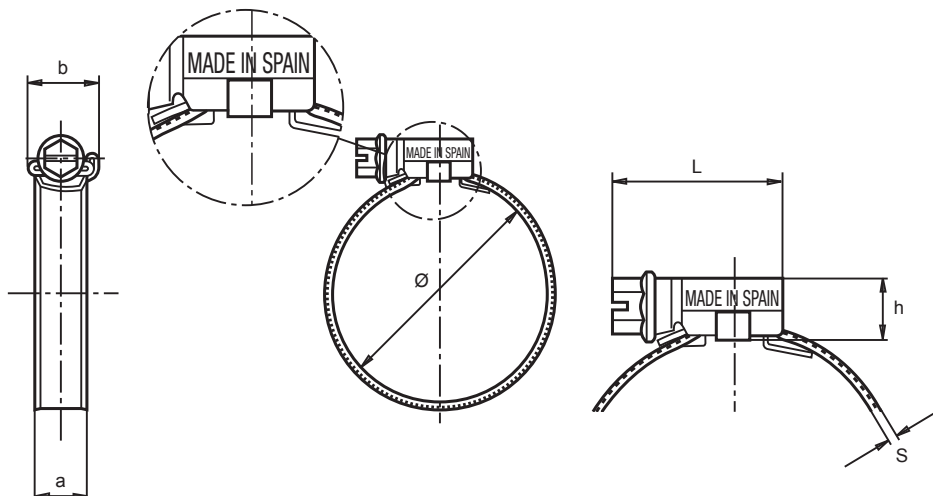
W5 Materials

Screw:

AISI-316 Cu
Stainless steel (A4)

Band and Housing:

X5CrNiMo 17.12.2
Stainless steel
(DIN 1.4401)
(AISI-316) (A4)



**W1**

12mm S-band Worm-drive Hose clip

DIN: 3017 Heavy series

Asfa-S W1 Hose Clip (12 mm bandwidth)

Information	Ø Application mm	Reference W1	L	s +0,10	h	a ± 0,4 0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity	Packing
The ASFA-S W1 hose clip combines an innovative housing designed to take a lot of torque 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 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.	16-27	03009001	29,6	0,8	11	12,2	18	4,2	45	50	400
	20-32	03009002	29,6	0,8	11	12,2	18	5,2	45	50	400
	25-40	03009003	29,6	0,8	11	12,2	18	5,2	40	50	400
	30-45	03009004	29,6	0,8	11	12,2	18	5,2	35	50	400
	32-50	03009005	29,6	0,8	11	12,2	18	6,0	35	50	400
	40-60	03009006	29,6	0,8	11	12,2	18	6,0	30	50	400
	50-70	03009007	31,6	0,8	11	12,2	18	6,8	25	50	400
	60-80	03009008	31,6	0,8	11	12,2	18	6,8	20	50	50
	70-90	03009009	31,6	0,8	11	12,2	18	6,8	17	50	50
	80-100	03009010	31,6	0,8	11	12,2	18	6,8	14	25	200
	90-110	03009011	31,6	0,8	11	12,2	18	6,8	12	25	200
	100-120	03009012	31,6	0,8	11	12,2	18	6,8	10	25	200
	110-130	03009013	31,6	0,8	11	12,2	18	6,8	8	25	25
	120-140	03009014	34,6	0,8	11	12,2	18	6,8	7	25	25
	130-150	03009015	34,6	0,8	11	12,2	18	6,8	6	25	25
	140-160	03009016	34,6	0,8	11	12,2	18	6,8	5	25	25
	150-170	03009017	34,6	0,8	11	12,2	18	6,8	4	25	25
	160-180	03009018	34,6	0,8	11	12,2	18	6,8	3	25	25
	170-190	03009019	34,6	0,8	11	12,2	18	6,8	2	10	10
	180-200	03009020	34,6	0,8	11	12,2	18	6,8	2	10	10
	190-210	03009021	34,6	0,8	11	12,2	18	6,8	1,8	10	10
	200-220	03009022	34,6	0,8	11	12,2	18	6,8	1,8	10	10
	210-230	03009023	34,6	0,8	11	12,2	18	6,8	1,6	10	10
	220-240	03009024	34,6	0,8	11	12,2	18	6,8	1,6	10	10

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

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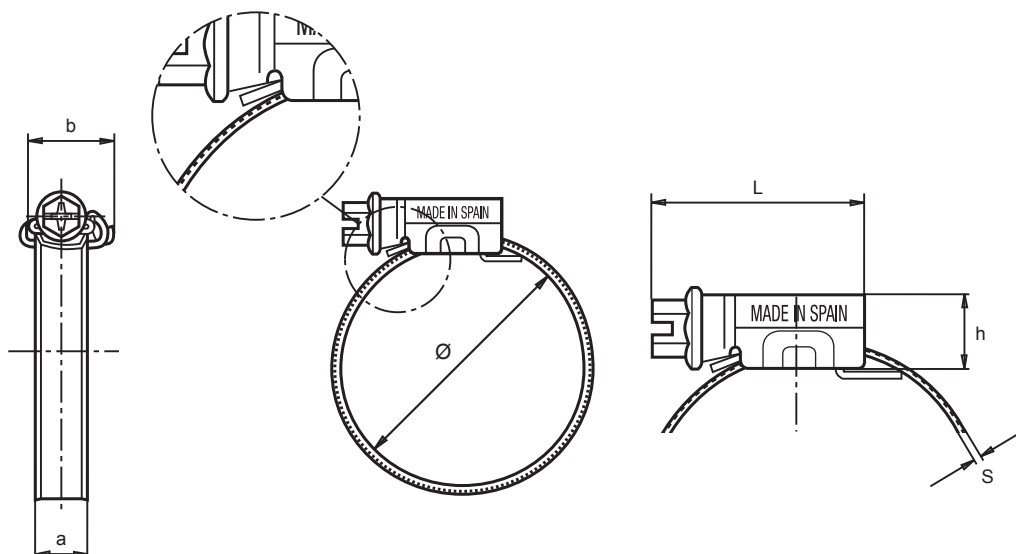
W1 Materials

Screw:

Qst 36-3 Mild steel
(DIN 1.0213)
Silver-white Cr3
Zinc-Plated

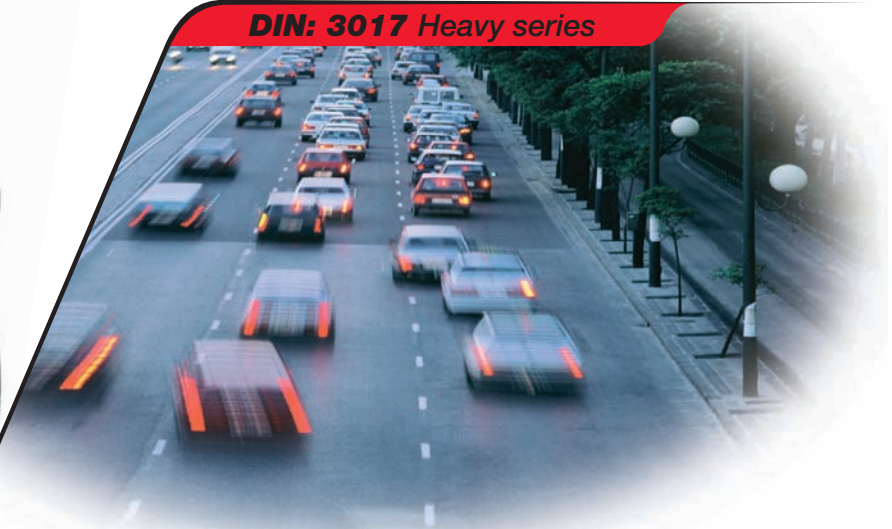
Band and Housing:

Galvanized steel
S/EN 10292
(DIN 1.0935)



W2

12mm S-band Worm-drive Hose clip

**DIN: 3017 Heavy series**

Asfa-S W2 Hose Clip (12 mm bandwidth)

Information	Ø Application mm	Reference W2	L	s +0,10	h	a ± 0,4 0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity	Packing
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.	16-27	03017017	29,6	0,8	11	12,2	18	4,2	45	50	400
	20-32	03017025	29,6	0,8	11	12,2	18	5,2	45	50	400
	25-40	03017033	29,6	0,8	11	12,2	18	5,2	40	50	400
	30-45	03017009	29,6	0,8	11	12,2	18	5,2	35	50	400
	32-50	03017041	29,6	0,8	11	12,2	18	6,0	35	50	400
	40-60	03017050	29,6	0,8	11	12,2	18	6,0	30	50	400
	50-70	03017068	31,6	0,8	11	12,2	18	6,8	25	50	400
	60-80	03017076	31,6	0,8	11	12,2	18	6,8	20	50	50
	70-90	03017084	31,6	0,8	11	12,2	18	6,8	17	50	50
	80-100	03017092	31,6	0,8	11	12,2	18	6,8	14	25	200
	90-110	03017105	31,6	0,8	11	12,2	18	6,8	12	25	200
	100-120	03017113	31,6	0,8	11	12,2	18	6,8	10	25	200
	110-130	03017121	31,6	0,8	11	12,2	18	6,8	8	25	25
	120-140	03017130	34,6	0,8	11	12,2	18	6,8	7	25	25
	130-150	03017148	34,6	0,8	11	12,2	18	6,8	6	25	25
	The ASFA-S W2 hose clip complies fully with the DIN 3017 norm and also with the RoHs directive EU 2003/95/EC dated 1st July 2006.	140-160	03017156	34,6	0,8	11	12,2	18	6,8	5	25
150-170		03017164	34,6	0,8	11	12,2	18	6,8	4	25	25
160-180		03017172	34,6	0,8	11	12,2	18	6,8	3	25	25
170-190		03017180	34,6	0,8	11	12,2	18	6,8	2	10	10
180-200		03017199	34,6	0,8	11	12,2	18	6,8	2	10	10
190-210		03017201	34,6	0,8	11	12,2	18	6,8	1,8	10	10
This clip is ideally for use in automotive applications, in agriculture and in fluid transfer applications.	200-220	03017210	34,6	0,8	11	12,2	18	6,8	1,8	10	10
	210-230	03017228	34,6	0,8	11	12,2	18	6,8	1,6	10	10
	220-240	03017236	34,6	0,8	11	12,2	18	6,8	1,6	10	10

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

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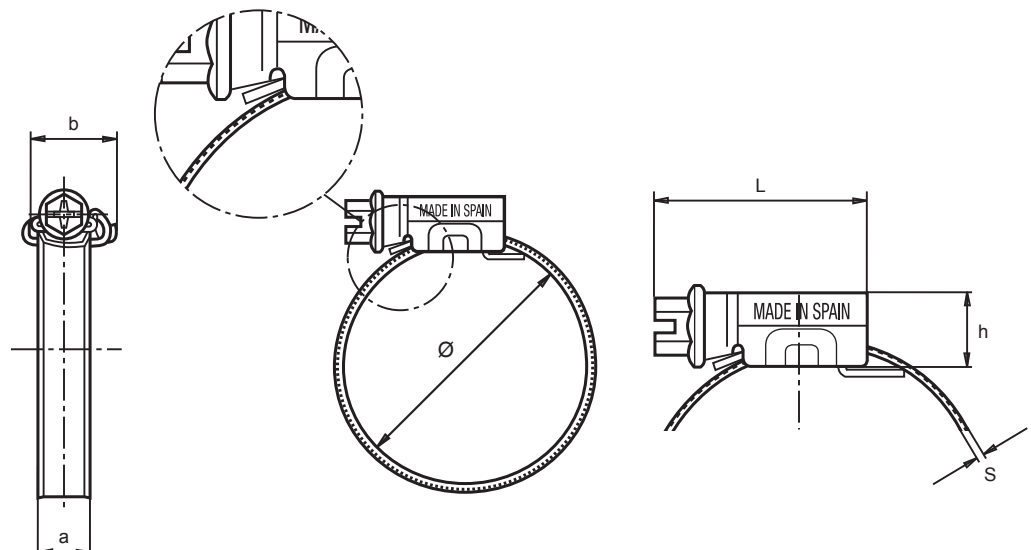
W2 Materials

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)



**W3**

12mm S-band Worm-drive Hose clip

DIN: 3017 Heavy series

Asfa-S W3 Hose Clip (12mm bandwidth)

Information

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.

Ø Application mm	Reference W3	L	s +0,10	h	a ± 0,4 0,2	b max.	Max. Values* Torque Nm	Max. Values* Pressure (Bars)	Box Quantity	Packing
16-27	03016209	29,6	0,8	11	12,2	18	4,2	45	50	400
20-32	03016217	29,6	0,8	11	12,2	18	5,2	45	50	400
25-40	03016225	29,6	0,8	11	12,2	18	5,2	40	50	400
30-45	03016233	29,6	0,8	11	12,2	18	5,2	35	50	400
32-50	03016241	29,6	0,8	11	12,2	18	6,0	35	50	400
40-60	03016250	29,6	0,8	11	12,2	18	6,0	30	50	400
50-70	03016268	31,6	0,8	11	12,2	18	6,8	25	50	400
60-80	03016276	31,6	0,8	11	12,2	18	6,8	20	50	50
70-90	03016284	31,6	0,8	11	12,2	18	6,8	17	50	50
80-100	03016292	31,6	0,8	11	12,2	18	6,8	14	25	200
90-110	03016305	31,6	0,8	11	12,2	18	6,8	12	25	200
100-120	03016313	31,6	0,8	11	12,2	18	6,8	10	25	200
110-130	03016321	31,6	0,8	11	12,2	18	6,8	8	25	25
120-140	03016330	34,6	0,8	11	12,2	18	6,8	7	25	25
130-150	03016348	34,6	0,8	11	12,2	18	6,8	6	25	25
140-160	03016356	34,6	0,8	11	12,2	18	6,8	5	25	25
150-170	03016364	34,6	0,8	11	12,2	18	6,8	4	25	25
160-180	03016372	34,6	0,8	11	12,2	18	6,8	3	25	25
170-190	03016380	34,6	0,8	11	12,2	18	6,8	2	10	10
180-200	03016399	34,6	0,8	11	12,2	18	6,8	2	10	10
190-210	03016428	34,6	0,8	11	12,2	18	6,8	1,8	10	10
200-220	03016436	34,6	0,8	11	12,2	18	6,8	1,8	10	10
210-230	03016444	34,6	0,8	11	12,2	18	6,8	1,6	10	10
220-240	03016452	34,6	0,8	11	12,2	18	6,8	1,6	10	10

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

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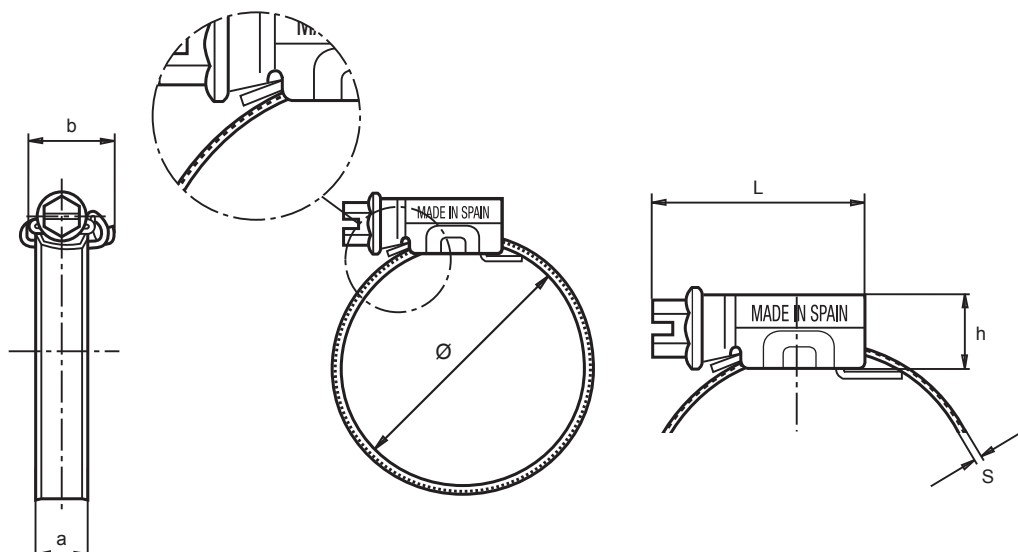
W3 Materials

Screw:

Stainless steel
(AISI-430)

Band and housing:

Stainless steel X6Cr17
(DIN 1.4016)
(AISI-430)





W4

12mm S-band Worm-drive Hose clip

DIN: 3017 Heavy series



Asfa-S W4 Hose Clip (12 mm bandwidth)

Information	Ø Application mm	Referencie W4	L	s +0,5	h	a +0,4 -0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity	Packing
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.	16-27	03014730	29,6	0,8	11	12,2	18	4,6	45	50	400
	20-32	03014510	29,6	0,8	11	12,2	18	5,6	45	50	400
	25-40	03014529	29,6	0,8	11	12,2	18	5,6	40	50	400
	30-45	03014748	29,6	0,8	11	12,2	18	5,6	35	50	400
	32-50	03014537	29,6	0,8	11	12,2	18	6,5	35	50	400
	40-60	03014545	29,6	0,8	11	12,2	18	6,5	30	50	400
	50-70	03014553	31,6	0,8	11	12,2	18	7,0	25	50	400
	60-80	03014561	31,6	0,8	11	12,2	18	7,0	20	50	50
	70-90	03014570	31,6	0,8	11	12,2	18	7,0	17	50	50
	80-100	03014588	31,6	0,8	11	12,2	18	7,0	14	25	200
	90-110	03014596	31,6	0,8	11	12,2	18	7,0	12	25	200
	100-120	03014609	31,6	0,8	11	12,2	18	7,0	10	25	200
	110-130	03014617	31,6	0,8	11	12,2	18	7,0	8	25	25
	120-140	03014625	34,6	0,8	11	12,2	18	7,0	7	25	25
	130-150	03014633	34,6	0,8	11	12,2	18	7,0	6	25	25
	140-160	03014641	34,6	0,8	11	12,2	18	7,0	5	25	25
150-170	03014650	34,6	0,8	11	12,2	18	7,0	4	25	25	
160-180	03014668	34,6	0,8	11	12,2	18	7,0	3	25	25	
170-190	03014676	34,6	0,8	11	12,2	18	7,0	2	10	10	
180-200	03014684	34,6	0,8	11	12,2	18	7,0	2	10	10	
190-210	03014692	34,6	0,8	11	12,2	18	7,0	1,8	10	10	
200-220	03014705	34,6	0,8	11	12,2	18	7,0	1,8	10	10	
210-230	03014713	34,6	0,8	11	12,2	18	7,0	1,6	10	10	
220-240	03014721	34,6	0,8	11	12,2	18	7,0	1,6	10	10	

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

Patented Worldwide

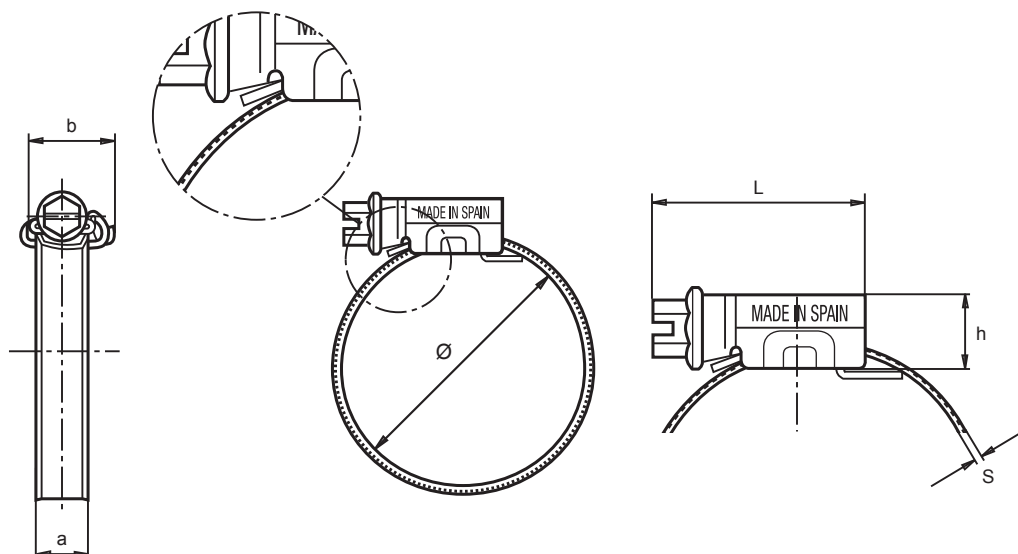
W4 Materials

Screw:

AISI-304 Cu
Stainless steel (A2)

Band and Housing:

X5CrNi1810
Stainless steel
(DIN 1.4301)
(AISI-304) (A2)





W5

12mm S-band Worm-drive Hose clip



DIN: 3017 Heavy series

Asfa-S W5 Hose Clip (12 mm bandwidth)

Information	Ø Application mm	Reference W5	L max.	s ±0,5	h max.	a ±0,4 ±0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity	Packing
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.	16-27	03017720	29,6	0,8	11	12,2	18	4,6	45	50	400
	20-32	03017500	29,6	0,8	11	12,2	18	5,6	45	50	400
	25-40	03017519	29,6	0,8	11	12,2	18	5,6	40	50	400
	30-45	03017738	29,6	0,8	11	12,2	18	5,6	35	50	400
	32-50	03017527	29,6	0,8	11	12,2	18	6,5	35	50	400
	40-60	03017535	29,6	0,8	11	12,2	18	6,5	30	50	400
	50-70	03017543	31,6	0,8	11	12,2	18	7,0	25	50	400
	60-80	03017551	31,6	0,8	11	12,2	18	7,0	20	50	50
	70-90	03017560	31,6	0,8	11	12,2	18	7,0	17	50	50
	80-100	03017578	31,6	0,8	11	12,2	18	7,0	14	25	200
	90-110	03017586	31,6	0,8	11	12,2	18	7,0	12	25	200
	100-120	03017594	31,6	0,8	11	12,2	18	7,0	10	25	200
	110-130	03017607	31,6	0,8	11	12,2	18	7,0	8	25	25
	120-140	03017615	34,6	0,8	11	12,2	18	7,0	7	25	25
	130-150	03017623	34,6	0,8	11	12,2	18	7,0	6	25	25
	140-160	03017631	34,6	0,8	11	12,2	18	7,0	5	25	25
	150-170	03017640	34,6	0,8	11	12,2	18	7,0	4	25	25
160-180	03017658	34,6	0,8	11	12,2	18	7,0	3	25	25	
170-190	03017666	34,6	0,8	11	12,2	18	7,0	2	10	10	
180-200	03017674	34,6	0,8	11	12,2	18	7,0	2	10	10	
190-210	03017682	34,6	0,8	11	12,2	18	7,0	1,8	10	10	
200-220	03017690	34,6	0,8	11	12,2	18	7,0	1,8	10	10	
210-230	03017703	34,6	0,8	11	12,2	18	7,0	1,6	10	10	
220-240	03017711	34,6	0,8	11	12,2	18	7,0	1,6	10	10	

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

Patented Worldwide

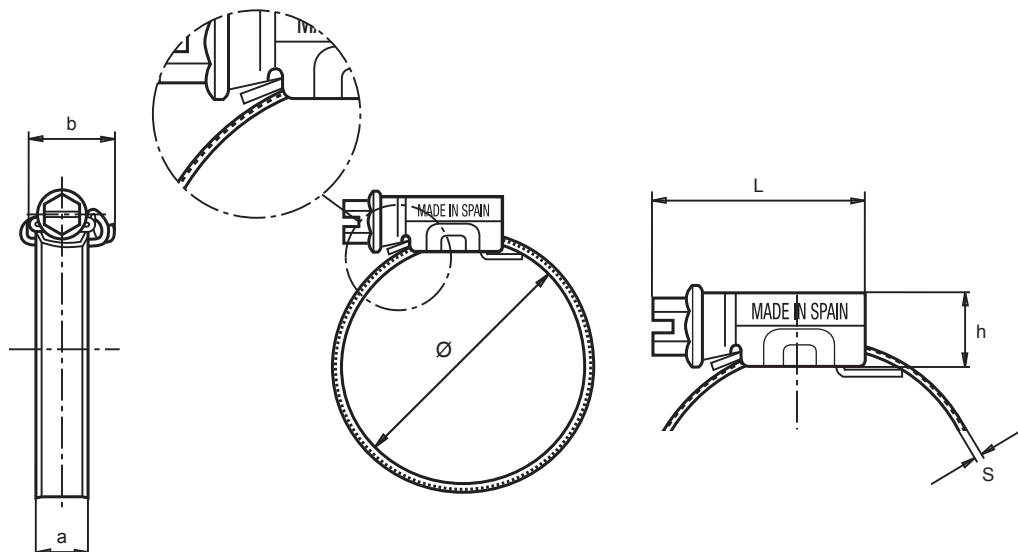
W5 Materials

Screw:

AISI-316 Cu Stainless steel (A4)

Band and Housing:

X5CrNiMo 17.12.2
Stainless steel
(DIN 1.4401)
(AISI-316) (A4)



Technical Information



Technical Information

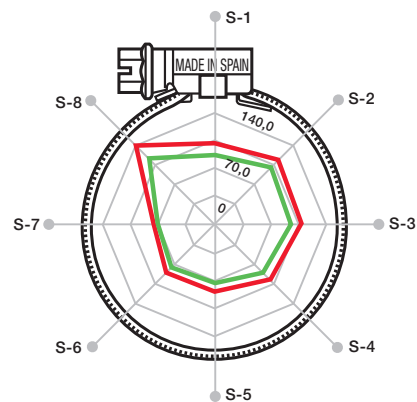
ASFA-L worm-drive hose clips

- A** Smooth band underside which avoids damage to the hose.
- B** Beveled band edges to avoid the clip cutting into the hose.
- C** Cold formed stamped band thread which gives a very good grip due to the fact that the thread is deeper than the thickness of the material used.
- D** The exclusive design of the housing keeps the screw in firm contact with the band and means that the ASFA-L gives great performance.
- E** The compact housing grips the screw preventing lateral movement during tightening.
- F** The screw was designed to take a lot of torque and can be tightened using a variety of different tools.
- G** All Mikalor hose clips are marked with the application range, material, the Mikalor logo and the country of manufacture in compliance with DIN 3017.
- H** Manual or automatic assembly.

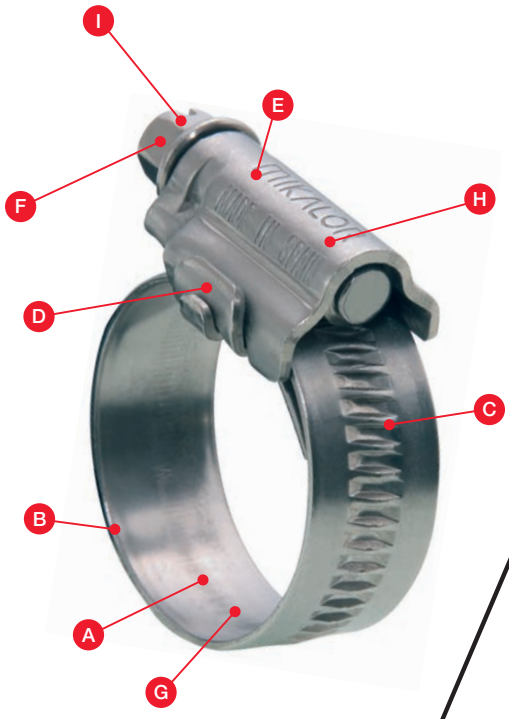
Polar Diagram

Sectors	S1	S2	S3	S4	S5	S6	S7	S8	Average
— 3 Nm	77,7	89,9	85,5	75,8	64,2	68,0	62,0	82,0	75,0
— 3,5 Nm	86,3	99,0	94,5	84,6	71,5	76,0	70,0	117,0	87,4

Torque / Efficiency [Nm / daN]



Technical Information



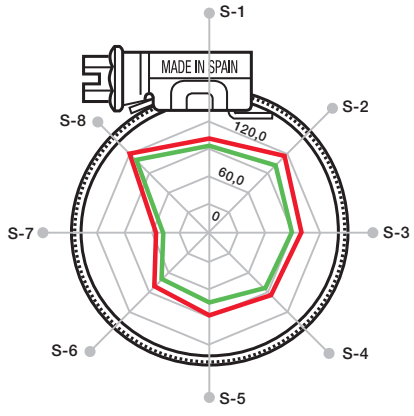
ASFA-S worm-drive hose clips

- A** Smooth band underside which avoids damage to the hose.
- B** Beveled band edges to avoid the clip cutting into the hose.
- C** Cold formed stamped band thread which gives a very good grip due to the fact that the thread is deeper than the thickness of the material used.
- D** Cold formed stamped band thread which gives a very good grip due to the fact that the thread is deeper than the thickness of the material used.
- E** The compact housing grips the screw preventing lateral movement during tightening.
- F** The screw was designed to take a lot of torque and can be tightened using a variety of different tools.
- G** The 12mm band gives extra clamping force compared to the 9mm version.
- H** All Mikalor hose clips are marked with the application range, material, the Mikalor logo and the country of manufacture in compliance with DIN 3017.
- I** Manual or automatic assembly.

Polar Diagram

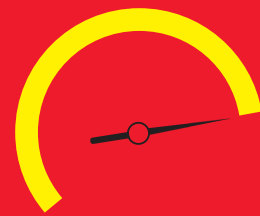
Sectors	S1	S2	S3	S4	S5	S6	S7	S8	Average
4 Nm	63,8	91,7	80,1	76,8	67,4	62,2	41,1	97,0	75,0
4,5 Nm	92,7	101,5	89,5	85,3	75,1	69,7	46,8	110,0	83,8

Torque / Efficiency [Nm / daN]





MIKALOR



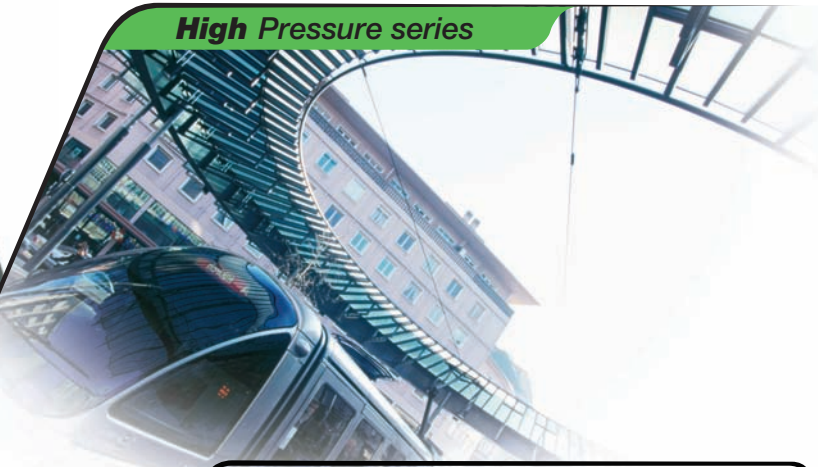
High Pressure



Super Heavy-Duty Hose Clamp

W1

High Pressure series



Super Heavy-duty hose clamp W1

Information

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 tool, 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 on 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

Ø Application d mm	Reference W1	r	e	a	b	s	Max. Values* Torque Nm	Max. Values* Pressure (Bars)	Box Quantity	Packing
17-19	03018263	M5	8	18 ^{+0.2}	19,8	0,6	4,5	48	50	400
20-22	03018271	M5	8	18 ^{+0.2}	19,8	0,6	4,5	48	50	400
23-25	03018280	M5	8	18 ^{+0.2}	19,8	0,6	4,5	45	50	400
26-28	03018298	M5	8	18 ^{+0.2}	19,8	0,6	4,5	45	50	400
29-31	03018300	M6	10	20 ^{+0.3}	22	0,8	8	42	50	50
32-35	03018319	M6	10	20 ^{+0.3}	22	0,8	8	42	50	50
36-39	03018327	M6	10	20 ^{+0.3}	22	0,8	8	40	50	50
40-43	03018335	M6	10	20 ^{+0.3}	22	0,8	8	40	50	50
44-47	03018010	M7	11	22 ^{+0.2}	24,5	1,2	16	44	50	50
48-51	03018028	M7	11	22 ^{+0.2}	24,5	1,2	16	44	50	50
52-55	03018036	M7	11	22 ^{+0.2}	24,5	1,2	16	40	25	25
56-59	03018044	M7	11	22 ^{+0.2}	24,5	1,2	16	40	25	25
60-63	03018052	M7	11	22 ^{+0.2}	24,5	1,2	16	36	25	25
64-67	03018060	M7	11	22 ^{+0.2}	24,5	1,2	16	36	25	25
68-73	03018079	M8	13	24 ^{+0.4}	26,5	1,5	25	28	25	25
74-79	03018087	M8	13	24 ^{+0.4}	26,5	1,5	25	28	25	25
80-85	03018095	M8	13	24 ^{+0.4}	26,5	1,5	25	28	25	25
86-91	03018108	M8	13	24 ^{+0.4}	26,5	1,5	25	20	25	25
92-97	03018116	M8	13	24 ^{+0.4}	26,5	1,5	25	20	25	25
98-103	03018124	M8	13	24 ^{+0.4}	26,5	1,5	25	20	25	25
104-112	03018132	M8	13	24 ^{+0.4}	26,5	1,5	25	12	25	25
113-121	03018140	M8	13	24 ^{+0.4}	26,5	1,5	25	12	25	25
122-130	03018159	M8	13	24 ^{+0.4}	26,5	1,5	25	12	25	25
131-139	03018167	M10	17	26 ^{+0.5}	29	1,7	50	9	10	10
140-148	03018175	M10	17	26 ^{+0.5}	29	1,7	50	9	10	10
149-161	03018183	M10	17	26 ^{+0.5}	29	1,7	50	9	10	10
162-174	03018191	M10	17	26 ^{+0.5}	29	1,7	50	6	10	10
175-187	03018204	M10	17	26 ^{+0.5}	29	1,7	50	6	10	10
188-200	03018212	M10	17	26 ^{+0.5}	29	1,7	50	6	10	10
201-213	03018220	M10	17	26 ^{+0.5}	29	1,7	50	3	10	10
214-226	03018239	M10	17	26 ^{+0.5}	29	1,7	50	3	10	10
227-239	03018247	M10	17	26 ^{+0.5}	29	1,7	50	3	10	10
240-252	03018255	M10	17	26 ^{+0.5}	29	1,7	50	3	10	10

W1 Materials

T-Bolt:

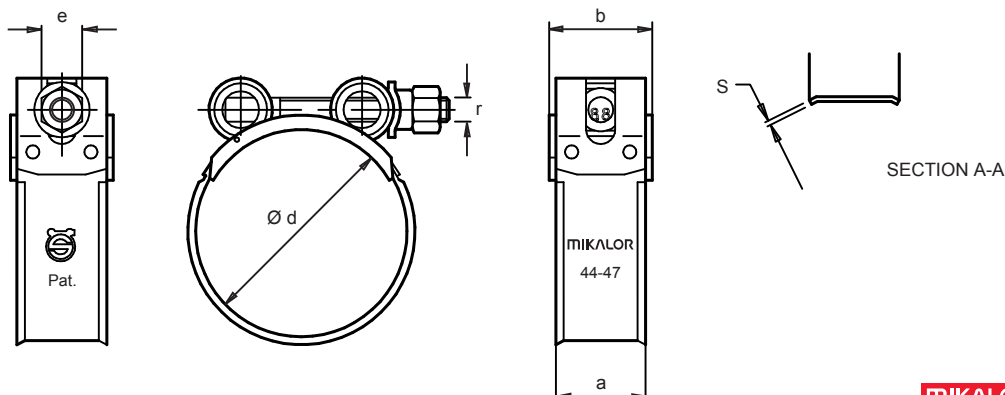
8.8 grade steel
Yellow-zinc plated

Band and Bridge:

Mild steel
Yellow zinc-plated

Washer and Trunions:

Mild steel
Yellow zinc-plated



Supra Heavy-Duty Hose Clamp Stainless Steel



W2



High Pressure series



Supra Heavy-duty hose clamp W2

Information

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.

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

Patented Worldwide

Ø Application d mm	Reference W2	r	e	a	b	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity	Packing
17-19	03019012	M6	8	18 ^{+0.2}	19,8	10	45	50	400
19-21	03019020	M6	8	18 ^{+0.2}	19,8	10	45	50	400
21-23	03019039	M6	8	18 ^{+0.2}	19,8	10	45	50	400
23-25	03019047	M6	8	18 ^{+0.2}	19,8	10	45	50	400
25-27	03019055	M6	8	18 ^{+0.2}	19,8	10	45	50	400
27-29	03019063	M6	8	18 ^{+0.2}	19,8	10	45	50	200
29-31	03019071	M7	10	20 ^{+0.3}	22	13	40	50	50
31-34	03019080	M7	10	20 ^{+0.3}	22	13	40	50	50
34-37	03019098	M7	10	20 ^{+0.3}	22	13	40	50	50
37-40	03019100	M7	10	20 ^{+0.3}	22	13	40	50	50
40-43	03019119	M7	10	20 ^{+0.3}	22	13	40	50	50
43-47	03019127	M7	10	20 ^{+0.3}	22	16	36	50	50
47-51	03019135	M7	10	20 ^{+0.3}	22	16	36	50	50
51-55	03019143	M7	10	20 ^{+0.3}	22	16	36	25	25
55-59	03019151	M7	10	20 ^{+0.3}	22	16	36	25	25
59-63	03019160	M7	10	20 ^{+0.3}	22	16	36	25	25
63-68	03019178	M7	10	20 ^{+0.3}	22	16	36	25	25
68-73	03019186	M8	13	25 ^{+0.4}	27,5	30	28	25	25
73-79	03019194	M8	13	25 ^{+0.4}	27,5	30	28	25	25
79-85	03019207	M8	13	25 ^{+0.4}	27,5	30	28	25	25
85-91	03019215	M8	13	25 ^{+0.4}	27,5	30	20	25	25
91-97	03019223	M8	13	25 ^{+0.4}	27,5	30	20	25	25
97-104	03019231	M8	13	25 ^{+0.4}	27,5	30	20	25	25
104-112	03019240	M8	13	25 ^{+0.4}	27,5	30	12	25	25
112-121	03019258	M8	13	25 ^{+0.4}	27,5	30	12	25	25
121-130	03019266	M8	13	25 ^{+0.4}	27,5	30	12	25	25
130-140	03019274	M10	15	28 ^{+0.4}	31	45	9	10	10
140-150	03019282	M10	15	28 ^{+0.4}	31	45	9	10	10
150-162	03019290	M10	15	28 ^{+0.4}	31	45	9	10	10
162-174	03019303	M10	15	28 ^{+0.4}	31	45	6	10	10
174-187	03019311	M10	15	28 ^{+0.4}	31	45	6	10	10
187-200	03019320	M10	15	28 ^{+0.4}	31	45	6	10	10
200-213	03019338	M10	15	28 ^{+0.4}	31	45	3	10	10
213-226	03019346	M10	15	28 ^{+0.4}	31	45	3	10	10
226-239	03019354	M10	15	28 ^{+0.4}	31	45	3	10	10
239-252	03019362	M10	15	28 ^{+0.4}	31	45	3	10	10

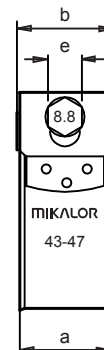
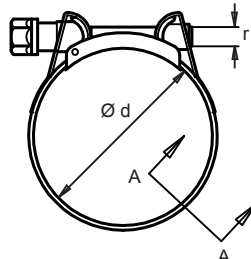
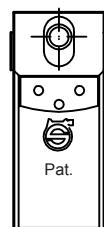
W2 Materials

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



SECTION A-A

Supra Heavy-Duty Hose Clamp Stainless Steel



W4



High Pressure series



Supra Heavy-duty hose clamp W4

Information	Ø Application mm	Reference W4	r	e	a	b	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity	Packing
<p>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.</p> <p>The stainless steel bolt together with the captive nut and spacer system allow you to clamp the most demanding of hose assemblies.</p> <p>Supra W4 is a full stainless steel clamp, destined for demanding applications where high corrosion resistance is vital.</p> <p>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.</p> <p>*The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.</p> <p>Patented Worldwide</p>	17-19	03013016	M6	8	18 ^{+0.2}	19,8	10	40	50	400
	19-21	03013024	M6	8	18 ^{+0.2}	19,8	10	40	50	400
	21-23	03013032	M6	8	18 ^{+0.2}	19,8	10	40	50	400
	23-25	03013040	M6	8	18 ^{+0.2}	19,8	10	40	50	400
	25-27	03013059	M6	8	18 ^{+0.2}	19,8	10	40	50	400
	27-29	03013067	M6	8	18 ^{+0.2}	19,8	10	40	50	200
	29-31	03013075	M7	11	20 ^{+0.3}	22	12	35	50	50
	31-34	03013083	M7	11	20 ^{+0.3}	22	12	35	50	50
	34-37	03013091	M7	11	20 ^{+0.3}	22	12	35	50	50
	37-40	03013104	M7	11	20 ^{+0.3}	22	12	35	50	50
	40-43	03013112	M7	11	20 ^{+0.3}	22	12	35	50	50
	43-47	03013120	M7	11	20 ^{+0.3}	22	12	35	50	50
	47-51	03013139	M7	11	20 ^{+0.3}	22	16	30	50	50
	51-55	03013147	M7	11	20 ^{+0.3}	22	16	30	25	25
	55-59	03013155	M7	11	20 ^{+0.3}	22	16	30	25	25
	59-63	03013163	M7	11	20 ^{+0.3}	22	16	30	25	25
	63-68	03013171	M7	11	20 ^{+0.3}	22	16	30	25	25
	68-73	03013180	M8	13	25 ^{+0.4}	27,5	30	20	25	25
	73-79	03013198	M8	13	25 ^{+0.4}	27,5	30	20	25	25
	79-85	03013200	M8	13	25 ^{+0.4}	27,5	30	20	25	25
	85-91	03013219	M8	13	25 ^{+0.4}	27,5	30	15	25	25
	91-97	03013227	M8	13	25 ^{+0.4}	27,5	30	15	25	25
	97-104	03013235	M8	13	25 ^{+0.4}	27,5	30	15	25	25
	104-112	03013243	M8	13	25 ^{+0.4}	27,5	30	10	25	25
	112-121	03013251	M8	13	25 ^{+0.4}	27,5	30	10	25	25
	121-130	03013260	M8	13	25 ^{+0.4}	27,5	30	10	25	25
	130-140	03013278	M10	15	28 ^{+0.4}	31	45	6	10	10
	140-150	03013286	M10	15	28 ^{+0.4}	31	45	6	10	10
	150-162	03013294	M10	15	28 ^{+0.4}	31	45	6	10	10
	162-174	03013307	M10	15	28 ^{+0.4}	31	45	3	10	10
	174-187	03013315	M10	15	28 ^{+0.4}	31	45	3	10	10
	187-200	03013323	M10	15	28 ^{+0.4}	31	45	3	10	10
	200-213	03013331	M10	15	28 ^{+0.4}	31	45	3	10	10
213-226	03013340	M10	15	28 ^{+0.4}	31	45	3	10	10	
226-239	03013358	M10	15	28 ^{+0.4}	31	45	3	10	10	
239-252	03013366	M10	15	28 ^{+0.4}	31	45	3	10	10	

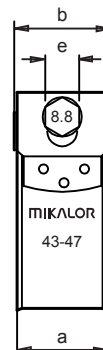
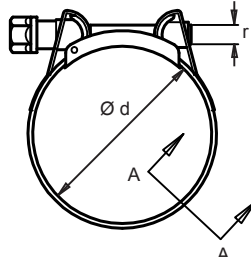
W4 Materials

Band and Bridge:

X5CrNi 1810 Stainless steel (DIN 1.4301) (AISI-304) (A2)

Bolt:

AISI 302 Cu Stainless steel



SECTION A-A

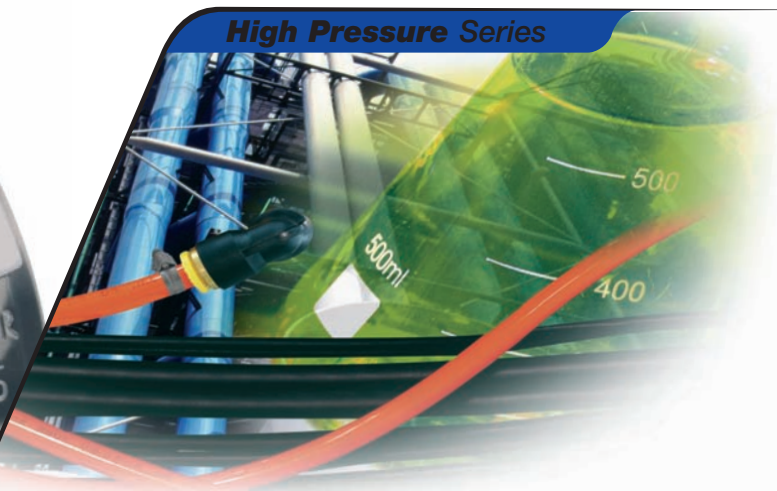
Supra Heavy-Duty Hose Clamp AISI-316 Stainless Steel



W5



High Pressure Series



Supra Heavy-Duty hose clamp W5

Information	Ø Application mm	Reference W5	r	e	a	b	Max. Values* Torque Nm	Max. Values* Pressure (Bars)	Box Quantity	Packing
<p>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.</p> <p>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.</p> <p>The AISI 316 stainless steel bolt together with the captive nut and spacer system allow you to clamp the most demanding of assemblies.</p> <p>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 petro-chemical industries and other applications where AISI 316 stainless steel fittings are required.</p> <p>The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.</p>	17-19	03013614	M6	8	18 ^{+0.2}	19,8	10	40	50	400
	19-21	03013622	M6	8	18 ^{+0.2}	19,8	10	40	50	400
	21-23	03013630	M6	8	18 ^{+0.2}	19,8	10	40	50	400
	23-25	03013649	M6	8	18 ^{+0.2}	19,8	10	40	50	400
	25-27	03013657	M6	8	18 ^{+0.2}	19,8	10	40	50	400
	27-29	03013665	M6	8	18 ^{+0.2}	19,8	10	40	50	200
	29-31	03013673	M7	11	20 ^{+0.3}	22	12	35	50	50
	31-34	03013681	M7	11	20 ^{+0.3}	22	12	35	50	50
	34-37	03013690	M7	11	20 ^{+0.3}	22	12	35	50	50
	37-40	03013702	M7	11	20 ^{+0.3}	22	12	35	50	50
	40-43	03013710	M7	11	20 ^{+0.3}	22	12	35	50	50
	43-47	03013729	M7	11	20 ^{+0.3}	22	12	35	50	50
	47-51	03013737	M7	11	20 ^{+0.3}	22	16	30	50	50
	51-55	03013745	M7	11	20 ^{+0.3}	22	16	30	25	25
	55-59	03013753	M7	11	20 ^{+0.3}	22	16	30	25	25
	59-63	03013761	M7	11	20 ^{+0.3}	22	16	30	25	25
	63-68	03013770	M7	11	20 ^{+0.3}	22	16	30	25	25
	68-73	03013788	M8	13	25 ^{+0.4}	27,5	30	20	25	25
	73-79	03013796	M8	13	25 ^{+0.4}	27,5	30	20	25	25
	79-85	03013809	M8	13	25 ^{+0.4}	27,5	30	20	25	25
	85-91	03013817	M8	13	25 ^{+0.4}	27,5	30	15	25	25
	91-97	03013825	M8	13	25 ^{+0.4}	27,5	30	15	25	25
	97-104	03013833	M8	13	25 ^{+0.4}	27,5	30	15	25	25
	104-112	03013841	M8	13	25 ^{+0.4}	27,5	30	10	25	25
	112-121	03013850	M8	13	25 ^{+0.4}	27,5	30	10	25	25
	121-130	03013868	M8	13	25 ^{+0.4}	27,5	30	10	25	25
	130-140	03013876	M10	15	28 ^{+0.4}	31	45	6	10	10
140-150	03013884	M10	15	28 ^{+0.4}	31	45	6	10	10	
150-162	03013892	M10	15	28 ^{+0.4}	31	45	6	10	10	
162-174	03013905	M10	15	28 ^{+0.4}	31	45	3	10	10	
174-187	03013913	M10	15	28 ^{+0.4}	31	45	3	10	10	
187-200	03013921	M10	15	28 ^{+0.4}	31	45	3	10	10	
200-213	03013930	M10	15	28 ^{+0.4}	31	45	3	10	10	
213-226	03013948	M10	15	28 ^{+0.4}	31	45	3	10	10	
226-239	03013956	M10	15	28 ^{+0.4}	31	45	3	10	10	
239-252	0301 3964	M10	15	28 ^{+0.4}	31	45	3	10	10	

Patented Worldwide.

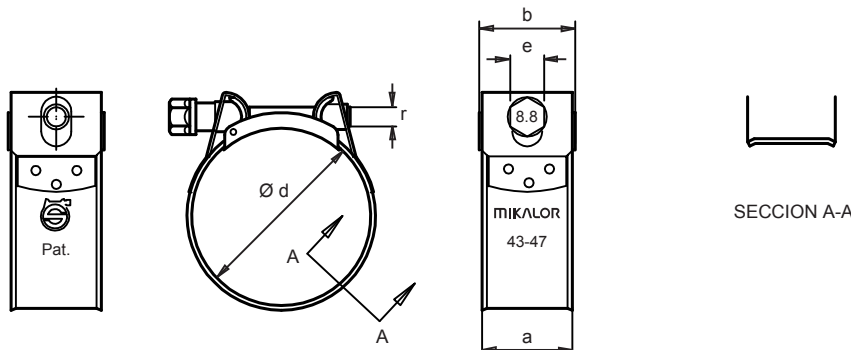
W5 Materials

Band and Bridge:

X5 Cr Ni MO 17.12.2
(DIN 1.4401) (AISI 316) (A4)
Stainless Steel

Bolt:

AISI 316 Cu (A4)
Stainless steel



Technical Information



Technical Information



Technical Information

Supra Heavy-Duty Clamp

- A** The design of the Supra heavy-duty clamp allows you to clamp the most demanding of applications. Supra complies with DIN 3017-3.
- 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** Swiveling bridge makes it easy to mount and dismount Supra.
- F** Beveled band edges protect the hose from damage.
- G** The revolutionary design makes it impossible to dislodge the nut and trunions.
- H** Flexible material allows Supra to adapt to the application zone, thereby guaranteeing a leak-proof assembly.
- I** All Supra Clamps are marked with the application range, material and the Mikalor logo.



MIKALOR



**Special Clips
and Clamps**





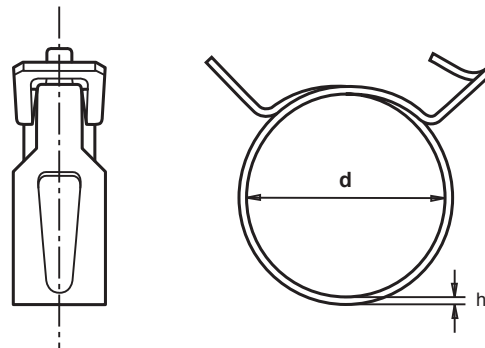
Heavy-duty Spring band clip W1

Information	Nom. d mm	Ø min d ₁	Ø max d ₂	Reference	h ± 0,08 0,02	Opening Force N	Box Quantity	Packing
The heavy-duty spring-band clamp is manufactured according to DIN 3021. This clamp 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.	17	15,2	18,3	03031501	0,85	100	200	800
	19	17,8	20,0	03031510	1,3	200	200	800
	20	18,4	21,8	03031528	1,3	200	200	800
	21	19,5	22,5	03031536	1,3	220	200	800
	23	21,0	24,7	03031544	1,3	220	200	800
	24	22,0	26,0	03031552	1,3	220	200	800
	25	23,0	36,8	03031560	1,5	230	200	800
	26	24,3	28,0	03031579	1,6	250	200	800
	27	25,0	28,9	03031587	1,6	280	200	800
	29	27,0	31,5	03031595	1,75	300	200	800
	31	28,5	22,0	03031608	1,75	280	200	800
	32	29,3	34,5	03031616	1,75	280	200	800
	35	31,5	38,0	03031624	1,75	260	200	800
	36	32,5	29,0	03031632	1,75	250	200	800
	38	34,5	41,5	03031640	1,75	220	200	800
	39	35,0	42,0	03031659	1,75	220	200	800
	40	35,5	42,5	03031667	1,75	220	200	800
	42	37,2	44,5	03031675	1,9	280	100	400
	43	38,0	45,5	03031683	1,9	280	100	400
44	38,5	46,5	03031691	1,9	280	100	400	
46	40,5	49,0	03031704	2,0	270	100	400	
47	41,0	50,0	03031712	2,0	260	100	400	
50	43,5	53,0	03031720	2,0	260	100	400	
51	44,0	54,0	03031739	2,0	260	100	400	
53	46,0	56,0	03031747	2,2	330	100	400	
55	46,8	58,0	03031755	2,2	320	100	400	

* h= thickness before surface treatment.

W1 Materials

Band:
50 CRV4
Steel



**W1**

Exhaust Clamp

Zinc-Plated Mild Steel

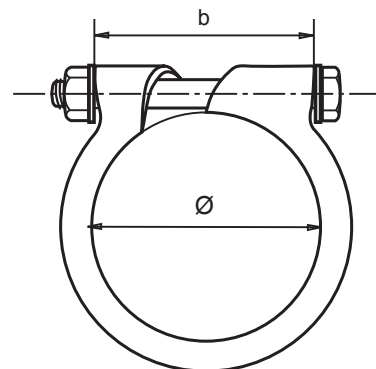
ATE W1 Exhaust Clamp

Information	Ø Application mm	Reference	Ø min. mm	b ± 0,5	a ± 0,2	Box Quantity	Packing
This clamp has been 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.	27-30	03002765	27	30	1,5	100	400
	30-33	03002773	30	33	1,5	100	400
	33-36	03002781	33	36	2,0	100	400
	39-42	03002790	39	42	2,0	100	400
	40-43	03002791	40	43	2,5	100	400
	42-45	03002802	42	45	2,5	100	400
	45-48	03002810	45	48	2,5	100	400
	47-50	03002829	47	50	2,5	100	400
	48-51	03002837	48	51	2,5	50	200
	49-52	03002845	49	52	2,5	50	200
	52-54	03002853	52	54	2,5	50	200
	53-56	03002861	53	56	2,5	50	200
	55-58	03002870	55	58	2,5	50	200
	57-59	03002888	57	59	2,5	50	200
	58-61	03002896	58	61	2,5	50	200
61-64	03002909	61	64	2,5	50	200	
67-71	03002917	67	71	3,0	50	200	
71-74	03002925	71	74	3,0	50	200	

W1 Materials

Bolt:
8.8 grade steel white zinc-plated

Band:
St34 (DIN 2393C) Steel



9mm L-band Stainless steel Worm-drive clip Double Bridge Clip



W4

Light series



Double Bridge Clip

Information	Reference W4	Application Ø mm	a ± 0,3 0,2	b Max.	L	h	Box Quantity	Packing
The Double Bridge clip was developed by the Mikalor R&D Department due to requirements from the ventilation sector for a clamp suitable for spiral hose. 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.	0301409A	50-70	9	14	25,6	10	100	100
	0301410A	60-80	9	14	25,6	10	100	100
	0301411B	70-90	9	14	25,6	10	100	100
	0301412B	80-100	9	14	25,6	10	50	50
	0301415B	100-120	9	14	25,6	10	25	50
	0301417B	120-140	9	14	25,6	10	25	50
	0301419B	140-160	9	14	25,6	10	25	50

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

Patented Worldwide

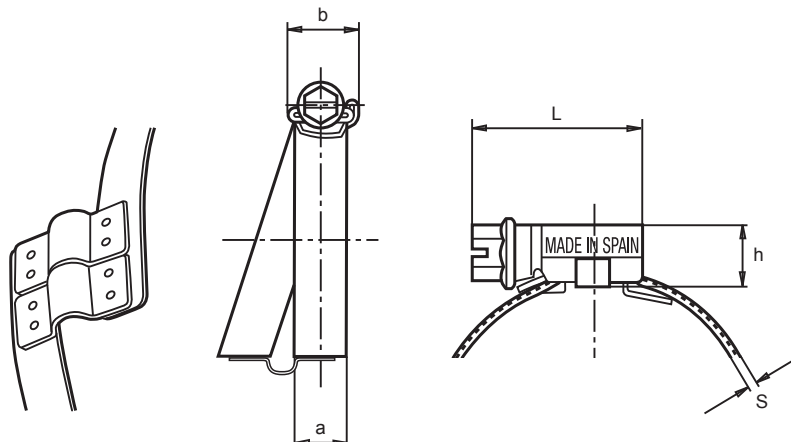
W4 Materials

Screw:

AISI-304 Cu (A2)
Stainless steel

Band and Housing:

X5CrNi 1810 Stainless steel
(DIN 1.4301) (AISI-304) (A2)





TI

Titanium S-band Worm-drive Hose clip

100% Titanium



Titanium-TI Hose Clip (12 mm bandwidth)

Information

The use of Titanium in the manufacture of this clip, together with the innovative design of the housing and the 12mm bandwidth mean that the Titanium clip gives superlative comparative results in weight, performance and corrosion resistance, not just compared with the rest of the Mikalor worm-drive range, but with worldwide competition included. We can supply all dimensions from 16-27 up to 220-240 thanks to the revolutionary manufacturing process. Due to the combination of its extraordinary low weight, increased pressure values and corrosion resistance, this clip is recommended for use in competition engines, whether they are on land, in the sea or in aircraft. Each Titanium clip is subject to individual quality control using automatic control systems to ensure that all parameters function to perfection. Titanium clips are hand-packed in boxes of 4 units per diameter, which include an instruction manual and technical specification sheet. This clip conforms to all EU norms and directives. We can truthfully say that we believe the Titanium clip to be the world's finest hose clip

Ø Application mm	Reference	L max.	s +0,1 0	h	a ± 0,4 0,2	b max.	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity	Packing
16-27	03009502	29,6	1,0	11	12,2	18	5,0	47	4	24
20-32	03009510	29,6	1,0	11	12,2	18	6,0	47	4	24
25-40	03009529	29,6	1,0	11	12,2	18	6,0	42	4	24
30-45	03009537	29,6	1,0	11	12,2	18	6,0	37	4	24
32-50	03009545	29,6	1,0	11	12,2	18	7,0	37	4	24
40-60	03009553	29,6	1,0	11	12,2	18	7,0	32	4	24
50-70	03009561	31,6	1,0	11	12,2	18	7,5	26	4	24
60-80	03009570	31,6	1,0	11	12,2	18	7,5	21	4	24
70-90	03009588	31,6	1,0	11	12,2	18	7,5	18	4	24
80-100	03009596	31,6	1,0	11	12,2	18	7,5	15	4	24
90-110	03009609	31,6	1,0	11	12,2	18	7,5	13	4	24
100-120	03009617	31,6	1,0	11	12,2	18	7,5	11	4	24
110-130	03009625	31,6	1,0	11	12,2	18	7,5	8,5	4	24
120-140	03009633	34,6	1,0	11	12,2	18	7,5	7,4	4	24
130-150	03009641	34,6	1,0	11	12,2	18	7,5	6,3	4	24
140-160	03009650	34,6	1,0	11	12,2	18	7,5	5,3	4	24
150-170	03009668	34,6	1,0	11	12,2	18	7,5	4,2	4	24
160-180	03009676	34,6	1,0	11	12,2	18	7,5	3,2	4	24
170-190	03009684	34,6	1,0	11	12,2	18	7,5	2,1	4	24
180-200	03009692	34,6	1,0	11	12,2	18	7,5	2,1	4	24
190-210	03009705	34,6	1,0	11	12,2	18	7,5	1,9	4	24
200-220	03009713	34,6	1,0	11	12,2	18	7,5	1,9	4	24
210-230	03009721	34,6	1,0	11	12,2	18	7,5	1,7	4	24
220-240	03009730	34,6	1,0	11	12,2	18	7,5	1,7	4	24

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

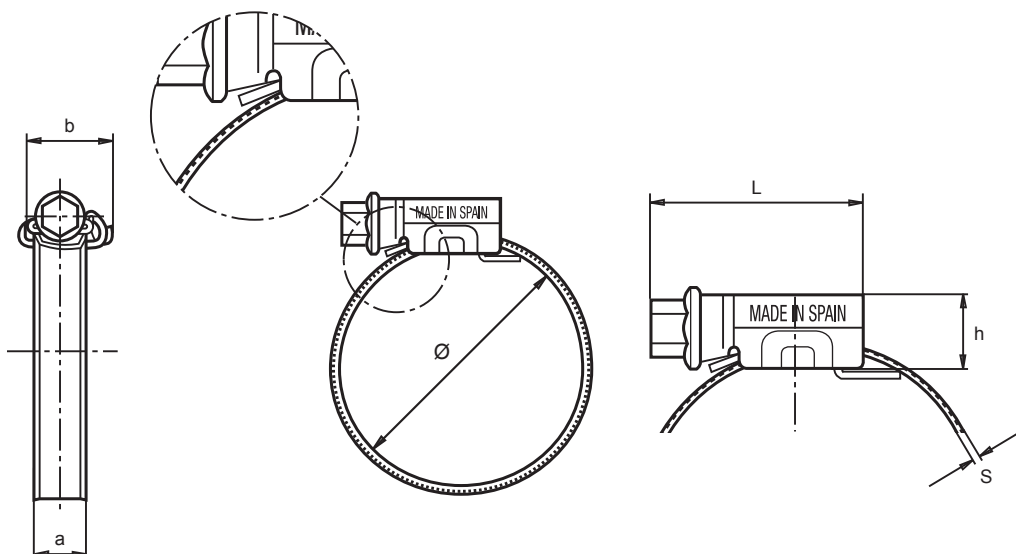
Patented Worldwide

TI - Materials

Screw:
Ti-3 (3.7055)
S/ASTM B 265-79

Band:
Ti-2 (3.7035)
S/ASTM B 265-79

Housing:
Ti-1 (3.7032)
S/ASTM B 265-79



Stainless steel inner-rings for ASFA-L worm-drive hose clips



W4



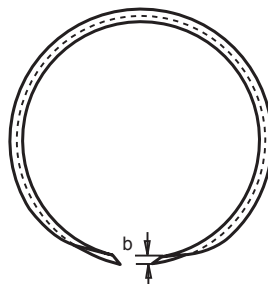
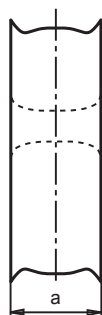
Inner Rings for ASFA L clips W4

Information	Ø Application mm	Reference Black	Reference Plain	a ±0,5	b	Box Quantity	Packing
This inner ring for ASFA-L worm-drive clip was designed to give extra protection to the hose, especially in applications where changes in the frequency of vibration can be an issue. The ring also contributes to an even distribution of pressure around the hose and confers a constant tension function to the clip. The black coating helps to ensure that the rings adapts correctly to the hose assembly.	8-16	73031015	03031018	13,5	0,25	200	1000
	12-22	73031023	03031026	13,5	0,25	200	800
	16-27	73031031	03031034	13,5	0,25	200	800
	20-32	73031040	03031042	13,5	0,25	200	800
	25-40	73031058	03031050	13,5	0,25	100	800
	30-45	73031066	03031069	13,5	0,25	100	800
	32-50	73031074	03031077	13,5	0,25	100	800
	40-60	73031082	03031085	13,5	0,25	100	400
	50-70	73031090	03031093	13,5	0,25	100	100
	60-80	73031103	03031106	13,5	0,25	100	100
	70-90	73031111	03031114	13,5	0,25	50	400
	80-100	73031120	03031122	13,5	0,25	50	400
	90-110	73031138	03031130	13,5	0,25	25	200
	100-120	73031146	03031149	13,5	0,25	25	200
	110-130	73031154	03031157	13,5	0,25	25	25
	120-140	73031162	03031165	13,5	0,25	25	25
130-150	73031170	03031173	13,5	0,25	25	25	
140-160	73031189	03031181	13,5	0,25	25	25	

W4 Materials

Band:
Stainless Steel
(AISI-301)

Finish:
Black Teflon
or
Stainless steel



Stainless steel inner-rings for ASFA-S worm-drive hose clips



W4



Black Finish



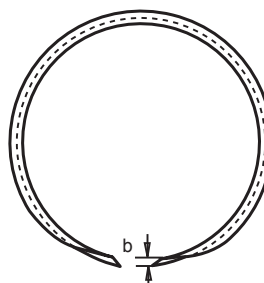
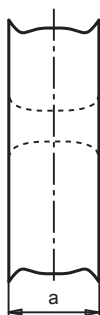
Inner Rings for ASFA S clips W4

Information	Ø Application mm	Reference Black	Reference Plain	a ± 0,5	b	Box Quantity	Packing
This inner ring for ASFA-S worm-drive clip was designed to give extra protection to the hose, especially in applications where changes in the frequency of vibration can be an issue. The ring also contributes to an even distribution of pressure around the hose and confers a constant tension function to the clip. The black coating helps to ensure that the rings adapts correctly to the hose assembly.	16-27	73031218	03031210	16,5	0,25	100	400
	20-32	73031226	03031228	16,5	0,25	100	400
	25-40	73031234	03031236	16,5	0,25	100	400
	30-45	73031242	03031244	16,5	0,25	100	400
	32-50	73031250	03031252	16,5	0,25	100	400
	40-60	73031269	03031260	16,5	0,25	100	400
	50-70	73031277	03031279	16,5	0,25	100	400
	60-80	73031285	03031287	16,5	0,25	100	50
	70-90	73031293	03031295	16,5	0,25	100	50
	80-100	73031306	03031309	16,5	0,25	25	200
	90-110	73031314	03031317	16,5	0,25	25	200
	100-120	73031322	03031325	16,5	0,25	25	200
	110-130	73031330	03031333	16,5	0,25	25	25
	120-140	73031349	03031341	16,5	0,25	25	25
	130-150	73031357	03031350	16,5	0,25	25	25
	140-160	73031365	03031368	16,5	0,25	25	25
	150-170	73031373	03031376	16,5	0,25	25	25
	160-180	73031381	03031384	16,5	0,25	25	25
	170-190	73031390	03031392	16,5	0,25	10	10
	180-200	73031402	03031405	16,5	0,25	10	10
190-210	73031410	03031413	16,5	0,25	10	10	
200-220	73031429	03031421	16,5	0,25	10	10	
210-230	73031437	03031430	16,5	0,25	10	10	
220-240	73031445	03031448	16,5	0,25	10	10	

W4 Materials

Band:
Stainless Steel
(AISI-301)

Finish:
Black Teflon
or
Stainless steel



**W3**

9mm L-band Worm-drive Hose clip

DIN: 3017 Light Series black

ASFA L Hose Clip W3 (9mm bandwidth)

Information	Ø Application mm	Reference	L max.	s + 0,1 0	h max.	a ± 0,3 ± 0,2	b Max.	Max. Values* Torque Nm	Max. Values* Pressure (Bars)	Box Quantity	Packing
<p>Thanks to the exclusive design of the housing, the ASFA LW3 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.</p> <p>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 machinery.</p>	8-16	73016011	22,1	0,6	10	9	14	3,0	45	200	800
	12-22	73016020	22,1	0,6	10	9	14	3,0	45	200	800
	16-27	73016038	23,6	0,7	10	9	14	3,5	42	200	800
	20-32	73016046	23,6	0,7	10	9	14	3,5	36	200	800
	25-40	73016062	25,6	0,7	10	9	14	4,0	32	100	800
	30-45	73016070	25,6	0,7	10	9	14	4,0	28	100	800
	32-50	73016089	25,6	0,7	10	9	14	4,0	24	100	800
	40-60	73016095	25,6	0,7	10	9	14	4,0	19	100	400
	50-70	73016100	26,6	0,7	10	9	14	4,0	17	100	100
	60-80	73016118	26,6	0,7	10	9	14	4,0	15	100	100

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 machinery.

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

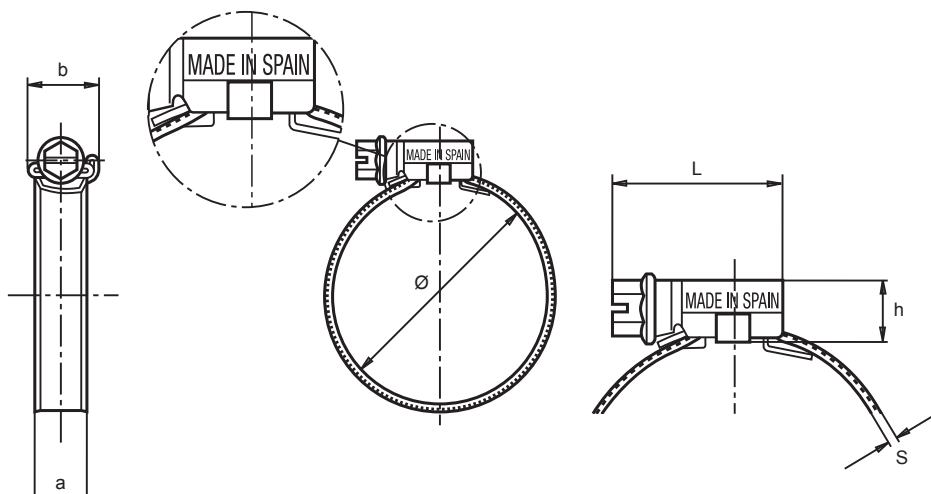
Patented Worldwide.

W3 Materials

Screw:
(AISI-430)
Stainless steel

Band and housing:
Stainless steel X6Cr-17
(DIN 1.4016) AISI 430

Finish:
Black



**W3**

12mm S-band Worm-drive Hose clip

DIN: 3017 Heavy Series black

ASFA-S W3 Hose Clip (12mm bandwidth)

Information	Ø Application mm	Reference	L max.	s + 0,1 0	h max.	a ± 0,3 ± 0,2	b Max.	Max. Values* Torque Nm	Max. Values* Pressure (Bars)	Box Quantity	Packing
Thanks to the exclusive design of the housing, the ASFA SW3 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 machinery.	16-27	73016206	29,6	0,8	11	12,2	18	4,2	45	50	400
	20-32	73016214	29,6	0,8	11	12,2	18	5,2	45	50	400
	25-40	73016222	29,6	0,8	11	12,2	18	5,2	40	50	400
	30-45	73016230	29,6	0,8	11	12,2	18	5,2	35	50	400
	32-50	73016249	29,6	0,8	11	12,2	18	6,0	35	50	400
	40-60	73016257	29,6	0,8	11	12,2	18	6,0	30	50	400
	50-70	73016265	31,6	0,8	11	12,2	18	6,8	25	50	400
	60-80	73016273	31,6	0,8	11	12,2	18	6,8	20	50	50

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

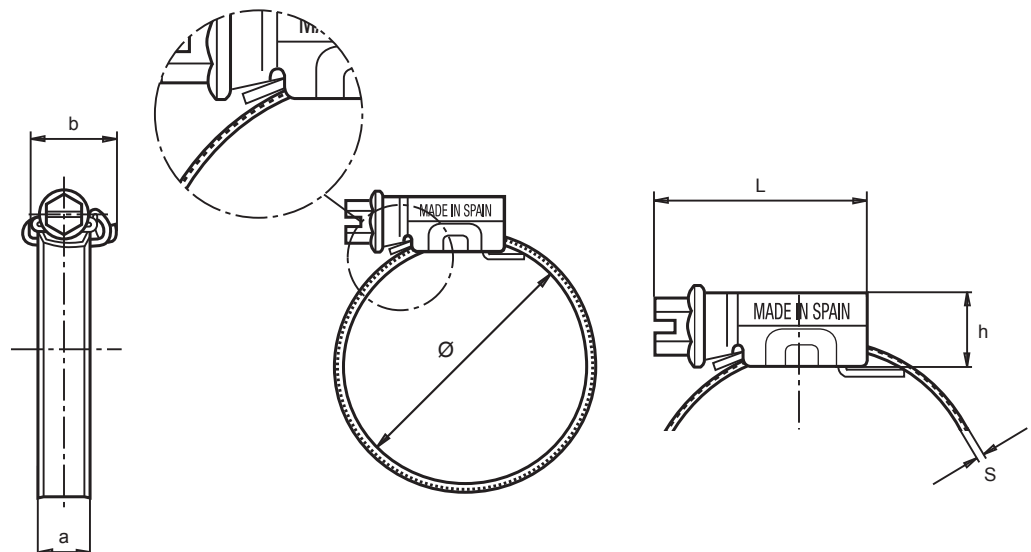
Patented Worldwide.

W3 Materials

Screw:
(AISI-430) Stainless steel

Band and housing:
Stainless steel X6Cr-17
(DIN 1.4016) AISI 430

Finish:
Black



**W3**

S-band Constant tension worm-drive clip

DIN: 3017 heavy series

ASFA-S W3 Constant tension worm-drive Hose Clip (12mm bandwidth)

Información

The main difference between the W3 constant tension worm-drive and the standard Mikalor worm-drive is to be found in the inner-ring insert incorporating a spring. This spring-loaded insert maintains constant pressure around the hose in case of sudden variations in temperature and /or vibration thereby avoiding leaks.

The fact that this clamp guarantees leak-proof hose assemblies with both gaseous fluid and liquids makes it ideal for applications in car, tractor or heavy machinery engines. Moreover, the non-perforated cold formed band together with the rounded band edges make sure that no damage occurs to the hose. This clip complies fully with the DIN 3017 norm and also with the RoHs directive EU/2002/95/EC dated 1st July 2006.

Ø Nominal mm	Reference W3	Ø Application	L max.	s + 0,1 0	h max.	a ± 0,3 0,2	b max.	Max. Values* Torque Nm	Max. Values* Pressure (Bars)	Box Quantity
16-27	03017800	13-23	29,6	0,8	11	12,2	18	4,5	47	200
20-32	03017818	17-28	29,6	0,8	11	12,2	18	5,5	47	200
25-40	03017826	22-36	29,6	0,8	11	12,2	18	5,5	42	100
30-45	03017834	27-41	29,6	0,8	11	12,2	18	5,5	37	100
32-50	03017842	29-46	29,6	0,8	11	12,2	18	6,3	37	100
40-60	03017850	37-56	29,6	0,8	11	12,2	18	6,3	32	100
50-70	03017869	47-66	31,6	0,8	11	12,2	18	7,0	27	100
60-80	03017877	57-76	31,6	0,8	11	12,2	18	7,0	22	100
70-90	03017885	67-86	31,6	0,8	11	12,2	18	7,0	18	50
80-100	03017893	77-96	31,6	0,8	11	12,2	18	7,0	15	50
90-110	03017906	87-106	31,6	0,8	11	12,2	18	7,0	13	25
100-120	03017914	97-116	31,6	0,8	11	12,2	18	7,0	11	25
110-130	03017922	107-126	31,6	0,8	11	12,2	18	7,0	9	25

* The bandwidth does not take into account the spring-loaded insert.
 * This can also be manufactured in 9mm L-band.

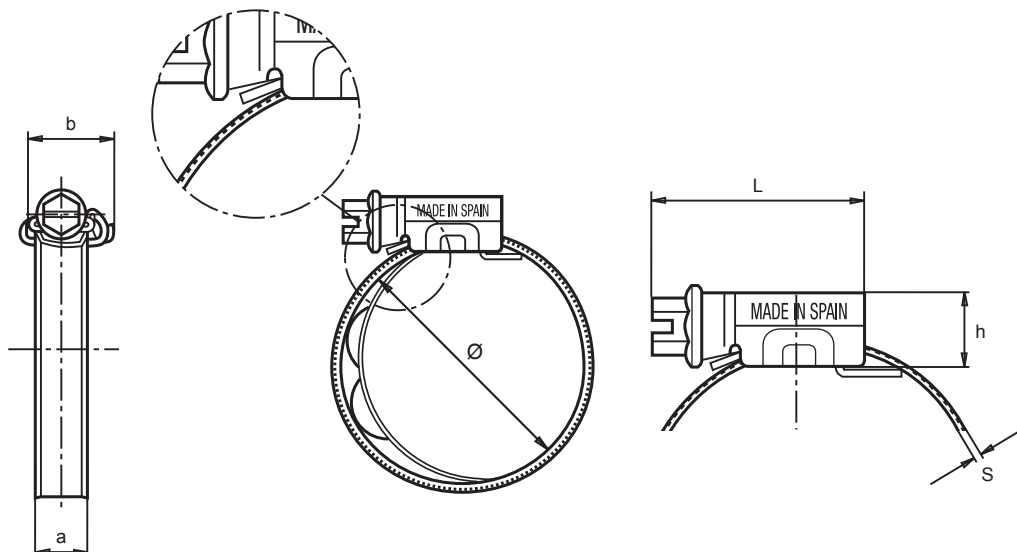
* The maximum application pressure can vary depending on the type of hose used and the geometry of the coupling.

W3 Materials

Screw:
 (AISI-430)
 Stainless steel

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

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



Supra CT Constant Tension Heavy-Duty Hose Clamp Stainless steel

W2



High Pressure series



Supra CT W2 Stainless Steel

Information

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 heavy machinery, trucks, buses, marine engines 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

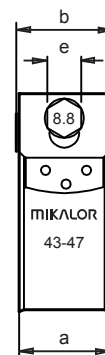
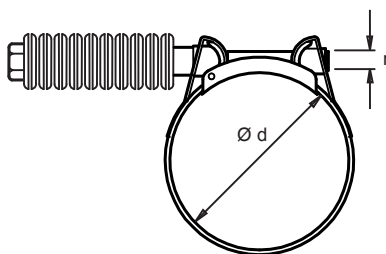
Ø Application mm	Reference W2	r	e	a	b	Max. Values* Torque (Nm)	Max. Values* Pressure (Bars)	Box Quantity	Packing
17-19	03020100	M6	10	18 ^{+0.2}	19,8	4,5	50	50	400
19-21	03020118	M6	10	18 ^{+0.2}	19,8	4,5	50	50	400
21-23	03020126	M6	10	18 ^{+0.2}	19,8	4,5	48	50	400
23-25	03020134	M6	10	18 ^{+0.2}	19,8	4,5	48	50	400
25-27	03020142	M6	10	18 ^{+0.2}	19,8	4,5	45	50	400
27-29	03020150	M6	10	18 ^{+0.2}	19,8	4,5	45	50	200
29-31	03020169	M7	11	20 ^{+0.3}	22,0	8,0	42	50	50
31-34	03020177	M7	11	20 ^{+0.3}	22,0	8,0	42	50	50
34-37	03020185	M7	11	20 ^{+0.3}	22,0	8,0	40	50	50
37-40	03020193	M7	11	20 ^{+0.3}	22,0	8,0	40	50	50
40-43	03020206	M7	11	20 ^{+0.3}	22,0	8,0	38	50	50
43-47	03020214	M7	11	20 ^{+0.3}	22,0	10,0	38	50	50
47-51	03020222	M7	11	20 ^{+0.3}	22,0	10,0	36	50	50
51-55	03020230	M7	11	20 ^{+0.3}	22,0	10,0	36	25	25
55-59	03020249	M7	11	20 ^{+0.3}	22,0	10,0	34	25	25
59-63	03020257	M7	11	20 ^{+0.3}	22,0	10,0	34	25	25
63-68	03020265	M7	11	20 ^{+0.3}	22,0	10,0	34	25	25
68-73	03020273	M8	13	25 ^{+0.4}	27,5	25,0	28	25	25
73-79	03020281	M8	13	25 ^{+0.4}	27,5	25,0	28	25	25
79-85	03020290	M8	13	25 ^{+0.4}	27,5	25,0	28	25	25
85-91	03020302	M8	13	25 ^{+0.4}	27,5	25,0	20	25	25
91-97	03020310	M8	13	25 ^{+0.4}	27,5	25,0	20	25	25
97-104	03020329	M8	13	25 ^{+0.4}	27,5	25,0	20	25	25
104-112	03020337	M8	13	25 ^{+0.4}	27,5	25,0	12	25	25
112-121	03020345	M8	13	25 ^{+0.4}	27,5	25,0	12	25	25
121-130	03020353	M8	13	25 ^{+0.4}	27,5	25,0	12	25	25
130-140	03020361	M10	17	28 ^{+0.4}	31,0	50,0	9	10	10
140-150	03020370	M10	17	28 ^{+0.4}	31,0	50,0	9	10	10
150-162	03020388	M10	17	28 ^{+0.4}	31,0	50,0	9	10	10
162-174	03020396	M10	17	28 ^{+0.4}	31,0	50,0	6	10	10
174-187	03020409	M10	17	28 ^{+0.4}	31,0	50,0	6	10	10
187-200	03020417	M10	17	28 ^{+0.4}	31,0	50,0	6	10	10
200-213	03020425	M10	17	28 ^{+0.4}	31,0	50,0	3	10	10
213-226	03020433	M10	17	28 ^{+0.4}	31,0	50,0	3	10	10
226-239	03020441	M10	17	28 ^{+0.4}	31,0	50,0	3	10	10
239-252	03020450	M10	17	28 ^{+0.4}	31,0	50,0	3	10	10

W2 Materials

Band and Bridge:
X6Cr17 Stainless steel
(DIN 1.4016) (AISI-430)

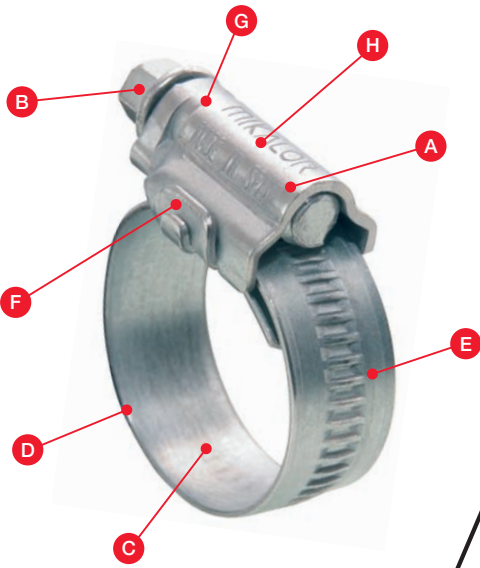
Screw:
8.8 grade steel
Silver-white Cr3 Zinc-Plated

Washers and Trunions:
AISI 304 Stainless steel



SECTION A-A

Technical Information



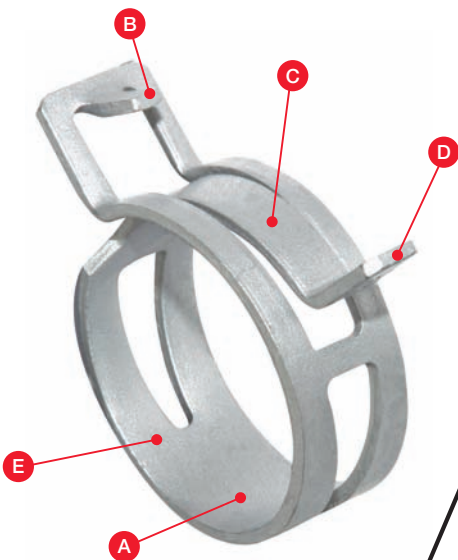
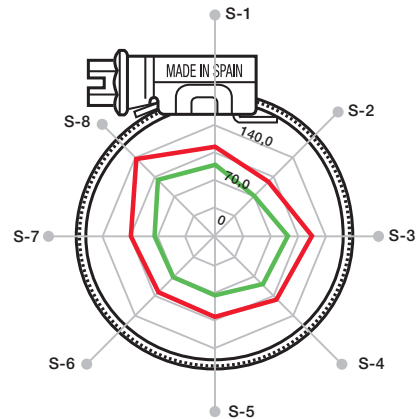
ASFA TI Titanium S-band worm-drive hose clip

- A** 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.
- B** The screw is also manufactured in Titanium and can take a great deal of torque.
- C** Smooth band underside which avoids damage to the hose.
- D** Beveled band edges to avoid the clip cutting into the hose.
- E** Cold formed stamped band thread which gives a very good grip due to the fact that the thread is deeper than the thickness of the material used.
- F** The exclusive design of the housing keeps the screw in firm contact with the band and means that the ASFA-TI gives great performance.
- G** The compact housing grips the screw preventing lateral movement during tightening.
- H** All ASFA TI hose clips are marked with the application range, material, the Mikalor logo and the country of manufacture.

Polar Diagram

Sectors	S1	S2	S3	S4	S5	S6	S7	S8	Average
4 Nm	90,0	71,0	93,0	86,0	77,0	76,0	71,3	101,0	81,4
5 Nm	113,0	97,6	123,0	113,6	103,6	102,2	101,4	137,0	109,2

Torque / Efficiency [Nm / daN]



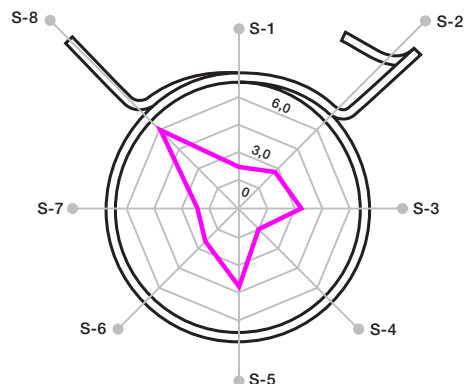
Heavy-duty spring-band clip DIN 3021

- A** The design of this clamp means that it can maintain the same radial force despite changes in temperature and/or pressure.
- B** Safety feature to avoid excessive pressure when mounting which could damage the clamp.
- C** Quick and easy to mount.
- D** Quick and easy to mount.
- E** Materials free of toxic substances in accordance with current environmental legislation.

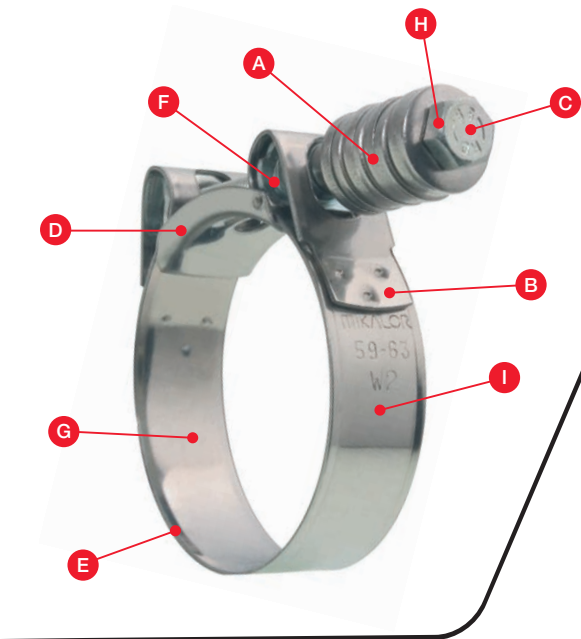
Polar Diagram

Sectors	S1	S2	S3	S4	S5	S6	S7	S8	Average
Force Kg	2,3	2,9	3,6	1,5	4,2	2,6	2,2	6,0	3,1

Torque / Efficiency [Nm / daN]



Technical Information



Supra CT Constant Tension Heavy-duty hose clamp

- A** 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.
- 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** Swiveling bridge makes it easy to mount and dismount Supra.
- E** Beveled band edges protect the hose from damage.
- F** The revolutionary design makes it impossible to dislodge the nut and trunions.
- G** Flexible material allows Supra to adapt to the application zone, thereby guaranteeing a leak-proof assembly.
- H** Manual or automatic assembly.
- I** All Supra Clamps are marked with the application range, material and the Mikalor logo.



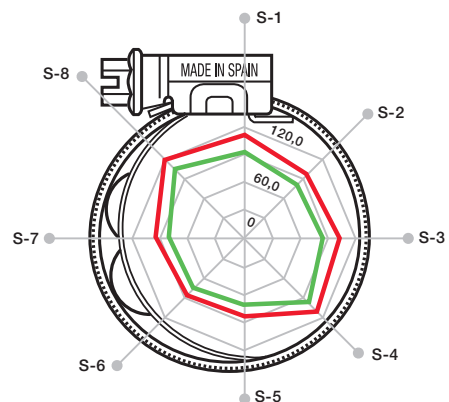
S-band Constant tension worm-drive clip

- 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** Smooth band underside which avoids damage to the hose.
- C** Beveled band edges to avoid the clip cutting into the hose.
- D** Cold formed stamped band thread which gives a very good grip due to the fact that the thread is deeper than the thickness of the material used.
- E** The screw was designed to take a lot of punishment and can be tightened using a variety of different tools.
- F** The exclusive design of the housing keeps the screw in firm contact with the band and means that the ASFA-L gives great performance.
- G** The compact housing grips the screw preventing lateral movement during tightening.
- H** All Mikalor hose clips are marked with the application range, material, the Mikalor logo and the country of manufacture in compliance with DIN 3017.
- I** The spring insert is fixed to the band in such a way that it automatically adjusts while tightening thus optimizing performance.

Polar Diagram

Sectors	S1	S2	S3	S4	S5	S6	S7	S8	Average
5 Nm	95,0	83,0	87,4	102,0	75,0	76,2	70,0	107,0	87,0
6 Nm	112,0	98,2	106,0	116,0	93,6	95,4	89,0	123,0	101,8

Torque / Efficiency [Nm / daN]

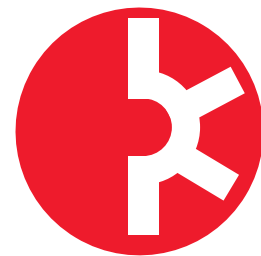


Ø 12-22 mm.

Ø 16-27 mm.

Ø 20-32 mm.

MIKALOR



Assortment
*Boxes and
Display Units*

Worm-Drive Hose Clip Assortment Boxes



Contents

Information

With the aim of providing 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.

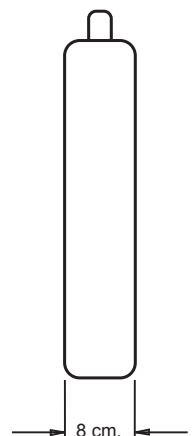
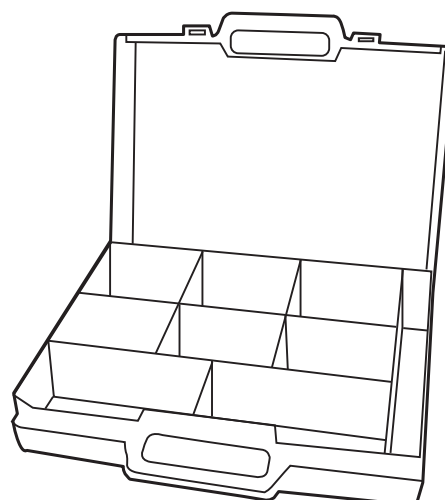
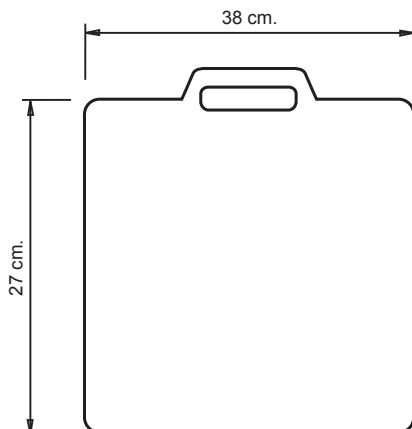
All assortment boxes include a flexible hex-socket screwdriver which can be used to torque up Mikalor worm-drive clips in all sorts of application zones.

Reference	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Flexi driver	Series	Material Quality
	8-16 Pcs	12-22 Pcs	16-27 Pcs	20-32 Pcs	25-40 Pcs	30-45 Pcs	32-50 Pcs	40-60 Pcs	50-70 Pcs	60-80 Pcs	70-90 Pcs			
03503010	60	40	40	20	20	20	10	10	6	-	-	1	LIGHT	W1
03503028	60	40	40	20	20	20	10	10	6	-	-	1	LIGHT	W2
03503044	60	40	40	20	20	20	10	10	6	-	-	1	LIGHT	W4
03503060	60	40	40	20	20	20	10	10	6	-	-	1	LIGHT	W5
03503087	-	-	25	20	12	-	8	6	6	5	5	1	HEAVY	W1
03503095	-	-	25	20	12	-	8	6	6	5	5	1	HEAVY	W2
03503108	-	-	25	20	12	-	8	6	6	5	5	1	HEAVY	W4

Materials

Case:
Yellow PVC

Insert:
High impact red polypropylene



Worm-Drive Hose Clip Display Units



Contents

Information

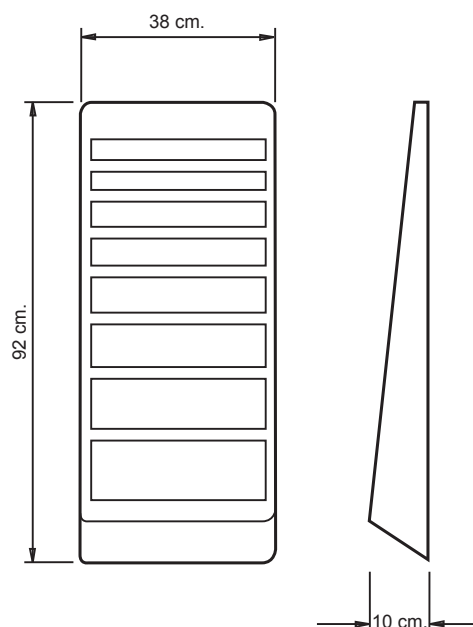
Our range of wall-displays is one of the most complete on the market, meaning that you can choose the one which most suits your needs and the space at your disposal.
The design of these easy to use wall displays, which are both attractive and well-organized, makes them an ideal sales tool.

Reference	Ø 8-16 Pcs	Ø 12-22 Pcs	Ø 16-27 Pcs	Ø 20-32 Pcs	Ø 25-40 Pcs	Ø 32-50 Pcs	Ø 40-60 Pcs	Ø 50-70 Pcs	Ø 70-90 Pcs	Series	Material Quality
02500191	200	200	200	200	100	100	100	100	-	LIGHT	W1
02500079	200	200	200	200	100	100	100	100	-	LIGHT	W2
02500087	200	200	200	200	100	100	100	100	-	LIGHT	W4
02500140	-	-	-	50	50	50	50	50	50	HEAVY	W1
02500167	-	-	-	50	50	50	50	50	50	HEAVY	W2
02500183	-	-	-	50	50	50	50	50	50	HEAVY	W4

Materials

Display:
High resistance
PS plastic

Color:
Yellow





Frontal Ear Clip pliers

Frontal ear clip pliers

Information

These pliers can be used to fasten all types of ear clip. The Frontal model is fast and easy to use and can be used in the majority of cases. It is also known as the "Russian" model

Article

Frontal Ear Clip pliers

Reference
Frontal ear clip pliers

03011088

Box
Quantity

1

Packing

1



Lateral Ear Clip Pliers

Frontal and lateral ear clip pliers

Information

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

Article

Frontal and lateral ear clip pliers

Reference
Lateral Ear clip pliers

03011096

Box
Quantity

1

Packing

1



Pliers for DIN 3021 Heavy-duty Spring band Clip

Pliers for heavy-duty spring-band clips

Información

Pliers for DIN 3021 heavy-duty spring-band clips. These pliers were specially designed to grip the DIN 3021 clip firmly during assembly.

Article

Pliers for heavy-duty spring-band clips

Reference
Spring-band pliers

03031499

Box
Quantity

1

Packing

1



Pliers for Clip clamp

Frontal pliers for Clip clamp

Information	Article	Reference Clip clamp pliers	Box Quantity	Packing
Pliers for the complete Clip clamp range.	Frontal pliers for Clip clamp	03030390	1	1



Application tool for preformed clamps

Application tool for preformed clamps

Information	Article	Reference Preformed clamp application tool	Box Quantity	Packing
Application tool for preformed clamps. This tool is very easy to use. It incorporates a function which regulates tension in the band and cuts the band end automatically.	Application tool for preformed clamps	03002015	1	1

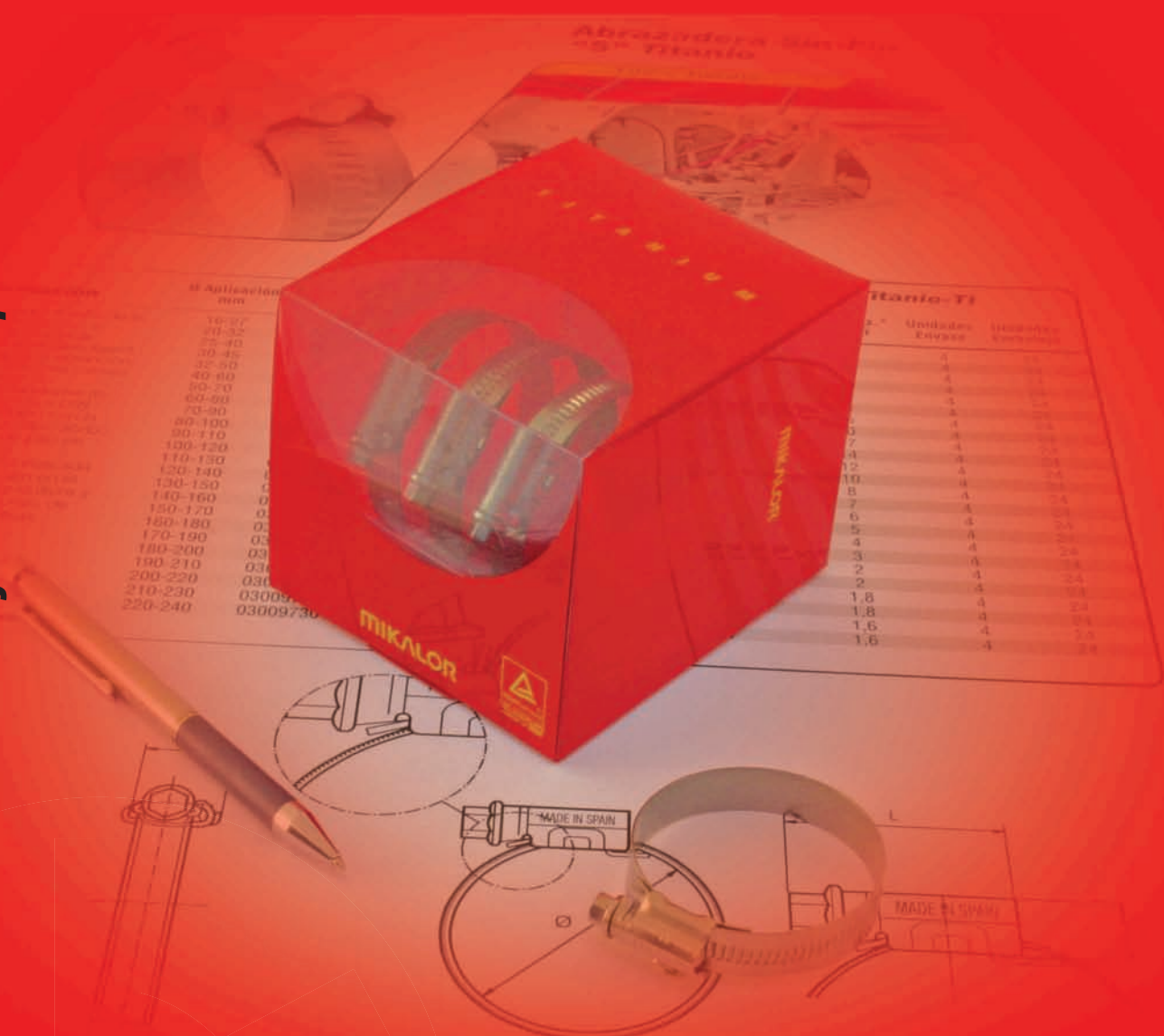


Pneumatic pliers for Clip clamp

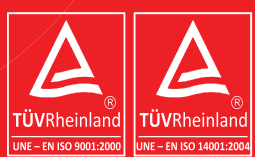
Pneumatic pliers for Clip clamp

Information	Article	Reference Pneumatic pliers for Clip clamp	Box Quantity	Packing
Pneumatic pliers for use with the complete range of Clip clamps. Ideal for use on assembly lines. Working pressure: 5 bars. Total weight : 650grs	Pneumatic pliers for Clip clamp	03030402	1	1

Much more than just clamps
Much more than just clamps



damesa 



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