



# The complete product range



# Page 4:

**Unifix Mini:** The small, light and quick repair solution for sealing holes, fractures and porous areas in water-bearing pipes.

Suitable for steel, copper, cast iron, lead and stainless steel piping, as well as for the temporary repair of PE and PVC pipes.

Available for 21-93 mm outside pipe diameter and in 60 or 100 mm length.

**M**iddle



#### Page 5:

Unifix Middle: Our sealing clamp is suitable to seal water-bearing as well as gas-bearing pipes.

Middle is available up to an outside pipe diameter of 118 mm and in length of 100 and 150 mm.

Tapping Saddle



#### Page 5:

**Unifix Tapping Saddle:** The extremely economical solution for creating additional branches. The clamp as well as the 60 mm wide and 1.5 mm thick mounting bands are completely made of stainless steel.

Maxi



#### Page 6:

Unifix Maxi: The classic for civil engineering.

For sealing or connecting gas- or water-bearing steel, cast iron, ductile cast iron and fibre cement pipes, as well as for repairing PE and PVC pipes. Maxi is available as one, two or three part version, as well as with threaded or flanged outlet.

Maxi-Box S+L+XL



## **Page 12:**

**Unifix Maxi Box S, L, XL:** With these three repair boxes you are flexible in reacting to various repair situations.

Holders



#### **Page 17:**

**Unifix Holders:** The suitable solution to protect non-restrained pipe connections from sliding.



All products with the Easy Inside symbol are equipped with Easy Grip function.

The Easy Grip function is an "installation aid" which makes the installation of stainless steel bands significantly easier and installation times significantly shorter.

This saves time, costs and energy!!!

How it works:



The side bars of the Middle and all Maxi models feature notches.



These notches serve as a slot for ring wrench or combination



The EasyGrip function follows the lever principle: Press the lower edge of the clamp and the combination wrench together with one hand. The mobile holder can now comfortably be placed on the upper edge of the stainless steel clamp using the other hand.

Tighten nuts and done!

Never before was the installation of stainless steel bands so Easy!!!



# The new stainless steel sealing band Unifix Mini!!!

for sealing holes, fractures and porous areas in water-bearing pipes

Suitable for: ★ Steel pipe

and the temporary repair of

★ Black steel pipe

cold water-bearing:

★ Stainless steel pipe Copper pipe

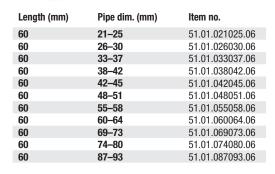
★ PE pipe ★ PVC pipe

multilayer pipes

#### What to know about our Unifix Mini:

- Suitable for sealing holes, fractures and porous areas in water-bearing pipes with a smooth surface
- Honeycombed structure of the sealing (EPDM, KTW approved) provides an improved compensation for pipe irregularities
- The installation of Mini in tight locations (7 mm suffice!) is easy
- Pressure levels: Water PN 10; Temperatures: Water to 90°C
- Sealing band, bridge and threaded bolts made of stainless steel
- Fully glued gasket
- Extremely easy installation
- Available in length 60 mm (with one bolt) or 100 mm (with two bolts)







Length (mm)	Pipe dim. (mm)	Item no.
100	21-25	51.01.021025.10
100	26-30	51.01.026030.10
100	33-37	51.01.033037.10
100	42-45	51.01.042045.10
100	48-51	51.01.048051.10
100	55-58	51.01.055058.10
100	60-64	51.01.060064.10
100	69-73	51.01.069073.10
100	74–80	51.01.074080.10
100	87-93	51.01.087093.10

Data subject to change.

#### **Assembly instruction Unifix Mini**

Stainless steel sealing clamps (lengths 60 and 100 mm)

#### Preparation:

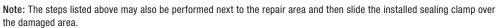


- 1. Clean the pipe around the damaged spots, removing any contaminations.
- 2. Be sure the outside pipe diameter conforms to the specified clamping range of the sealing clamp.
- 3. Rubber sleeve and pipe has to be moistened with soap suds.
- 4. Turn the nuts on the threaded bolts back to the end of the thread.



#### **Installation steps:**

- 1. Pull up the stainless steel bridge and open the clamp.
- 2. Bend the sealing clamp around the pipe and hook in the stainless steel bridge again. Please be sure the damaged spot is as much as possible covered by the sealing sleeve.
  - (The distance between the outer edge of the damaged area and the outer edge of the sealing clamp may not be less than 2 cm each side).



Tighten the nuts uniformly with a torque of 20 Nm. After about 15-20 minutes retighten the nuts again with a torque of 20 Nm. After the repair has been made a compression test must be performed.

# The Unifix Middle

for sealing holes, fractures and porous areas in water- and gas-bearing pipes



Suitable for: ★ Steel pipe

Steel pipe and for temporary repairs of

★ Copper pipe cold water-bearing:

★ Stainless steel pipe 🖈 PE pipe

★ Black steel pipe ★ PVC pipe

★ Cast iron pipe

★ Ductile cast iron pipe

★ Fibre cement pipe



#### **About our Unifix Middle:**

- Suitable for sealing holes, fractures and porous areas in water-bearing and gas-bearing pipes (Caution: outside of building for gas-bearing pipes only) with smooth surface
- Pressure levels: Water PN 16, Gas PN 4; Temperatures: Water to 90 °C, Gas −5 to +50 °C
- Sealing band, bridge and threaded bolts of stainless steel 1.4301 (V2A) similar to AISI 304
- Fully glued gasket
- Threaded bolts with blue Teflon coating and thread protection caps
- Sealing made of EPDM for water (KTW) or NBR for gas (DIN DVGW) approved
- In lengths 100 mm (with one threaded bolts) and 150 mm (with two threaded bolts
- On request also available with threaded outlet! See page 10.

Length (mm)	Pipe dim. (mm)	Item no.	Length (mm)	Pipe dim. (mm)	Item no.
100	32-36	51.02.032036.10	150	32-36	51.02.032036.15
100	40-44	51.02.040044.10	150	40-44	51.02.040044.15
100	44-51	51.02.044051.10	150	44-51	51.02.044051.15
100	48-55	51.02.048055.10	150	48-55	51.02.048055.15
100	50-57	51.02.050057.10	150	50-57	51.02.050057.15
100	52-59	51.02.052059.10	150	52-59	51.02.052059.15
100	56-63	51.02.056063.10	150	56-63	51.02.056063.15
100	58-65	51.02.058065.10	150	58-65	51.02.058065.15
100	60-67	51.02.060067.10	150	60-67	51.02.060067.15
100	75-83	51.02.075083.10	150	75-83	51.02.075083.15
100	87-95	51.02.087095.10	150	87-95	51.02.087095.15
100	108-118	51.02.108118.10	150	108-118	51.02.108118.15

All dimensions and length are available within five working days (with EPDM sealing).



# The Unifix tapping saddles with female thread

The economical alternative for creating branches!

#### **About our tapping saddles:**

- Suitable for creating branches in water- or gas-bearing pipes (Caution: only for gas-bearing pipes outside of buildings).
- The tapping saddles are made of stainless steel 1.4301 (V2A) similar to AISI 304 and are available equipped with EPDM (for water only) or NBR (for gas) seals.
- The mounting bands are also made of stainless steel and the inside lined with a smooth rubber collar. This prevents damage, particularly in plastic pipes and prevents the tapping saddle from slipping.
- The tapping saddles are available with the following female thread outlets:  $\frac{1}{2}$ "  $\frac{3}{4}$ "  $\frac{1}{4}$ "  $\frac{1}{4}$
- Length of the upper shell: up to DN 125:125 mm; from DN 150:150 mm
- Using the mounting bands in various lengths the tapping saddles can be used for the following pipe diameters:

	Outside pipe-Ø (mm)
DN 80	88-110
DN 100	108-134
DN 125	114–139

Further	dimensions	upon	reaues
	4	apo	·oquoo

	Outside pipe-Ø (mm)
DN 150	138-160
DN 175	159-180
DN 200	190–218

	Outside pipe-Ø (mm)
DN 225	216-238
DN 250	230-260
DN 275	265-285



## The **Unifix Maxi**

suitable for sealing or connecting water- and gas-bearing pipes Available in one, two or three part versions, or with threaded or flanged outlet!

Suitable for: ★ Steel pipe

★ Cast iron pipe

★ Ductile cast iron pipe

★ Fibre cement pipe

**★** PE pipe

PVC pipe | cold water area

and the following illustrated damage or installation situations can be repaired or performed using the Maxi:

breaks in pipes	porous areas in pipes
fractures in pipes	connecting cut pipes (Caution: observe the length! Please call us for this!)
holes in pipes	connecting cut pipes with slight bend or offse (maximum 2°) (conditional suitability: please call us for this!)

#### **About our Maxi:**

- Suitable for sealing and connecting water- or gas-bearing pipes (Caution: for gas-bearing pipes outside of buildings only).
- Our stainless steel sealing clamps are made of 100% stainless steel 1.4301 (V2A) similar to AISI 304 and are suitable for the quick and permanent repair of broken, fractured or porous pipes.
  For applications requiring a higher resistance (wastewater treatment plants, chemical industry, increased chloride content) we also offer the Maxi in V4A stainless steel.
- The bolts are also welded onto the clamp, so that only the stainless steel bridge is movable. So during installation it is never necessary to remove elements of the stainless steel sealing clamps. This way no parts will be lost during installation.
- The welding during manufacturing is performed by robots to ensure continuous precision and quality (welding as per EN15614-1).

After welding process the repair clamps are passivated to prevent corrosion.

- The bolts are Teflon coated. This ensures lifelong durability.
- The nuts are passivated yellow and guarantee free movement.
- The size is stamped into the clamp and is therefore visible many years after installation in the floor.
- All products are standard equipped with EPDM seals for water (KTW approved), but are also available with NBR seals for gas (DIN DVGW tested) or viton seals upon request.
- The seals feature a honeycombed structure and bevelled ends.
- Continuous testing ensures quality.

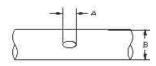
# Choosing the right Maxi...

Enclosed an overview of the dimensions with which a one, two or three part Maxi may be used.

Range: sections	Maxi 1 (one part)	Maxi 2 (two part)	Maxi 3 (three part)
48- 87	Χ		
88-269	Χ	Χ	
270-350	Χ	Χ	Χ
351-835		Χ	Χ
836-970			Χ

## ... in the right installation length:

To find the right installation length of the repair clamp add the size of the damaged area (A) to the pipe diameter (B).



For PE pipes add 50 % of the value to the sum.

If possible, we recommend using a supportive sleeve with PE pipes (only possible with cutted pipes).

6

# The Unifix Maxi

# **Temperatures:**

Water to 90 °C, Gas -5 to +50 °C

#### **Pressure levels:**

The permissible pressure levels vary depending on the pipe type, outside pipe diameter, damage and the use of single or multi part sealing clamps.

The following figures are therefore to be used as a basis:

Outside pipe-Ø (mm)	Pressur Water	. ,
Maxi 1 (one part	t sealing	clamp)
48-102	16	5
106-230	16	4
237-350	10	3

Outside pipe-Ø (mm)	Pressu Water	. ,
Maxi 2 (two part	sealing	clamp)
88-282	16	4
295-510	10	3
510-530	6	_

Outside pipe-Ø (mm)	Pressu Water	٠,
Maxi 3 (three pa	art sealin	g clamp)
270-460	10	3
475-630	6	2
654-780	4	-
813-1000	2	_

# Length / bolts:

Length (mm)	Bolt qty.
150	2
200	2
300	3

Length (mm)	Bolt qty.
400	4
500	5
600	6

Length (mm)	Bolt qty.	
700	7	
800	8	
900	9	

Length (mm)	Bolt qty.
1000	10

#### Maxi 1

(one part stainless steel sealing clamp)







DN	Outside pipe-Ø in mm	Instal 150	lation le 200	ength in 300	mm 400	500	600
40	48- 55	Χ	Χ				
	52- 59	Χ	Χ				
50	60- 67	Χ	X	Χ			
	67- 74	X	X	Χ			
65	70- 77	X	X	Χ			
	73- 80	X	(X)	Χ	Χ		
	76– 85	X	(X)	X	Χ		
	82- 90	X	X	X	X		
80	87- 95	(X)	(X)	X	X		
	90- 98	X	(X)	(X)	X		
	95–105	(X)	(X)	X	X		
	98–108	(X)	(X)	(X)	X		
	102–112	X X	(X) (X)	X	X X		
100	106–116 108–118	X	(X)	(X)	X	Χ	
100	113–123	<b>X</b>	(X)	X	X	X	
	118–128	<b>(X)</b>	(X)	×	X	X	
	120–120	X	X	X	X	X	
	125–135	X	X	X	X	X	
125	132–144	×	(X)	×	X	X	
120	135–145	X	(X)	X	X	X	
	140–152	X	X	Χ	X	Χ	
150	151–161	X	X	X	Χ	X	
	159–170	X	X	X	Χ	Χ	
	165-176	Χ	X	Χ	Χ	Χ	
	167–177	Χ	X	Χ	Χ	Χ	
	170-182	Χ	Χ	Χ	Χ	Χ	
	174-184		Χ	Χ	Χ	Χ	
	176-186		X	Χ	Χ	Χ	

		Outside pipe-Ø	Inetall	ation lor	nath in r	nm		,
	DN	in mm	150	200	300	400	500	600
200		180–191		X	Χ	Χ	Χ	
	175	186-196		Χ	Χ	Χ	Χ	
		193-203		X	Χ	Χ	Χ	
		200-212		X	Χ	Χ	Χ	
	200	209-220		X	Χ	Χ	Χ	
		215-225		Χ	Χ	Χ	Χ	Χ
		219-230		X	Χ	Χ	Χ	Χ
		222-233			Χ	Χ	Χ	Χ
		228-240			Χ	Χ	Χ	Χ
		232-242			Χ	Χ	Χ	Χ
		237-247			Χ	Χ	Χ	Χ
		239–249			Χ	Χ	Χ	Χ
		243-253			Χ	Χ	Χ	Χ
		250-260			Χ	Χ	Χ	Χ
		252-262					Χ	Χ
		261–271					Χ	Χ
		266–276					Χ	Χ
	250	270–280					Χ	Χ
		273–284					Χ	Χ
		280–293					Χ	Χ
		290-300			X	Χ	Χ	
		300–310					Χ	Χ
		310–320			Χ		Χ	Χ
	300	315–326					Χ	Χ
200 20 200 20 21 22 23 24 25 26 26 27 28 29 20 20 20 21 21 22 23 24 25 26 27 28 29 20 20 20 20 20 20 20 20 20 20	320-330					Χ	Χ	
		325–335					Χ	Χ
		334–346					X	Χ
		340-350					Χ	Χ
		350-360				X	Χ	Χ

(X) = with EPDM sealing available within five working days

# INTERIX.

# The **Unifix Maxi**

Maxi 2

(two part stainless steel sealing clamp)





	Outside pipe-Ø	Instal	lation I	ength i	n mm	
DN	in mm	200	300	400	500	600
80	88-110	Χ	Χ	Χ	Χ	
	100-120	Χ	Χ	Χ	Χ	
100	108-128	Χ	Χ	Χ	Χ	
	112-134	Χ	Χ	Χ	Χ	
	120-140	Χ	Χ	Χ	Χ	
125	133-156	Χ	Χ	Χ	Χ	
	138-160	Χ	Χ	Χ	Χ	
150	158-180	Χ	Χ	Χ	Χ	
	165-185	Χ	Χ	Χ	Χ	
	168-190	Χ	Χ	Χ	Χ	
	176-196	Χ	Χ	Χ	Χ	
175	190-210	Χ	Χ	Χ	Χ	
	195-217	Χ	Χ	Χ	Χ	
200	210-230	Χ	Χ	Χ	Χ	
	216-238	Χ	Χ	Χ	Χ	
	225-246	Χ	Χ	Χ	Χ	
	230-250	Χ	Χ	Χ	Χ	
	238-260		Χ	Χ	Χ	
	250-271		Χ	Χ	Χ	

DN	Outside pipe-Ø in mm	Instal 200	lation I 300	ength i	n mm 500	600
200	269-289		Χ	Χ	Χ	
250	273-293		Χ	Χ	Χ	
	282-302		Χ	Χ	Χ	
	295-315		Χ	Χ	Χ	
300	314-335		Χ	Χ	Χ	Χ
	322-344		Χ	Χ	Χ	Χ
	337-358		Χ	Χ	Χ	Χ
350	347-368		Χ	Χ	Χ	Χ
	365-385		Χ	Χ	Χ	Χ
	382-402			Χ	Χ	Χ
	396-420			Χ	Χ	Χ
400	410-430			Χ	Χ	Χ
	420-440			Χ	Χ	Χ
	435-455				Χ	Χ
	450-470				Χ	Χ
450	457–477				Χ	Χ
	485-508				Χ	Χ
500	510-530				Χ	Χ

Up to 855 mm outside pipe diameter and installation length 800 mm also available upon request.



Maxi 3 (three part stainless steel clamp)



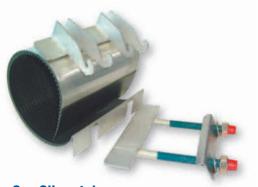
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DN	Outside pipe-Ø in mm	Instal 300	llation I 400	ength ii 500	n mm 600	700
250	270-300	Χ	Χ			
300	310-340	Χ	Χ			
	335-365	Χ	Χ			
350	340-370	Χ	Χ			
	360-390	Χ	Χ	Χ		
	385-415	Χ	Χ	Χ		
	395-425	Χ	Χ	Χ		
400	400-430	Χ	Χ	Χ		
	410-440	Χ	Χ	Χ		
	430-460	Χ	Χ	Χ		
	435-465	Χ	Χ	Χ	Χ	Χ
450	440-470	Χ	Χ	Χ	Χ	Χ
	460-490	Χ	Χ	Χ	Χ	Χ
	475-505		Χ	Χ	Χ	Χ
500	485-515		Χ	Χ	Χ	Χ
	510-540			Χ	Χ	Χ
	530-560			Χ	Χ	Χ
	535-565				Χ	Χ

	DN	Outside pipe-Ø in mm	Install 300	ation le 400	ngth in 500	mm 600	700
	500	555- 585				Х	X
	300	570- 600				X	X
	600	585- 615				X	X
		610- 640				Χ	X
		620- 650				Χ	Χ
		630- 660				Χ	Χ
		654- 684				Χ	Χ
	700	702- 732				Χ	X
		711- 741				Χ	X
	750	747– 777				Χ	X
		780- 810				Χ	X
	800	813- 843				Χ	X
		852- 882				Χ	X
		864- 894				Χ	X
	900	900- 930				Χ	X
		925- 955				Χ	X
		945- 975				X	X
		970_1000				Χ	Χ

# The Unifix Maxi in Slim style







**Our Slim style:** 

Are you installing in tight spaces???

With the Slim you can simply unhook the plate with the mounting bolts leaving you with only a 10 mm opening required for installation.



## Installation instructions for the Unifix Maxi with Easygrip Easy inside

#### Preparation:

- 1. Clean the pipe around the damaged area.
- 2. Be sure the outside pipe diameter meets the specified clamping range of the sealing clamp.
- 3. Moisten rubber seal and pipe with soapy water. Ratio (1:5 soap:water)

#### **Installation steps:**

- 1. Loosen nuts to the red thread protection caps (do not remove). Pull up the stainless steel bridge and bend the clamp apart. Position the clamp over the pipe (image 1).
- 2. Hook the bridge into the Easygrip notch of the side bar (image 2). Then pull the bridge higher, so that the bridge lies on the ends of the side bars (image 3).
- 3. Take a combination wrench and place it in the Easygrip notch of the side bars (image 4). Simultaneously grab the combination wrench and the lower bar of the clamp and pull them together. You may now easily raise the bridge to its final position. The nuts can now easily be hand tightened. Be sure the rubber seal neatly rests on the pipe.
- Remove the combination wrench from the Easygrip notch and evenly hand tighten the nuts. Now evenly tighten the nuts with a torque wrench - at M12 and M14 to 70 Nm and 120 Nm for M16 for steel, cast iron and fibre cement pipes. For PVC pipes the torque may only be approx. 50 Nm. After approx. 15-20 minutes retighten the nuts using the same torque setting

#### For PE pipe please note the following information:

Recheck whether the installation length of the clamp was calculated correctly (installation length calculation see page 5)! After the initial hand tightening, the nuts are tightened with a torque of 70 Nm at M12 and M14, and 120 Nm at M16. Then wait 15 minutes and retighten with the specified torque. After a repeated waiting period of 15 minutes retighten again. If possible, retighten the nuts with the specified torque after a 24 hour waiting period.

5. The same method may be used for multi part repair clamps and/or repair clamps with threaded or flanged outlet. With multi part versions it is not necessary to open more than one clamp side.



#### **Caution:**

- 1. Please ensure there is no dirt between pipe and the stainless steel clamp.
- 2. Despite the teflon coated bolts and the yellow passivated nuts, the closure must be kept as clean as possible to prevent the nuts and bolts from seizing.
- Installation steps 1 to 3 may also be performed next to the damaged area. The pre-installed clamp may then be slid over the damaged area and secured as per step 4.





# The Unifix Maxi with various outlets

The one, two or three part Maxi is also available with various outlets, with female thread, male thread, female/male thread and with flanged outlet.

#### **About our Maxi with threaded outlet:**

- Sealing clamp: Stainless steel 1.4301 (V2A) similar to AISI 304.
- Bolts: Stainless steel 1.4301 (V2A) similar to AISI 304; the dimensions are (depend on the diameters) M12, M14 or M16.
- Nuts: Stainless steel 1.4301 (V2A) similar to AISI 304. Size M12, M14 or M16. Yellow passivated to ensure free movement.
- **Bridge:** Stainless steel 1.4301 (V2A) similar to AISI 304.
- Bridge plate: Stainless steel 1.4301 (V2A) similar to AISI 304. The bridge plate is vulcanized into the seal.
- Seal: The standard seals used are made of EPDM (suitable for water pipes), but seals made of NBR (for gas) are also available.
  The sealing features a honeycombed structure and ensures optimal sealing together with the 0-ring seal



Data subject to change.

- After welding all stainless steel parts are passivated to achieve high corrosion protection.
- All products are also available in V4A stainless steel.

#### **Threaded outlets:**

at the outlet.

Female thread:  $\frac{1}{2}$ "  $-\frac{3}{4}$ "  $-\frac{1}{2}$ "  $-\frac{1}{4}$ "  $-\frac{1}{2}$ "  $-\frac{2}{2}$ "  $-\frac{2}{2}$ "  $-\frac{3}{2}$ "  $-\frac{4}{2}$ "

Male thread:  $2\frac{1}{2}$ " -3"

Female/male thread: 2" female, 21/2" male

#### Minimal dimensions on threaded outlets:

	Middle respectiv	ely Maxi 1*	Maxi 2	
Threaded connector	Outside pipe-Ø in mm	Installation length in mm	Outside pipe-Ø in mm	Installation length in mm
1/2"	40- 44	150	88-110	200
3/4"	48- 52	150	88-110	200
1"	67- 74	150	88-110	200
1 1/4"	82- 89	150	88-110	200
1 1/2"	95-105	150	88-110	200
2"	95-105	150	88-110	200
2 1/2"	108-118	300	108-128	300
3"	-	-	108-128	400
4"	-	-	133–153	400

<sup>\*</sup> Advice concerning products with threaded outlets:

For pipes with outside diameter smaller 65 mm we recommend to use type "Middle".



# The **Unifix Maxi** with various outlets

# **About our Maxi with flange connection:**

- The flange version is only available for our two or three part Maxi and fits ranges from 88-110 mm to 768-798 mm. The installation lengths are optionally in 300, 400, 500, 600, 800 and 1000 mm.
- The materials comply with the specifications of the Maxi with threaded outlet with the following addition: information about the welded-on flange: stainless steel 1.4301 (V2A) similar to AISI 304, WIG welded (Wolfram Inert Gas) on the inside and outside to create a full weld of the external body and flange. The absolute overall height of the outlet is approx. 120 mm for flanges to DN 150 and approx. 150 mm for flanges DN 200-DN 300.
- Flanged outlet: Stainless steel 1.4301 (V2A) similar to AISI 304, flange as per DIN EN 1092-1 (formerly DIN 2576), from DN 50 to DN 300.
- After welding, all stainless steel parts are passivated to achieve high corrosion protection.
- All products are also available in V4A stainless steel.
- Outside pipe diameter 545 mm and up is delivered as a three part Maxi as standard version.
- A version with bolts pointed downward is also possible.
- The pressure levels vary depending on the outside pipe diameter, materials used and the flange version. The pressures listed in the table are solely intended as a guideline:

Outside pipe-Ø	Pressure level (bar)			
(mm)	Water	Gas		
88-210	16	4		
216-410	10	3		
420-798	6	2		

#### Flange sizes: minimum required outside diameter and minimum required length:

Flange	Outside pipe-Ø (mm)	Installation length	Flange adapter
DN 50	88-110	300	PN 10 / 16
DN 65	88-110	300	PN 10 / 16
DN 80 Plus	88-110	400	PN 10 / 16
DN 80	108-128	400	PN 10 / 16
DN 100 Plus	108-128	400	PN 10 / 16
DN 100	133-153	400	PN 10 / 16
DN 125	135-155	400	PN 10 / 16
DN 150 Plus	158-180	400	PN 10 / 16
DN 150	169-189	400	PN 10 / 16
DN 200 Plus	210-230	500	PN 10
DN 200	240-260 (8 holes)	500	PN 10
DN 200	240-260 (12 holes)	500	PN 16
DN 250	315-325	600	PN 10
DN 300	upon request		

Plus = includes a conical reduction for a smaller DN size.





	Outside pipe-	Insta	llation	lengtl	n in mr	n	
DN	Ø in mm	300	400	500	600	800	1000
80	88-110	Χ	Χ	Χ	Χ		
	100-120	Χ	Χ	Χ	Χ		
100	108-128	Χ	Χ	Χ	Χ		
	114-134	Χ	Χ	Χ	Χ		
	120-140	Χ	Χ	Χ	Χ		
	130–150	Χ	Χ	Χ	Χ		
125	133–155	Χ	Χ	Χ	Χ		
	135–155	Χ	Χ	Χ	Χ		
	140–160	Χ	Χ	Χ	Χ		
150	158–180	Χ	Χ	Χ	Χ		
	165–185	Χ	Χ	Χ	Χ		
	168–189	Χ	Χ	Χ	Χ		
	170–190	Χ	Χ	Χ	Χ		
	176–196	Χ	Χ	Χ	Χ		
	180–200	X	X	Χ	Χ		
175	190–210	X	X	X	X		
	195–217	X	X	Χ	X		
	205–225	X	Χ	Χ	Χ		
200	210-230	X	X	X	X		
	216–238	X	X	X	X		
	225–246	X	X	X	X		
	230-250	X	X	X	X X		
225	240–260 252–272	X	X	X	X		
223	260-280	X		X	X		
		X	X X	X	X		
250	269–289			X	X		
250	273–293 282–302	X X	X X	X	X		
	282–302 295–315	X	X	X	X		
	Z90-310	٨	٨	٨	٨		

DN	Outside pipe- Ø in mm	Instal 300	lation 400	length 500	(mm) 600	800	1000
300	314–334 322–344 335–355	X X X	X X X	X X X	X X X		
350	347–367 350–368 360–380 365–385 382–402 396-420 404–424		X X X X X X	X X X X X X	X X X X X X	X X X	
400	410–430 420–440 435–455 468–488		X	X X X	X X X	X X X	
500	485–505 527–547 545–575 568–598			X	X X X	X X X	
600	588–618 610–640 628–658 648–678 668–698 688–718				X X X	X X X X X	X X X X
700	708–738 728–758					X X	X X
750	748–778 768–798					X X	X X



# The Unifix-Maxi Box S

# Our economic repair box.

Nine different sizes of Unifix Maxi stainless steel repair clamps for all types of pipe from 60 mm to 170 mm outside-Ø -

#### ALL-IN-ONE-BOX!

#### Suitable for:

- ★ Steel pipe
- ★ Cast iron pipe
- ★ Ductile cast iron pipe
- ★ Fibre cement pipe
- ★ PE pipe
- cold water area ★ PVC pipe

#### **About our Unifix Maxi Box S:**

- This repair box contains nine different repair clamps (all in 200 mm installation length) for various pipes from DN 50 to DN 150. The following table indicates which types of pipe are covered by which sizes of sealing clamp.
- Caution: The nine stainless steel clamps are not intended to be combined.

#### So every sealing clamp is by itself!

- A few more good points:
  - the box weights only 22 kg
  - and it is so small: 600 x 400 x 230 mm
- Bolts: Stainless steel 1.4301 (V2A) similar to AISI 304; M14
- Spanner plate: Stainless steel 1.4301 (V2A) similar to AISI 304, vulcanized into the seal
- Seal: Stainless steel sealing clamps with EDPM seal for water or NBR seal for gas.

Outside pipe-Ø (mm)  48– 95	Pressure level (bar)					
(mm)	Water	Gas				
48- 95	16	5				
88-170	16	4				



Item no.: 50.03.20.1 (with NBR seal) Item no.: 51.03.20.1 (with EPDM seal)

#### **Content Maxi Box S:**

#### Stainless steel clamps Unifix Maxi:

- 1 piece Maxi 60-67 mm
- 1 piece Maxi 70-77 mm
- 1 piece Maxi 82-90 mm
- 1 piece Maxi 90 98 mm ■ 1 piece Maxi 98-108 mm
- 1 piece Maxi 108-118 mm
- 1 piece Maxi 118-128 mm ■ 1 piece Maxi 132-144 mm
- 1 piece Maxi 159-170 mm

	DN	Inches								
	Nominal		Cast iron	Steel	PVC	Fibre ceme	nt pipe as p	er DIN 19800	)	
Maxi 1	width					PN 2,5	PN 6	PN 10	PN 12,5	PN 16
			Outside pipe- Ø (mm)							
60-67	50	2	66	60.3	63	-	-	-	-	-
70-77	60	_	77	70.0	_	_	_	_	_	_
	65	2 ½	_	76.1	75	_	_	-	_	_
82-90	65	2 ½	82	_	-	-	-	-	83	85
	70	-	87	_	-	-	-	-	-	-
90-98	80	3	98	88.9	90	-	-	98	-	-
98-108	80	3	_	_	-	-	-	-	100	104
	90	-	108	101.6	_	-	-	-	-	_
108-118	100	4	118	108/114.3	110	-	_	-	_	_
118-128	100	4	_	_	-	-	118	120	124	130
132-144	125	-	144	133/139.7	140	-	_	-	_	_
159-170	125	-	_	_	_	_	-	-	-	159
	150	6	170	159/168.3	160	168	-	-	-	_



# The Unifix Maxi Box L

# Our most flexible repair box.

44 different repair facilities with Gebo Unifix stainless steel clamps for all types of pipe from 48 mm to 359 mm outside-Ø –

**ALL-IN-ONE-BOX!** 

#### **About our Unifix Maxi Box L:**

- This repair set includes a total of 20 sealing clamps and the corresponding spanner plates.
- Dimensions of the box: 800 x 600 x 600 mm
- A "modular system" for repairs to be made on pipes with a diameter of 48–359 mm.
- Each sealing clamp can be used individually or connected to another sealing clamp, creating one, two or three part sealing clamps. The concept is to combine the various sealing clamps to allow the desired outside pipe diameter to be sealed.
- The installation length of the clamps is generally 300 mm.
- Bolts: Stainless steel 1.4301 (V2A) similar to AISI 304, M14
- Spanner plates: Stainless steel 1.4301 (V2A) similar to AISI 304
- **Seal:** The Seal is available as EPDM for water or NBR for gas.

It features honeycombed structure and bevelled ends.

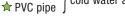
Pressure levels: The pressure levels vary depending on the number of elements used and the different outside pipe diameters.

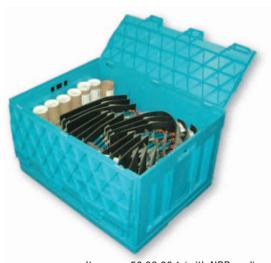
The values contained in the tables are therefore solely intended as a guideline:

Outside pipe-Ø	Pressure level (bar)				
(mm)	Water	Gas			
48- 95	16	5			
88-282	16	4			
282-359	10	3			

#### **Suitable for:**

- ★ Steel pipe
- ★ Stainless steel pipe
- ★ Cast iron pipe
- ★ Ductile cast iron pipe
- ★ Fibre cement pipe
- ★ PE pipe
- cold water area





Item no.: 50.03.30.1 (with NBR seal)
Item no.: 51.03.30.1 (with EPDM seal)



#### **Content Maxi Box L:**

#### Stainless steel clamps Unifix Maxi:

- 3 pieces Maxi 48 55 mm (section 1)
- 3 pieces Maxi 52-59 mm (section 2)
- 3 pieces Maxi 60-67 mm (section 3)
- 3 pieces Maxi 70-77 mm (section 4) ■ 3 pieces Maxi 82-90 mm (section 5)
- 3 pieces Maxi 90−98 mm (section 6)
- 1 piece Maxi 102−112 mm (section 7)
- 1 piece Maxi 118-128 mm (section 8)

#### Spanner plates:

■ 8 different sizes of spanner plates (5 pieces per size)



# Additional information Unifix Maxi Box L

#### How it works:

- Take the outside diameter of the damaged pipe.
- Select the right combination of the stainless steel bands and the suitable spanner plates (according to the table).

Outside pipe-Ø (mm)	Sections	Spanner plates
48- 55	1	D
52- 59	2	D
60- 67	3	E
70- 77	4	E
82- 90	5	G
90- 98	6	G
102-112	7	Ţ
106-126	1 + 1	2xH
112–132	2 + 1	2xI
118–128	8	1
118–138	2 + 2	2xl
124–144	3 + 2	2xJ
130-150	3 + 3	2xJ
140–160	4 + 3	2xJ
150–170	4 + 4	2xJ
163–183	5 + 4	2xK
164–194	1+1+1	3xK
170-200	2 + 1 + 1	3xK
176–196	5 + 5	2xK
176–206	2 + 2 + 1	3xK
182-202	6 + 5	2xK
182-212	2 + 2 + 2	3xK
188-208	6 + 6	2xK
188-218	3 + 2 + 2	3xK
194–224 195–215	3 + 3 + 2 7 + 5	3xK 2xK
200-230	3 + 3 + 3	3xK
201–231	7 + 6	2xK
210–240	4+3+3	3xK
217-237	8+6	2xL
220-250	4 + 4 + 3	3xL
230-250	8 + 7	2xL
230-260	4 + 4 + 4	3xL
243–273	5 + 4 + 4	3xL
256-286	5 + 5 + 4	3xL
269-299	5 + 5 + 5	3xL
275-305	6 + 5 + 5	3xL
281-311	6+6+5	3xL
287-317	6 + 6 + 6	3xL
288-318	7 + 5 + 5	3xL
294-324	7 + 6 + 5	3xL
300-330	7 + 6 + 6	3xL
316-346	8 + 6 + 6	3xL
329-359	8 + 7 + 6	3xL

For smaller pipe dimensions the single clamps can be used.

Bigger pipe dimensions can be covered by combination of various sealing clamps. All sealing clamps have a length of 300 mm with four bolts.

The spanner plates are available in different sizes. These plates have to choose carefully because they have a special "curvature" which has to correspond to the "curvature" of the outside pipe diameter which has to be repaired. That is why the spanner plates are separately enclosed and not – as usual – vulcanized into the gasket.

The spanner plates have a double side glued tape, so that they can easily fixed into the clamps.



- Put the combined clamp after the assembly together and install done!!!
- All components of the Maxi Box L can be ordered separately.

# The Unifix Maxi Box XL

## Our greatest repair box.

Five different sizes of Unifix Maxi repair clamps for the repair of various pipe materials from 90-669 mm outside-Ø -

**ALL-IN-ONE-BOX!** 

#### **About our Maxi Box XL:**

- The concept works like this: Repair various outside pipe diameters by connecting the various sections contained in the Maxi XL Box.
- The sections (A-E) can be used also separately for the corresponding pipe diameter.
- Dimensions of the box: 800 x 600 x 600 mm
- The installation length of the sealing clamps is generally 400 mm.
- Tip: Using the content of two Maxi XL Boxes you can also repair pipes up to an outside pipe diameter of 1086 mm. And the box even has enough space to hold twice its content.
- Materials: Sealing clamps, bolts (M16): Stainless steel 1.4301 (V2A) similar to AISI 304
- **Seal:** The Seal is available as EPDM for water or NBR for gas. It features honeycombed structure and bevelled ends.
- Pressure levels: The pressure levels vary depending on the number of elements used and further depend on the different outside pipe diameters and the kind of damage.

Therefore all figures are "guidelines":

Outside pipe-Ø	Pressure	level (bar)
(mm)	Water	Gas
213- 282	16	4
282- 460	10	3
460- 630	6	2
630- 813	4	1
813-1086	2	0.5

#### **Suitable for:**

- ★ Steel pipe
- ★ Stainless steel pipe
- ★ Cast iron pipe
- ★ Ductile cast iron pipe
- ★ Fibre cement pipe
- PE pipe cold water area
- ★ PVC pipe \ Cold Water



Item no.: 50.03.40.1 (with NBR seal) Item no.: 51.03.40.1 (with EPDM seal)



#### **Content Maxi Box XL:**

#### Stainless steel clamps Unifix Maxi:

- 1 piece Maxi 90-98 mm (section A)
- 1 piece Maxi 111-121 mm (section B)
- 1 piece Maxi 131 141 mm (section C)
- 1 piece Maxi 160-170 mm (section D)
- 1 piece Maxi 190-200 mm (section E)



# Additional information Unifix Maxi Box XL

#### **How it works:**

- Take the outside diameter of the damaged pipe.
- Select the right combination of the stainless steel band (according to the table) and hook them into.
- Mount it done!

#### Repairs with Maxi Box XL:

Area / Outside pipe-Ø (mm)	Sections
213-233	A + B
233-253	A + C
253–273	B + C
264–284	A + D
284-304	B + D
294–314	A + E
304–324	C + D
314–334	B + E
335–355	C + E
354–384	A + B + C
386–416	A + B + D
406–436	A + C + D
416–446	A + B + E
426–456	B + C + D
436–466	A + C + E
456–486	B + C + E
467–497	A + D + E
487–517	B + D + E
508–538	C + D + E
527–567	A + B + C + D
558–598	A + B + C + E
589-629	A + B + D + E
609–649	A + C + D + E
629–669	B + C + D + E

# Repairs with a "double equipment" of Maxi Box XL:

Area / Outside pipe-Ø (mm)	Sections
694- 744	E + E + B + A + A
728- 778	E + E + C + B + A
796- 846	E + E + D + C + B
816- 866	E + E + D + C + C
894- 954	E + E + D + C + B + A
928- 988	E + E + D + D + B + A
982-1042	E + E + D + D + C + C
1026-1086	E + E + D + C + C + B + A

- Install them according to the asssembly instruction done!
- $\blacksquare$  If a stainless steel clamp of Maxi Box XL is used up it can be ordered separately  $\ldots$

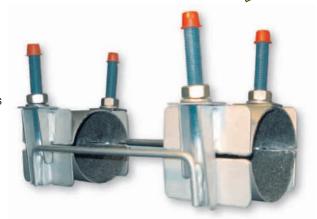
# The Unifix Holders

Use these holders to secure non-restrained pipe connections from sliding.

#### **About our holders:**

- **Bolts:** Stainless steel 1.4301 (V2A) similar to AISI 304; M16
- Stainless steel bridge: Stainless steel 1.4301 (V2A) similar to AISI 304
- Threaded nuts: Stainless steel 1.4301 (V2A) similar to AISI 304. Size M16, yellow passivated
- Stainless steel band + support bars: Stainless steel 1.4301 (V2A) similar to AISI 304
- After welding all stainless steel parts are passivated to ensure optimal corrosion protection.
- Also available in V4A stainless steel.
- Inside coating of the stainless steel band: The inside of the stainless steel clamp is taped with a non-skid film (similar to emery paper). This tightly secures the pipes and even thin-walled pipes are not damaged.
- The holders are available from DN 100 to DN 600.
- Installation lengths and exact dimensions available upon request.
- Special production on specific customer request.







# How do I find the **correct item number?**

All item numbers issued by Gebo are "descriptive", meaning all item numbers provide precise information about the configuration, dimension and the consistency of the respective product. The item numbers are configured just like a modular system, as shown in the example:

#### Example:

5 1 Stainless steel sealing clamp made of V2A with EPDM seal

**0 6** Type Maxi, one part, with female thread outlet

**1 2 0 1 3 1** For an outside pipe diameter of 120–131 mm

2 0 In installation length 200 mm

With a threaded outlet of 1 ½"

## Alltogether it then looks like:

51 . 06 . 120131 . 20 . 5

#### Material seal:

- 50 V2A with NBR
- 51 V2A with EPDM
- 52 V2A with Viton
- VZA WILLI VILO
- 56 Slim with NBR
- **57** Slim with EPDM
- **58** Slim with Viton
- **59** V4A with NBR
- 60 V4A with EPDM
- 61 V4A with Viton

#### Various types:

- **01** Mini
- 02 Middle
- **03** Maxi 1
- **04** Maxi 2
- **05** Maxi 3
- 06 Maxi 1 (female thread)

Pipe dimensions:

\* from to

- 07 Maxi 2 (female thread)
- **08** Maxi 3 (female thread)
- **09** Maxi 1 (male thread)
- 10 Maxi 2 (male thread)
- 11 Maxi 3 (male thread)
- 12 Maxi 1 (female/male thread)
- 13 Maxi 2 (female/male thread)
- 14 Maxi 3 (female/male thread)
- 15 Maxi 2 (flanged outlet)
- 16 Maxi 3 (flanged outlet)
- 19 Holders
- 21 Tapping saddle

## Length: Threaded outlet:

**06** 60 mm

**10** 100 mm

**15** 150 mm

**20** 200 mm

**30** 300 mm

**40** 400 mm

**50** 500 mm

**60** 600 mm

**70** 700 mm

- 1 1/2"
- 2 3/4"
- **3** 1"
- 4 1 1/4"
- **5** 1 ½"
- **6** 2"
- 7 21/2"
- **8** 3"
- 9 4"

#### Flanged outlet:

- **a** DN 50
- **b** DN 65
- c DN 80 Plus
- **d** DN 80
- e DN 100 Plus
- **f** DN 100
- **g** DN 125
- h DN 150 Plus
- i DN 150
- J DN 200 Plus
- k DN 200
- I DN 250

In Unifix without threaded or flanged outlets omit the section indicated in green.



# **Example:** Item number configuration for a Mini:

1) Stainless steel sealing clamp made of V2A with EPDM seal

2) Type Mini

3) For outside pipe-Ø from/to: 21-25 mm

4) Installation length: 100 mm

51 . 01 . 021025 . 10

## **Example:** Item number configuration for a Maxi:

1) Stainless steel sealing clamp made of V2A with EPDM seal

2) Type Maxi 1 with female thread

3) For outside pipe-Ø from/to: 82-89 mm

4) Installation length: 150 mm

5) Threaded outlet: 1"

51 . 06 . 082089 . 15 . 3

# Dimension table for pressure pipes

Pipe types DN	Steel threaded pipe	Black steel pipe	Steel with PE- covering	Stainles: steel	s Gray cast iron PN 8/16	Ductile cast iron	PE	PVC	PE-Xa	Fibre Co PN 10 cal.	ement PN 10 uncal.	PN 12.5 cal.	PN 16 cal.
40	48.3	51.0	51.9	48.3	56.0	56.0	50.0	50.0	50.0				
50	60.3	57.0	63.9	60.3	66.0	66.0	63.0	63.0	63.0				
65	76.1	70.0	79.7	76.1	77.0	82.0	75.0	75.0	75.0			83.0	85.0
80	88.9	88.9	92.5	88.9	98.0	98.0	90.0	90.0	90.0	98.0	102.0	100.0	104.0
100	114.3	108.0	117.5	114.3	118.0	118.0	110.0	110.0	110.0	120.0	128.0	124.0	130.0
							125.0	125.0	125.0				
125	139.7	133.0	144.0	139.7	144.0	144.0	140.0	140.0	140.0	149.0	154.0	153.0	159.0
150	168.3	159.0	168.3	168.3	170.0	170.0	160.0	160.0	160.0	178.0	184.0	182.0	190.0
							180.0	180.0	180.0				
200	219.1	216.0	219.1	219.1	222.0	222.0	200.0	200.0	200.0	234.0	243.0	240.0	252.0
							225.0	225.0	225.0				
250	273.0	267.0	273.0	273.0	274.0	274.0	250.0	250.0	250.0	286.0	288.0	296.0	308.0
							280.0	280.0	280.0				
300	323.9	318.0	323.9	323.9	326.0	326.0	315.0	315.0	315.0	342.0	346.0	352.0	368.0
350	355.6	368.0	360.0		378.0	378.0	355.0	355.0	355.0	400.0	404.0	410.0	428.0
400	406.4	419.0	410.8		429.0	429.0	400.0	400.0	400.0	456.0	460.0	470.0	488.0
450	457.0		461.4		480.0	480.0	450.0	450.0	450.0	510.0		524.0	546.0
500	508.0		513.0		532.0	532.0	500.0	500.0	500.0	564.0		582.0	606.0
			564.0		583.0		560.0	560.0	560.0				
600	610.0		615.0		634.0	635.0	630.0	630.0	630.0	678.0		698.0	726.0
			665.0										
700	711.0		716.0		738.0	738.0	710.0	710.0	710.0		792.0		
			767.0										
800	813.0		819.0		842.0	842.0	800.0	800.0	800.0				
			870.0										
900	914.0		920.0		945.0	945.0	900.0	900.0	900.0				
1000	1016.0		1022.0		1048.0	1048.0	1000.0	1000.0	1000.0		1126.0		



Fax 00 49 (0) 23 36 / 92 85 - 70

Am Damm 4 · D-58332 Schwelm

ssue: 04/2014

Internet www.gebo.de