




FROM ANDERSTORP, SWEDEN



CLAMPING & CONNECTING PRODUCTS

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We began life, over a hundred years ago, manufacturing fire-fighting equipment. With the invention of a new type of hose clamp, we helped improve the effectiveness of fire-fighting operations at the time. Today, we still firmly believe that quality saves lives. Perhaps that's why our clamps have become the industry benchmark.

ABA represents the flagship brand in the NORMA Group. Over the years, we have built up a strong and loyal following around the world due to the outstanding quality of our products.



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A little piece of metal could seem insignificant, but both you and i know that the quality in every detail is vital. That is why we, since the very start in 1896. And we firmly believe that quality saves lives. Perhaps that is why our hose clamps are considered the best in the industry.

Our clamps with their iconic blue housing are synonymous with quality, reliability and safety the world over. Demanding professionals know that we make no compromises on clamping force, tightening and breaking torque. Ever.



ABA SAFESEAL TECHNOLOGY™

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 clamps are produced in factories certified to ISO 14001 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.

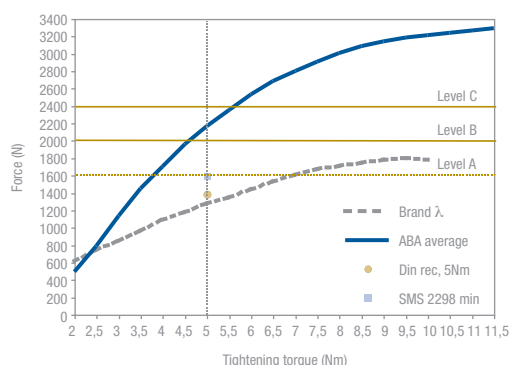


Fig 1. Mechanical efficiency of ABA clamps i.e. the relation tightening torque and sealing force. (2-sector "mechanical efficiency" test. Force: Newton, Speed: 200 rpm.)

OUR GROUP TECHNICAL CENTRE – STATE OF THE ART TEST FACILITIES

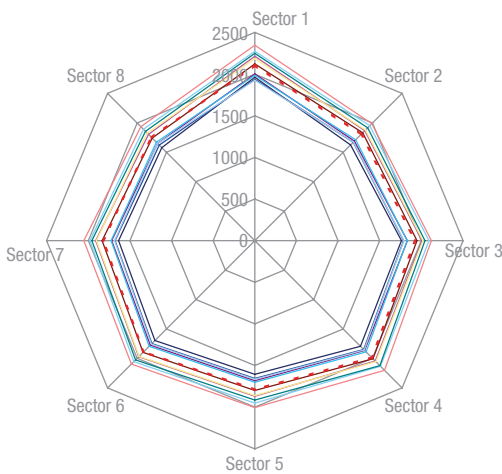


Fig 2. High and consistent quality from clamp to clamp. Each graph is one clamp. (8-sector "one measure" test. Force: Newton, Speed: 200 rpm.)

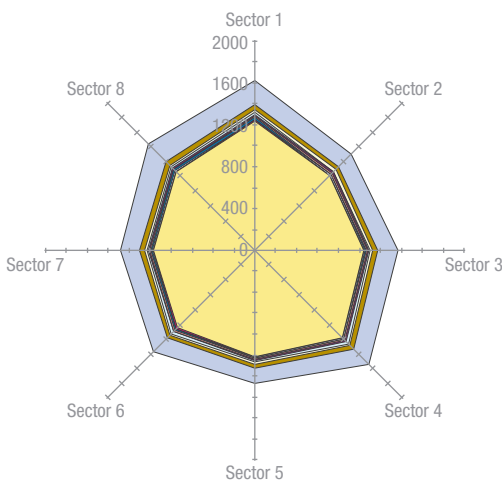


Fig 3. High remaining clamping force thanks to the one piece housing design. (8-sector load test. Force: Newton, Time: 1 min, Time step: 6 sec, Tightening torque: 4,5 Nm.)

Our 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.
- Testing according to SS-ISO 9227 with neutral salt mist spray
- First-class products produced in plants certified to TS 16949:2000. The best steel qualities enable stable production processes and provide a high and even product quality.
- Products produced in plants certified to ISO 14001 and made entirely with recyclable materials.

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 on next page.

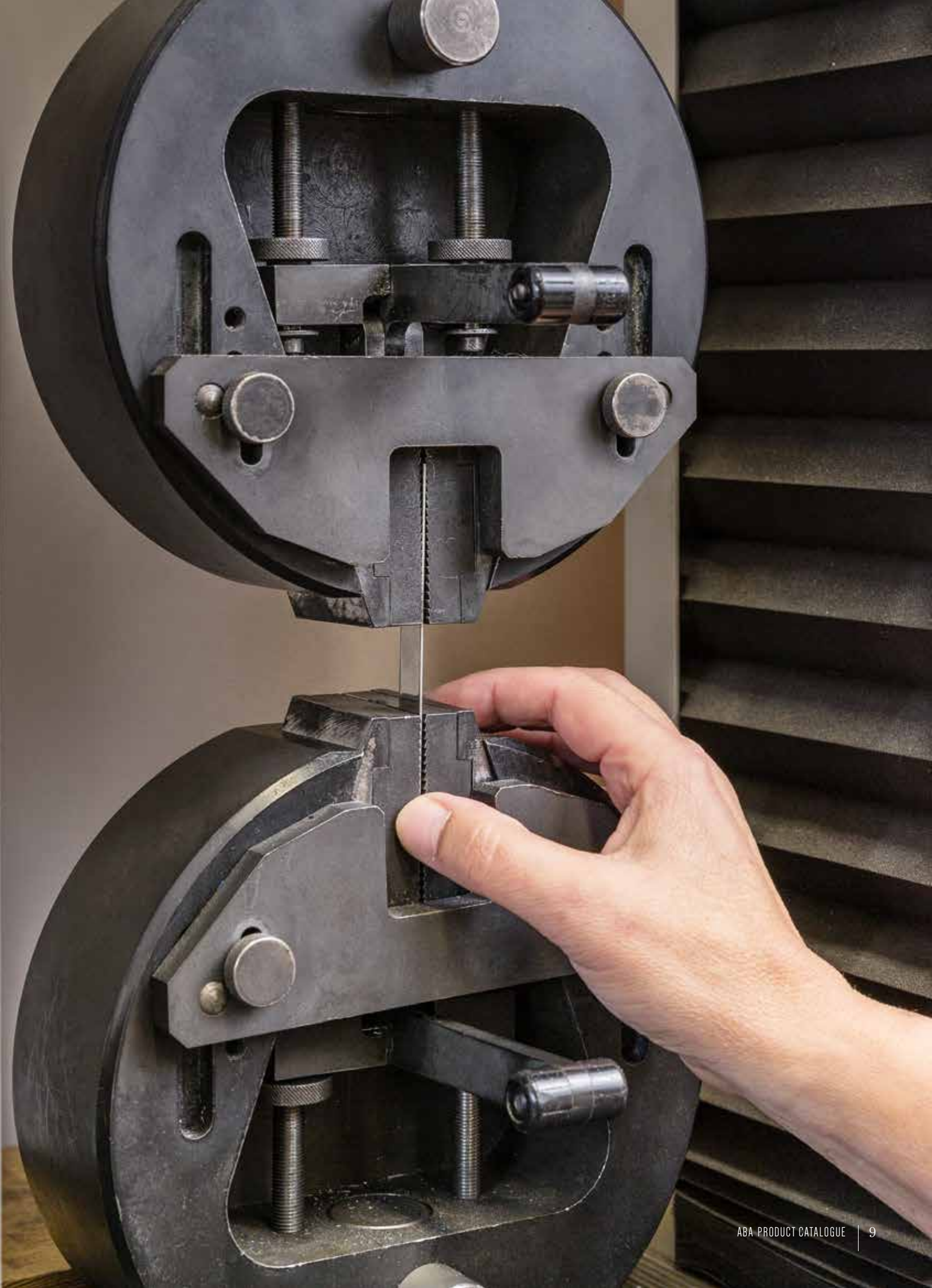
Extensive global expertise

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 plays a vital role. 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 us to perform tests for your specific need – just contact your Area Sales Manager.



PAGE	TYPE	RANGE DIAMETER	BAND WITH	MATERIAL
P14	 ABA Original	15–307 mm	12 mm	Aluzink, stainless steel and acid resistant
P16	 ABA Original SMO	15–307 mm	12 mm	Acid resistant stainless steel
P18	 ABA Nova	8-85 mm	9 mm	Aluzink, stainless steel and acid resistant
P20	 ABA Safe	32-112 mm	12 mm	Aluzink and stainless steel
P22	 ABA Mini	7–17 mm	9 mm	Zinc plated and stainless steel
P26	 Breeze Standard Hi-Torque	25-232 mm	16 mm	Stainless steel
P27	 Breeze Constant-Torque Standard	12-160 mm	14,3 mm	Stainless steel band and screws in different material
P28	 Breeze Constant-Torque Heavy Duty	44-168 mm	16 mm	Stainless steel band and screws in different material
P30	 Breeze Aero BG/BGV	12-160 mm	14.3 mm	Stainless steel band and screws in different material
P32	 Breeze Aero-Seal	11–311 mm	14.2 mm	Stainless steel band and screws in different material
P34	 Breeze Mini	5.6–64 mm	7.9 mm	Stainless steel band and screws in different material



PAGE	TYPE	RANGE DIAMETER	BAND WITH	MATERIAL
P36	 Breeze Power-Seal	11–178 mm	12.7 mm	Stainless steel band and screws in different material
P38	 Breeze liner	13-140 mm	14 mm	Stainless steel band and screws in different material
P40	 Breeze Make-A-Clamp	2.6–30.5 mm	12.7 mm	Stainless steel
P42	 ABA Power clamp	32–175 mm	20 mm	Zinc plated and acid resistant
P44	 ABA Robust acid resistant	17–252 mm	18, 20, 25 mm	Acid resistant
P46	 Breeze T-Bolt	31.8–223.8 mm	19 mm	Stainless steel band and screws in different material
P48	 Breeze T-Bolt Spring Loaded	54–198.4 mm	19 mm	Stainless steel band and screws in different material
P50	 Tool clips	6-93 mm	NA	Zinc plated and nylon coated
P52	 Pen & pencil clips	7-15 mm	NA	Spring steel and nickel plated
P54	 Rubber lined clips	3.2-110 mm	12 mm	Zinc plated steel and stainless steel
P56	 Low profile cable tie	30-240 mm	4.52, 7.62 mm	6/6 Nylon grade

PAGE	TYPE	RANGE DIAMETER	BAND WITH	MATERIAL
P58 	ABA Assortment 270	8-56 mm	9 mm	Aluzink and stainless steel
P58 	ABA Assortment 120	8-15 mm	9 mm	Zinc plated
P59 	ABA Assortment 335	8-65 mm	9 mm	Aluzink
P59 	ABA Assortment 244	8-65 mm	9 mm	Aluzink
P60 	Low profile cable tie mounting tool			
P60 	Low profile cable tie demounting tool			
P60 	Pliers for stainless steel cable tie			
P60 	ABA Flexidriver - 25 cm			
P60 	ABA Flexidriver - 60 cm			
P60 	ABA Dynamometric screwdriver			



S10

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

S20

Material and surface treatment chosen by the manufacturer. Min. 200 hours to red rust.*

S30

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

S40

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

S50

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

S60

All parts in acid resistant steel 1.4547/SS2378. Min. time to red rust – well over 4000 hours.*

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

Materials International Standards

Standard	DIN	AISI/AS	BS	AFNOR NF	SS	SUS
S10, W1	Completely zinc plated steel					
S20	Manufacturer's choice min. 200 hours to red rust.					
W2	1. 4016 in housing and band. Screw: 72 hours to red rust.					
S30, W3	1.4016	430	430 S 17	Z8 C17	2320	430
S40, W4	1.4301	304	304 S 15	Z6 CN 18-09	2332	304
S50, W5	1.4401	316	316 S 31	Z3 CND 17-11-1	2343	316
S60	1.4547					

SS = Swedish Standard.

DIN = Deutsches Institut für Normung.

AISI = American Iron and Steel Institute.

ABA ORIGINAL



- ① Extra strong one-piece pressed housing
- ② Rolled-up band edges
- ③ Smooth band underside

There is only one Original

ABA Original clamps feature an extra strong one-piece pressed housing, rolled-up band edges and a smooth band underside that protects the hose. ABA Original – the trouble-free clamp with high tightening force and high breaking torque.

Advantages at a glance

- High clamping force
- High breaking torque
- Protection of the hose thanks to the smooth band underside
- Every clamp is date stamped for traceability

Typical applications

- Machine building
- Chemical industry
- Irrigation systems
- Railway
- Agricultural machines
- Building machines
- Marine

Materials



ABA stainless steel clamps are the natural choice for applications where corrosion resistance is required.

ABA Original Aluzink S20

- The band is made of Aluzink for added corrosion resistance, this gives three times the protection offered by conventional galvanized steel

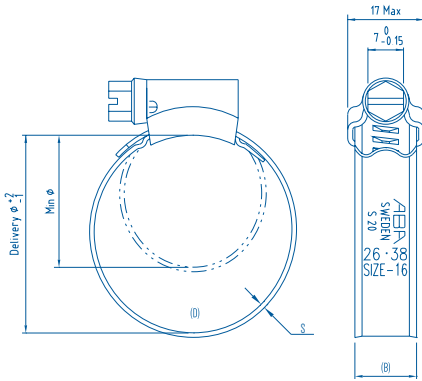
ABA Original Stainless S40

- All parts are made of SS 2333/AISI 304 stainless steel

ABA Original Acid-Resistant S50

- All parts are made of SS 2343/AISI 316 stainless steel
- Natural choice for applications where premium corrosion resistance is required

Dimensions



Specifications

ABA ORIGINAL 12 MM						
Width (B mm)	Clamping ranges (D mm)	Clamping ranges (D in.)	Thickness (S mm)	S20 Product No.	S40 Product No.	S50 Product No.
12	15-24	9/16-15/16	0.8	0813 4001 020	0813 4003 020	0813 4034 020
	19-28	3/4-1 1/8	0.8	0813 4001 024	0813 4003 024	0813 4034 024
	22-32	7/8-1 1/4	0.8	0813 4001 027	0813 4003 027	0813 4034 027
	26-38	1-1 1/2	0.8	0813 4001 032	0813 4003 032	0813 4034 032
	32-44	1 1/4-1 3/4	0.8*	0813 4001 038	0813 4003 038	0813 4034 038
	38-50	1 1/2-2	0.8*	0813 4001 044	0813 4003 044	0813 4034 044
	44-56	1 3/4-2 3/16	0.8*	0813 4001 050	0813 4003 050	0813 4034 050
	50-65	2-2 9/16	0.8*	0813 4001 058	0813 4003 058	0813 4034 058
	58-75	2 1/4-2 15/16	0.8*	0813 4001 067	0813 4003 067	0813 4034 067
	68-85	2 11/16-3 3/8	0.8*	0813 4001 077	0813 4003 077	0813 4034 077
	77-95	3-3 3/4	0.8*	0813 4001 086	0813 4003 086	0813 4034 086
	87-112	3 7/16-4 7/16	0.8*	0813 4001 100	0813 4003 100	0813 4034 100
	104-138	4 1/16-5 7/16	0.8*	0813 4001 121	0813 4003 121	0813 4034 121
	130-165	5 1/8-6 1/2	0.8*	0813 4001 148	0813 4003 148	0813 4034 148
	150-180	5 15/16-7 1/16	0.8*	0813 4001 165	0813 4003 165	0813 4034 165
	175-205	6 7/8-8 1/16	0.8*	0813 4001 190	0813 4003 190	0813 4034 190
	200-231	7 7/8-9 1/16	0.8*	0813 4001 216	0813 4003 216	0813 4034 216
	226-256	8 7/8-10 1/16	0.8*	0813 4001 241	0813 4003 241	0813 4034 241
	251-282	9 7/8-11 1/8	0.8*	0813 4001 267	0813 4003 267	0813 4034 267
	277-307	10 15/16-12 1/16	0.8*	0813 4001 292	0813 4003 292	0813 4034 292

* 1.0 for S20

ABA ORIGINAL SMO



- ① Hexagon screw
- ② Traceability code
- ③ One-piece pressed housing
- ④ Smooth band underside

For the most extreme environments

Produced in SMO 254 material for extreme environments where lower grade stainless steel or acid proof material is not enough. SMO 254 is an austenitic stainless steel designed for maximum resistance to pitting and crevice corrosion and has a very good resistance to various types of stress corrosion.

Advantages at a glance

- Every clamp is date stamped for traceability
- Excellent resistance against pitting and crevice corrosion
- Very high resistance against stress corrosion cracking
- Strong performance under heavy mechanical loads

Typical applications

- Wire for parts for seawater handling equipments
- Chemical and food processing equipments
- Oil and gas production equipments
- Marine and shipbuilding

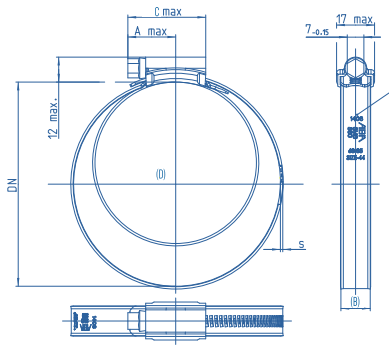
Material



ABA Original SMO S60

- This steel is especially suited for high chloride environments such as brackish water, seawater and high chloride resistance streams.
- All parts produced from SMO 254 material / SS 2378 / EN 1.4547 / S31254
- Min time to red rust - well over 4000 hours

Dimensions



Specifications

ABA ORIGINAL SMO 12 MM				
Width (B mm)	Clamping ranges (D mm)	Clamping ranges (D in.)	Thickness (S mm)	S60 Product No.
12	15-24	9/16-15/16	0.8	0813 0043 020
	19-28	3/4-1 1/8	0.8	0813 0043 024
	22-32	7/8-1 1/4	0.8	0813 0043 027
	26-38	1-1 1/2	0.8	0813 0043 032
	32-44	1 1/4-1 3/4	0.8	0813 0043 038
	38-50	1 1/2-2	0.8	0813 0043 044
	44-56	1 3/4-2 3/16	0.8	0813 0043 050
	50-65	2-2 9/16	0.8	0813 0043 058
	58-75	2 1/4-2 15/16	0.8	0813 0043 067
	68-85	2 11/16-3 3/8	0.8	0813 0043 077
	77-95	3-3 3/4	0.8	0813 0043 086
	87-112	3 7/16-4 7/16	0.8	0813 0043 100
	104-138	4 1/16-5 7/16	0.8	0813 0043 121
	130-165	5 1/8-6 1/2	0.8	0813 0043 148
	150-180	5 15/16-7 1/16	0.8	0813 0043 165
	175-205	6 7/8-8 1/16	0.8	0813 0043 190
	200-231	7 7/8-9 1/16	0.8	0813 0043 216
226-256	8 7/8-10 1/16	0.8	0813 0043 241	
251-282	9 7/8-11 1/8	0.8	0813 0043 267	
277-307	10 15/16-12 1/16	0.8	0813 0043 292	

ABA NOVA



- ① **Specially designed screw** – Improved idle torque
- ② **Compact housing** – Better and more evenly spread clamping force
- ③ **Mechanically locked** – No welding points
- ④ **Band marking** – Material & size marked on each clamp
- ⑤ **Traceability** code of each clamp

The highly versatile clamp

ABA Nova clamps incorporate a newly designed housing positioned to more evenly distribute a high clamping force and give safer guidance of the emerging band. The short housing saddle also provides optimal contact pressure on the hose.

The New Generation design results in a clamping force reserve that resists breaks for a safe seal connection. In addition, smooth undersides and rolled-up band edges are gentle on the hose and reduce risk of leakage as well.

Advantages at a glance

- High clamping force
- High break torque
- Lower idle torque
- Every clamp is date stamped for traceability
- Requires very low packing space

Materials



The highly versatile ABA Nova clamp is an ideal choice for smaller dimensions of hoses.

Typical applications

- Machine building
- Chemical industry
- Irrigation systems
- Railway
- Agricultural machines
- Building machines
- Marine

ABA Nova Aluzink S20

- The band is made of Aluzink for added corrosion resistance, this gives three times the protection offered by conventional galvanized steel

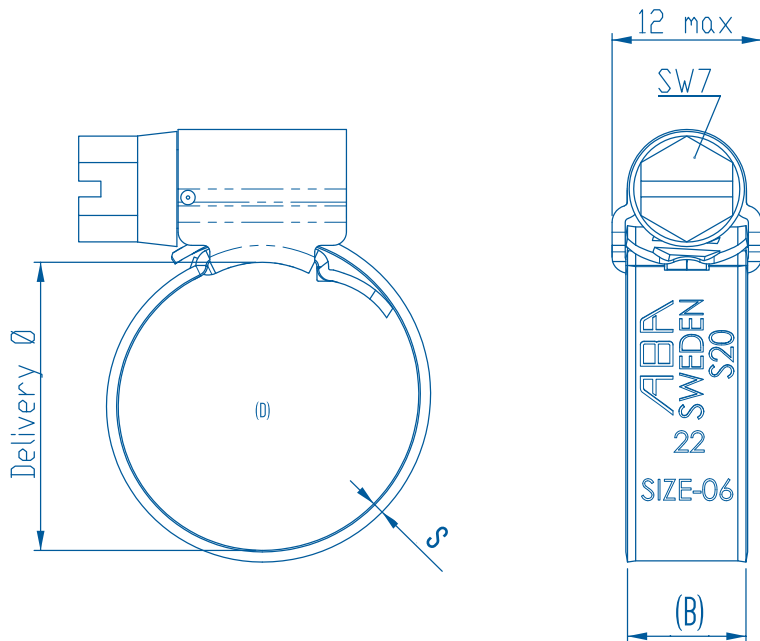
ABA Nova Stainless S40

- 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
- Natural choice for applications where premium corrosion resistance is required
- This not only ensures premium corrosion resistance, it also prevents abrasion caused by using different material grades.

Dimensions



Specifications

ABA NOVA 9 MM						
Width (B mm)	Clamping ranges (D mm)	Clamping ranges (D in.)	Thickness (S mm)	S20 Product No.	S40 Product No.	S50 Product No.
9	8-14	5/16-9/16	0.8	0811 6108 011	0811 6110 011	0811 6112 011
	11-17	7/16-11/16	0.8	0811 6108 014	0811 6110 014	0811 6112 014
	13-20	1/2-13/16	0.8	0811 6108 017	0811 6110 017	0811 6112 017
	15-24	9/16-15/16	0.8	0811 6108 020	0811 6110 020	
	19-28	3/4-11/8	0.8	0811 6108 024	0811 6110 024	
	22-32	7/8-11/4	0.8	0811 6108 027	0811 6110 027	
	26-38	1-1 1/2	0.8	0811 6108 032	0811 6110 032	
	32-44	1 1/4-1 3/4	0.8*	0811 6108 038		
	38-50	1 1/2-2	0.8*	0811 6108 044		
	44-56	1 3/4-2 3/16	0.8*	0811 6108 050		
	50-65	2-2 9/16	0.8*	0811 6108 058		
	58-75	2 1/4-2 15/16	0.8*	0811 6108 067		
	68-85	2 11/16-3 3/8	0.8*	0811 6108 077		
	70-90	2 3/4-3 9/16	0.8*	0811 6109 080		
	80-100	3 1/8-3 15/16	0.8*	0811 6109 090		
	90-110	3 9/16-4 5/16	0.8*	0811 6109 100		
	100-120	3 15/16-4 3/4	0.8*	0811 6109 110		
	110-130	4 5/16-5 1/8	0.8*	0811 6109 120		
	120-140	4 3/4-5 1/2	0.8*	0811 6109 130		
	130-150	5 1/8-5 15/16	0.8*	0811 6109 140		
	140-160	5 1/2-6 5/16	0.8*	0811 6109 150		

*1.0 for S20

ABA SAFE



- ① Extra strong one-piece pressed housing
- ② Smooth inner band
- ③ Spring insert

The flexible clamp

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. Safe™ clamp provides the clamping force needed for an effective joint.

Advantages at a glance

- Protect soft hoses from damage
- Insert made of stainless steel in all cases
- Every clamp is date stamped for traceability

Typical applications

- Plastic ducts or soft hose.

Materials



ABA Safe Aluzink S20

- The band is made of Aluzink for added corrosion resistance this gives three times the protection offered by conventional galvanized steel

ABA Safe Stainless S40

- All parts are made of SS 2333/AISI 304 stainless steel
- Every clamp is date stamped for traceability This not only ensures premium corrosion resistance, it also prevents abrasion caused by using different material grades.

Safe characteristics

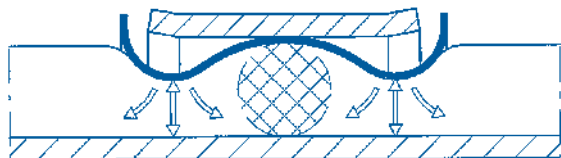


Illustration 1. On tightening, the wave-shaped band causes maximum compression of the rubber at the two beads. The rubber is squeezed inwards towards the middle and outwards towards the edges. As the rubber between the two beads is only marginally affected it retains its elasticity and acts as an "O"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

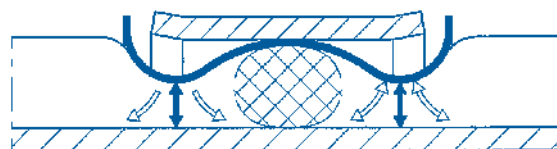
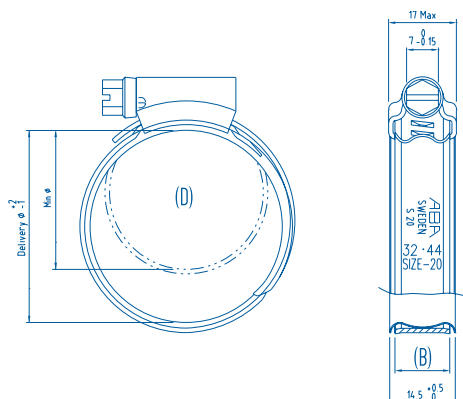


Illustration 2. On heating the band the "O" ring flattens out. As it cools down it will assume its original shape and seal against the end fitting. The design of the Safe™ clamp makes it particularly suitable for soft hoses with relatively thick walls. Plastic piping that is relatively resistant to compression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

Dimensions



Specifications

ABA SAFE™ 12 MM					
Width (B mm)	Clamping ranges (D mm)	Clamping ranges (D in.)	Thickness (S mm)	S20 Product No.	S40 Product No.
12	32-44	1 1/4-1 3/4	0.8*	0813 4008 038	0813 4017 038
	38-50	1 1/2-2	0.8*	0813 4008 044	0813 4017 044
	44-56	1 3/4-2 3/16	0.8*	0813 4008 050	0813 4017 050
	50-65	2-2 9/16	0.8*	0813 4008 058	0813 4017 058
	58-75	2 1/4-2 15/16	0.8*	0813 4008 067	0813 4017 067
	68-85	2 11/16-3 3/8	0.8*	0813 4008 077	0813 4017 077
	77-95	3-3 3/4	0.8*	0813 4008 086	0813 4017 086
	87-112	3 7/16-4 7/16	0.8*	0813 4008 100	0813 4017 100

* 1.0 for S20

ABA MINI



- ① **Rolled-up band edges**
- ② **Band tongue** that fits under the hose is profiled for added strength.
- ③ **Hexagonal head** and can be tightened with a flexible socket.
- ④ **The nut is retained** even if the screw is removed.

A durable solution for quick and safe clamping

ABA Mini Standard clamp is particularly suitable for use on small, thin-walled hoses. This little clamp provides an excellent clamping force well over screwless clamps.

Advantages at a glance

- Excellent clamping force well over screwless clamps.
- The band is stamped with the ABA brand name and its size.

Typical applications

- For small thin-walled hoses

Materials

S10	S20	S30	S40	S50	S60
(W1)			(W4)		
X			X		

Type of bands housing and screw

ABA Mini S10 combi slot screw.

- Pre-galvanized clamp. Combi slot screw permits use of various installation tools.

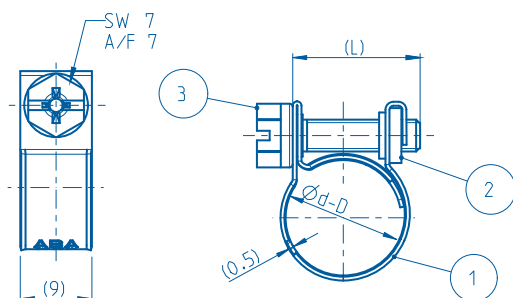


ABA Mini S40 cross slot screw.

- Durable small clamp. Stainless steel construction is ideal for demanding environments.



Dimensions



Specifications

ABA MINI					
Width	Clamping ranges	Clamping ranges	Thickness	S10	S40
(B mm)	(D mm)	(D in.)	(S mm)	Product No.	Product No.
9	7	1/4	0.5	0810 6101 007	0810 3002 007
	8	5/16	0.5	0810 6101 008	0810 3002 008
	9	3/8	0.5	0810 6101 009	0810 3002 009
	10	3/8	0.5	0810 6101 010	0810 3002 010
	11	7/16	0.5	0810 6101 011	0810 3002 011
	12	1/2	0.5	0810 6101 012	0810 3002 012
	13	1/2	0.5	0810 6101 013	0810 3002 013
	14	9/16	0.5	0810 6101 014	0810 3002 014
	15	9/16	0.5	0810 6101 015	0810 3002 015
	16	5/8	0.5	0810 6101 016	0810 3002 016
	17	11/16	0.5	0810 6101 017	0810 3002 017





BREEZE STANDARD HI-TORQUE



- ① Incredible torquing drive, sealing pressure and vibration resistance
- ② Inner liner to protect soft hose
- ③ Eight screw-threads are engaged in the band simultaneously
- ④ 7.9mm hexagonal slotted screw

Fixing traffic signs

The strongest worm-gear clamp made in the world today. Withstands more than 3 times the SAE torque requirements for Type F worm-gear clamps. The Hi-Torque Clamp is produced using components entirely manufactured from stainless steel.

The construction of the worm-drive housing on the band facilitates installation of a wide range of signs. The recommended tightening torque for secure and reliable installation is 16 Nm and the breaking torque is more than 20 Nm.

Advantages at a glance

- Very high break torque
- Quadra-Lock housing construction
- Secure and reliable installation
- No sharp edges to injure the installer
- Easy installation of two signs on one pole

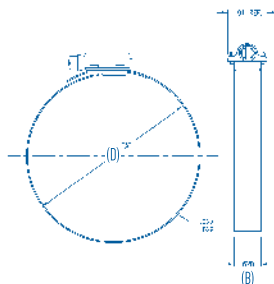
Materials



Typical applications

- Traffic signs, street signs, billboards and illuminated signs installations
- Heavy duty sealing applications
- Agricultural
- Chemical Industry
- Food Processing
- Fluid Transfer

Dimensions



Specifications

BREEZE STANDARD HI-TORQUE				
Width (B mm)	Clamping ranges (D mm)	Clamping ranges (D in.)	Hexagonal slotted screw (mm)	S40 Product No.
16	25-45	1-1 3/4	7.9	0156 6021 035
	32-54	1 1/4-2 1/8		0156 6021 043
	45-67	1 3/4-2 5/8		0156 6021 056
	57-79	2 1/4-3 1/8		0156 6021 068
	70-92	2 3/4-3 5/8		0156 6021 081
	83-105	3 1/4-4 1/8		0156 6021 094
	95-118	3 3/4-4 5/8		0156 6021 106
	108-130	4 1/4-5 1/8		0156 6021 119
	121-143	4 3/4-5 5/8		0156 6021 132
	133-156	5 1/4-6 1/8		0156 6021 144
	146-168	5 3/4-6 5/8		0156 6021 157
	159-181	6 1/4-7 1/8		0156 6021 170
	172-194	6 3/4-7 5/8		0156 6021 183
	184-206	7 1/4-8 1/8		0156 6021 195
	197-219	7 3/4-8 5/8		0156 6021 208
	210-232	8 1/4-9 1/8		0156 6021 221

BREEZE CONSTANT-TORQUE STANDARD



- ① Custom designed stainless steel Belleville washer springs
- ② Inner liner which protects all types of hoses from damage

Constant tension clamp

This Breeze Constant Torque Standard (HKFK) is a breakthrough in clamping technology. A Belleville spring mechanism permits the constant torque clamp to automatically increase or decrease its own diameter due to changes in operational or environmental temperatures. The unique design eliminates “cold flow” leaks.

The Standard version is based on the Breeze Aero and comes with 8 Belleville washer springs for the smaller sizes and 10 washers for bigger sizes for an increased performance in demanding applications.

Advantages at a glance

- Increased sealing reliability across a wide temperature range
- Automatic re-tensioning during temperature changes
- High performance
- Inner liner helps to maintain consistent sealing pressure

Materials



*Classified by corrosion resistance. Band material S40/Screw material S10. According to DIN norms it would be comparable to W2.

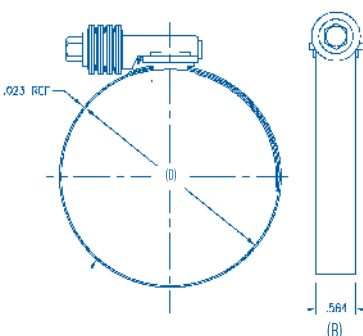
Typical applications

- Commercial vehicle
- Passenger vehicle
- Industrial
- Infrastructure

Specifications

BREEZE CONSTANT TORQUE STANDARD						
Width (B mm)	Clamping ranges (D mm)	Clamping ranges (D in.)	Belleville springs (Qty. of washers)	S10 Product No. Carbon screw	S40 Product No. 304 Stainless screw	
14,3	12-22	1/2-7/8	8	0362 6105 017	0362 6101 017	
	16-27	5/8-1 1/16		0362 6105 022	0362 6101 022	
	20-32	3/4-1 1/4		0362 6105 026	0362 6101 026	
	25-40	1-1 9/16		0362 6105 033	0362 6101 033	
	30-45	1 3/16-1 3/4		0362 6105 038	0362 6101 038	
	35-50	1 3/8-2		0362 6105 043	0362 6101 043	
	40-60	1 9/16-2 3/8		0362 6105 050	0362 6101 050	
	50-70	2-2 3/4		0362 6105 060	0362 6101 060	
	60-80	2 3/8-3 1/8		0362 6105 070	0362 6101 070	
	70-90	2 3/4-3 9/16		0362 6105 080	0362 6101 080	
	80-100	3 1/8-4		10		0362 6102 090
	90-110	3 1/2-4 3/8				0362 6102 100
	100-120	4-4 3/4				0362 6102 110
	110-130	4 3/8-5 1/8				0362 6102 120
120-140	4 3/4-5 1/2		0362 6102 130			
130-150	5 1/8-5 7/8		0362 6102 140			
140-160	5 1/2-6 1/4			0362 6102 150		

Dimensions



BREEZE CONSTANT-TORQUE HEAVY DUTY



- ① Custom designed stainless steel Belleville washer springs
- ② Inner liner which protects all types of hoses from damage
- ③ 10mm hexagonal screw

Constant tension clamp

The Breeze Constant-Torque® Heavy Duty (HKF) is a breakthrough in clamping technology. A Belleville spring mechanism permits the constant torque clamp to automatically increase or decrease its own diameter due to changes in operational or

environmental temperatures. The unique design eliminates “cold flow” leaks. With its 16mm band width and the 10 Belleville washer springs this clamps is the perfect solution for heavy duty applications exposed to temperature changes.

Advantages at a glance

- Increased sealing reliability across a wide temperature range
- Automatic re-tensioning during temperature changes
- Very high performance
- Per SAE standard J1508 Type “SLHD”
- Inner liner helps to maintain consistent sealing pressure

Materials

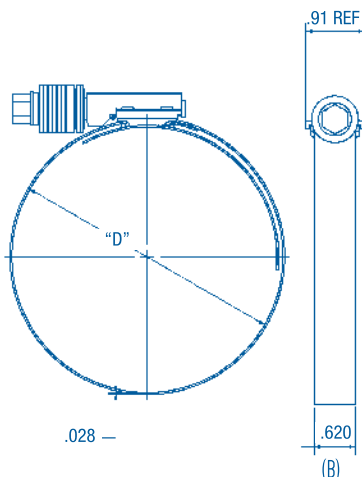


* Classified by corrosion resistance. Band material S40/Screw material S10. According to DIN norms it is comparable to W2

Typical applications

- Commercial vehicle
- Passenger vehicle
- Industrial
- Infrastructure

Dimensions

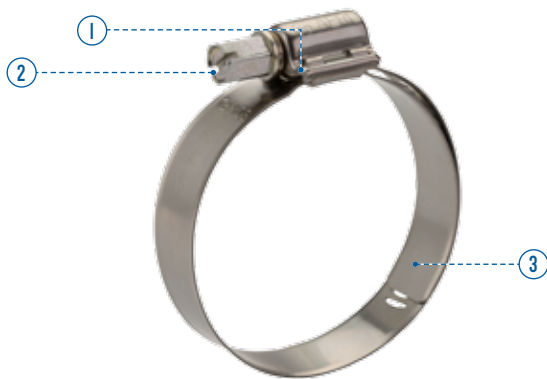


Specifications

BREEZE CONSTANT TORQUE HEAVY DUTY				
Width (B mm)	Clamping ranges (D mm)	Clamping ranges (D in.)	Belleville springs (Qty. of washers)	S10 Product No. Carbon screw
16	44-67	1 3/4-2 5/8	10	0156 8020 056
	57-79	2 1/4-3 1/8		0156 8020 068
	70-92	2 3/4-3 5/8		0156 8020 081
	83-105	3 1/4-4 1/8		0156 8020 094
	95-117	3 3/4-4 5/8		0156 8020 106
	108-130	4 1/4-5 1/8		0156 8020 119
	121-143	4 3/4-5 5/8		0156 8020 132
	133-156	5 1/4-6 1/8		0156 8020 145
	146-168	5 3/4-6 5/8		0156 8020 157



BREEZE AERO BG/BGV[®]



- ① **High-strength Quadra-Lock housing construction**
- ② **8mm hexagonal slotted screw**
- ③ **Lined band protects hose from damage**

The strong clamp for every situation

The Breeze Aero BG is the clamp of choice for applications that require a bit more power than the standard. It was designed to seal high pressure connections transporting air, water or hydraulic medias. The BGV offers an innovative quick-latch solution for a

much faster mounting of the clamp. An integral extension of the band as an inner liner protects soft-surface hose (silicone and others) from damage caused by extrusion or shearing through the band slots.

Advantages at a glance

- High performance
- Quick-latch closure available
- Inner liner which protects all types of hoses from damage
- SAE Standard J1508 Type F

Materials



*Classified by corrosion resistance. Band material S40/Screw material S10. According to DIN norm it is comparable to W2

Typical applications

- Industrial
- Passenger vehicle
- Commercial vehicle
- Air and water lines
- Hydraulic lines

Type of bands housing and screw

Breeze Aero BG

- Hexagonal slotted screw permits use of various installation tools.

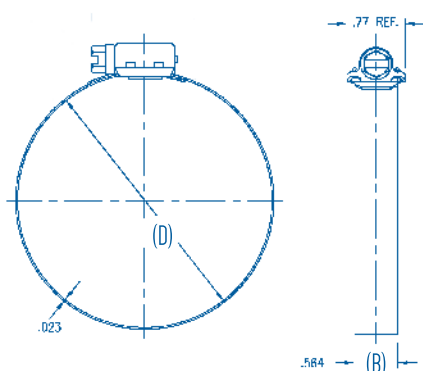


Breeze Aero BGV

The quick-latch closing mechanism enables a much faster installation by opening the connection between screw and band.



Dimensions



Specifications

BREEZE AERO BG			
Width (B mm)	Clamping ranges (D mm)	Clamping ranges (D in.)	S10 Product No.
14.3	12-22	1/2-7/8	Carbon screw 0362 7000 017
	16-27	5/8-1 1/16	0362 7000 022
	20-32	3/4-1 1/4	0362 7000 026
	25-40	1-1 9/16	0362 7000 033
	30-45	1 3/16-1 3/4	0362 7000 038
	35-50	1 3/8-2	0362 7000 043
	40-60	1 9/16-2 3/8	0362 7000 050
	50-70	2-2 3/4	0362 7000 060
	60-80	2 3/8-3 1/8	0362 7000 070
	70-90	2 3/4-3 9/16	0362 7000 080
	80-100	3 1/8-4	0362 7000 090
	90-110	3 1/2-4 3/8	0362 7000 100
	100-120	4-4 3/4	0362 7000 110
	110-130	4 3/8-5 1/8	0362 7000 120
	120-140	4 3/4-5 1/2	0362 7000 130
	130-150	5 1/8-5 7/8	0362 7000 140
140-160	5 1/2-6 1/4	0362 6000 150	

BREEZE AERO BGV				
Width (B mm)	Clamping ranges (D mm)	Clamping ranges (D in.)	S10 Product No.	S40 Product No.
14.3	25-40	1-1 9/16	Carbon screw 0362 7001 033	304 Stainless screw 0362 7010 033
	30-45	1 3/16-1 3/4	0362 7001 038	0362 7010 038
	35-50	1 3/8-2	0362 7001 043	0362 7010 043
	40-60	1 9/16-2 3/8	0362 7001 050	0362 7010 050
	50-70	2-2 3/4	0362 7001 060	0362 7010 060
	60-80	2 3/8-3 1/8	0362 7001 070	0362 7010 070
	70-90	2 3/4-3 9/16	0362 7001 080	0362 7010 080
	80-100	3 1/8-4	0362 7001 090	0362 7010 090
	90-110	3 1/2-4 3/8	0362 7001 100	0362 7010 100
	100-120	4-4 3/4	0362 7001 110	0362 7010 110
	110-130	4 3/8-5 1/8	0362 7001 120	0362 7010 120
	120-140	4 3/4-5 1/2	0362 7001 130	0362 7010 130
	130-150	5 1/8-5 7/8	0362 7001 140	0362 7010 140
	140-160	5 1/2-6 1/4	0362 6001 150	0362 6010 150

BREEZE AERO-SEAL



- ① **Hex head Screw**
- ② **Heavy-duty Quadra-Lock design**
- ③ **Conical Arched Perforated Slots:** More steel between perforations for added strength and smoother worm-drive engagement

The original perforated stainless steel worm-drive clamp

A heavy-duty Quadra-Lock construction enables far more tightening torque to be delivered to the band perforations. Use for aircraft and heavy-duty industrial applications.

Advantages at a glance

- Very high break torque
- Different screws depending on uses
- Stronger performance

Typical applications

- Commercial vehicles
- Passenger vehicles
- Industrial

Materials

S10	S20	S30 (W3)	S40 (W4)	S50	S60
×	*	×	×		

* Classified by corrosion resistance. Band material S40/Screw material S10. According to DIN norm it is comparable to W2.

** Classified by corrosion resistance. Band material S40/Screw material S30.

Type of bands housing and screw

Thumb/Wing screw

- Only available in S30 material

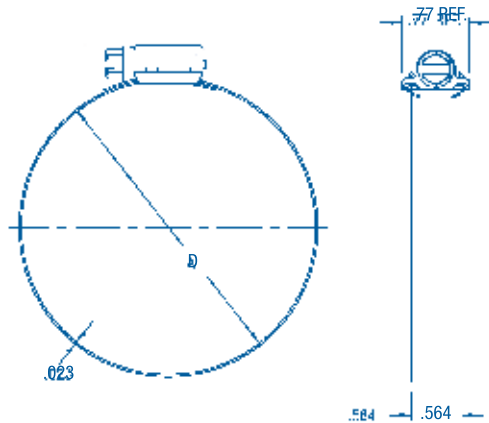


Safe-seal screw head

- Safe-seal collared screw.
Only available in S30 material



Dimensions



Specifications

BREEZE AERO-SEAL						
Width (mm)	Clamping ranges (D mm)	Clamping ranges (D in.)	Hexagonal slotted screw (mm)	S10 Product No. Carbon Screw	S30 Product No. 410 Stainless Screw*	S40 Product No. 304 Stainless Screw
14.2	11-20	7/16-13/16	7.9	0360 0000 016	0360 0020 016	0360 0030 016
	13-23	1/2-15/16		0360 0000 018	0360 0020 018	0360 0030 018
	14-27	9/16-11/16		0360 0000 021	0360 0020 021	0360 0030 021
	17-32	11/16-11/4		0360 0000 025	0360 0020 025	0360 0030 025
	21-38	13/16-11/2		0360 0000 030	0360 0020 030	0360 0030 030
	21-44	13/16-1 3/4		0360 0000 033	0360 0020 033	0360 0030 033
	27-51	11/16-2		0360 0000 039	0360 0020 039	0360 0030 039
	33-57	15/16-2 1/4		0360 0000 045	0360 0020 045	0360 0030 046
	40-64	1 9/16-2 1/2		0360 0000 052	0360 0020 052	0360 0030 052
	46-70	1 13/16-2 3/4		0360 0000 058	0360 0020 058	0360 0030 058
	52-76	2 1/16-3		0360 0000 064	0360 0020 064	0360 0030 064
	59-83	2 5/16-3 1/4		0360 0000 071	0360 0020 071	0360 0030 071
	65-89	2 9/16-3 1/2		0360 0000 077	0360 0020 077	0360 0030 077
	71-95	2 13/16-3 3/4		0360 0000 083	0360 0020 083	0360 0030 083
	78-102	3 1/16-4		0360 0000 090	0360 0020 090	0360 0030 090
	84-108	3 5/16-4 1/4		0360 0000 096	0360 0020 096	0360 0030 096
	91-114	3 9/16-4 1/2		0360 0010 103	0360 0020 103	0360 0030 103
	48-127	1 7/8-5		0360 0000 088	0360 0020 088	0360 0030 088
	64-140	2 1/2-5 1/2		0360 0000 102	0360 0020 102	0360 0030 102
	79-152	3 1/8-6		0360 0000 116	0360 0020 116	0360 0030 116
	92-165	3 5/8-6 1/2		0360 0000 129	0360 0020 129	0360 0030 129
	105-178	4 1/8-7		0360 0000 142	0360 0020 142	0360 0030 142
	143-216	5 5/8-8 1/2		0360 0000 180	0360 0020 180	0360 0030 180
	181-254	7 1/8-10		0360 0000 218	0360 0020 218	0360 0030 218
	238-311	9 3/8-12 1/4		0360 0000 275	0360 0020 275	0360 0030 275

*410 Stainless Steel Hex Screw also available with thumb/wing screw and safety collar screw

BREEZE MINI



- ① **One Piece Housing** provides strength and stability
- ② **Conical Arched Perforated Slots:** More steel between perforations for added strength and smoother worm-drive engagement

A lightweight and streamlined clamp

The streamlined configuration allows for installation in tight fitting or difficult to reach areas. This clamp creates high sealing pressure with only 1,2 to 1,7 nm of installation torque.

Advantages at a glance

- Installation in tight fitting or difficult to reach areas
- High sealing pressure with low torque
- Used in small diameter applications

Typical applications

- Commercial vehicles
- Passenger vehicles
- Industrial
- Infrastructure
- Residential
- Air & fuel lines

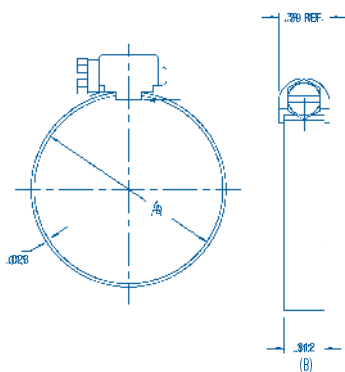
Materials



* Classified by corrosion resistance. Band material S40/Screw material S10. According to DIN norm it is comparable to W2.

** Classified by corrosion resistance. Band material S40/Screw material S30.

Dimensions



Specifications

BREEZE MINI						
Width (B mm)	Clamping ranges (D mm)	Clamping ranges (D in.)	Hex Screw (mm)	S10 Product No.	S30 Product No.	S40 Product No.
7.9	5.6-16	1/4-5/8	6.4	Carbon Screw	410 Stainless Screw	304 Stainless Screw
	11-20	7/16-13/16		0360 0102 011	0360 0103 011	0360 0104 011
	13-23	1/2-15/16		0360 0102 016	0360 0103 016	0360 0104 016
	14-27	9/16-11/16		0360 0102 018	0360 0103 018	0360 0104 018
	17-32	11/16-1 1/4		0360 0102 021	0360 0103 021	0360 0104 021
	24-38	15/16-1 1/2		0360 0102 025	0360 0103 025	0360 0104 025
	30-44	1 3/16-1 3/4		0360 0102 031	0360 0103 031	0360 0104 031
	37-51	1 7/16-2		0360 0102 037	0360 0103 037	0360 0104 037
	43-57	1 11/16-2 1/4		0360 0102 044	0360 0103 044	0360 0104 044
	49-64	1 15/16-2 1/2		0360 0102 050	0360 0103 050	0360 0104 050
					0360 0102 057	0360 0103 057



BREEZE POWER-SEAL



- ① **Quadra-Lock Housing** provides strength and stability
- ② **Conical Arched Perforated Slots:** More steel between perforations for added strength and smoother worm-drive engagement
- ③ **12,7mm S40 stainless band**

General purpose clamp

General purpose automotive and industrial clamps. High strength Quadra-Lock housing construction. Exceeds all SAE requirements. Use for all standard clamp applications.

Advantages at a glance

- Per SAE standard J1508 Type "F"

Typical applications

- Commercial vehicles
- Passenger vehicles
- Industrial
- Infrastructure

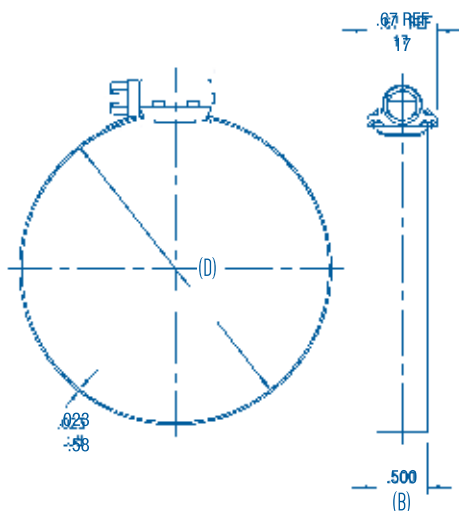
Materials

S10	S20	S30 (W3)	S40 (W4)	S50 (W5)	S60
×		×	×	×	

* Classified by corrosion resistance. Band material S40/Screw material S10. According to DIN norm it is comparable to W2.

** Classified by corrosion resistance. Band material S40/Screw material S30.

Dimensions



Specifications

POWER SEAL							
Width (B mm)	Clamping ranges (D mm)	Clamping ranges (D in.)	Hex Screw (mm)	S10 Product No.	S30 Product No.	S40 Product No.	S50 Product No.
12.7	11-20	7/16-13/16	7.9	Plated Hex Screw	410 Stainless Steel Screw	304 Stainless Steel Screw	All 316 Stainless Steel
	13-23	1/2-15/16		0361 0114 016	0361 0116 016	0361 0117 016	0361 0115 016
	14-27	9/16-1 1/16		0361 0114 018	0361 0116 018	0361 0117 018	0361 0115 018
	17-32	11/16-1 1/4		0361 0114 021	0361 0116 021	0361 0117 021	0361 0115 021
	21-38	13/16-1 1/2		0361 0114 025	0361 0116 025	0361 0117 025	0361 0115 025
	21-44	13/16-1 3/4		0361 0114 030	0361 0116 030	0361 0117 030	0361 0115 030
	27-51	1 1/16-2		0361 0114 033	0361 0116 033	0361 0117 033	0361 0115 033
	33-57	1 5/16-2 1/4		0361 0114 039	0361 0116 039	0361 0117 039	0361 0115 039
	40-64	1 9/16-2 1/2		0361 0114 045	0361 0116 045	0361 0117 045	0361 0115 045
	46-70	1 13/16-2 3/4		0361 0114 052	0361 0116 052	0361 0117 052	0361 0115 052
	52-76	2 1/16-3		0361 0114 058	0361 0116 053	0361 0117 058	0361 0115 058
	59-83	2 5/16-3 1/4		0361 0114 053	0361 0116 058	0361 0117 064	0361 0115 053
	65-89	2 9/16-3 1/2		0361 0114 059	0361 0116 059	0361 0117 071	0361 0115 059
	71-95	2 13/16-3 3/4		0361 0114 065	0361 0116 065	0361 0117 077	0361 0115 065
	78-102	3 1/16-4		0361 0114 072	0361 0116 072	0361 0117 083	0361 0115 072
	84-108	3 5/16-4 1/4		0361 0114 083	0361 0116 083	0361 0117 090	0361 0115 083
	91-114	3 9/16-4 1/2		0361 0114 084	0361 0116 084	0361 0117 096	0361 0115 084
	48-127	1 7/8-5		0361 0114 091	0361 0116 088	0361 1097 102	0361 0115 091
	64-140	2 1/2-5 1/2		0361 0114 088	0361 0116 091	0361 0117 088	0361 0115 088
	79-152	3 1/8-6		0361 0114 102	0361 0116 102	0361 1093 127	0361 0115 102
	92-165	3 5/8-6 1/2		0361 0114 116	0361 0116 116	0361 0117 116	0361 0115 116
	105-178	4 1/8-7		0361 0114 129	0361 0116 129	0361 1090 152	0361 0115 129
				0361 0114 141	0361 0116 142	0361 0117 142	0361 0115 142

BREEZE LINER



- ① **High-strength Quadra-Lock housing construction**
- ② **7,9mm hexagonal slotted screw**
- ③ **Lined band protects hose from damage**

Extension clamp

An integral extension of the band as an inner liner protects soft-surface hose (silicone and others) from damage caused by extrusion or shearing through the band slots. Liner clamps afford

maximum protection to soft hoses while providing a true concentric seal.

Advantages at a glance

- Inner liner which protects all types of hoses from damage
- SAE Standard J1508 Type F

Materials



* Classified by corrosion resistance. Band material S40/Screw material S10. According to DIN norms it would be comparable to W2

** Classified by corrosion resistance. Band material S40/Screw material S30.

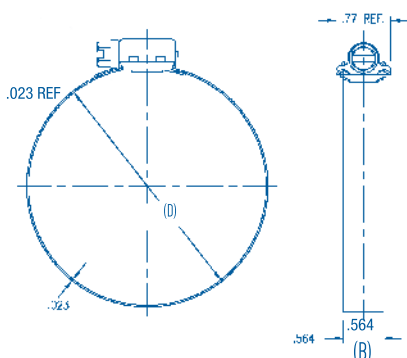
Typical applications

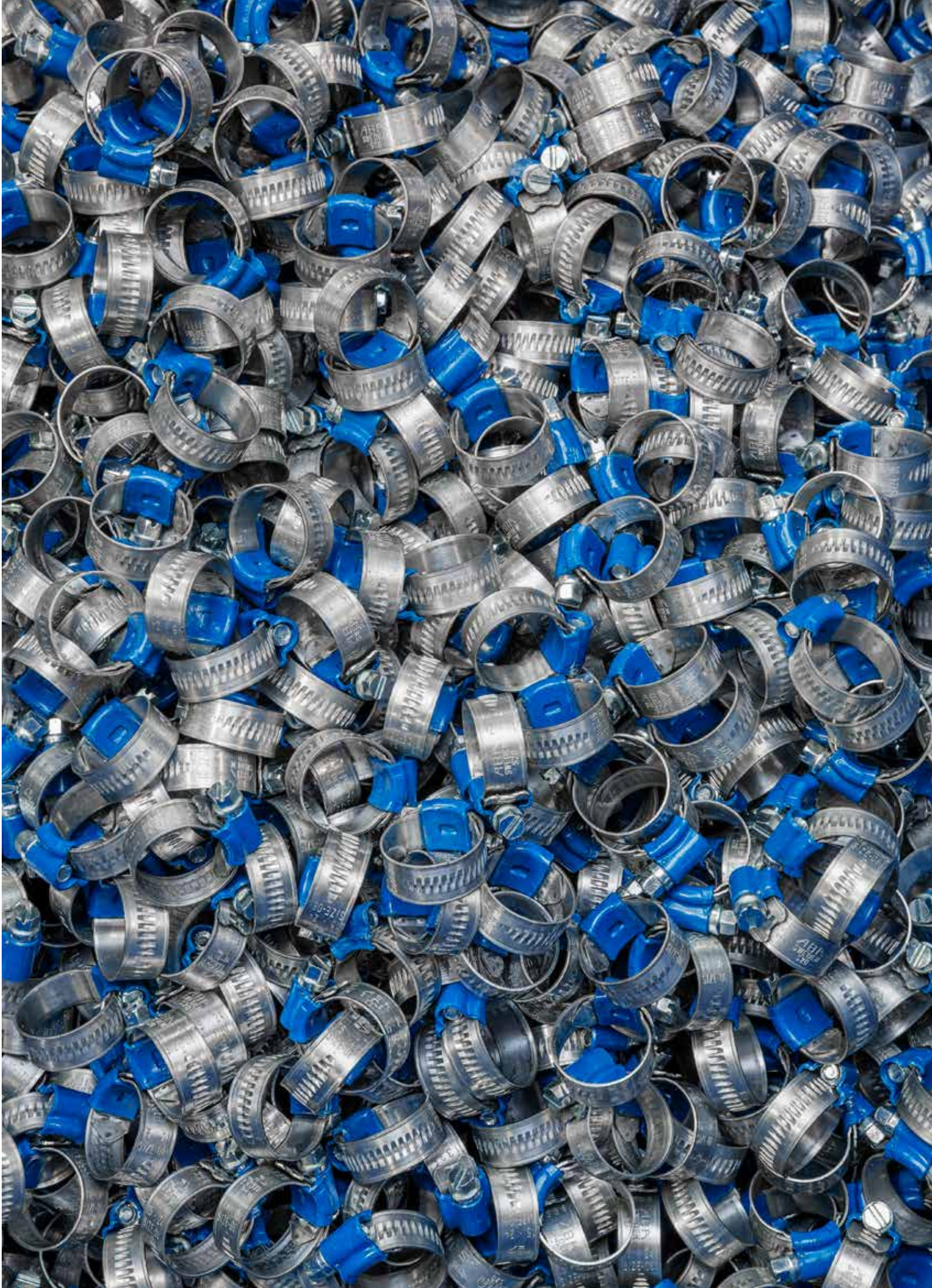
- Commercial vehicle
- Passenger vehicle
- Industrial
- Infrastructure

Specifications

BREEZE LINER				
Width (B mm)	Clamping ranges (D mm)	Clamping ranges (D in.)	S10 Product No. Carbon screw	S30 Product No. 410 Stainless screw
12,7	11-20	7/16-25/32	0361 0200 016	0361 0122 016
	13-23	1/2-29/32	0361 0200 018	0361 0122 018
	14-27	9/16-11/16	0361 0200 021	0361 0122 021
	17-32	11/16-11/4	0361 0200 025	0361 0122 025
	21-38	13/16-11/2	0361 0200 030	0361 0122 030
	21-44	13/16-1 3/4	0361 0200 033	0361 0122 033
	27-51	1/16-2	0361 0200 039	0361 0122 039
	33-57	15/16-2 1/4	0361 0200 045	0361 0122 045
	40-64	19/16-2 1/2	0361 0200 052	0361 0122 052
	46-70	1 13/16-2 3/4	0361 0200 058	0361 0122 058
	52-76	2 1/16-3	0361 0200 064	0361 0122 064
	59-83	2 5/16-3 1/4	0361 0200 071	0361 0122 071
	65-89	2 9/16-3 1/2	0361 0200 077	0361 0122 077
	71-95	2 13/16-3 3/4	0361 0200 083	0361 0122 083
	78-102	3 1/16-4	0361 0200 090	0361 0122 090
	84-108	3 5/16-4 1/4	0361 0200 096	0361 0122 096
	91-114	3 9/16-4 1/2	0361 0200 103	0361 0122 103
	105-127	4 1/8-5	0361 0200 116	0361 0122 116
	117-140	4 5/8-5 1/2	0361 0200 129	0361 0122 129

Dimensions





BREEZE MAKE-A-CLAMP



- ① **4-piece** Quadra Lock housing
- ② **Modular interlocking band** to hardware system
- ③ **S40 Series stainless steel band** with safety edge

By simply cutting off a piece of banding from a continuous roll, you can make any size 100% stainless steel worm-gear clamp. Superior to and more versatile than "crimp/buckle" banding and strapping products.

The maintenance clamp system in a box

Breeze Make-A-Clamp gives you a reusable total maintenance clamp system in a kit, consisting of a continuous roll of stainless steel banding and all stainless steel adjustable worm-gear assembly fasteners. It's a must for anyone who's likely to encounter requirements for varying sized large clamps.

Advantages at a glance

- A maintenance "clamp system" in a box
- Make any size 100% stainless steel worm-gear clamp
- Highly versatile
- Reusable

Typical applications

- Commercial vehicles
- Passenger vehicles
- Industrial
- Infrastructure
- DIY

Materials



Specifications

BREEZE MAKE-A-CLAMP				
Width (mm)	Designation	Hexagonal slotted screw (mm)	Fasteners & screw housing assemblies (mm)	S40 Product No.
12.7	Mini kit: 2.6 meters band, 3 adj. fasteners, 1 band splice	7	14.2	0364 0200 025
	Kit with 30.5 meters band, 25 adj. fasteners, 10 band splices			0364 0201 003
	Kit with 15.2 meters band, 10 adj. fasteners, 5 band splices			0364 0202 030
	Box of 25 adj. fasteners			0364 0203 125
	Box of 10 adj. fasteners			0364 0204 100
	Box with 30.5 meters band, 10 band splices			0364 0205 300
	Box with 15.2 meters band, 50 band splices			0364 0206 000
	6" demonstrator kit with clamp			0364 0207 050
	Box of 10 band splices			0364 0208 000

ABA POWER CLAMP



- ① **Single screw version**
- ② **Double screw version**
- ③ **Heavy-Duty double band clamp.**
- ④ **Full trunnions**
- ⑤ **Welding spots**

Heavy-duty clamps

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.

Advantages at a glance

- High break torque
- Excellent tensile force

Typical applications

- Agriculture
- Drainage systems
- Irrigation
- Sludge suction

Materials

S10	S20	S30	S40	S50	S60
(W1)				(W5)	
×				×	

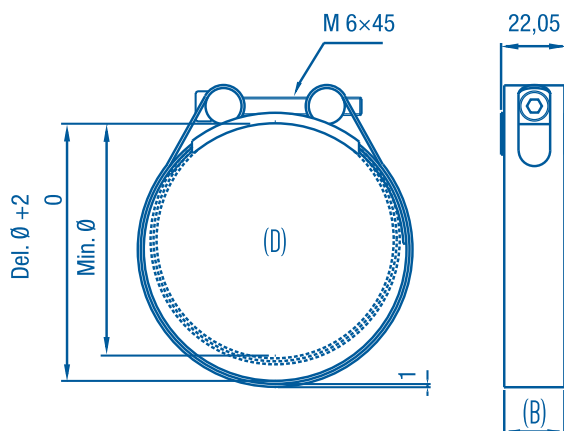
Single screw version

- Power Clamp – S10(W1): Electro zink plated
- Power Clamp – S50(W5): All parts are made in SS2343/AISI 316 stainless steel.

Double screw version for extra clamping force.

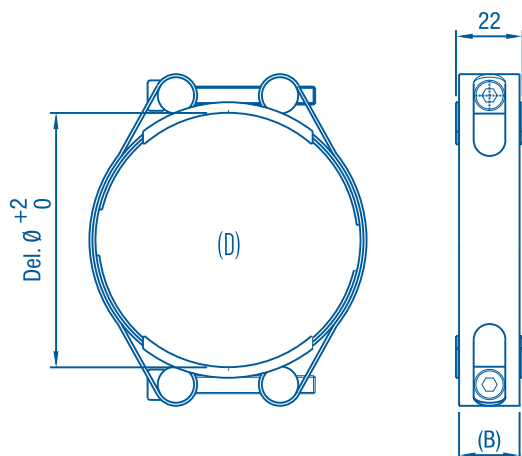
- Power Clamp Double – S10(W1): Electro zink plated
- Power Clamp Double – S50(W5): All parts are made in SS2343/AISI 316 stainless steel.

Dimensions



Specifications

ABA POWER CLAMP SINGLE				
Width	Clamping ranges	Clamping ranges	S10	S50
(B mm)	(D mm)	(D in.)	Product No.	Product No.
20	34-40	1 5/16-1 9/16	0569 7002 040	0569 6001 040
	39-45	1 9/16-1 3/4	0569 6002 045	0569 0001 045
	44-50	1 3/4-2	0569 6002 050	0569 0001 050
	49-55	1 15/16-2 3/16	0569 7002 055	0569 6001 055
	54-60	2 1/8-2 3/8	0569 7002 060	0569 6001 060
	59-65	2 5/16-2 9/16	0569 7002 065	0569 600 065
	64-70	2 1/2-2 3/4	0569 7002 070	0569 6001 070
	69-75	2 3/4-2 15/16	0569 7002 075	0569 6001 075
	74-80	2 15/16-3 1/8	0569 6002 080	0569 0001 080
	79-85	3 1/8-3 3/8	0569 7002 085	0569 6001 085
	84-90	3 5/16-3 9/16	0569 7002 090	0569 6001 090
	89-95	3 1/2-3 3/4	0569 7002 095	0569 6001 095
	94-100	3 11/16-3 15/16	0569 6002 100	0569 0001 100
	99-105	3 7/8-4 1/8	0569 7002 105	0569 6001 105
	104-110	4 1/16-4 5/16	0569 7002 110	0569 6001 110
	109-115	4 5/16-4 1/2	0569 7002 115	0569 6001 115
	114-120	4 1/2-4 3/4	0569 6002 120	0569 0001 120
	119-125	4 11/16-4 5/16	0569 7002 125	0569 6001 125
	124-130	4 7/8-5 1/8	0569 6002 130	0569 0001 130
	129-135	5 1/16-5 5/16	0569 7002 135	0569 6001 135
134-140	5 1/4-5 1/2	0569 7002 140	0569 6001 140	



ABA POWER CLAMP DOUBLE				
Width	Clamping ranges	Clamping ranges	S10	S50
(B mm)	(D mm)	(D in.)	Product No.	Product No.
20	32-40	1 1/4-1 9/16	0569 7003 040	0569 6004 040
	40-50	1 9/16-2	0569 6003 050	0569 6004 050
	45-55	1 3/4-2 3/16	0569 7003 055	0569 6004 055
	50-60	2-2 3/8	0569 7003 060	0569 6004 060
	55-65	2 3/16-2 9/16	0569 7003 065	0569 6004 065
	60-70	2 3/8-2 3/4	0569 7003 070	0569 6004 070
	65-75	2 9/16-2 15/16	0569 7003 075	0569 6004 075
	70-80	2 3/4-3 1/8	0569 7003 080	0569 6004 080
	75-85	2 15/16-3 3/8	0569 7003 085	0569 6004 085
	80-90	3 1/8-3 9/16	0569 6003 090	0569 6004 090
	85-95	3 3/8-3 3/4	0569 7003 095	0569 6004 095
	90-100	3 9/16-3 15/16	0569 7003 100	0569 6004 100
	95-105	3 3/4-4 1/8	0569 6003 105	0569 6004 105
	100-110	3 15/16-4 5/16	0569 7003 110	0569 6004 110
	105-115	4 1/8-4 1/2	0569 6003 115	0569 7004 115
	110-120	4 5/16-4 3/4	0569 6003 120	0569 6004 120
	115-125	4 1/2-4 15/16	0569 6003 125	0569 6004 125
	120-130	4 3/4-5 1/8	0569 7003 130	0569 6004 130
	125-135	4 15/16-5 5/16	0569 7003 135	0569 6004 135
	130-140	5 1/8-5 1/2	0569 7003 140	0569 6004 140
135-145	5 5/16-5 11/16	0569 7003 145	0569 6004 145	
140-150	5 1/2-5 15/16	0569 6003 150	0569 6004 150	
145-155	5 11/16-6 1/8	0569 6003 155	0569 6004 155	
150-160	5 15/16-6 5/16	0569 6003 160	0569 6004 160	
155-165	6 1/8-6 1/2	0569 6003 165	0569 6004 165	
160-170	6 5/16-6 11/16	0569 6003 170	0569 6004 170	
165-175	6 1/2-6 7/8	0569 6003 175	0569 6004 175	

ABA ROBUST ACID RESISTANT



- ① **The bolt is manufactured with integrated spacer** – one piece less to take care of
- ② **Band bridge with rolled up edges** – to protect the hose when the tightening force becomes high
- ③ **Hexagonal bolt** – ordinary tools such as a universal spanner can be used for tightening

A strongly dimensioned hose clamp

A big, strong clamp producing a secure and careful grip around powerful hoses. The Robust Acid resistant clamp is used where great tightening forces are needed – for instance large and reinforced hoses within agriculture, irrigation, drainage systems, sludge suction etc. where there is a high demand for durability and a safe functionality in spite of tough handling and severe conditions.

The curve radius of the band bridge, the even transitions between the parts and the band as well as the smooth band underside give a good contact surface against the hose and consequently good sealing.

Advantages at a glance

- Gentle on the hose when the tightening force becomes high
- Withstands hard tightening, repeated mounting and dismounting
- Safe functionality in severe conditions

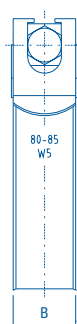
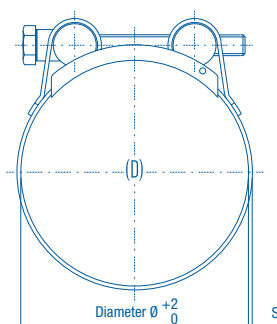
Materials



Typical applications

- For large/reinforced hoses
- Agriculture
- Irrigation
- Drainage systems
- Sludge suction

Dimensions



Specifications

ABA ROBUST ACID RESISTANT							
Width (B mm)	Clamping ranges (D mm)	Clamping ranges (D in.)	S (in)	Hexagonal screw (mm)	S50 Product No.		
18	17-19	11/16-3/4	0.6	M5x35	0569 6013 019		
	20-22	13/16-7/8		M5x35	0569 6013 022		
	23-25	15/16-1		M5x35	0569 6013 025		
	26-28	1-1 1/8		M5x35	0569 6013 028		
	29-31	1 1/8-1 1/4		M5x35	0569 6013 031		
20	32-35	1 1/4-1 3/8	1	M6x50	0569 7013 035		
	36-39	1 7/16-1 9/16		M6x50	0569 7013 039		
	40-43	1 9/16-1 11/16		M6x50	0569 7013 043		
	44-47	1 3/4-1 7/8		M6x50	0569 6013 047		
	48-51	1 7/8-2		M6x50	0569 6013 051		
	52-55	2 1/16-2 3/16		M6x50	0569 7013 055		
	56-59	2 3/16-2 5/16		M6x55	0569 7013 059		
	60-63	2 3/8-2 1/2		M6x55	0569 7013 063		
	25	64-67		2 1/2-2 5/8	1.2	M8x70	0569 6014 067
		68-73		2 11/16-2 7/8		M8x70	0569 7014 073
74-79		2 15/16-3 1/8	M8x70	0569 7014 079			
80-85		3 1/8-3 3/8	M8x70	0569 7014 085			
86-91		3 3/8-3 9/16	M8x70	0569 7014 091			
92-97		3 5/8-3 13/16	M8x70	0569 7014 097			
98-103		3 7/8-4 1/16	M8x70	0569 7014 103			
104-112		4 1/16-4 7/16	M8x80	0569 6014 112			
113-121		4 7/16-4 3/4	M8x80	0569 7014 113			
122-130		4 13/16-5 1/8	M8x80	0569 7014 130			
131-139		5 3/16-5 1/2	M8x80	0569 6014 139			
140-148		5 1/2-5 13/16	M8x80	0569 7014 148			
149-161		5 7/8-6 5/16	1.5	M8x80		0569 7014 161	
162-174		6 3/8-6 7/8		M8x80		0569 6014 174	
175-187		6 7/8-7 3/8		M8x80		0569 6014 187	
188-200	7 3/8-7 7/8	M8x80		0569 6014 200			
201-213	7 15/16-8 3/8	M8x80		0569 6014 213			
214-226	8 7/16-8 7/8	M8x80		0569 6014 226			
227-239	8 15/16-9 7/16	M8x80		0569 6014 239			
240-252	9 7/16-9 15/16	M8x80	0569 6014 252				

BREEZE T-BOLT



- ① Locking or free-spinning nut.
- ② Bolt available in carbon or stainless.
- ③ Floating bridge for 360° loading.
- ④ S40 stainless steel band with safety edge.

Engineered for long-term durability

A clamp that is performance engineered for long-term durability and manufactured to the highest quality standards. Designed for a wide variety of automotive, industrial and marine applications.

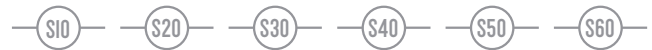
Advantages at a glance

- High-strength clamp design
- Available with Spring design for constant tension

Typical applications

- Commercial vehicles
- Passenger vehicles
- Industrial
- Infrastructure

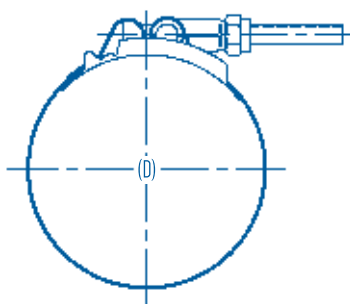
Materials



×*

* Classified by corrosion resistance. Band material S40/Screw material S10. According to DIN norm it is comparable to W2.

Dimensions



Specifications

BREEZE T-BOLT			
Width (mm)	Clamping ranges (D mm)	Clamping ranges* (D in.)	S40 Product No.
19	44.5-50.8	1 3/4-2	0363 0021 048
	47.6-55.6	1 7/8-2 3/16	0363 0021 052
	50.8-58.7	2-2 5/16	0363 0021 055
	54-61.9	2 1/8-2 7/16	0363 0021 058
	57.2-65.1	2 1/4-2 9/16	0363 0021 061
	60.3-68.3	2 3/8-2 11/16	0363 0021 064
	63.5-71.4	2 1/2-2 13/16	0363 0021 068
	66.7-74.6	2 5/8-2 15/16	0363 0021 071
	69.9-77.8	2 3/4-3 1/16	0363 0021 074
	73-81	2 7/8-3 3/16	0363 0021 077
	76.2-84.1	3-3 5/16	0363 0021 080
	79.4-87.3	3 1/8-3 7/16	0363 0021 084
	82.6-90.5	3 1/4-3 9/16	0363 0021 087
	85.7-93.7	3 3/8-3 11/16	0363 0021 090
	88.9-96.8	3 1/2-3 13/16	0363 0021 093
	92.1-100	3 5/8-3 15/16	0363 0021 096
	95.3-103.2	3 3/4-4 1/16	0363 0021 099
	101.6-109.5	4-4 5/16	0363 0021 106
	103.2-111.1	4 1/16-4 3/8	0363 0021 107
	108-115.9	4 1/4-4 9/16	0363 0021 112
	114.3-122.2	4 1/2-4 13/16	0363 0021 118
	127-134.9	5-5 1/4	0363 0021 131
	133.4-141.3	5 1/4-5 9/16	0363 0021 137
	139.7-147.6	5 1/2-5 13/16	0363 0021 144
	146.1-154	5 3/4-6 1/16	0363 0021 150
	152.4-160.3	6-6 5/16	0363 0021 156
	158.8-166.7	6 1/4-6 9/16	0363 0021 163
	165.1-173	6 1/2-6 13/16	0363 0021 169
	171.5-179.4	6 3/4-7 1/16	0363 0021 175
	177.8-185.7	7-7 5/16	0363 0021 182
	184.2-192.1	7 1/4-7 9/16	0363 0021 188
	190.5-198.4	7 1/2-7 13/16	0363 0021 195
	196.9-204.8	7 3/4-8 1/16	0363 0021 201
	215.9-223.8	8 1/2-8 13/16	0363 0021 220

Other diameters available on request

BREEZE T-BOLT SPRING LOADED



- ① Large spring
- ② Small spring
- ③ Floating bridge for 360° loading
- ④ Solid S40 stainless steel band

Heavy-Duty Large Spring

A clamp that is performance engineered for long-term durability and manufactured to the highest quality standards. The Spring-Loaded T-Bolt clamps provide comprehensive application coverage and are performance engineered. They meet the same durability, torque and quality standards as the T-Bolt clamps. The spring design adds constant tension performance.

Advantages at a glance

- Increased sealing reliability across a wide temperature range
- Automatic re-tensioning during temperature changes
- High-strength clamp design
- Per SAE standard J1508 Type "SLTB"

Typical applications

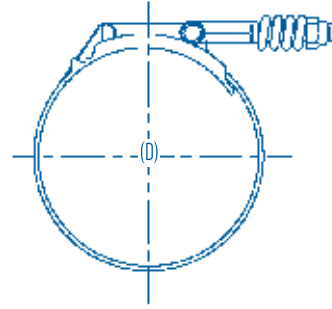
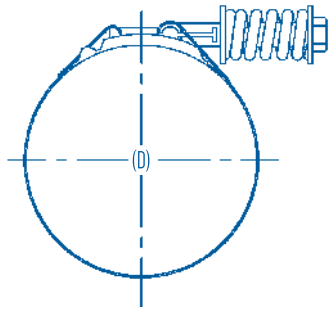
- Designed for a wide variety of automotive, industrial and marine applications

Materials



* Classified by corrosion resistance. Band material S40/Screw material S10. According to DIN norm it is comparable to W2.

Dimensions



Specifications

BREEZE T-BOLT SPRING LOADED (HEAVY DUTY)			
Width (mm)	Clamping ranges (D mm)	Clamping ranges (D in.)	SIO Product No.
19	54-61.9	2 1/8-2 3/8	0363 0004 058
	57.2-65.1	2 1/4-2 9/16	0363 0004 061
	60.3-68.3	2 3/8-2 11/16	0363 0004 064
	63.5-71.4	2 1/2-2 13/16	0363 0004 068
	66.7-74.6	2 5/8-2 15/16	0363 0004 071
	69.9-77.8	2 3/4-3 1/16	0363 0004 074
	73-81	2 7/8-3 3/16	0363 0004 077
	76.2-84.1	3-3 5/16	0363 0004 080
	77.8-85.7	3 1/16-3 3/8	0363 0004 082
	79.4-87.3	3 1/8-3 7/16	0363 0004 084
	82.6-90.5	3 1/4-3 9/16	0363 0004 087
	85.7-93.7	3 3/8-3 11/16	0363 0004 090
	88.9-96.8	3 1/2-3 13/16	0363 0004 093
	90.5-98.4	3 9/16-3 7/8	0363 0004 094
	92.1-100	3 5/8-3 15/16	0363 0004 096
	95.3-103.2	3 3/4-4 1/16	0363 0004 099
	103.2-111.1	4 1/16-4 3/8	0363 0004 107
	104.8-112.7	4 1/8-4 7/16	0363 0004 109
	108-115.9	4 1/4-4 9/16	0363 0004 112
	114.3-122.2	4 1/2-4 13/16	0363 0004 118
	115.9-123.8	4 9/16-4 7/8	0363 0004 120
	127-134.9	5-5 1/4	0363 0004 131
	133.4-141.3	5 1/4-5 9/16	0363 0004 137
	139.7-147.6	5 1/2-5 13/16	0363 0004 144
	146.1-154	5 3/4-6 1/16	0363 0004 150
	152.4-160.3	6-6 5/16	0363 0004 156
	158.8-166.7	6 1/4-6 9/16	0363 0004 163
	165.1-173	6 1/2-6 13/16	0363 0004 169
	177.8-185.7	7-7 5/16	0363 0004 182
	184.2-192.1	7 1/4-7 9/16	0363 0004 188
	190.5-198.4	7 1/2-7 13/16	0363 0004 195

BREEZE T-BOLT SMALL SPRING (STANDARD DUTY)			
Width (mm)	Clamping ranges (D mm)	Clamping ranges (D in.)	SIO Product No.
19	54-61.9	2 1/8-2 3/8	0363 0006 058
	57.2-65.1	2 1/4-2 9/16	0363 0006 061
	60.3-68.3	2 3/8-2 11/16	0363 0006 064
	63.5-71.4	2 1/2-2 13/16	0363 0006 068
	66.7-74.6	2 5/8-2 15/16	0363 0006 071
	69.9-77.8	2 3/4-3 1/16	0363 0006 074
	73-81	2 7/8-3 3/16	0363 0006 077
	76.2-84.1	3-3 5/16	0363 0006 080
	77.8-85.7	3 1/16-3 3/8	0363 0006 082
	79.4-87.3	3 1/8-3 7/16	0363 0006 084
	82.6-90.5	3 1/4-3 9/16	0363 0006 087
	85.7-93.7	3 3/8-3 11/16	0363 0006 090
	88.9-96.8	3 1/2-3 13/16	0363 0006 093
	90.5-98.4	3 9/16-3 7/8	0363 0006 094
	92.1-100	3 5/8-3 15/16	0363 0006 096
	95.3-103.2	3 3/4-4 1/16	0363 0006 099
	103.2-111.1	4 1/16-4 3/8	0363 0006 107
	104.8-112.7	4 1/8-4 7/16	0363 0006 109
	108-115.9	4 1/4-4 9/16	0363 0006 112
	114.3-122.2	4 1/2-4 13/16	0363 0006 118
	115.9-123.8	4 9/16-4 7/8	0363 0006 120
	127-134.9	5-5 1/4	0363 0006 131
	133.4-141.3	5 1/4-5 9/16	0363 0006 137
	139.7-147.6	5 1/2-5 13/16	0363 0006 144
	146.1-154	5 3/4-6 1/16	0363 0006 150
	152.4-160.3	6-6 5/16	0363 0006 156
	158.8-166.7	6 1/4-6 9/16	0363 0006 163
	165.1-173	6 1/2-6 13/16	0363 0006 169
	177.8-185.7	7-7 5/16	0363 0006 182
	184.2-192.1	7 1/4-7 9/16	0363 0006 188
	190.5-198.4	7 1/2-7 13/16	0363 0006 195

TOOL CLIPS



①

① Closed Type

Closed Clips are produced in high quality spring steel. They are produced according to industrial and professional users' demands but are also frequently used in the DIY sector. The closed type is our most popular clip.

Three surface finishes are available:

- Standard – Zinc plated (5 µm)
- Black Nylon coated
- White Nylon coated

Dimensional allowance should be made for a reduction in hole size due to the nylon coating.



②

② Open Type

Tool Clips are produced in high quality spring steel. The open type allows an easier entry or withdrawal from the item being secured.

Three surface finishes:

- Standard – Zinc plated (5 µm)
- Black Nylon coated
- White Nylon coated

Dimensional allowance should be made for a reduction in hole size due to the nylon coating.



③

③ Super Clips

Super Clips are the heavy-duty Tool Clips, designed for larger objects up to 93 mm diameter.

Three surface finishes are available:

- Standard – Zinc plated, 5 µm thickness
- Black Nylon coated
- White Nylon coated

Dimensional allowance should be made for a reduction in hole size due to the nylon coating.

Advantages at a glance

- High quality spring steel
- Simple and reliable

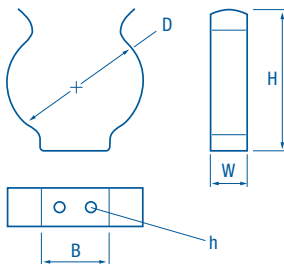
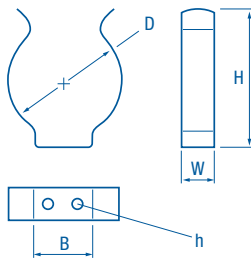
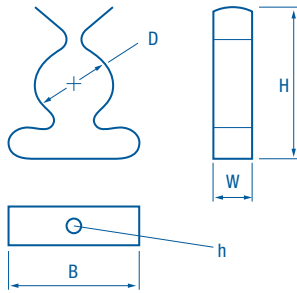
Materials

- Standard – Zinc plated, 5 µm thickness
- Black Nylon coated
- White Nylon coated

Typical applications

- DIY (Do-it-yourself)

Dimensions



Specifications

TERRY CLOSED CLIP

Diameter ranges (D mm)	Diameter ranges (D in.)	Height (H mm)	Width (W mm)	Breadth (B mm)	Hole (h mm)	Nylon coated (CS70 carbon steel)		
						Product No. Black	Product No. White	Product No. Zinc plated
6-7	1/4-1/4	15.3	6.35	12.9	2.4	0816 5005 006		0816 5009 006
10-12	3/8-1/2	20.0	6.35	15.5	2.4	0816 5005 010	0816 5007 010	0816 5009 010
13-14	1/2-9/16	26.4	7.94	20.1	3.2	0816 5005 013	0816 5007 013	0816 5009 013
16-19	5/8-3/4	32.2	7.94	22.6	3.2	0816 5005 016	0816 5007 016	0816 5009 016
19-21	3/4-13/16	36.4	7.94	25.3	3.2	0816 5005 019	0816 5007 019	0816 5009 019
25-27	1-11/16	40.3	9.52	28.8	3.2	0816 5005 025	0816 5007 025	0816 5009 025
28-31	1 1/8-1 1/4	48.7	9.52	34.1	3.6	0816 5005 028	0816 5007 028	0816 5009 028
32-34	1 1/4-1 5/16	59.3	11.11	42.8	3.6	0816 5005 032	0816 5007 032	0816 5009 032
38-40	1 1/2-1 9/16	67.0	12.70	49.5	4.0*	0816 5005 038	0816 5007 038	0816 5009 038
51-54	2-2 1/8	80.2	12.70	53.0	4.0*	0816 5005 051	0816 5007 051	0816 5009 051

* 2 holes

TERRY OPENED CLIP

Diameter ranges (D mm)	Diameter ranges (D in.)	Height (H mm)	Width (W mm)	Breadth (B mm)	Hole (h mm)	Nylon coated (CS70 carbon steel)		
						Product No. Black	Product No. White	Product No. Zinc plated
6-7	1/4-1/4	10.5	6.35	3.8	2.4	0816 5004 006		0816 5008 006
10-12	3/8-1/2	13.3	6.35	4.3	2.4	0816 5004 010	0816 5006 010	0816 5008 010
13-14	1/2-9/16	16.1	7.94	5.0	3.2	0816 5004 013	0816 5006 013	0816 5008 013
16-19	5/8-3/4	20.5	7.94	6.5	3.2	0816 5004 016	0816 5006 016	0816 5008 016
19-21	3/4-13/16	26.6	7.94	9.0	3.2	0816 5004 019	0816 5006 019	0816 5008 019
25-27	1-11/16	30.0	9.52	10.2	3.2	0816 5004 025	0816 5006 025	0816 5008 025
28-31	1 1/8-1 1/4	33.4	9.52	12.0	3.6	0816 5004 028	0816 5006 028	0816 5008 028
32-34	1 1/4-1 5/16	39.0	11.11	12.0	3.2	0816 5004 032	0816 5006 032	0816 5008 032
38-40	1 1/2-1 9/16	48.0	12.70	13.0	3.2	0816 5004 038	0816 5006 038	0816 5008 038
51-54	2-2 1/8	61.3	12.70	19.5	*3.6	0816 5004 051	0816 5006 051	0816 5008 051

* 2 holes

TERRY SUPER CLIP

Diameter ranges (D mm)	Diameter ranges (D in.)	Height (H mm)	Width (W mm)	Breadth (B mm)	Hole (h mm)	Nylon coated (CS70 carbon steel)		
						Product No. Black	Product No. White	Product No. Zinc plated
44-66	1 3/4-2 5/8	53.4	12.7	25.5	4.0	0816 6010 044	0816 6011 044	0816 6012 044
64-67	2 1/2-2 5/8	75.5	19.1	35.5	4.90	0816 6010 064	0816 6011 064	0816 6012 064
76-79	3-3 1/8	87.5	19.1	47.0	4.75	0816 6010 076	0816 6011 076	0816 6012 076
89-93	3 1/2-3 11/16	101.6	22.2	48.0	4.75	0816 6010 089	0816 6011 089	0816 6012 089

PEN & PENCIL CLIPS



Practical and safe pen and small tools holder

- Clips on pocket or uniform
- Adjusts to diameter of pen or small tool
- Spring steel holder & nickel plated clip
- Single, double and triple holder

Specifications

TERRY PEN & PENCIL CLIP				
Diameter ranges (D mm)	Diameter ranges (D in.)	Height (H mm)	Width (W mm)	Spring steel and nickel plated Product No.
7-15	1/4-9/16	40.0	11.0	0819 5000 001
7-15	1/4-9/16	40.0	25.5	0819 5000 002
7-15	1/4-9/16	40.0	40.0	0819 5000 003



2260

1101-101

2266

RUBBER LINED CLIPS



- ① **The rubber prevent vibrations** from being transmitted, safeguards against scratching and also insulates.
- ② **The SS range** of clips has a solid single layer hot dip galvanized steel.
- ③ **The rubber profile** is in EPDM material.

Rubber lined retaining clamps

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.

Advantages at a glance

- Alternative clamp forms available on request
- Many material options

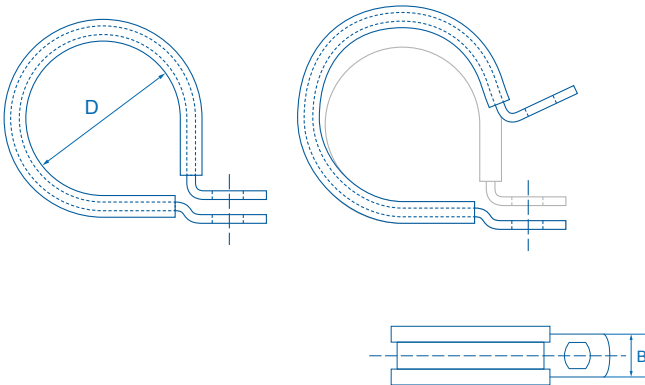
Typical applications

Rubber lined clips are used in the automotive industry, machine construction, hydraulic and pneumatic applications, process industries, shipbuilding and refrigeration.

Materials

S10	S20	S30	S40	S50	S60
(W1)			(W4)		
×			×		

Dimensions

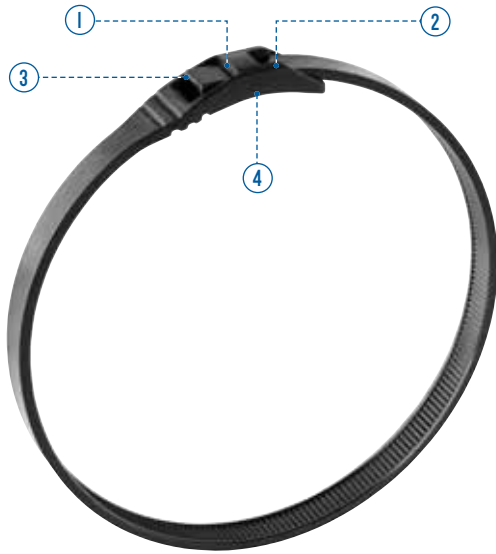


Specifications

ABA RUBBER LINED CLIP SMS			
Width	Diameters	Diameters	SIO
(B mm)	(D mm)	(D in.)	Product No.
12	3,2	1/8	0975 8112 003
	4,8	3/16	0975 8112 005
	6,4	1/4	0975 8112 006
	7,9	5/16	0975 8112 008
	9,5	3/8	0975 8112 010
	11,1	7/16	0975 8112 011
	12,7	1/2	0975 8112 013
	14,3	9/16	0975 8112 014
	15,9	5/8	0975 8112 016
	17,5	11/16	0975 8112 018
	19	3/4	0975 8112 019
	20,6	13/16	0975 8112 021
	22,2	7/8	0975 8112 022
	23,8	15/16	0975 8112 024
	25,4	1	0975 8112 025
	27	1 1/16	0975 8112 027
	28,6	1 1/8	0975 8112 029
	30,2	1 3/16	0975 8112 030
	31,8	1 1/4	0975 8112 032
	33,3	1 5/16	0975 8112 033
	34,9	1 3/8	0975 8112 035
	36,5	1 7/16	0975 8112 036
	38,1	1 1/2	0975 8112 038
	41	1 5/8	0975 8112 041
	44,5	1 3/4	0975 8112 045
	47	1 7/8	0975 8112 047
	51	2	0975 8112 051
	54	2 1/8	0975 8112 054
	60	2 3/8	0975 8112 060
	65	2 9/16	0975 8112 065
	74	2 15/16	0975 8112 074
	110	4 5/16	0975 8112 110

* Available in stainless steel on request

LOW PROFILE CABLE TIE



- ① Lowest profile nylon tie available today
- ② Flexible head design easily flexes around tubing or bundled wiring
- ③ No sharp cut-off edges to injure the user
- ④ Tamper-proof pawl located under the tie's head

Low-profile, easy-to-use nylon zip ties

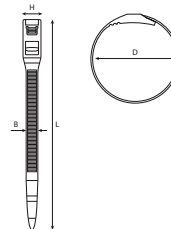
ABA cable ties combine superior tensile strength and long-lasting quality with the market's lowest profile. Highly versatile, they are the first choice for virtually any medium or heavy-duty application requiring a good-looking, high-quality zip tie. They are also safer than standard ties.

Their smooth, snag-proof contour has no barbs or spikes to injure an installer, technician or user. ABA cable ties are the first choice whenever a safe, visually appealing, low-profile tie is needed. Applications span industrial use to high-end consumer products. Natural or black colors are available.

Advantages at a glance

- Exceptional functionality, strength and safety
- Snug-fitting, good-looking and safe, ABA cable ties bring a wealth of positive benefits to installers and users alike.
- Very easy to install. No special tools are required. Any pair of pliers or industrial application tools can be used. Ties can also be tightened by hand.
- Made of 6/6 grade nylon, ABA cable ties are very resistant.
- Working temperature spans -40°C to +85°C, permitting use in a wide range of environments.

Dimensions



Specifications

ABA LOW PROFILE CABLE TIE (MEDIUM DUTY)						
Width (B mm)*	Diameters (D mm)	Diameters (D in.)	Length (L mm)	Head (H mm)	Nylon 6/6	
					Product No.	Product No.
					Black	Natural
4.52	30-50	1 3/16-2	177	8.37	0860 0510 177	0860 0520 177
	30-80	1 3/16-3 1/8	280	8.37	0860 0520 280	0860 0510 280
	30-110	1 3/16-4 5/16	350	8.37	0860 0520 350	0860 0510 350

Typical applications

- Industrial
- Wire harnessing
- Automotive
- Marine
- Computer components
- Outdoor access platforms
- Racks and store fixtures
- Show cars
- Camping
- Cycling
- Playgrounds

ABA LOW PROFILE CABLE TIE (HEAVY DUTY)						
Width (B mm)*	Diameters (D mm)	Diameters (D in.)	Length (L mm)	Head (H mm)	Nylon 6/6	
					Product No.	Product No.
					Black	Natural
7.62	30-110	1 3/16-4 5/16	350	12.19	0860 0620 350	0860 0610 350
	30-140	1 3/16-5 1/2	450	12.19	0860 0620 450	0860 0610 450
	30-190	1 3/16-7 1/2	600	12.19	0860 0620 600	0860 0610 600
	30-240	1 3/16-9 7/16	760	12.19	0860 0620 760	0860 0610 760

Materials

- Made of 6/6 grade nylon



ASSORTMENT 270



ABA ASSORTMENT 270 (ABA NOVA AND ABA ORIGINAL)					
Width	Clamping ranges (mm)	Clamping ranges (in)	Quantity	SIO Product No.	S40 Product No.
NOVA					
9	8 - 14	5/16 - 9/16	50	0819 0026 013	0819 0026 040
	11 - 17	7/16 - 11/16	50		
	13 - 20	1/2 - 13/16	50		
ORIGINAL					
12	15 - 24	9/16 - 15/16	25		
	19 - 28	3/4 - 11/8	25		
	22 - 32	7/8 - 1 1/4	20		
	26 - 38	1 - 1 1/2	15		
	32 - 44	1 1/4 - 1 3/4	15		
	38 - 50	1 1/2 - 2	10		
NA	FLEXIDRIVER	NA	1		

Assortment box with most common clamp sizes.

Dimensions and height of the assortment box

- 123 x 456 x 78 cm
- 9.0 kg

ASSORTMENT 120



ABA ASSORTMENT 120 (ABA MINI)					
Width	Clamping ranges (mm)	Clamping ranges (in)	Quantity	SIO Product No.	
9	8	5/16	15	0819 0026 014	
	9	3/8	15		
	10	3/8	30		
	11	7/16	10		
	12	1/2	30		
	13	1/2	10		
	14	9/16	5		
	15	9/16	5		
		FLEXIDRIVER			1

Assortment box with most common clamp sizes.

Dimensions and height of the assortment box

- 123 x 456 x 78 cm
- 9.0 kg

ASSORTMENT 335



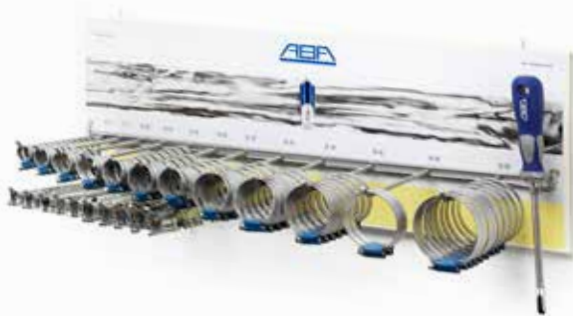
Dispenser with most common clamp sizes.

Dimensions and height of the dispenser

- 90×24×13.8 cm
- 8.9 kg

ABA ASSORTMENT 335 (ABA NOVA, ABA ORIGINAL AND ABA MINI)					
Width	Clamping ranges (mm)	Clamping ranges (in)	Quantity	SIO Product No.	
NOVA					
9	8 - 14	5/16 - 9/16	30	0819 0026 011	
	11 - 17	7/16 - 11/16	30		
	13 - 20	1/2 - 13/16	45		
ORIGINAL					
12	15 - 24	9/16 - 15/16	34		
	19 - 28	3/4-11/8	24		
	22 - 32	7/8-11/4	12		
	26 - 38	1-11/2	12		
	32 - 44	11/4-1 3/4	12		
	38 - 50	1 1/2-2	12		
	44 - 56	1 3/4-2 3/16	12		
	50 - 65	2-2 9/16	12		
MINI					
9	8	5/16	10		
	9	3/8	10		
	10	3/8	10		
	11	7/16	10		
	12	1/2	10		
	13	1/2	10		
	14	9/16	10		
	15	9/16	10		
	16	5/8	10		
	17	11/16	10		
NA	FLEXIDRIVER	NA	3		

ASSORTMENT 244



Dispenser with most common clamp sizes

Dimensions and height of the dispenser

- 65×15×23.4 cm
- 4.7 kg

ABA ASSORTMENT 244 (ABA NOVA, ABA ORIGINAL AND ABA MINI)					
Width	Clamping ranges (mm)	Clamping ranges (in)	Quantity	SIO Product No.	
NOVA					
9	8 - 14	5/16 - 9/16	12	0819 0026 009	
	11 - 17	7/16 - 11/16	12		
	13 - 20	1/2 - 13/16	12		
ORIGINAL					
12	15 - 24	9/16 - 15/16	24		
	19 - 28	3/4-11/8	12		
	22 - 32	7/8-11/4	12		
	26 - 38	1-11/2	12		
	32 - 44	11/4-1 3/4	12		
	38 - 50	1 1/2-2	12		
	44 - 56	1 3/4-2 3/16	12		
	50 - 65	2-2 9/16	12		
MINI					
9	8	5/16	10		
	9	3/8	10		
	10	3/8	10		
	11	7/16	10		
	12	1/2	10		
	13	1/2	10		
	14	9/16	10		
	15	9/16	10		
	16	5/8	10		
	17	11/16	10		
NA	FLEXIDRIVER	NA	1		

LOW PROFILE CABLE TIE MOUNTING TOOL



- Article number 0860 0510 001

LOW PROFILE CABLE TIE DEMOUNTING TOOL



- Article number 0860 0510 002

PLIERS FOR STAINLESS STEEL CABLE TIE



- Article number 0827 0305 407

FLEXIDRIVER – 25 CM



- Article number 0000 0000 900

FLEXIDRIVER – 60 CM



- Article number 0000 0000 901

DYNAMOMETRIC SCREWDRIVER



- Article number 0000 0000 902



▷ THE CUSTOMER IN FOCUS





QUALITY IN PRODUCTS AND SERVICES

As a customer of ABA premium hose and pipe clamping and connecting products, you will always enjoy:

- First-class products produced in plants certified to TS 16949:2000. The best steel qualities enable stable processes and provide a high and even product quality.
- Continuous improvement to always exceed the demands of our SS2298 standard. This assures you of products with a high break torque combined with a high clamping force around the hose. ABA Safeseal Technology – our guarantee to you.
- The ABA Original product line. Clamps without welded or riveted housings. Instead, just one purpose-made tube pressed to its final shape in a precision process. All bands have embossed threads that allow a flat band underside to tightly fit against the hose wall.
- Prompt and secure delivery of all our products in this catalogue. Essential in today's industrial sector.
- Technical advice for a variety of applications such as drainage waste water pipes, freshwater pipes, fuel lines, water and air hoses, etc. We also provide you with test data using your own tubes or hoses – free of charge!
- Our products are produced in plants certified to ISO14001 and made entirely with recyclable materials.

- Packaging with a solid design made to satisfy different customer needs.
- Highly-appreciated merchandisers used all over the world as efficient sales tools.
- A wide variety of sales promotion materials and product training for our Distributors.

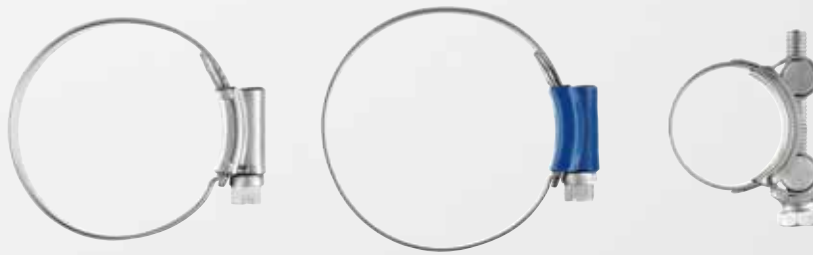
All summarised in three letters – ABA.

A recent Market Survey confirmed that our customers value the ABA brand and what it stands for very highly. Interviewees rated the ABA brand name as the most important buying criterion, closely followed by the quality of products and services. Product price came third - being important as well.

Our aim is to put our customer first – to continue to develop our product range with improved solutions and services so that we will then always be your first choice!



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ABA clamps are manufactured according to ISO 14001. They can be reused many times thanks to their high and constant quality, which is continuously monitored according to our ISO 9000:2000 and ISO TS 16949 certifications.

As part of Engineered Joining Technology leader NORMA Group, the ABA brand enjoys the benefits of access to a large group working with multiple brands and subsidiaries worldwide.