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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: Fields of application

<table>
<thead>
<tr>
<th>Scope / Notice</th>
<th>Regulations applicable in Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application in fire extinguishing systems</td>
<td>DIN 14462</td>
</tr>
<tr>
<td>Planning, execution, operation and maintenance of drinking water installations</td>
<td>DIN EN 1717</td>
</tr>
<tr>
<td>Planning, execution, operation and maintenance of drinking water installations</td>
<td>DIN 1988</td>
</tr>
<tr>
<td>Planning, execution, operation and maintenance of drinking water installations</td>
<td>VDI/DVGW 6023</td>
</tr>
<tr>
<td>Planning, execution, operation and maintenance of drinking water installations</td>
<td>Trinkwasserverordnung (TrinkwV)</td>
</tr>
</tbody>
</table>

Regulations from section: Media

<table>
<thead>
<tr>
<th>Scope / Notice</th>
<th>Regulations applicable in Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitability for drinking water</td>
<td>Trinkwasserverordnung (TrinkwV)</td>
</tr>
<tr>
<td>Suitability for heating water for pump hot water heating systems</td>
<td>VDI-Richtlinie 2035, Sheet 1 and Sheet 2</td>
</tr>
</tbody>
</table>

Regulations from section: Sealing elements

<table>
<thead>
<tr>
<th>Scope / Notice</th>
<th>Regulations applicable in Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of use of the EPDM sealing element</td>
<td>DIN EN 12828</td>
</tr>
<tr>
<td>Heating</td>
<td></td>
</tr>
</tbody>
</table>
Regulations from section: Corrosion

<table>
<thead>
<tr>
<th>Scope / Notice</th>
<th>Regulations applicable in Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulations for external corrosion protection</td>
<td>DIN EN 806-2</td>
</tr>
<tr>
<td>Regulations for external corrosion protection</td>
<td>DIN 1988-200</td>
</tr>
</tbody>
</table>

Regulations from section: Storage

<table>
<thead>
<tr>
<th>Scope / Notice</th>
<th>Regulations applicable in Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements for material storage</td>
<td>DIN EN 806-4, Chapter 4.2</td>
</tr>
</tbody>
</table>

Regulations from section: Leakage test

<table>
<thead>
<tr>
<th>Scope / Notice</th>
<th>Regulations applicable in Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test on a system that is finished but not yet covered</td>
<td>DIN EN 806–4</td>
</tr>
<tr>
<td>Leakage test for water installations</td>
<td>ZVSHK-Merkblatt: &quot;Dichtheitsprüfungen von Trinkwasserinstallationen mit Druckluft, Inertgas oder Wasser&quot;</td>
</tr>
</tbody>
</table>

Regulations from section: Maintenance

<table>
<thead>
<tr>
<th>Scope / Notice</th>
<th>Regulations applicable in Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation and maintenance of potable water installations</td>
<td>DIN EN 806-5</td>
</tr>
</tbody>
</table>

2.2 Intended use

Coordinate the use of the system for areas of use and media other than those described with the Viega Service Center.

2.2.1 Areas of use

Use is possible in the following areas among others:
Painting systems
Drinking water installations
Industrial and heating systems
Fire extinguishing systems, see “Regulations from section: Fields of application” on page 7
- wet
- wet / dry
- dry
Solar installations with flat collectors
Compressed air systems
Cooling water pipelines (closed circuit)

Drinking water installation

For planning, execution, operation and maintenance of potable water installations, observe the applicable regulations, see “Regulations from section: Fields of application” on page 7.

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 7.

- Drinking water:
  - Without limitations
  - max. chloride concentration 250 mg/l
- Heating water for pump hot water heating systems
- Compressed air in compliance with the specification of the sealing elements being used
  - EPDM at oil concentration < 25 mg/m³
- Anti-freeze, cooling brines up to a concentration of 50%

2.3 Product description
2.3.1 Overview

The piping system consists of labs-free press connectors in connection with silicone-free stainless steel pipes and the corresponding press tools.
The system components are available in the following dimensions:
d 15 / 18 / 22 / 28 / 35 / 42 / 54.

2.3.2 Pipes

The following pipes are available from the system described:

<table>
<thead>
<tr>
<th>Type of pipe</th>
<th>Stainless steel pipe 1.4401</th>
<th>Stainless steel pipe 1.4521</th>
</tr>
</thead>
<tbody>
<tr>
<td>d</td>
<td>15 / 18 / 22 / 28 / 35 / 42 / 54</td>
<td>15 / 18 / 22 / 28 / 35 / 42 / 54</td>
</tr>
<tr>
<td>Material No.</td>
<td>1.4401 (X5CrNiMo 17-12-2), with 2.3 % molybdenum for increased durability</td>
<td>1.4521 (X2CrMoTi 18-2)</td>
</tr>
<tr>
<td>PRE value</td>
<td>24.1</td>
<td>24.1</td>
</tr>
<tr>
<td>Pipe marking</td>
<td>—</td>
<td>green line</td>
</tr>
<tr>
<td>Protective cap</td>
<td>yellow</td>
<td>Green</td>
</tr>
</tbody>
</table>
Pipe key data Sanpress pipe (1.4401 and 1.4521)

<table>
<thead>
<tr>
<th>d x s_{\text{min}} [mm]</th>
<th>Volume per metre of pipe [l/m]</th>
<th>Pipe weight [kg/m]</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 x 1.0</td>
<td>0.13</td>
<td>0.35</td>
</tr>
<tr>
<td>18 x 1.0</td>
<td>0.20</td>
<td>0.43</td>
</tr>
<tr>
<td>22 x 1.2</td>
<td>0.30</td>
<td>0.65</td>
</tr>
<tr>
<td>28 x 1.2</td>
<td>0.51</td>
<td>0.84</td>
</tr>
<tr>
<td>35 x 1.5</td>
<td>0.80</td>
<td>1.26</td>
</tr>
<tr>
<td>42 x 1.5</td>
<td>1.19</td>
<td>1.52</td>
</tr>
<tr>
<td>54 x 1.5</td>
<td>2.04</td>
<td>1.97</td>
</tr>
</tbody>
</table>

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 distance to connectors.
- Observe the expansion direction: Plan fixed and gliding points.

Make sure to affix the pipelines in such a way as to de-couple them from the installation body, so that they cannot transfer any structure-borne sound, resulting from thermal expansion or possible pressure surges, onto the installation body or other components.

Observe the following fixing intervals:

Interval between the pipe clamps

<table>
<thead>
<tr>
<th>d [mm]</th>
<th>Fixing interval between the pipe clamps [m]</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.0</td>
<td>1.25</td>
</tr>
<tr>
<td>18.0</td>
<td>1.50</td>
</tr>
<tr>
<td>22.0</td>
<td>2.00</td>
</tr>
<tr>
<td>28.0</td>
<td>2.25</td>
</tr>
<tr>
<td>35.0</td>
<td>2.75</td>
</tr>
<tr>
<td>42.0</td>
<td>3.00</td>
</tr>
<tr>
<td>54.0</td>
<td>3.50</td>
</tr>
</tbody>
</table>
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 equalised 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

<table>
<thead>
<tr>
<th>Material</th>
<th>Heat expansion co-efficient $\alpha$ [mm/mK]</th>
<th>Example: Length expansion with pipe lengths $L = 20$ m and $\Delta T = 50$ K [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stainless steel</td>
<td>0.0165</td>
<td>16.5</td>
</tr>
</tbody>
</table>

The length expansion $\Delta l$ can be taken from the diagram or can be calculated using the following formula:

$\Delta l = \alpha \times L \times \Delta T$
2.3.3 Press connectors

Press connectors are available in a number of shapes. An overview of the press connectors suitable for the system can be found in the catalogue.

The press connectors have a circumferential bead in which the sealing element lies. The connector is deformed upstream and downstream of the bead and permanently connected to the pipe during pressing. The sealing element is not deformed during pressing.

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 connector is guaranteed to be leaky in an unpressed state. In this way, inadvertently unpressed connections are noticed immediately when filling the system.

Viega ensures that inadvertently unpressed connections during installation become visible when the system is filled.

- with 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

The press connectors are factory-fitted with labs-free EPDM sealing elements.

Area of use of the EPDM sealing element

<table>
<thead>
<tr>
<th>Area of use</th>
<th>Potable water</th>
<th>Heating</th>
<th>Solar installations</th>
<th>Compressed air</th>
<th>Technical gases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature $[T_{\text{max}}]$</td>
<td>110 °C</td>
<td>110 °C</td>
<td>60 °C</td>
<td>1.6 MPa (16 bar)</td>
<td>—</td>
</tr>
<tr>
<td>Operating pressure $[P_{\text{max}}]$</td>
<td>1.6 MPa (16 bar)</td>
<td>1.6 MPa (16 bar)</td>
<td>0.6 MPa (6 bar)</td>
<td>1.6 MPa (16 bar)</td>
<td>—</td>
</tr>
<tr>
<td>Comments</td>
<td>—</td>
<td>$T_{\text{max}}$ 105 °C$^2$</td>
<td>for flat collectors</td>
<td>dry, oil content $&lt; 25 \text{ mg} / \text{m}^3$</td>
<td>—</td>
</tr>
</tbody>
</table>

$^1$ Consultation with the Viega Service Center required.

$^2$ see “Regulations from section: Sealing elements” on page 7

2.3.5 Markings on components

Pipe marking

The pipe markings contain important information regarding the material configuration and manufacture of the pipes. Their meaning is as follows:

- manufacturer
- System name
- pipe material
- certification
- dimension
- supplier’s mark
- date of manufacture
- batch number
- CE mark
- DOP and DOP number
- manufacturing standard

Markings on press connectors

The press connectors are marked with a coloured dot. This identifies the SC-Contur, where the test medium would escape in the case of an inadvertently unpressed connection.
Fig. 5: Marking on the press connector

The blue dot indicates that the system is labs-free, suitable for potable water and is equipped with the SC-Contur.

2.3.6 Mixed installations

In potable water installations, piping components from different metals can have a detrimental effect on each other and e.g. cause corrosion. Threaded adapters made of stainless steel, for instance, may not be connected directly with pipes or threaded connectors made of galvanised steel.

Components made of stainless steel and galvanised steel may not be directly connected, thread/adapter press connectors made of gunmetal/silicon bronze are recommended here.

Permitted mixed installations

Generally, labs-free components of other Viega systems can be used in the Sanpress LF system.

Please contact the Viega Service Center for questions on this subject.

2.4 Information for use

2.4.1 Corrosion

The Sanpress LF system should be protected against excessively high concentrations of chloride generated by both the medium and by external factors.

An excessive chloride concentration can lead to corrosion in stainless steel systems.
Avoid external contact with materials containing chloride

- Insulating materials must not have a water-soluble chloride ion content that exceeds 0.05%.
- Sound insulating inlays on the pipe clamps must not contain leachable chloride.
- Stainless steel pipes must not come into contact with building materials or mortar containing chloride.

If external corrosion protection is required, observe the pertinent guidelines, see “Regulations from section: Corrosion” on page 8.

The Sanpress LF system can be used for all types of potable water.

The chloride concentration in the medium must not exceed a maximum value of 250 mg/l.

This chloride is not a disinfectant, but in fact pertains to the content in sea and table salt (sodium chloride).
3 Handling

3.1 Transport

Sanpress pipes are free from silicon when delivered to the wholesaler.

Store and transport the pipes properly until used.

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 may not be pressed.

3.2 Storage

Viega guarantees that the press connectors are sent in a labs-free delivery state.

Keep the connector packaging closed and remove the connector from the packaging only immediately before use.

For storage, comply with the requirements specified in the applicable regulations, see “Regulations from section: Storage” on page 8:

- Store components in a clean and dry place.
- Do not store the components directly on the floor.
- Provide at least three points of support for the storage of pipes.
- Where possible, store different sizes separately. Store small sizes on top of larger sizes if separate storage is not possible.
- Only use stainless steel cleaning agent to clean surfaces.
- To prevent contact corrosion, store pipes of different materials separately.

3.3 Assembly information

3.3.1 Mounting instructions

Checking system components

System components may, in some cases, become damaged through transportation and storage.
Check all parts.
Replace damaged components.
Do not repair damaged components.
Contaminated components may not be installed.

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 metallic 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 Permitted exchange of sealing elements

**Important instruction**

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 replaced by a labs-free sealing element of the same material Chapter 2.3.4 „Sealing elements” on page 14. The use of other sealing elements is not permitted.

Exchanging a sealing element is permitted in the following situations:

- if the sealing element in the press connector is obviously damaged and should be exchanged for a Viega replacement sealing element made of the same material
### 3.3.4 Space requirements and intervals

#### Pressing between pipelines

**Space requirement PT1, type 2 (PT2), PT3-EH, PT3-AH, Pressgun 4B, 4E, 5**

<table>
<thead>
<tr>
<th>d</th>
<th>15</th>
<th>18</th>
<th>22</th>
<th>28</th>
<th>35</th>
<th>42</th>
<th>54</th>
</tr>
</thead>
<tbody>
<tr>
<td>a [mm]</td>
<td>20</td>
<td>20</td>
<td>25</td>
<td>25</td>
<td>30</td>
<td>45</td>
<td>50</td>
</tr>
<tr>
<td>b [mm]</td>
<td>50</td>
<td>55</td>
<td>60</td>
<td>70</td>
<td>85</td>
<td>100</td>
<td>115</td>
</tr>
</tbody>
</table>

**Space requirement Picco, Pressgun Picco**

<table>
<thead>
<tr>
<th>d</th>
<th>15</th>
<th>18</th>
<th>22</th>
<th>28</th>
<th>35</th>
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</thead>
<tbody>
<tr>
<td>a [mm]</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>b [mm]</td>
<td>60</td>
<td>60</td>
<td>65</td>
<td>65</td>
<td>65</td>
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</tbody>
</table>

**Space requirement press ring**

<table>
<thead>
<tr>
<th>d</th>
<th>15</th>
<th>18</th>
<th>22</th>
<th>28</th>
<th>35</th>
<th>42</th>
<th>54</th>
</tr>
</thead>
<tbody>
<tr>
<td>a [mm]</td>
<td>40</td>
<td>45</td>
<td>45</td>
<td>50</td>
<td>55</td>
<td>60</td>
<td>65</td>
</tr>
<tr>
<td>b [mm]</td>
<td>50</td>
<td>55</td>
<td>60</td>
<td>70</td>
<td>75</td>
<td>85</td>
<td>90</td>
</tr>
</tbody>
</table>

#### Pressing between pipe and wall

**Space requirement PT1, type 2 (PT2), PT3-EH, PT3-AH, Pressgun 4B, 4E, 5**

<table>
<thead>
<tr>
<th>d</th>
<th>15</th>
<th>18</th>
<th>22</th>
<th>28</th>
<th>35</th>
<th>42</th>
<th>54</th>
</tr>
</thead>
<tbody>
<tr>
<td>a [mm]</td>
<td>25</td>
<td>25</td>
<td>30</td>
<td>30</td>
<td>50</td>
<td>50</td>
<td>55</td>
</tr>
<tr>
<td>b [mm]</td>
<td>65</td>
<td>75</td>
<td>80</td>
<td>85</td>
<td>95</td>
<td>115</td>
<td>140</td>
</tr>
<tr>
<td>c [mm]</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>50</td>
<td>50</td>
<td>70</td>
<td>80</td>
</tr>
</tbody>
</table>

**Space requirement Picco, Pressgun Picco**

<table>
<thead>
<tr>
<th>d</th>
<th>15</th>
<th>18</th>
<th>22</th>
<th>28</th>
<th>35</th>
</tr>
</thead>
<tbody>
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<td>a [mm]</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>b [mm]</td>
<td>70</td>
<td>70</td>
<td>75</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>c [mm]</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
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</tbody>
</table>
Space requirement press ring

<table>
<thead>
<tr>
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<th>15</th>
<th>18</th>
<th>22</th>
<th>28</th>
<th>35</th>
<th>42</th>
<th>54</th>
</tr>
</thead>
<tbody>
<tr>
<td>a  [mm]</td>
<td>40</td>
<td>45</td>
<td>45</td>
<td>50</td>
<td>55</td>
<td>60</td>
<td>65</td>
</tr>
<tr>
<td>b  [mm]</td>
<td>50</td>
<td>55</td>
<td>60</td>
<td>70</td>
<td>75</td>
<td>85</td>
<td>90</td>
</tr>
<tr>
<td>c  [mm]</td>
<td>35</td>
<td>40</td>
<td>40</td>
<td>45</td>
<td>50</td>
<td>55</td>
<td>65</td>
</tr>
</tbody>
</table>

Minimum distance with d 15–54

<table>
<thead>
<tr>
<th>Press machine</th>
<th>a_min [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT1</td>
<td>45</td>
</tr>
<tr>
<td>Type 2 (PT2)</td>
<td></td>
</tr>
<tr>
<td>Type PT3-EH</td>
<td></td>
</tr>
<tr>
<td>Type PT3-AH</td>
<td>50</td>
</tr>
<tr>
<td>Pressgun 4E / 4B</td>
<td></td>
</tr>
<tr>
<td>Pressgun 5</td>
<td></td>
</tr>
<tr>
<td>Picco / Pressgun Picco</td>
<td>35</td>
</tr>
</tbody>
</table>

NOTICE!
Leaky 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.

With pipes with a diameter of d 15–28, the length of the pipe must be at least as long as the total insertion depth of both press connectors.
Minimum interval with press jaws d 12–54

<table>
<thead>
<tr>
<th>d</th>
<th>$a_{\text{min}}$ [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td>28</td>
<td>0</td>
</tr>
<tr>
<td>35</td>
<td>10</td>
</tr>
<tr>
<td>42</td>
<td>15</td>
</tr>
<tr>
<td>54</td>
<td>25</td>
</tr>
</tbody>
</table>

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

### 3.3.5 Required tools

The following tools are required for production of a press connection:
- pipe cutter or a fine-toothed hacksaw
- deburrer and coloured pen for marking
- press machine with constant pressing force
- Press jaw or press ring with corresponding hinged adapter jaw, suitable for the pipe diameter and suitable profile

**Fig. 6: Press jaws**

Recommended Viega press machines:
- Pressgun 5
- Pressgun Picco
- Pressgun 4E / 4B
- Picco
- Type PT3-AH
3.4 Assembly

Assembly shown by example of a Sanpress press connector.

3.4.1 Replacing the sealing element

Removing the sealing element

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

Remove the sealing element from the bead.

Inserting the sealing element

Insert a new, undamaged sealing element into the bead.

Ensure that the complete sealing element is in the bead.
### 3.4.2 Bending pipes

Pipes in the sizes \(d\) 15, 18, 22 and 28 can be bent cold with commercially available bending equipment (radius at least \(3.5 \times d\)).

The pipe ends \((a)\) must be at least 50 mm long so that the press connectors can be mounted properly.

![Bending pipe diagram](image)

### 3.4.3 Shortening the pipes

**NOTICE!**

**Leaky 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 cutting discs (angle grinders) or flame cutters when cutting to length.
- Do not use grease or oils (e.g., cutting oil).

For information about tools, also see **Chapter 3.3.5 “Required tools” on page 21**.

Cut the pipe properly using a pipe cutter or fine-toothed hacksaw.

Avoid grooves on the pipe surface.

### 3.4.4 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. Use of a deburrer (model 2292.2) is recommended.
NOTICE!
Damage due to the wrong tool!
Do not use sanding disks or similar tools when deburring. The pipes could be damaged by these.

Deburr the inside and outside of the pipe.
3.4.5 Pressing the connection

Requirements:
- The pipe end is not bent or damaged.
- The pipe is deburred.
- The correct sealing element is in the press connector.
  EPDM = polished black
- The sealing element is undamaged.
- The complete sealing element is in the bead.

Push the press connector onto the pipe as far as it will go.

Mark the insertion depth.

Place the press jaw onto the press machine and push the retaining bolt in until it clicks into place.

INFO! Observe the press tool instruction manual.
Open the press jaw and place at a right-angle onto the connector.

Check the insertion depth using the marking.

Ensure that the press jaw is placed centrally on the bead of the press connector.

Carry out the pressing process.

Open and remove the press jaw.

Connection is pressed.

### 3.4.6 Leakage test

The installer must perform a leakage test before commissioning. Carry out this test on a system that is finished but not yet covered. Observe the applicable regulations, see "Regulations from section: Leakage test" on page 8.

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 8.

Document the result.

### 3.5 Maintenance

Observe the applicable regulations for the operation and maintenance of drinking water installations, see "Regulations from section: Maintenance" on page 8.
3.6 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.