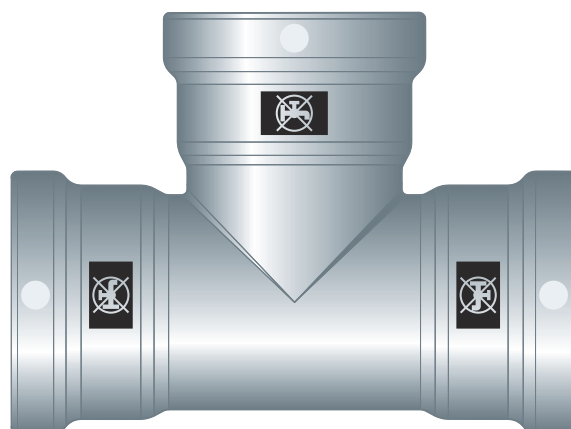


Instructions for Use

Megapress S XL



Press connector system made of non-alloy steel for thick-walled steel pipes

System
Megapress S XL

Year built (from)
10/2017

viega

Table of contents

1	About these instructions for use	3
1.1	Target groups	3
1.2	Labelling of notes	3
1.3	About this translated version	4
2	Product information	5
2.1	Standards and regulations	5
2.2	Intended use	7
2.2.1	Areas of application	7
2.2.2	Media	7
2.3	Product description	8
2.3.1	Overview	8
2.3.2	Pipes	8
2.3.3	Press connectors	14
2.3.4	Sealing elements	14
2.3.5	Technical data	15
2.3.6	Markings on components	15
2.4	Information for use	16
2.4.1	Corrosion	16
3	Handling	17
3.1	Transport	17
3.2	Storage	17
3.3	Assembly information	17
3.3.1	Mounting instructions	17
3.3.2	Potential equalisation	23
3.3.3	Space requirements and intervals	23
3.3.4	Required tools	26
3.4	Assembly	27
3.4.1	Replacing the sealing element	28
3.4.2	Shortening the pipes	29
3.4.3	Deburring the pipes	29
3.4.4	Pressing the connection	30
3.4.5	Leakage test	32
3.5	Disposal	33

1 About these instructions for use

Trade mark rights exist for this document; for further information, go to viega.com/legal.

1.1 Target groups

The information in this manual is directed at heating and sanitary professionals and trained personnel.

Individuals without the abovementioned training or qualification are not permitted to mount, install and, if required, maintain this product. This restriction does not extend to possible operating instructions.

The installation of Viega products must take place in accordance with the general rules of engineering and the Viega instructions for use.

1.2 Labelling of notes

Warning and advisory texts are set aside from the remainder of the text and are labelled with the relevant pictographs.



DANGER!

This symbol warns of possible life-threatening injury.



WARNING!

This symbol warns of possible serious injury.



CAUTION!

This symbol warns of possible injury.



NOTICE!

This symbol warns of possible damage to property.



This symbol gives additional information and hints.

1.3 About this translated version

This instruction for use contains important information about the choice of product or system, assembly and commissioning as well as intended use and, if required, maintenance measures. The information about the products, their properties and application technology are based on the current standards in Europe (e.g. EN) and/or in Germany (e.g. DIN/DVGW).

Some passages in the text may refer to technical codes in Europe/Germany. These should serve as recommendations in the absence of corresponding national regulations. The relevant national laws, standards, regulations, directives and other technical provisions take priority over the German/European directives specified in this manual: The information herein is not binding for other countries and regions; as said above, they should be understood as a recommendation.

2 Product information

2.1 Standards and regulations

The following standards and regulations apply to Germany / Europe and are provided as a support feature.

Regulations from section: Application areas

Scope / Notice	Regulations applicable in Germany
No application for fuel gases	DVGW G 260
Planning, setup, operation and maintenance of fire extinguishing systems	DIN 14462

Regulations from section: Media

Scope / Notice	Regulations applicable in Germany
Suitability for heating water for pump hot water heating systems	VDI-Richtlinie 2035, Sheet 1 and Sheet 2

Regulations from section: Pipes

Scope / Notice	Regulations applicable in Germany
Differentiation of pipe types and pipe series	DIN EN 10255
Requirements in steel pipes - Boiler pipe quality	DIN EN 10220
Requirements in steel pipes - Boiler pipe quality	DIN EN 10216-1
Requirements in steel pipes - Boiler pipe quality	DIN EN 10217-1
External protective coatings (galvanisation) for steel pipes	DIN EN 10240
Fixing distance between the pipe clamps	VdS CEA 4001

Regulations from section: Sealing elements

Scope / Notice	Regulations applicable in Germany
Area of application of the FKM sealing element ■ Heating	DIN EN 12828

Regulations from section: Storage

Scope / Notice	Regulations applicable in Germany
Requirements for material storage	DIN EN 806-4, Chapter 4.2

Regulations from section: Notes on mounting

Scope / Notice	Regulations applicable in Germany
Requirements and notes for fire extinguisher and sprinkler systems	VdS-Anerkennung G 414021
Permissible pressures, nominal widths and application conditions	VdS 2100-26-2: 2012-04, Table A. 1
Fixing distances Fire risk classes	VdS CEA 4001
Minimum pipe wall thickness and maximum pipe wall thickness	CEA 4001, Table 15.02
External protective coatings (galvanisation) for steel pipes	DIN EN 10240

Regulations from section: Leakage test

Scope / Notice	Regulations applicable in Germany
Test on a system that is finished but not yet covered	DIN EN 806-4
Leakage test for water installations	ZVSHK-Merkblatt: "Dichtheitsprüfungen von Trinkwasserinstallationen mit Druckluft, Inertgas oder Wasser"
Pressure test in sprinkler units	VdS CEA 4001, Chapter 17
Requirements for filling and top-up water	VDI 2035

2.2 Intended use



Agree the use of the system for areas of application and media other than those described with Viega.

2.2.1 Areas of application

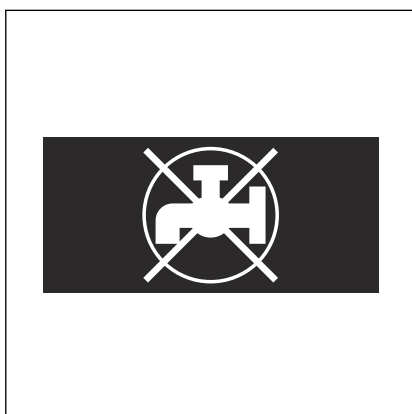




Fig. 1: "Non-potable water"

The system is intended for use in industry, heating and cooling systems and is a replacement for weld, threaded and roller-groove connections during new installations and repairs. The system is not suitable for use in potable water installations. For this reason, the press connectors are labelled with a black symbol "Not potable water".


Do not use the piping system for fuel gases, see  'Regulations from section: Application areas' on page 5.

Use is possible in the following areas among others:

- Closed heating and cooling circuits
- Industrial units
- Sprinkler systems
- Fire extinguishing systems, see  'Regulations from section: Application areas' on page 5
- Compressed air systems
- Systems for technical gases (on request)

2.2.2 Media

The system is suitable for the following media, amongst others:

For the applicable directives, see  'Regulations from section: Media' on page 5.

- Heating water for closed pump hot water heating systems
- Compressed air (dry) in compliance with the specification of the sealing elements being used
- Anti-freeze, cooling brines up to a concentration of 50 %
- technical gases (on request)

2.3 Product description

2.3.1 Overview

The piping system consists of press connectors for thick-walled steel pipes and the corresponding press tools.

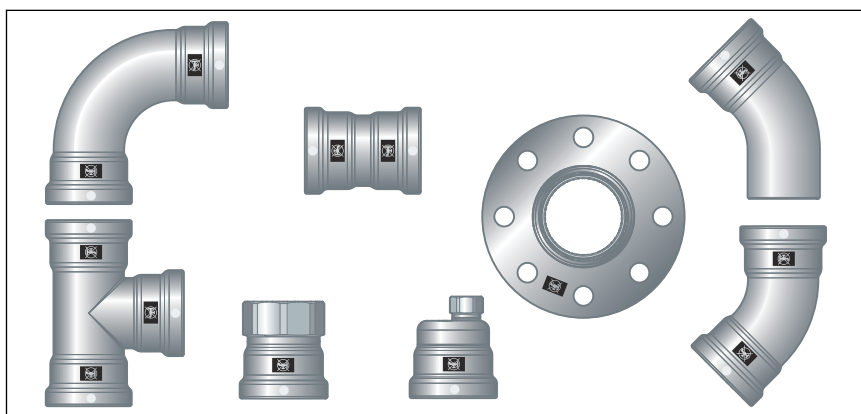


Fig. 2: Megapress S XL press connectors

The system components are available in the following dimensions:
D2½ (DN 65), D3 (DN 80), D4 (DN 100)

2.3.2 Pipes

Megapress S XL press connectors may be used with the following seamless (S) or longitudinal welded (W) steel pipes:

- Black
- Galvanised
- Industrially painted
- Powder coated

The steel pipes must correspond to the applicable regulations, see
🔗 'Regulations from section: Pipes' on page 5



If the pipe has been coated, the maximum external diameter mentioned in the table must not be exceeded.

Pipe overview – threaded pipe quality

The standard differentiates between heavy pipe series H and medium pipe series M or between pipe type L, L 1 and L 2. Seamless pipes and pipes welded along the longitudinal seam belong to the different pipe series and pipe types, see 🔗 'Regulations from section: Pipes' on page 5.

Threaded pipe quality – heavy series H and medium series M

Thread size [inch]	Nominal width [DN]	Nominal external diameter [mm]	Min. external diameter incl. coating [mm]	Max. external diameter incl. coating [mm]	Wall thickness heavy series H [mm]	Wall thickness medium series M [mm]
2½	65	76.1	75.3	76.6	4.5	3.6
3	80	88.9	88.0	89.5	5.0	4.0
4	100	114.3	113.1	115.0	5.4	4.5

Threaded pipe quality – pipe type L

Thread size [inch]	Nominal width [DN]	Nominal external diameter [mm]	Min. external diameter incl. coating [mm]	Max. external diameter incl. coating [mm]	Wall thickness [mm]
2½	65	76.1	75.2	76.0	3.2
3	80	88.9	87.9	88.7	3.2
4	100	114.3	113.0	113.9	3.6


Threaded pipe quality – pipe type L 1

Thread size [inch]	Nominal width [DN]	Nominal external diameter [mm]	Min. external diameter incl. coating [mm]	Max. external diameter incl. coating [mm]	Wall thickness [mm]
2½	65	76.1	75.2	76.3	3.2
3	80	88.9	87.9	89.4	3.6
4	100	114.3	113.0	114.9	4.0

Threaded pipe quality – pipe type L 2

Thread size [inch]	Nominal width [DN]	Nominal external diameter [mm]	Min. external diameter incl. coating [mm]	Max. external diameter incl. coating [mm]	Wall thickness [mm]
2½	65	76.1	75.2	76.0	3.2
3	80	88.9	87.9	88.7	3.2
4	100	114.3	113.0	113.9	3.6

Pipe overview – boiler pipe quality

The standards differentiate between pipe series 1, 2 and 3. They recommend using installation pipe series 1 as pipe series 2 and 3 are either not or not always available in practice. Pipe series 1 includes seamless pipes and pipes welded along the longitudinal seam, see  'Regulations from section: Pipes' on page 5.

Boiler pipe quality – pipe series 1

Thread size [Inch]	Nominal width [DN]	Nominal external diameter [mm]	Min. external diameter incl. coating [mm]	Max. external diameter incl. coating [mm]	Possible pipe wall thickness for seam-less pipes ¹⁾ [mm]	Possible pipe wall thickness for pipes welded along the longitudinal seam ¹⁾ [mm]
2½	65	76.1	75.3	76.9	2.9–20.0	1.4–10.0
3	80	88.9	88.0	89.8	3.2–25.0	1.4–10.0
4	100	114.3	113.2	115.4	3.6–32.0	1.4–11.0

¹⁾ see ↗ 'Regulations from section: Pipes' on page 5

Laying and fixing pipes

Only pipe clamps with chloride-free sound insulating inlays should be used to secure the pipes.

Observe the general rules of fixing technology:

- Do not use fixed pipelines as a support for other pipelines and components.
- Do not use pipe hooks.
- Observe the expansion direction: Plan fixed and gliding points.

Distance between the pipe clamps

D [mm]	Nominal width [inch]	Fixing distance between the pipe clamps [m] ¹⁾	Fixing distance between the pipe clamps [m] ²⁾
76.1	2½	5.50	4.00
88.9	3	6.00	4.00
114.3	4	6.00	4.00

¹⁾ acc. to manufacturer's information

²⁾ according to VdS, see ↗ 'Regulations from section: Pipes' on page 5

Length expansion

Pipelines expand with heat. Heat expansion is dependent on the material. Changes in length lead to tension within the installation. These tensions must be compensated for with suitable measures.

The following are effective:

- Fixed and gliding points
- Expansion equalisation joints (expansion bends)
- Compensators

Heat expansion co-efficients of various pipe materials

Material	Heat expansion co-efficient α [mm/mK]	Example: Length expansion with pipe lengths $L = 20$ m and $\Delta T = 50$ K [mm]
Steel	0.0120	12.0

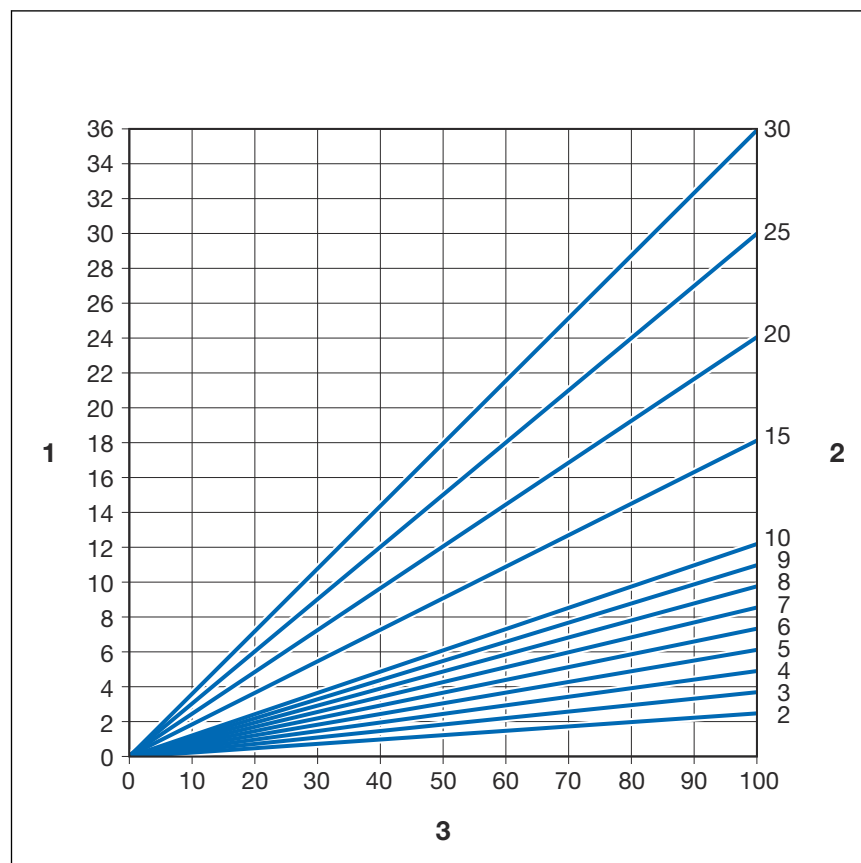


Fig. 3: Length expansion steel pipes

- 1 - Length expansion Δl [mm]
- 2 - Pipe length l_0 [m]
- 3 - Temperature difference ΔT [K]

The length expansion Δl can be taken from the diagram or can be calculated using the following formula:

$$\Delta l = \alpha \text{ [mm/mK]} \times L \text{ [m]} \times \Delta T \text{ [K]}$$

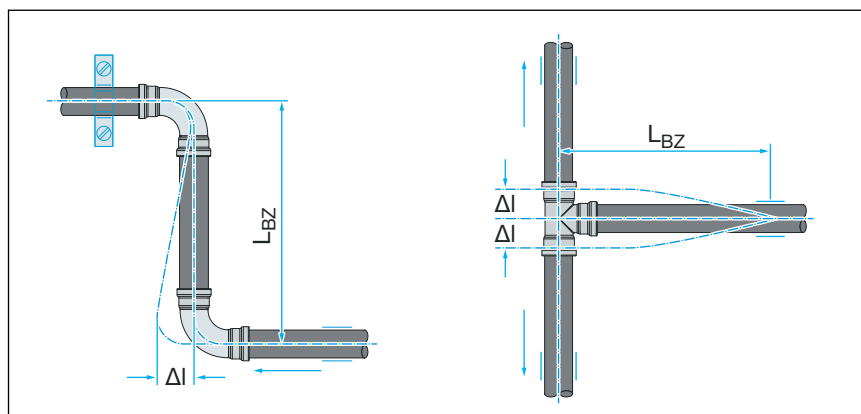


Fig. 4: Z-shaped and T-shaped expansion bends

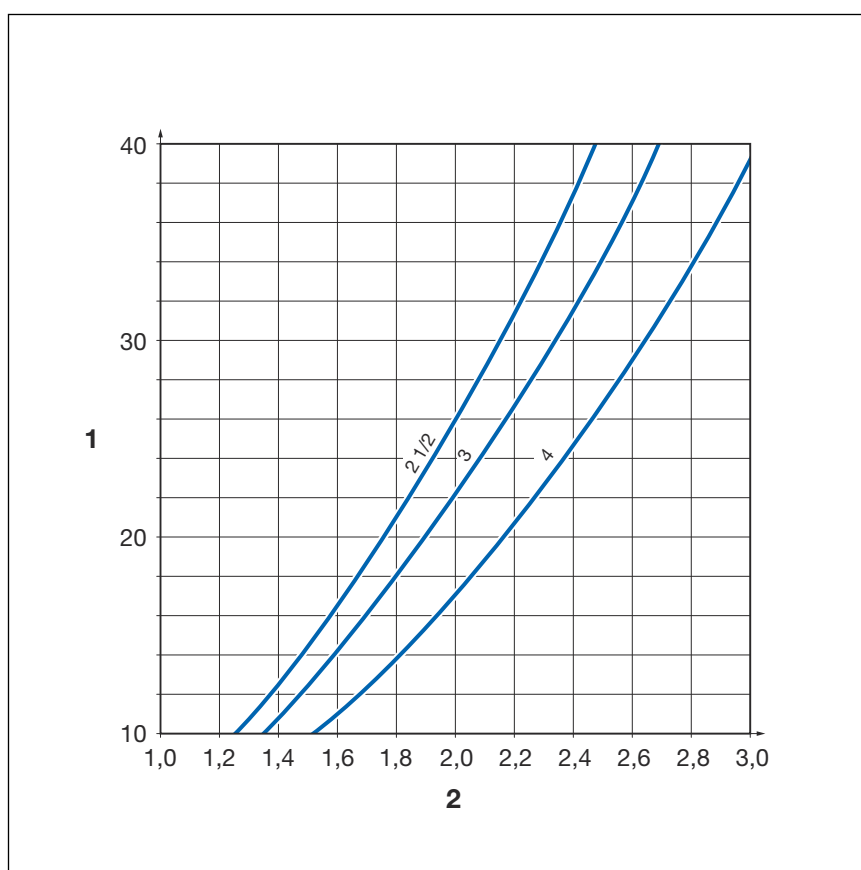


Fig. 5: Z- and T-shaped expansion bends for Megapress S XL 2 1/2 to 4 inches

- 1 - Expansion compensation Δl [mm]
 2 - Pipe bend length L_{BZ} [m]

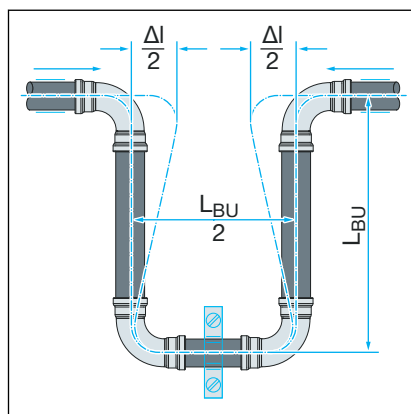


Fig. 6: U-shaped expansion bend

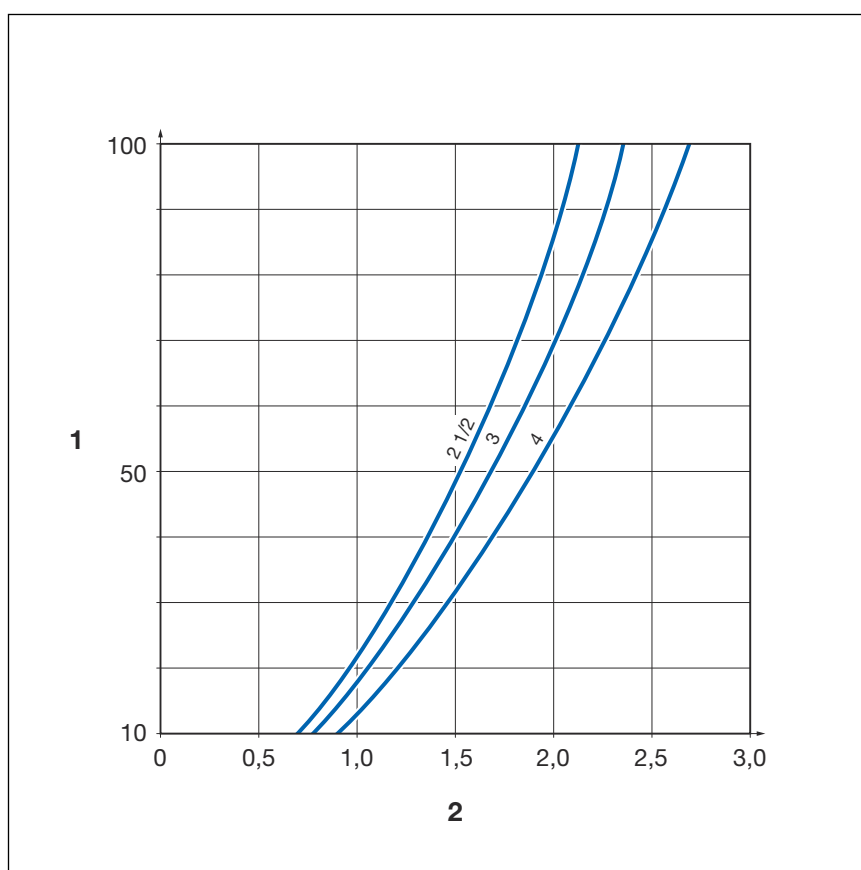


Fig. 7: U-shaped expansion bend for Megapress S XL 2 1/2 to 4 inches

- 1 - Expansion compensation Δl [mm]
 2 - Pipe bend length L_{BZ} [m]

2.3.3 Press connectors

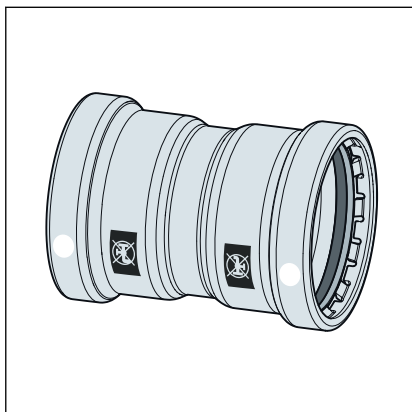


Fig. 8: Megapress S XL press connectors

The Megapress S XL press connectors consist of non-alloy steel (material 1.0308) and have an external 3–5 µm zinc-nickel coating. There is a cutting ring, a separator ring, and a round sealing element with increased cross section in the bead of the press connector. The cutting ring cuts into the pipe during pressing and ensures a force-fit connection.

During installation, and later during the pressing, the separator ring protects the sealing element from damage from the cutting ring.

SC-Contur

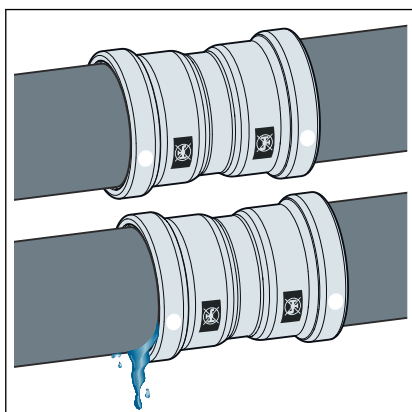


Fig. 9: SC-Contur

Viega press connectors are equipped with the SC-Contur. The SC-Contur is a safety technology that is certified by the DVGW and ensures that the press connector is guaranteed to be leaky in an unpressed state. In this way, inadvertently unpressed connections are noticed during a leakage test.

Viega guarantees that accidentally unpressed connections become visible during a leakage test:

- with the wet leakage test in the pressure range from 0.1–0.65 MPa (1.0–6.5 bar)
- with dry leakage test in the pressure range from 22 hPa–0.3 MPa (22 mbar–3.0 bar)

2.3.4 Sealing elements

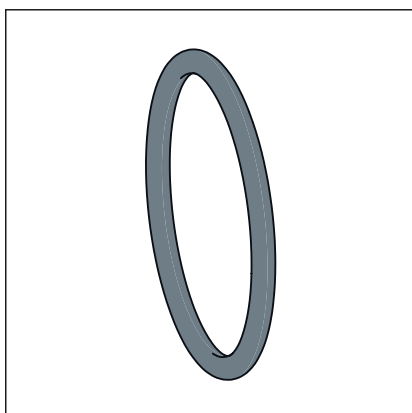


Fig. 10: FKM round sealing element

Megapress S XL press connectors are factory-fitted with FKM sealing elements. Thanks to the increased line thickness, even seal pipe surfaces with slightly uneven surfaces are sealed off.

Area of use of the FKM sealing element

Area of application	Heating	Solar installations	Compressed air	Technical gases
Use	Pump hot water heating system	Solar circuit	all pipeline sections	all pipeline sections
Operating temperature [T _{max}]	-5 °C–140 °C	1)	60 °C	—
Operating pressure [P _{max}]	1.6 MPa (16 bar)	0.6 MPa (6 bar)	1.6 MPa (16 bar)	—
Comments	pursuant to the applicable regulations ²⁾ T _{max} : 105 °C with radiator connections T _{max} : 95	for flat collectors	dry	1)

¹⁾ Consultation with Viega required.

²⁾ see ↗ 'Regulations from section: Sealing elements' on page 6

2.3.5 Technical data

Observe the following operating conditions for the installation of the system:

Operating temperature [T _{max}]	140 °C
Operating pressure [P _{max}]	1.6 MPa (16 bar)

2.3.6 Markings on components

Markings on press connectors

The press connectors are marked with a coloured dot. The dot identifies the SC-Contur where the test medium would escape in the case of an inadvertently unpressed connection.

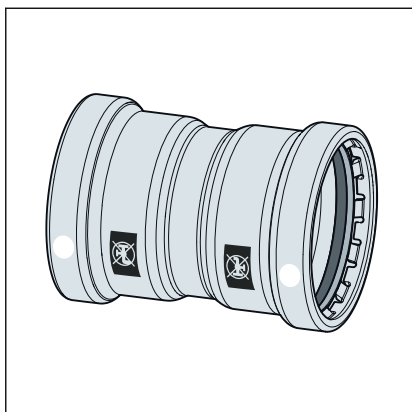


Fig. 11: White dot and print "Not suitable for potable water!"

The white dot indicates that the press connection is equipped with the FKM round sealing element and with the SC-Contur.

The black rectangle serves as a warning "Not suitable for potable water!".

The rectangle is to be found in the following places:

- On the press end of the press connector
- On the flange of the flange adapter

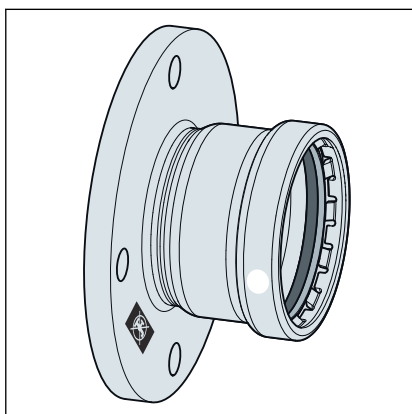


Fig. 12: White dot and print "Not suitable for potable water!"

2.4 Information for use

2.4.1 Corrosion

A zinc-nickel coating protects Megapress S XL press connectors against external corrosion, e. g. in the case of arising condensation water in cooling systems.



Pipes must be equipped with suitable corrosion protection.

Pipes and press connectors must be insulated according to the general rules of engineering.

Observe the manufacturer's information.

3 Handling

3.1 Transport

Observe the following when transporting pipes:

- Do not pull the pipes over the sill. The surface could be damaged.
- Secure pipes during transportation. Pipes may become bent due to shifting.
- Do not damage the protective caps on the pipe ends and do not remove them until immediately before mounting. Damaged pipe ends must not be pressed.



In addition, observe the instructions provided by the pipe manufacturer.

3.2 Storage

For storage, comply with the requirements specified in the applicable regulations, see [§ 'Regulations from section: Storage' on page 6](#):

- Store components in a clean and dry place.
- Do not store the components directly on the floor.
- Where possible, store different sizes separately.
Store small sizes on top of larger sizes if separate storage is not possible.
- Store pipes of different materials separately to prevent contact corrosion.



In addition, observe the instructions provided by the pipe manufacturer.

3.3 Assembly information

3.3.1 Mounting instructions

System components may, in some cases, become damaged through transportation and storage.

- Only use original parts in perfect condition.
- Damaged parts must be replaced. Do not attempt to repair them.
- Store products in a clean and dry place.
- Check the installation pipes for suitable surface properties and the min./max. external diameter.

- Do not press on embossed pipe markings.
- Pipes and press connectors must be insulated pursuant to the general rules of engineering.

Fire extinguisher and sprinkler systems

The following requirements must be observed:

- For the applicable directives, see ↗ *'Regulations from section: Notes on mounting'* on page 6
- Compliance with the data from the following table



For sprinkler systems in compliance with VdS, only black, galvanised, or powder-coated steel pipes according to the specifications for VdS approval may be used.

Permissible pressures, nominal widths and application conditions

Permitted pressure	DN65: 1.6 MPa (16 bar) DN80: 1.25 MPa (12.5 bar) DN100: 1.0 MPa (10 bar)
Nominal widths	D 2½–4
Area of use (pipeline network)	Wet sprinkler units: <ul style="list-style-type: none"> ■ Piping network downstream of the alarm valve station Dry sprinkler units: <ul style="list-style-type: none"> ■ Piping network downstream of the alarm valve station
Fixing intervals	1)
Firefighting water additive	Generally not permitted; exceptions only with the manufacturer's permission and prior agreement of the VdS

1) see ↗ *'Regulations from section: Notes on mounting'* on page 6

Pipe wall thicknesses

DN [inch]	Minimum pipe wall thickness [mm] ¹⁾	Maximum pipe wall thicknesses [mm] ¹⁾
D 2½ (DN 65)	2.6	4.5
D 3 (DN 80)	2.9	5.0
D 4 (DN 100)	3.2	5.4

1) according to VdS, see ↗ *'Regulations from section: Notes on mounting'* on page 6

The following fire hazard classes are covered by Megapress S XL:

- Fire hazard class LH (light hazard)
- Fire hazard class OH 1–4 (ordinary hazard)
- Fire hazard class HHP 1–4 (extra hazard, production risks)
- Fire hazard class HHS 1–4 (extra hazard, storage risks)

See ↗ *'Regulations from section: Notes on mounting' on page 6.*

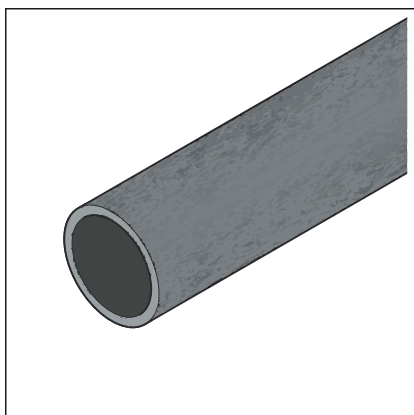
Preparation of the pipes

As long as they are free from dirt, smooth, firm, even and undamaged, the following pipe surfaces are suitable for the production of press connections without further treatment:

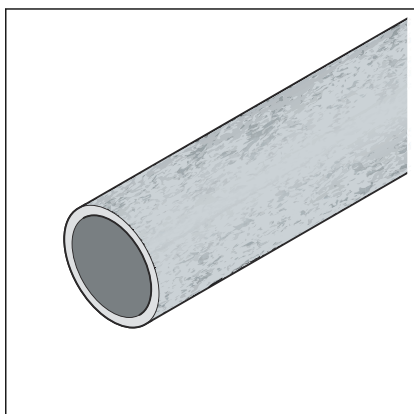


NOTICE!

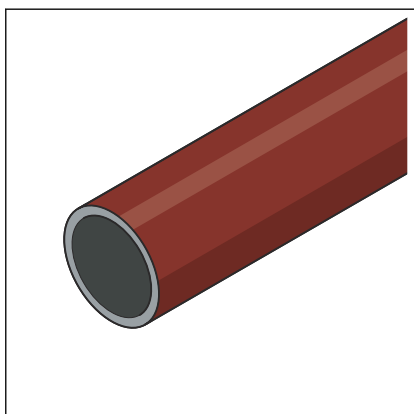
Always check the quality of the pipe surface on the complete pipe circumference. For permanently installed existing pipes, for example, Viega recommends the use of a mirror to be able to check the surface quality on the complete pipe circumference.



Black uncoated pipes



Galvanised pipes, for galvanisation see [Chapter 2.1 'Standards and regulations' on page 5](#) (maximum external diameter in acc. with [Chapter 2.3.2 'Pipes' on page 8](#))

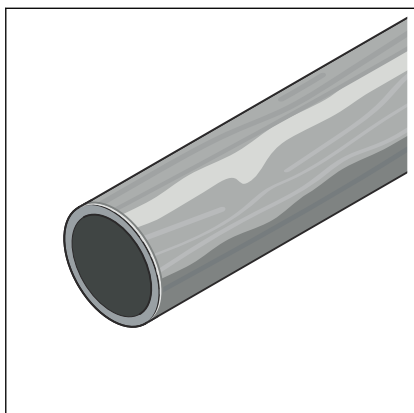


Industrially painted or powder-coated pipes (maximum external diameter in acc. with [Chapter 2.3.2 'Pipes' on page 8](#))

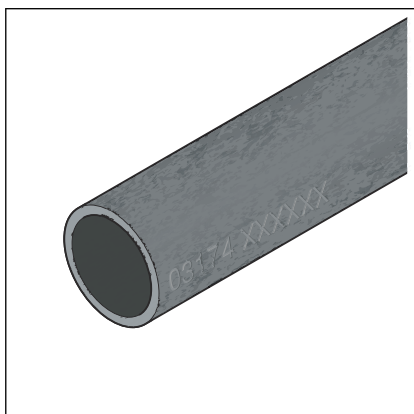
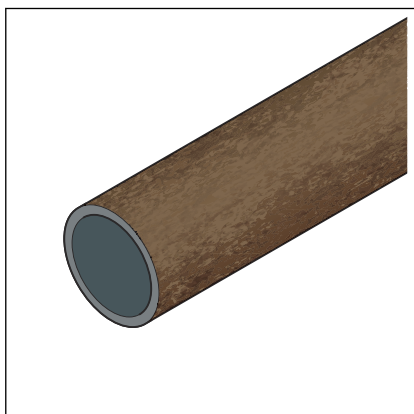
Pipe surfaces must be treated around the press connection if they exhibit the following characteristics:

Uneven, manually applied layers of paint

Exceeding the maximum external diameter due to coating that has been applied → *Chapter 2.3.2 'Pipes' on page 8*



Bumps, damage, grooves, corrosion or loose adhesions



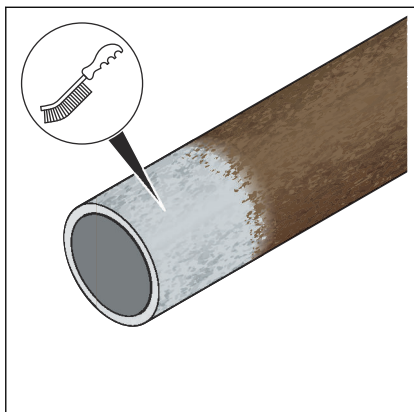
NOTICE! **Leaky press connection**

Pressings on the embossed pipe marking may cause leaking.

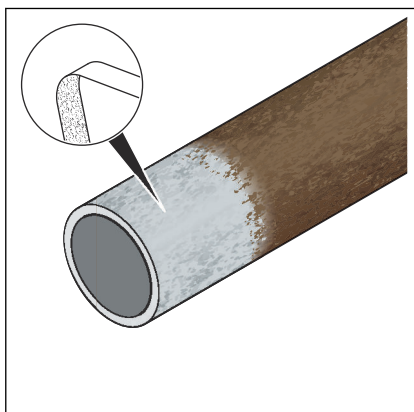
- Do not carry out pressings on the embossed pipe marking.

The following are examples of suitable tools for the work:

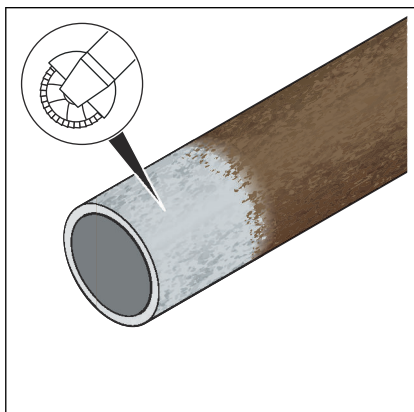
■ Wire brush



■ Cleaning fleece or sanding paper (grain > 80)



■ Angle grinder with serrated washer

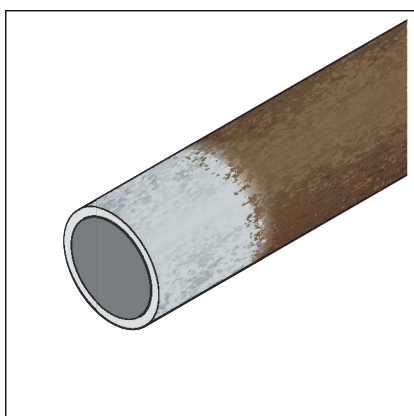


After the treatment, the quality of the pipe surface should be as shown in the following graphic:



NOTICE!

Always check the quality of the pipe surface on the complete pipe circumference. For permanently installed existing pipes, for example, Viega recommends the use of a mirror to be able to check the surface quality on the complete pipe circumference.



The external diameter of the installation pipe must not fall below the minimum value, see [Chapter 2.3.2 'Pipes' on page 8](#).

In systems where complete corrosion protection is required (e. g. cooling systems), those parts of the previously processed pipe surface that are uncovered after pressing must subsequently be equipped with suitable corrosion protection.

3.3.2 Potential equalisation



DANGER!

Danger due to electrical current

An electric shock can lead to burns and serious injury and even death.

Because all metallic piping systems conduct electricity, unintentional contact with a live part can lead to the whole piping system and components connected to it (e. g. radiators) becoming energised.

- Only allow electrical work to be carried out by qualified electricians.
- Always integrate the metal piping system into the potential equalisation.

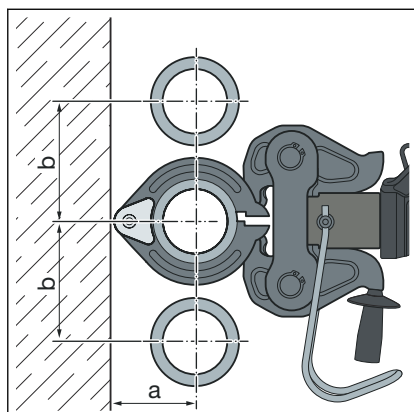


It is the fitter of the electrical system who is responsible for ensuring that the potential equalisation is tested and secured.

3.3.3 Space requirements and intervals

The minimum distance to welding seams and bending points must be $3 \times D$ – however at least 100 mm.

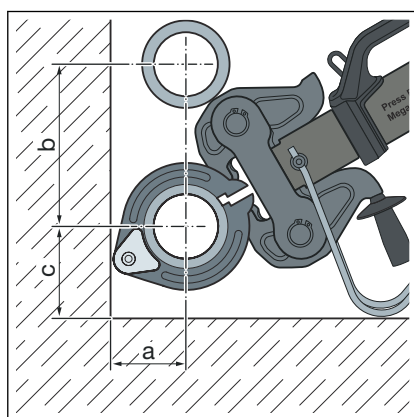
Pressing between pipelines



Space requirement press rings D2½–4

D	2½	3	4
a [mm]	115	120	135
b [mm]	150	170	210

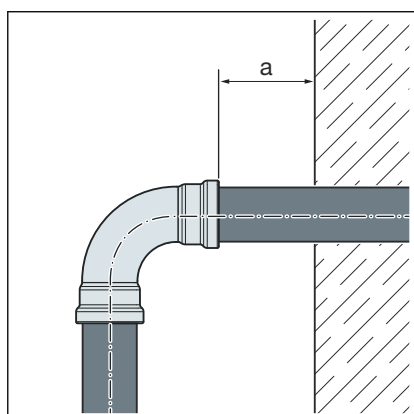
Pressing between pipe and wall



Space requirement press rings D2½–4

D	2½	3	4
a [mm]	115	120	135
b [mm]	150	170	210
c [mm]	100	120	140

Wall distance



Minimum distance with press rings D2½–4

Press machine	a _{min} [mm]
Type 2 (PT2)	20
Type PT3-EH	
Pressgun 4E / 4B	
Pressgun 5	
Pressgun 6 Plus	

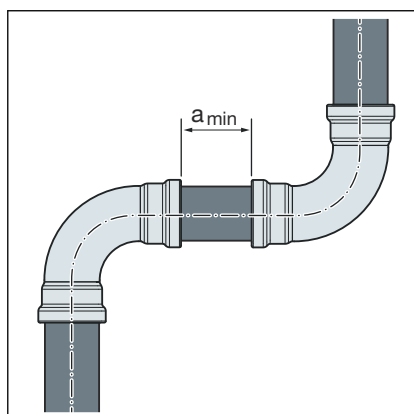
Interval between the pressings



NOTICE!

Leaking press connections due to pipes being too short!

If two press connectors are to be mounted onto a pipe without an interval, the pipe must not be too short. If the pipe is not inserted up to the prescribed insertion depth in the press connector during pressing, the connection may become leaky.



Minimum distance with press rings D2½–4

D [inch]	a _{min} [mm]
2½	15
3	
4	

Z dimensions

For the Z dimensions, refer to the respective product page in the online catalogue.

3.3.4 Required tools



NOTICE!

Megapress S XL press connectors may be pressed only with Megapress XL press rings. Press rings and press chains of the metal Viega press connector systems Profi-press XL, Sanpress XL, Sanpress Inox XL and Prestabo XL cannot be used.

Possible combinations of press machines and press jaws

Press machines	Press jaws	Press rings	Set
Type 2 (PT2) PT3 EH / AH Pressgun 4E / 4B Pressgun 5 Pressgun 6 / 6B / 6 Plus	DN10–DN25 model 4299.9	DN15 model 4296.1, with hinged adapter jaw Z1 model 2296.2 DN 32 to DN 50 model 4296.1, with hinged adapter jaw Z2 model 2296.2	Press jaws DN 15 to DN 25, press rings DN 32 to DN 50, hinged adapter jaw Z2 model 4299.61
Type 2 (PT2) PT3 EH Pressgun 4E / 4B Pressgun 5 Pressgun 6 Plus	—	DN65 to DN100 model 4296.1XL, with Pressgun Press Booster model 4296.4XL	Press ring DN65 and Pressgun Press Booster model 4296.2XL Press rings DN 80 and DN 100 model 4296.5XL
Picco Pressgun Picco Pressgun Picco 6 / 6 Plus	DN10 and DN15 model 4284.9	DN15 model 4296.1, with hinged adapter jaw P1 model 2496.1	—

The following tools are required for production of a press connection:

- Pipe cutter or a fine-toothed hacksaw
Or angle-grinder
Or chopsaw with low cutting speed
- Deburrer or half-round file and coloured pen for marking
- Press machine with constant pressing force
- Press ring (D2½–4), Press Booster with fixed hinged adapter jaw, suitable for the pipe diameter and with a suitable profile

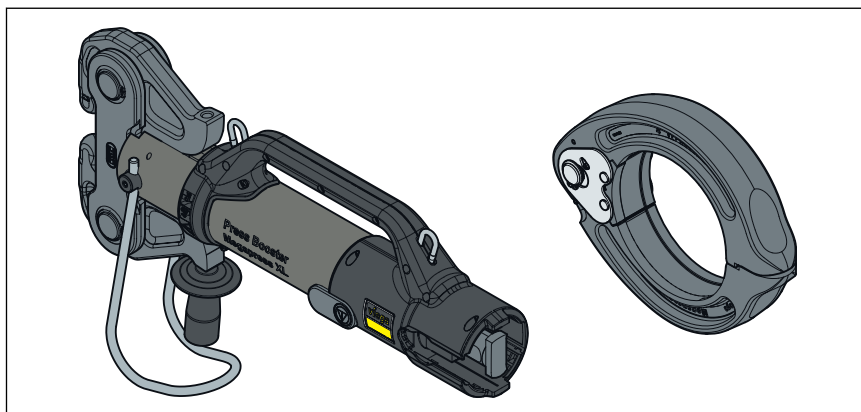


Fig. 13: Pressgun Press Booster, Megapress XL press ring



Viega recommends the use of Viega system tools when installing the press fittings.

The Viega system press tools have been developed and tailored specifically for the installation of Viega press connector systems.

3.4 Assembly

Permitted exchange of sealing elements



NOTICE!

With their material-specific qualities, sealing elements in press connectors are adapted for use with the corresponding media and/or the areas of use of the piping systems and are generally only certified for them.

The exchange of a sealing element is generally permitted. The sealing element must be exchanged for a designated spare part for the intended application ↪ *Chapter 2.3.4 'Sealing elements' on page 14*. The use of other sealing elements is not permitted.

If the round sealing element in the press connector is obviously damaged, it should be exchanged for a Viega replacement round sealing element made of the same material.

3.4.1 Replacing the sealing element

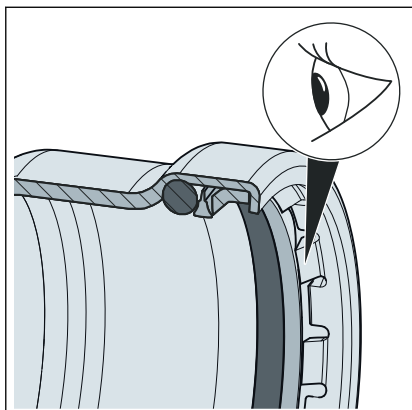


Fig. 14: Cutting ring



CAUTION! **Risk of injury due to sharp edges**

There is a sharp-edged cutting ring above the sealing element (see arrow). There is a risk of injury (cutting) when replacing the sealing element.

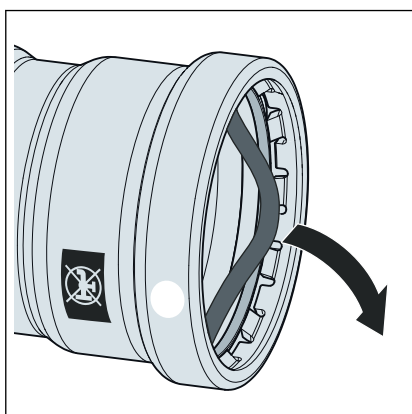
- Do not reach into the press connector with your bare hands.

Removing the sealing element

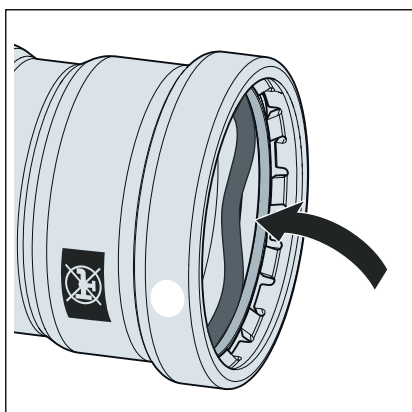


Do not use pointed or sharp-edged objects to remove the sealing element. They may damage the sealing element or the bead.

- Remove the sealing element from the bead. Proceed carefully to avoid damaging the sealing element seat.



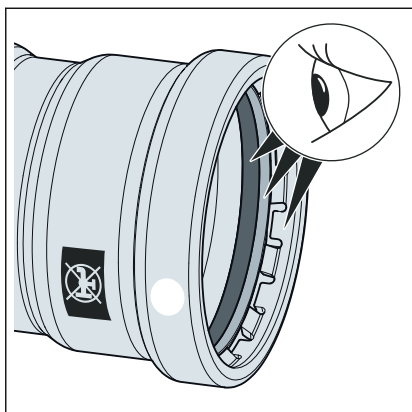
Inserting the sealing element



- Insert a new, undamaged sealing element, model 4286XL into the bead.

Make sure that the sealing element is not damaged by the cutting ring.

- Ensure that the complete sealing element is in the bead.



- The correct sealing element is in the press connector.
FKM = matt black
- Sealing element, separator ring and cutting ring are undamaged.
- The complete sealing element, separator ring and cutting ring are in the bead.

3.4.2 Shortening the pipes



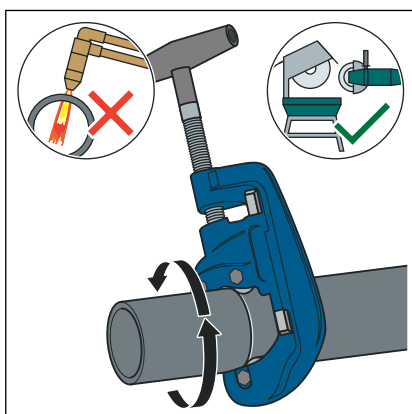
NOTICE! **Leaking press connections due to damaged material!**

Press connections can become leaky due to damaged pipes or sealing elements.

Observe the following instructions to avoid damage to pipes and sealing elements:

- Do not use flame cutters when cutting to length.
- Do not use grease or oils (e. g. cutting oil).

For information about tools, also see [Chapter 3.3.4 'Required tools'](#) on page 26.



- Cut the pipe at a right angle using a pipe cutter, angle grinder or fine-toothed hacksaw. Do not use a flame cutter

Avoid grooves on the pipe surface.

3.4.3 Deburring the pipes

The pipe ends must be thoroughly deburred internally and externally after shortening.

Deburring prevents the sealing element being damaged or the that the press connector cants when mounted. Viega recommends using a deburrer.

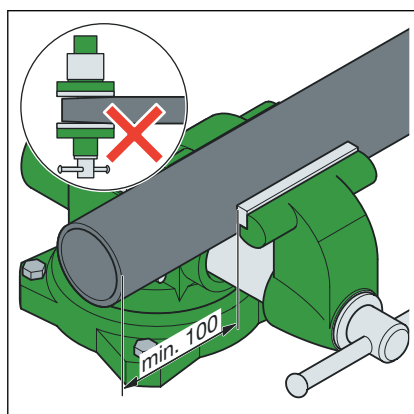
- D2½, 3 (model 2292.4XL)
- D 4 (half-round file)



NOTICE!

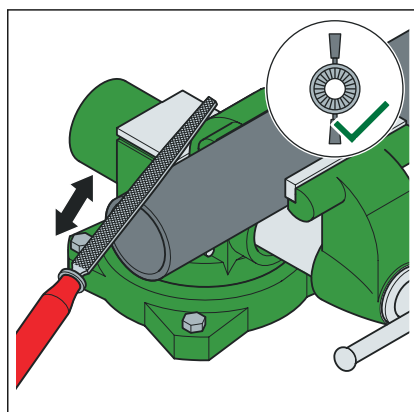
Damage due to the wrong tool!

Do not use sanding disks or similar tools when deburring. The pipes could be damaged by these.



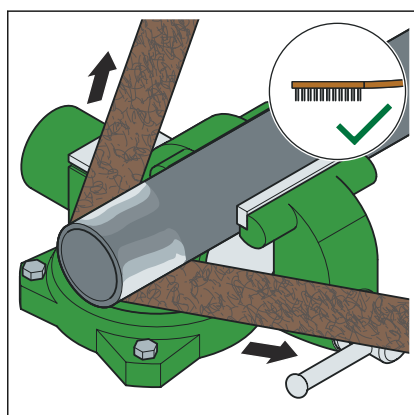
- Secure the pipe in the vice.
- When clamping, leave an interval of at least 100 mm (a) to the pipe end.

The pipe ends must not be bent or damaged.

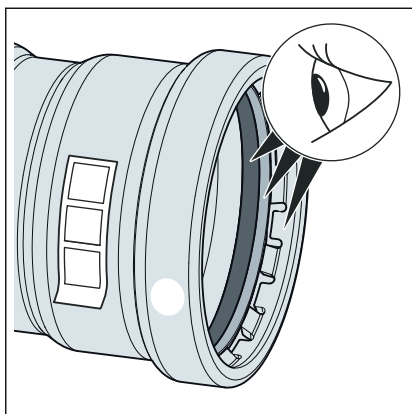


- Deburr the inside and outside of the pipe.

3.4.4 Pressing the connection

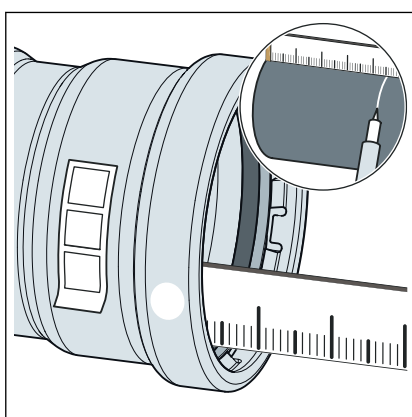


- With the help of a wire brush, cleaning fleece or sanding paper, remove loose dirt and rust particles from the pressing area.



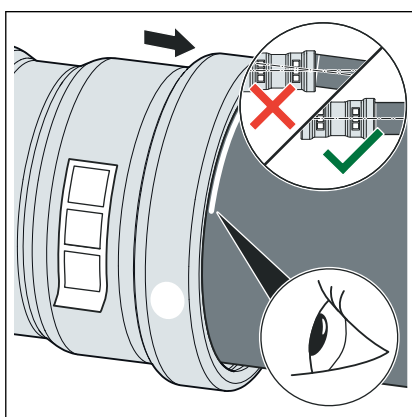
Requirements:

- The pipe end is not bent or damaged.
- The pipe is deburred.
- The correct sealing element is in the press connector.
FKM = matt black
- Sealing element, separator ring and cutting ring are undamaged.
- The complete sealing element, separator ring and cutting ring are in the bead.

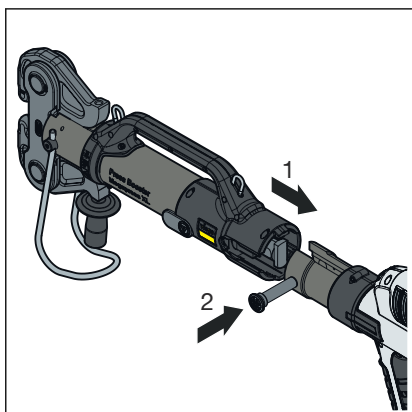


- Measure and mark the insertion depth.

D [inch]	Insertion depth [mm]
2 ½	46
3	59
4	80

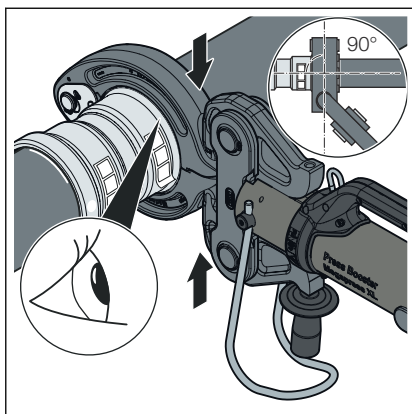


- Push the press connector up to the marked insertion depth on the pipe. Do not twist the press connector.

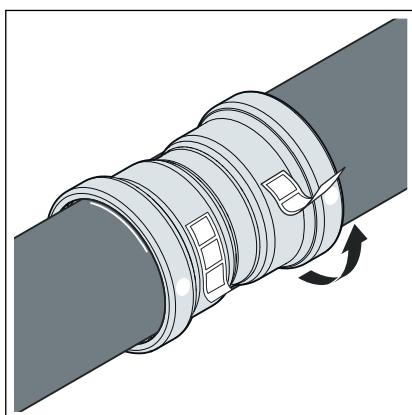


- Place the Pressgun Press Booster into the press machine and push the retaining pin in until it clicks into place.

INFO! Observe the press tool instruction manual.



- Place the XL press ring on the press connector. Observe the proper fit of the press ring.
- Position the hinged adapter jaw of the Pressgun Press Booster on the recesses of the press ring.
- **Carry out two pressings.**
If necessary, carry out a reset stroke.
- Open the hinged adapter jaw and remove the press ring.




- Remove the check label.
- ◻ The connection is marked as having been pressed.


3.4.5 Leakage test

The installer must perform a leakage test before commissioning.

The installer must perform a leakage test (load and leakage test) before commissioning.

Carry out this test on a system that is finished but not covered yet.


Observe the applicable regulations, see  'Regulations from section: Leakage test' on page 6.

The leakage test pursuant to the applicable regulations must also be carried out for non-potable water installations, see  'Regulations from section: Leakage test' on page 6.

Document the result.



To prevent corrosion after the leakage test has been performed with water, the system must remain full.

For the filling and top-up water, comply with the requirements specified in the applicable regulations, see  'Regulations from section: Leakage test' on page 6.

3.5 Disposal

Separate the product and packaging materials (e. g. paper, metal, plastic or non-ferrous metals) and dispose of in accordance with valid national legal requirements.



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