



Quality in every detail

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ABA first started manufacturing in Sweden in 1896. The ABA Group of companies has since developed to become a leading multinational company specialising in the design and production of hose and pipe clamps as well as connectors for many world-wide applications.

Quality has been and continues to be the key to success which has made ABA products among the market leaders in Japan for many years – a market with very high demands on quality. Our 8 factories are accredited with the leading quality and environmental standards including ISO 9000:2000, ISO 14001 and ISO TS 16949 for factories supplying the automotive industry.

Hose and pipe clamps produced under the 'ABA' trademark are available in many types and standards ensuring that our customers enjoy the benefit of the highest achievable results on clamping force, tightening and breaking torque. For projects requiring design verification, we support the performance of our products with endurance certification. ABA is one of the very few manufacturers in our industry with access to extensive in-house system testing facilities.

Distribution of 'ABA' trademark products is undertaken through a network of carefully selected companies specialising in volume distribution in their national market segments. Many long-term co-operations have also resulted in joint ventures or alliances for example:

- ABA Well Grow Ltd., Hong Kong
- ABA China Ltd., Kina
- Hah Seng Trading Ltd. Partners, Thailand
- Kuriyama Corporation, Japan
- Geoen Bevestigingsmaterialen, B.V., Holland

The following pages will show you detailed information on our product range. Of course you are most welcome to visit us on our website www.abagroup.com or contact us at info@aba.se.

There is always an ABA hose clamp outlet close to you or – if not – maybe you want to join our team in your local market place – in such a case – *Welcome to the ABA world of clamps!*



Guide

Material Type of clamp Range (mm)	STANDARD S10/S20	STAINLESS SS2320/S30 AISI 430 DIN 1.4016	STAINLESS SS2333/S40 AISI 304 DIN 1.4301 W4	ACID RESISTANT SS2343/S50/S60 AISI 316 DIN 1.4436 W5	Remarks
WORM GEAR CLAMP SMS & DIN Ø 8–1060 mm band width	 9 + 12 mm	 9 mm 12 mm	 12 mm	 9 mm 12 mm	<ul style="list-style-type: none"> Corrosion resistance in salt-spray test S20, std: >200 hrs. S30 430: >400 hrs. S40 304: >1 000 hrs. ind. S50, S60 316: >1 000 hrs. marine
RADIAL™ Ø 15–95 mm band width	 9 mm				<ul style="list-style-type: none"> Can be delivered with torque screw cap Strong spring effect
SAFE™ Ø 32–112 mm band width	 12 mm		 12 mm		<ul style="list-style-type: none"> Increased leakage protection on soft hoses Excellent on many plastic tubes
MICRO Ø 7–19 mm band width	 5 mm		 5 mm		<ul style="list-style-type: none"> For small hose dimensions
MINI Ø 6,5–18 mm band width	 9 mm		 9 mm		<ul style="list-style-type: none"> Sure seal of small thin-walled hoses Easy to assemble Fixed nut
ROBUST Ø 17–252 mm band width	 18-30 mm			 18-25 mm	<ul style="list-style-type: none"> High tightening force on thickwalled hoses A highly competitive product
POWERCLAMP Ø 32–180 mm band width	 20 mm			 20-25 mm	<ul style="list-style-type: none"> High tightening force Industrial use Trucks and agricultural machines
EAR CLIP Ø 5–40 mm					<ul style="list-style-type: none"> Easy to assemble Inexpensive
RUBBER LINED CLIP SMS & DIN Ø 3–110 mm	 SMS DIN				<ul style="list-style-type: none"> Eliminates hose and cable wear due to vibrations
EXHAUST CLAMP Ø 27–147 mm					<ul style="list-style-type: none"> Uniform tightening around the exhaust tubes gives a good sealing A quality exhaust tube clamp
PIPE CLAMP Ø 25–57 mm					<ul style="list-style-type: none"> Fixing of exhaust tubes, signs etc

SS = Swedish Standard. DIN = Deutsches Institut für Normung. AISI = American Iron and Steel Institute.

ABA Safeseal Technology™

2-sector "mechanical efficiency" test. Force: Newton. Speed: 200 rpm.

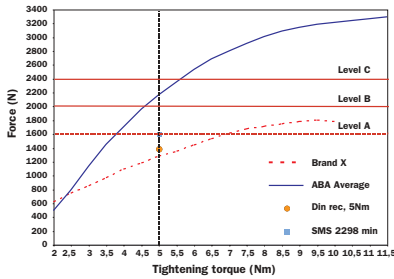
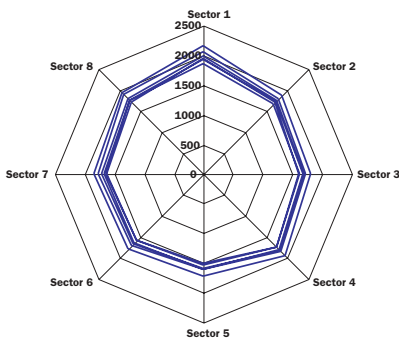


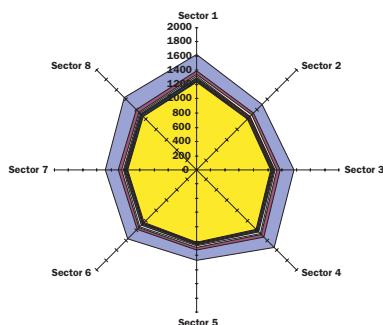
Fig. 1. Mechanical efficiency of ABA clamps i.e. the relation tightening torque and sealing force.

High and consistent quality from clamp to clamp. Each graph is one clamp.



**Fig 2. 8-sector "one measure" test.
Force: Newton. Speed: 200 rpm.**

High remaining clamping force thanks to the one piece housing design.



**Fig. 3. 8-sector load test.
Force: Newton. Time: 1 min.
Time step: 6 sec.
Tightening torque: 4,5 Nm**

Reliable

ABA clamps are designed to have a *clamping force reserve* and not break. They will reliably continue to develop a *sealing force* around the hose when tightened (see blue line fig. 1) 360° around the joint.

One-piece pressed housing

The worm gear housing is pressed from custom-made piping to an interior tolerance of a few hundredths of a millimetre. ABA worm gear housings withstand high breaking torques due to the design in comparison with riveted, welded or just folded housing designs.

High clamping force

A good clamp should be able to develop a high level of tightening force around the hose or pipe. The even tightening force secures a tight seal. Through the installation torque you decide on the level of force to apply.

Gentle on the hose

The smooth underside and rolled-up band edges are gentle on the hose and reduce the risk of leakages. A choice of hose clamp is a choice of clamping force. Bear in mind that settings in the rubber will in the long term reduce the clamping force. Is the clamping force you have selected large enough? Be sure – choose ABA Original clamps.

Aluzink

Our standard bands are made from an Aluzink material, which provides roughly three times better corrosion protection than traditional galvanization. An Aluzink band, in conjunction with our product design, provides the optimum clamping force.

ABA – for a better environment and quality

ABA is ISO 14001 certified and our products can be reused many times thanks to the high and constant quality continuously surveyed in our ISO 9000:2000 as well as ISO TS 16949 systems.



ABA Group Technical Center -



Pressure, Vibration, Temperature (PVT) tests

Product development, validation and other customer specific test.



ABA Safeseal Technology™

ABA tests – a guarantee against leakage

A hose connection has three components:

- Pipe ends – a large number are available for different purposes.
- Hoses – an equally large number are available.
- Naturally, hose clamps with different characteristics intended for different jobs are also required. ABA Original can be used, with the correct tightening torque, for a large number of applications. ABA Original with aluzink or stainless bands provide a very large clamping force and a leakproof connection. Choose ABA for safety's sake.

Clamping force meter

If you wish to compare the clamping force of different products, we can help you on site with our portable measuring equipment. Once the clamping force has been determined, a suitable level of corrosion protection can be selected from the table to the right.

Product development

We continuously test systems of hoses, pipe ends, clamps and couplings at our Technical Centre, in order to develop new products and to improve our existing products.

Technical Centre in Anderstorp

Mechanical efficiency is one of our test parameters, which is shown in the diagram on the left side Fig. 1. An increase of tightening torque does not always mean an increase in clamping force! Here the Clamp design and lubrication play vital roles. Our Technical Centre has a state-of-the-art equipment for testing of pressure, vibration and temperature variations. Essential parameters which over time will affect a hose or pipe connection. Many customers have during recent years asked us to perform tests and give technical advice concerning their specific applications.

In industry, the choice of clamp is important. Therefore, we have developed a meter that measures the exact clamping force at eight points, directly after installation and over extended periods of time. Tests have shown that ABA products achieve high clamping forces before breaking and thus ensure that the customer has a clamping force reserve in the clamp to avoid blow-off or leakage over time. If you want ABA to perform tests for your specific need – just contact your Area Sales Manager.



Material and surface treatment chosen by the manufacturer. Min 72 hours to red rust.* Comparable to W1



Material and surface treatment chosen by the manufacturer. Min. 200 hours to red rust.* ABA's material choice is high quality, Swedish, aluzink. Closest to W2 but since the screw is in carbon steel and the band is in chromium steel the time to red rust is lower for W2.



All parts in chrome steel 1.4016/AISI 430/SS2320. Min. time to red rust is 500 hours.* Comparable to W3.



All parts in stainless steel 1.4301/AISI 304/SS2333. Min. time to red rust is 500 hours.* Comparable to W4.



All parts in acid resistant steel 1.4436/AISI 316/SS2343. Min. time to red rust is 2.000 hours.* Comparable to W5.



All parts in acid resistant steel. Min. time to red rust – well over 2.000 hours.* Screw & housing in 1.4436/AISI 316/SS2343 and band in higher grade 1.4547/SS-EN 10 088-1.

* Testing according to SS-ISO 9227 with neutral salt mist spray.

- State of the art test facilities

8-sector load tests.

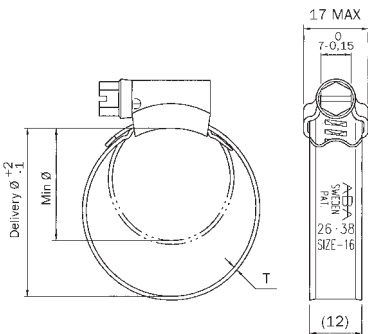
Sealing force tests as a function of clamp type, hose type, installation speed, torque and all parameters can be measured over time.

2-sector load tests.

A portable test unit for sealing force tests in order to compare clamps.



ABA 12 mm Original Aluzink S20 and Stainless S40



ABA Original clamps feature an extra strong one-piece pressed housing, rolled-up band edges and a smooth band underside that protects the hose. For added corrosion resistance the band in the ABA 12 mm Standard is made of Aluzink which gives three times the protection offered by conventional galvanized steel. ABA Original – the trouble-free clamp with high tightening force and high breaking torque.

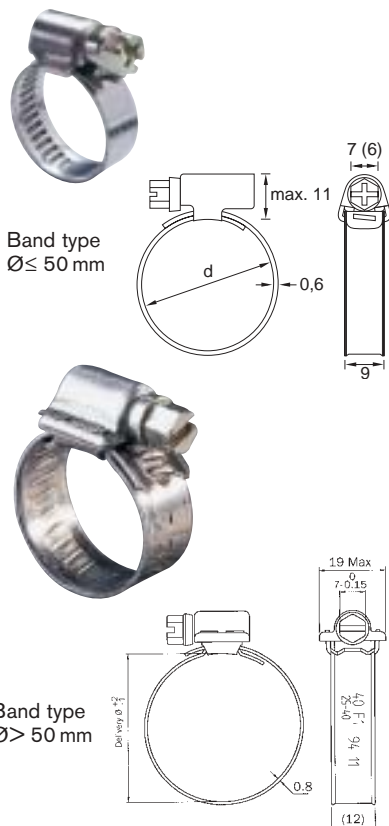
ABA Original Standard-S20:
Screw: Electro zinc plated.
Band: Aluzink. Housing:
Painted.

ABA Original Stainless-S40:
All parts in SS 2333/AISI 304
Stainless Steel. For dimensions
under Ø 20 mm – see ABA
Nova 9 mm.
Clamping range in accordance
with SS 2298, on page 7.

Hose size	Supplied Ø	Minimum Ø	Standard T	Stainless T	Rec. tightening torque Nm
15-24	25	15	0.8	0.8	4-5
19-28	29	19			
22-32	33	22			
26-38	39	26	1.0		5-6
32-44	45	32			
38-50	51	38			
44-56	57	44			
50-65	66	50			
58-75	76	58			
68-85	86	68			
77-95	96	77			
87-112	113	87			
106-138	139	106			
132-165	166	132			
150-180	181	150			
175-205	206	175			
200-231	232	200			
226-256	257	226			
251-282	283	251			
277-307	308	277			

Larger sizes available

ABA 9 mm and 12 mm W2



ABA Stainless SS 2320/AISI 430 clamps are available with 9 mm and 12 mm band widths. Larger sizes, diameters over 50 mm in 9 and 12 mm bands are made in a heavy duty version with smooth underside and solid band appreciated in a.o. trucks, buses and heavy equipment.

ABA W2: Screw: Galvanized carbon steel. Band and housing:
SS 2320/AISI 430. Clamping range in accordance with DIN 3017.1

Band width 9 mm			
Hose size	Supplied Ø	Minimum Ø	Rec. tightening torque Nm
8-12	13	8	2-2.5
10-16	17	10	
12-20	21	12	
12-22	23	12	
16-25	26	16	2.5-3
16-27	28	16	
20-32	33	20	
23-35	36	23	
25-40	41	25	
30-45	46	30	
32-50	51	32	
40-60	61	40	
50-70	71	50	
60-80	81	60	
70-90	91	70	
80-100	101	80	
90-110	111	90	
100-120	121	100	
110-130	131	110	
120-140	141	120	
130-150	151	130	
140-160	161	140	

Band width 12 mm			
Hose size	Supplied Ø	Minimum Ø	Rec. tightening torque Nm
16-25	26	16	2.5-3.5
16-27 ¹⁾	28	16	
20-32	33	20	
23-35 ¹⁾	36	23	
25-40	41	25	3.5-4.5
30-45 ¹⁾	46	30	
32-50	51	32	
40-60	61	40	
50-70	71	50	
60-80	81	60	
70-90	91	70	
80-100	101	80	
90-110	111	90	
100-120	121	100	
110-130	131	110	
120-140 ¹⁾	141	120	
130-150 ¹⁾	151	130	
140-160 ¹⁾	161	140	
150-170 ¹⁾	171	150	
160-180 ¹⁾	181	160	
170-190 ¹⁾	191	170	
180-200 ¹⁾	201	180	

¹⁾ Not in stock

ABA 12 mm Acid Resistant A High Torque Clamp S50

The acid resistant clamp is produced from SS 2343/AISI 316 high tensile strength steel. It has one of the best clamping force ratings in the world thanks to its special thread design and ABA's manufacturing methods. Whenever required this clamp has a very high clamping force and premium corrosion resistance. Every clamp is date stamped for traceability. This clamp has received high praise from US Powerboats, amongst others.

ABA Acid Resistant: All parts are made of SS 2343/AISI 316 stainless steel, in accordance with SS 2298, -S50

Hose size	Supplied Ø	Minimum Ø	Rec. tightening Nm
15-24	25	15	2.5-3.5
19-28	29	19	
22-32	33	22	
26-38	39	26	3.5-4.5
32-44	45	32	
38-50	51	38	
44-56	57	44	5-6
50-65	66	50	
58-75	76	58	
68-85	86	68	
77-95	96	77	
87-112	113	87	
104-138	139	104	
130-165	166	130	
150-180	181	150	
175-205	206	175	
200-231	232	200	
226-256	257	226	
251-282	283	251	
277-307	308	277	



ABA Nova 9 mm Aluzink S20 Stainless S40 and Acid Resistant S50

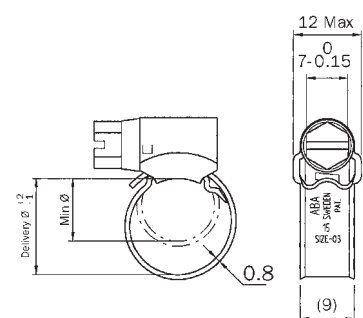
The highly general ABA Nova clamp is the ideal choice for smaller dimensions of hoses. The worm gear housing is manufactured in a closely monitored automatic resistance welding process. The base of the housing is cut back and the internal tolerances are very close: a few hundredths of a millimetre. It is available for a wide range of hose dimensions and retains its roundness and sealing qualities even on the smallest of hoses.

ABA Nova Standard-S20: Screw: Electro zinc plated. Band: Aluzink. Housing: Painted.

ABA Nova Stainless-S40: All parts are made of SS 2333/AISI 304 stainless steel.

ABA Nova Acid Resistant-S50: All parts are made of SS 2343/AISI 316 stainless steel.

Clamping range in accordance with SS 2298.



Standard			
Hose size	Supplied Ø	Minimum Ø	Rec. tightening Nm
8-14	15	8	2.5-3.5
11-17	17	10	
13-20	22	12	3-4
15-24	25	15	
19-28	28	16	
22-32	32	20	4-4,5
26-38	40	25	
32-44	45	30	
38-50	51	32	
44-56	56	44	
50-65	65	50	
58-75	75	58	
68-85	85	68	

Stainless			
Hose size	Supplied Ø	Minimum Ø	Rec. tightening Nm
8-14	15	8	2.5-3.5
11-17	17	10	
13-20	22	12	3-4
15-24	25	15	
19-28	28	16	
22-32	32	20	4-4,5
26-38	40	25	

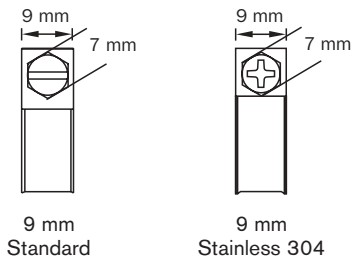
Acid resistant			
Hose size	Supplied Ø	Minimum Ø	Rec. tightening Nm
8-14	15	8	2.5-3.5
11-17	17	10	
13-20	22	12	



ABA Mini Standard S10 and Stainless S40



Stainless S40



ABA Mini features rolled-up band edges that are gentle on hoses. The band tongue that fits under the hose is profiled for added strength. The nut is retained even if the screw is removed. Furthermore the screw has a hexagonal head and can be tightened with an ABA flexible socket wrench. The ABA Mini is particularly suitable for use on small, thin-walled hoses.

ABA Mini Standard-S10: Electro zinc plated.
ABA Mini Stainless-S40: All parts are made of SS 2333/AISI 304 stainless steel.

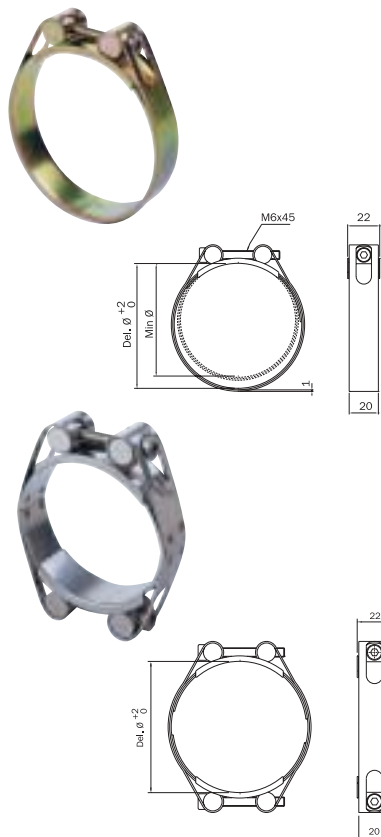
Standard – S10

Size	Del ø	Min ø	Rec tightening Torque. Nm
Mini 7	7,5	6,5	1,5
Mini 8	8,5	7	
Mini 9	9,5	8	
Mini 10	10,5	9	
Mini 11	11,5	9,5	
Mini 12	12,5	10,5	
Mini 13	13,5	11,5	
Mini 14	14,5	12,5	
Mini 15	15,5	13,5	
Mini 16	16,5	14	
Mini 17	17,5	15	

Stainless – S40

Size	Del ø	Min ø	Rec tightening Torque. Nm
Mini 8	8,5	7,5	1,5
Mini 9	9,5	8,5	
Mini 10	11	9,5	
Mini 11	12	10,5	
Mini 12	13	11,5	
Mini 13	14	12,5	
Mini 14	15	13,5	
Mini 15	16	14,5	
Mini 16	17	15	
Mini 17	18	16	

Power Clamp Standard S10 and Acid Resistant S50



A very strong heavy duty double band clamp. Also available in a double screw version for extra clamping force. Both “single” and “double” are available in standard version and in stainless steel 316/S50.

Power Clamp Standard-S10: All parts are made of high grade carbon steel which have an electro zink plating.
ABA Acid Resistant-S50: All parts are made of SS 2343/AISI 316/S50 stainless steel.

Power Clamp single

Supplied ø	Minimum ø	Supplied ø	Minimum ø
40	34	95	89
45	39	100	94
50	44	105	99
55	49	110	104
60	54	115	109
65	59	120	114
70	64	125	119
75	69	130	124
80	74	135	129
85	79	140	134
90	84	155*	149

Power Clamp double

Supplied ø	Minimum ø	Supplied ø	Minimum ø
40	32	115	105
50	40	120	110
55	45	125	115
60	50	130	120
65	55	135	125
70	60	140	130
75	65	145	135
80	70	150	140
85	75	155	145
90	80	160	150
95	85	165	155
100	90	170	160
105	95	175	165
110	100	180	170

Acid resistant not in stock.
* Not Standard

ABA Robust Standard S10 and Acid Resistant S50

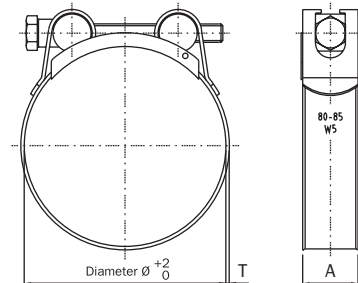
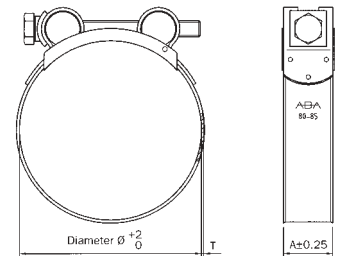
ABA Robust is a heavy-duty clamp with rolled-up band edges. It is used in many applications such as for sealing heavy-gauge reinforced hoses used for irrigation, drainage, sludge pumping etc. The hexagonal head design allows tightening with an ordinary spanner or socket wrench. This product has the original heavy duty design with preshaped welding points. ABA Robust comes with three (3) welding points for increased security for larger sizes. Please note that over 40 mm diameter ABA only use M8 bolts or larger for safe installations.

ABA Robust Standard-S10: All parts are made of high grade carbon steel and are individually electro zinc plated before assembly.

ABA Robust Acid Resistant-S50: All parts are made of SS 2343/AISI 316 stainless.

Standard				Acid resistant			
Ø mm	A	T	Bolt	Ø mm	A	T	Bolt
17-19	18	0.6	M5x35	17-19*	18	0.6	M5x35
20-22	20	0.8	M6x45	20-22*	20	1.0	M6x50
23-25				23-25*			
26-28				26-28*			
29-31				29-31*			
32-35				32-35			
36-39				36-39			
40-43				40-43			
44-47	23	1.2	M8x60	44-47	25	1.2	M8x70
48-51				48-51			
52-55				52-55			
56-59				56-59			
60-63				60-63			
64-67				64-67			
68-73				68-73			
74-79				74-79			
80-85				80-85			
86-91				86-91			
92-97				92-97			
98-103				98-103			
104-112				104-112			
113-121				113-121			
122-130				122-130			
131-139	M8x80	1.5	M8x80	131-139			
140-148				140-148			
149-161				149-161			
162-174	30	1.7	M10x90	162-174	1.5	1.5	M8x80
175-187				175-187			
188-200				188-200			
201-213				201-213			
214-226				214-226			
227-239				227-239			
240-252				240-252			

*Screw material M5. Zink plated Navy Brass.

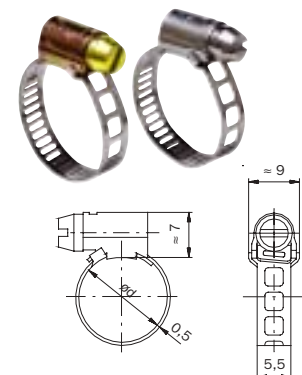


ABA Micro Standard S20 and Stainless S40

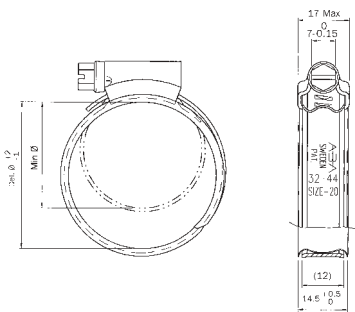
Micro extends our product range for small hose dimensions where a small and flexible wormgear clamp is needed and where the demand for tightening force is low. The band width is 5 mm and the clamp a "retaining" product.

Micro: Screw and housing: Electro zinc plated or both parts in stainless AISI304.
Band: SS 2320/AISI 430 Stainless Steel or SS2333/AISI304.

Clamping range (d)	Rec. tightening torque Nm
mm	0,3 - 0,4
7 - 11	
9 - 14	
10 - 19	



ABA Safe™ 12 mm Aluzink S20 and Stainless S40



ABA Safe™ utilizes the flexibility of the hose (rubber) and protects soft hoses against damage. The profile beads increase the clamp pressure locally, which means the clamp can also be used for plastic piping that is relatively resistant to deformation. ABA Original clamp provides the clamping force needed for an effective joint.

ABA Safe™ Standard-S20: See ABA Original 12 mm Standard.

ABA Safe™ Stainless-S40: See ABA Original 12 mm SS 2333/AISI 304 Stainless.

In both versions the inner ring is made of cold rolled steel SS 2331/AISI 301.

Size	Supplied Ø	Minimum Ø	Rec tightening torque Nm
32-44	43	32	5-6
38-50	49	38	
44-56	55	44	
50-65	64	50	
58-75	74	58	
68-85	84	68	
77-95	94	77	
87-112	111	87	

Technical function – Safe™

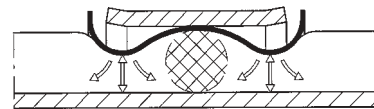


Illustration 1. On tightening, the wave-shaped band causes maximum compression of the rubber at the two beads. The rubber is squeezed inwards towards the middle and outwards towards the edges. As the rubber between the two beads is only marginally affected it retains its elasticity and acts as an "O" ring

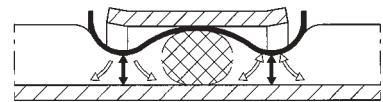
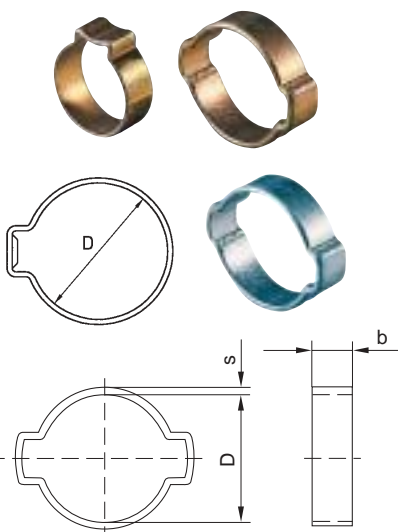


Illustration 2. On heating the band the "O" ring flattens out. As it cools down it will assume its original shape and seal against the end fitting. The design of the ABA Safe™ clamp makes it particularly suitable for soft hoses with relatively thick walls. Plastic piping that is relatively resistant to compression can often be sealed due to the increased pressure at the profile beads.

Ear Clips Standard S10 and Stainless S40



Ear Clips are available in galvanized steel. Sizes marked with (*) are available in stainless steel S40. Application tools are available, see page 15.

1 Ear Clip

Clamping range D	b	s
9-11	6,5	0,8
10-12	0,9	1
11-13*		
12-14	7	1
14-16	1,1	
16-18		1,2

2 Ear Clip

Clamping range D	b	s
5 - 7*	6	0,6
7 - 9	6	0,8
9 - 11	6,5	0,8
11 - 13	6,5	0,9
13 - 15*	7	1,0
14 - 17	7	1,2
15 - 18*	7,5	1,2
17 - 20	7,5	1,2
18 - 21	8	1,2
20 - 23*	8	1,3
22 - 25*	8,5	1,4
23 - 27	8,5	1,4
25 - 28	9	1,4
28 - 31	9	1,4
31 - 34	9,5	1,4
34 - 37	9,5	1,6
37 - 40	10	1,6

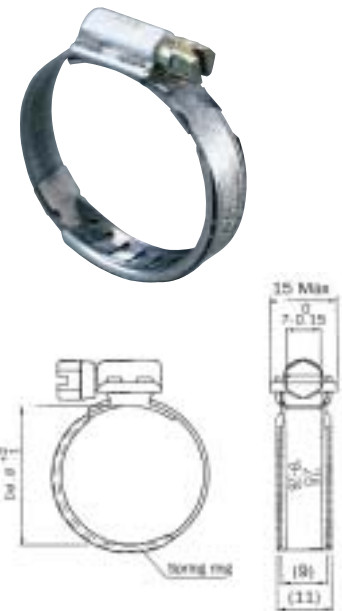
Radial™ Standard S20

The Radial™ Spring Clamp consists of a Standard riveted clamp fitted with an SS 2331/AISI 301 stainless steel liner. Unlike the ABA Safe™ clamp the insert in the Radial™ acts as a *spring*. Inward *radial* pressure on the hose is made possible as the material between the cut-outs and the longitudinal beads act as leaf springs. It is an innovative and very cost efficient design. See Figs. 1 to 3 below.

Standard – S20

Size	Supplied Ø	Minimum Ø	Rec tightening torque Nm
15-24	23	17	3
19-28	27	20	
22-32	31	23	3.5
26-38	37	26	
32-44	43	32	
38-50	49	38	4
44-56	55	44	
50-65	64	50	4.5
58-75	74	58	
68-85	84	68	
77-95	94	77	

Larger sizes on request.



Technical function – Radial™

Fig.1 shows the clamp prior to tightening. During tightening the spring liner flattens as per Fig. 2. As the rubber spreads out the clamp reverts to its original position with nearly all its original power intact under the band. Fig. 3 When the clamp is heated, the spring liner will flatten out. It regains its original shape when cooled down.

Maximum radial movement is 2 mm, which corresponds to 6 mm of tightening at the gear housing (2π). The Radial™ clamp works radially inwards towards the centre at every point, thus ensuring a strong and even tightening force around the hose. This means that the effect of the heating and cooling cycles on the band is minimized, as shown in Fig. 4. Radial also compensates for the rubber not having time to relax during high-speed fitting, also shown in Fig. 4.

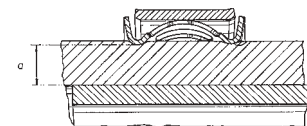
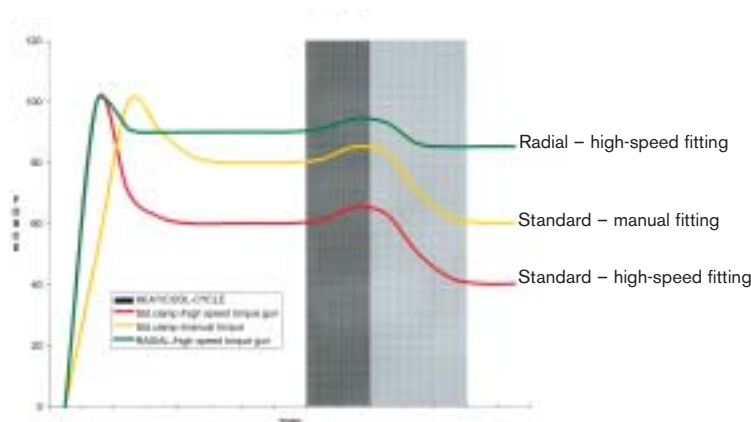


Fig.1 The clamp before tightening.

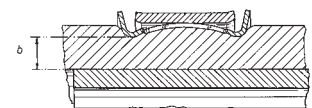


Fig. 2 The clamp immediately after tightening.

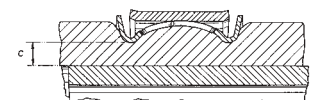


Fig. 3 The clamp after the rubber has spread out.

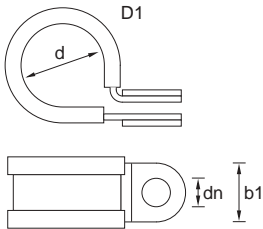
Rubber Lined Clips Standard and Stainless



**Standard type
Clamps**



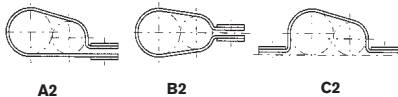
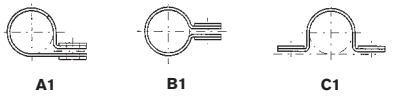
**SQ retaining
Clamps**



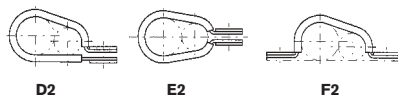
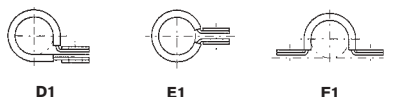
Standard: Form D1, band widths 12, 15 and 20 mm.

Available on request: band width 9 mm and 25 mm, design without rubber profile (forms A1, B1, C1), SQ Clamps for fastening two pipes (forms D2, E2, F2).

SQ forms according to DIN 3016



without rubber profile



with rubber profile

Retaining clamps are primarily used for securing pipes, tubes and cables in place. The rubber profile prevents vibrations from being transmitted, safeguards against scratching and also insulates.

Rubber clips are used in the automotive industry, machine construction, hydraulic and pneumatic applications, process industries, shipbuilding and refrigeration. The SMS range of clips has a solid single layer hot dip galvanized steel. The rubber profile is in EPDM material.

D±0.4	E±0.4	T	D±0.4	E±0.4	T
3.2	14.6	0.8	28.6	27.9	1.3
4.8	15.4	0.8	30.2*	28.6	1.3
6.4	16.2	0.8	31.8	29.4	1.3
7.9	17.0	0.8	33.3*	30.2	1.3
9.5	17.8	0.8	34.9	31.0	1.3
11.1	18.6	0.8	36.5*	31.8	1.3
12.7	19.4	1.0	38.1	32.6	1.3
14.3	20.2	1.0	41.0*	34.0	1.3
15.9	21.0	1.0	44.5	38.0	1.3
17.5	21.8	1.0	47.0*	36.5	1.3
19.0	22.6	1.0	51.0*	44.1	1.3
20.6*	23.4	1.0	54.0*	45.5	1.3
22.2	24.2	1.0	60.0*	43.5	1.3
23.8*	25.0	1.0	65.0*	46.1	1.3
25.4	25.8	1.0	74.0*	51.0	1.3
27.0*	27.1	1.3	110.0*	68.0	1.3

Band width 12,7 mm ABA Standard.

* Stainless steel to order only

SQ Retaining clamps are produced to DIN 3016. The standard form is D1. Bands have reinforced bolt holes for extra strength and rubber profile. Available in W1 material (galvanized steel) and W4 (stainless steel) – other material options and clamp forms available on request.

Nominal diameter (d) mm	Band width (b1) mm	Diameter of hole (dn) mm
4	12	5,3
5	12	5,3
up to		
25	12	5,3
5	15	6,4
...		
8*	15	6,4
10*	15	6,4
12*	15	6,4
14*	15	6,4
15*	15	6,4
16*	15	6,4
17*	15	6,4
18*	15	6,4
20*	15	6,4
24*	15	6,4
25*	15	6,4
28*	15	6,4
up to		
40	15	6,4
10	20	8,4
up to		
50	20	8,4

d can be selected in steps of 1 mm.

Larger nominal diameters on request.

* These sizes are frequently used in the D1 form.

DIN 3016 materials:

W1 = Galvanized steel

W3 = Chrome steel
1.4016/SS2320/AISI430

W4 = Stainless steel
1.4301/SS2333/AISI304

W5 = Stainless steel
1.4571/SS2343/AISI316

Exhaust Pipe Clamp

The Exhaust Pipe Clamp was originally designed by ABA in collaboration with the automotive industry to provide a high and even tightening force around the entire pipe, minimize leakage and be vibration-proof. The wide range of standard clamps covers most vehicles. Stainless material is available on request.

Self-locking screw is standard on 2.0 and 2.5 gauge clamps and facilitates quick and easy tightening with one hand. 1.5 mm and 3 mm are supplied with hexagonal screws. Clamps of size R 71 and larger are not kept in stock.

*=1,5 mm

Class	D1	D2
R27-1.5	27	24
R30-1.5	30	27
R33-1.5	33	30

*=2,0 mm

Class	D1	D2
R36-2.0	36	33
R39.5-2.0	39.5	36.5
R42-2.0	42	39
R49.5-2.0	50	47.5
R51-2.0	51	48
R54.1-2.0	54.1	52
R59.1-2.0	59.1	57

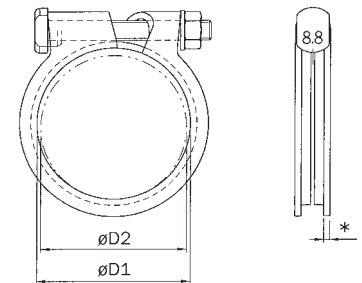
*=2,5 mm

Class	D1	D2
R43.5-2.5	43.5	40.5
R45-2.5	45	42
R46-2.5	46	43
R47-2.5	47	44
R48-2.5	48	45
R49-2.5	49	46
R51-2.5	51	48
R52-2.5	52	49
R54-2.5	54	51
R55-2.5	55	52
R56-2.5	56	53
R58-2.5	58	55
R61-2.5	61	58
R64-2.5	64	61

*=3,0 mm

Class	D1	D2	Screw
R71-3.0	71	67	M10
R74-3.0	74	71	
R94-3.0	94	90	
R96-3.0	96	91	M12
R107-3.0	107	102	
R114-3.0	114	110	M10
R120-3.0	120	116	
R147-3.0	147	142	M12

* Material thickness



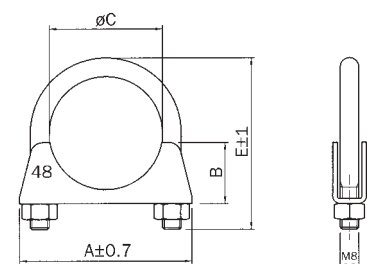
Pipe Clamp

Our standard M8 pipe clamps, produced in Sweden to meet quality standards, are suitable for use with a wide range of pipe diameters. Pipe clamps are not used only in exhaust systems. Other applications include TV aerials, road signs etc.

M10 pipe clamps are available to order as well as other sizes of M8 pipe clamps.

Material: Electro zinc plated steel.

Size	A±0.7	B	C	E±1
25	50	16	25	52
28	53	17.5	28	54
32	57	19	32	60
35	60	20	35	63
38	63	22	38	65
42	67	23.5	42	69
45	70	25.5	45	71
48	73	26	48	73
51	76	26.5	51	76
54	79	28	54	79
57	82.5	29	57	83



Assortments



Assortment 244
65x15x23.4 cm 4.7 kg



Assortment 335
90x24x13.8 cm 8.9 kg



Assortment 270
40x8.5x27 cm 6.3 kg



Assortment 120
28x17x4.5 cm 1.2 kg



Assortment 135
34x24x5 cm 2.9 kg



Assortment 500
36x47x17 cm 12.3 kg



Assortment 130
34x24x5 cm 2.4 kg



Assortment 600
34x24x5 cm 3.3 kg

ABA Banding System

An instant solution for clamping. The ABA Banding System offers you the immediate possibility to make your own clamp from the components. Ideal for service & maintenance. Each system is supplied in a dispenser box containing a full length of band and a number of the unique quick-lock housings with screw. The band is perforated, flexible and in stainless steel. Available in 9 or 12 mm band widths.

ABA Banding System/W2B: Screw and housing: Electro zinc plated and yellow chromated.
Band: AISI 430.

Band width	Description
9 mm	KIT 3 meters with 8 quick-lock housings
12 mm	KIT 3 meters with 6 quick-lock housings
9 mm	KIT 5 meters with 8 quick-lock housings
12 mm	KIT 5 meters with 6 quick-lock housings
9 mm	Bandbox containing 25 meters
12 mm	Bandbox containing 25 meters
9 mm	Quick-lock housing box 100 pcs
12 mm	Quick-lock housing box 100 pcs



Tools



Ear Clip pliers



Dynatool
Dynamometric tool range 0 – 6 Nm with sound indication.



Flexidriver 60 cm



Flexidriver 25 cm

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