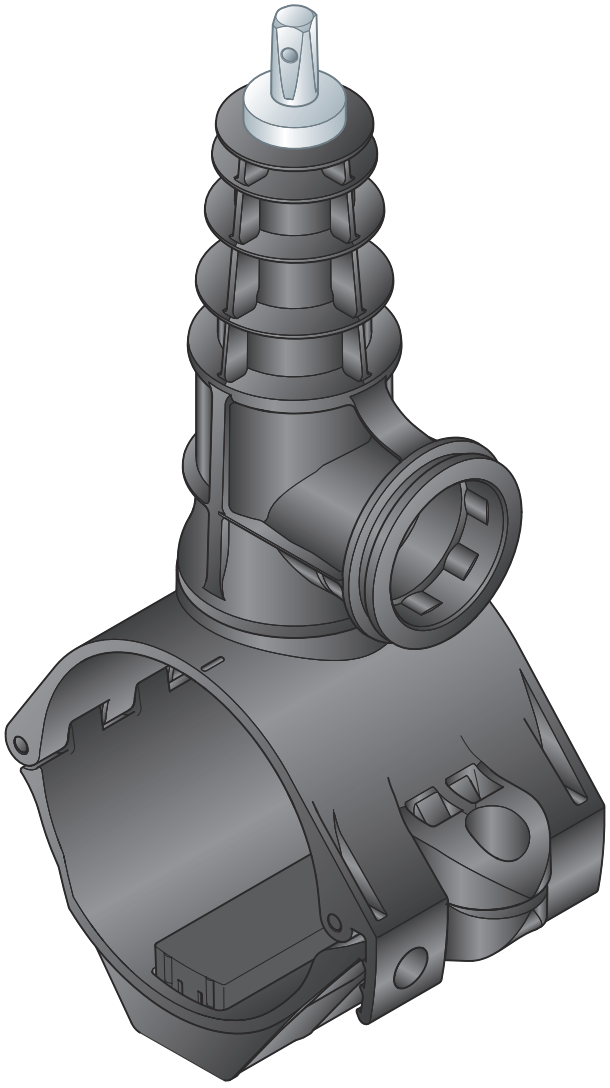
AU

Instructions for Use

Geopress tapping valve



for water applications

Model
9690TW

Year built (from)
01/2018

viega

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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 utility and pipeline construction companies and their technical professionals.

Only specialist companies which can prove they are qualified in accordance with the applicable directives may be engaged for the construction of potable water connection lines, see *'Regulations from section: Target group' on page 5*.

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. National regulations can be found on the relevant web site of your country at *viega.com.au/standards*

This product complies with the lead-free requirements of the National construction code Volume 2.

Regulations from section: Target group

Scope / Notice	Regulations applicable in Germany
Qualification of specialist companies	DVGW-Arbeitsblatt GW 301
Qualification of specialist companies	DVGW-Arbeitsblatt GW 302
Qualification and requirements in the potable water supplier	DVGW-Arbeitsblatt W 1000

Regulations from section: Application areas

Scope / Notice	Regulations applicable in Germany
Planning, execution, operation and maintenance of potable water connection lines	DIN EN 805
Planning, execution, operation and maintenance of potable water connection lines	DVGW-Arbeitsblatt W 400-1
Planning, execution, operation and maintenance of potable water connection lines	DVGW-Arbeitsblatt W 400-2
Planning, execution, operation and maintenance of potable water connection lines	DVGW-Arbeitsblatt W 400-3
Planning, execution, operation and maintenance of potable water installations	DVGW-Merkblatt W 333

Regulations from section: Media

Scope / Notice	Regulations applicable in Germany
Suitability for potable water	Trinkwasserverordnung (TrinkwV)

Regulations from section: Pipes

Scope / Notice	Regulations applicable in Germany
Permitted use with pipe materials for water supply – polyethylene.	DIN EN 12201
Permitted use with piping materials in potable water installations (HDPE)	DIN 8074, DIN 8075

Regulations from section: Notes on mounting

Scope / Notice	Regulations applicable in Germany
Threshold values for ovalities	DIN EN 1555-2, Table 1 DIN EN 12201-2, Table 1

Regulations from section: Commissioning the service connection

Scope / Notice	Regulations applicable in Germany
Floor filling work	DVGW G 472
Test pressure during function and flow control volume testing	DIN 3588

Regulations from section: Leakage test

Scope / Notice	Regulations applicable in Germany
Leakage test before commissioning the connection line	DVGW-Arbeitsblatt W 400-2
Leakage test before commissioning the connection line	DVGW-Arbeitsblatt W 333
Leakage test before commissioning the connection line	DIN EN 805

2.2 Intended use

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

The system can be installed at outdoor temperatures from -10 °C to 50 °C. The component temperatures of the press connectors and the press machine must not be less than -5 °C.

The expression "SC-Contur" appearing in the instructions for use means "Smart Connect Feature".

2.2.1 Areas of application

The tapping valve is suitable for the connection of service connections on the water supply pipelines that are not under pressure.

Potable water installation

For planning, execution and operation of potable water connection lines, observe the applicable regulations, see *'Regulations from section: Application areas' on page 5*.

2.2.2 Media

The max. operating pressure depends on the type of pipe used and the specific application.

2.2.3 Replacing a damaged tapping valve

CAUTION!
A hole must be drilled in accordance with *Chapter 3.4.3 'Tapping the supply line' on page 20* to make a tight connection. The tapping valve must not be positioned at the location of an existing hole. When a Viega tapping valve is replaced, the new tapping valve must not be placed in the position of the previously dismounted tapping valve. Failure to comply may cause a leak in the connection to the supply line.

2.3 Product description

2.3.1 Overview

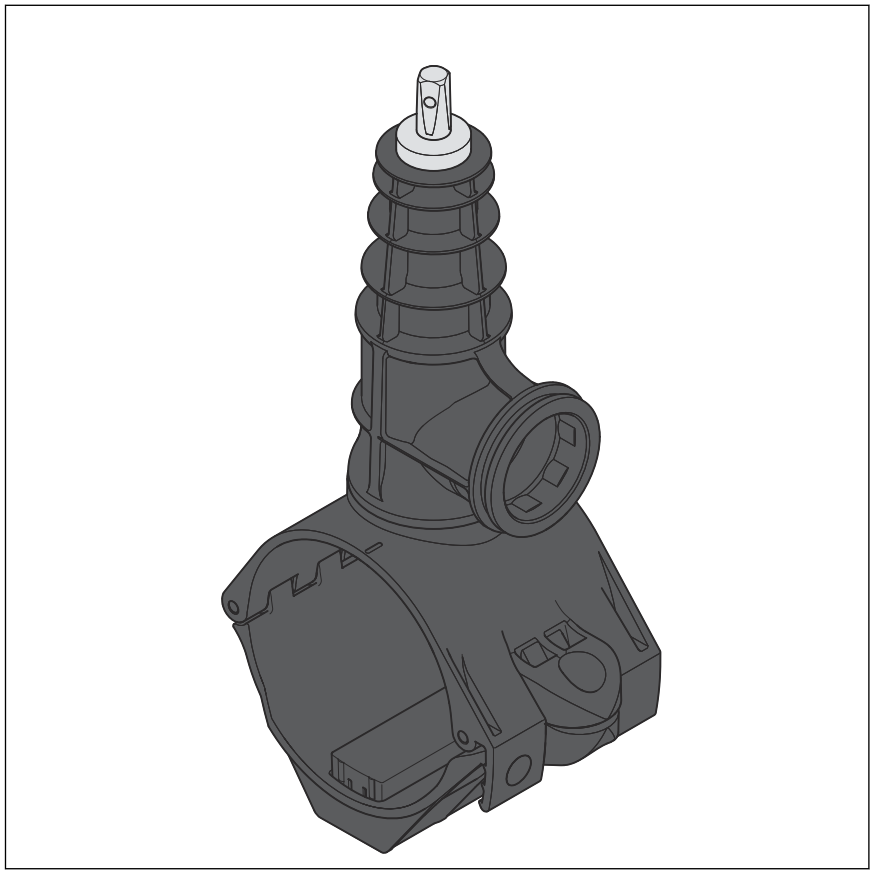


Fig. 1: Geopress tapping valve

The model is available in the following dimensions:
d63 / 90 / 110 / 125 / 140 / 160 / 180 / 200.

2.3.2 Pipes

The tapping valve is suitable for connecting service connections to depressurised and pressurised supply lines according to the following table:

Potable water

Permitted use with piping materials

d [mm]	HDPE [1)] SDR 11–17.6
63	✓
90	✓
110	✓
125	✓
140	✓
160	✓
180	✓
200	✓

[1)] see ‘Regulations from section: Pipes’ on page 6

2.3.3 Tapping valve

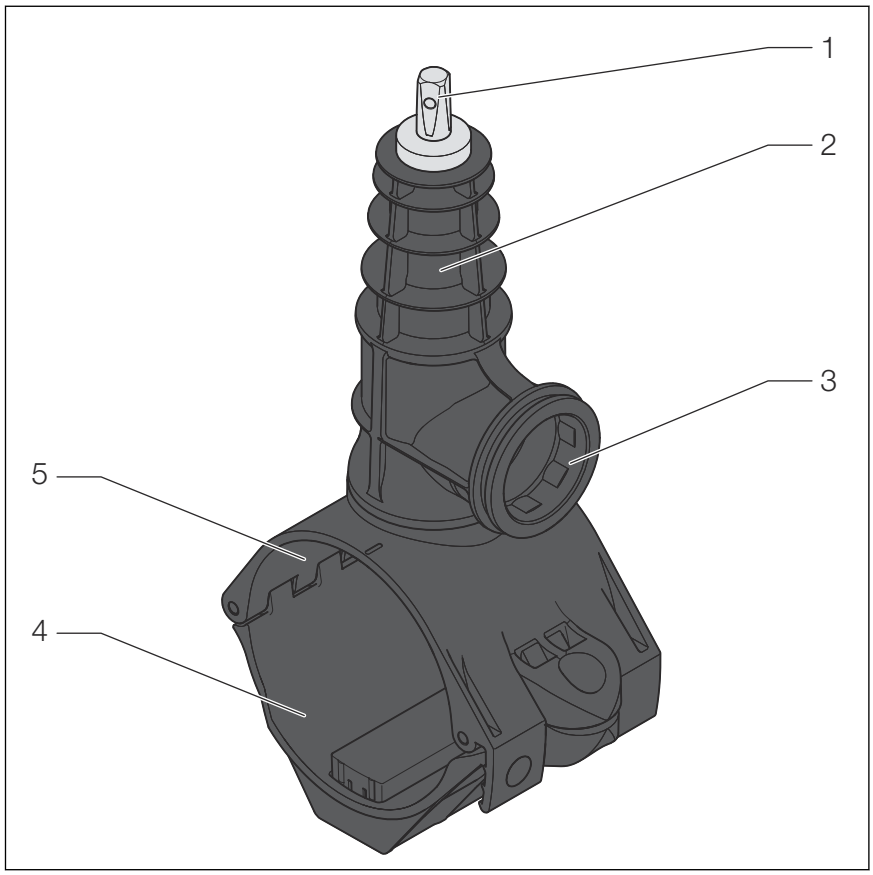


Fig. 2: Components tapping valve

1 Spindle
2 Tapping / valve casing
3 Outlet sleeve with clamping ring
4 Pipe clamp bottom piece
5 Pipe clamp top

Geopress tapping valves are made of high-quality plastic. They are equipped with an outlet sleeve for Geopress K.

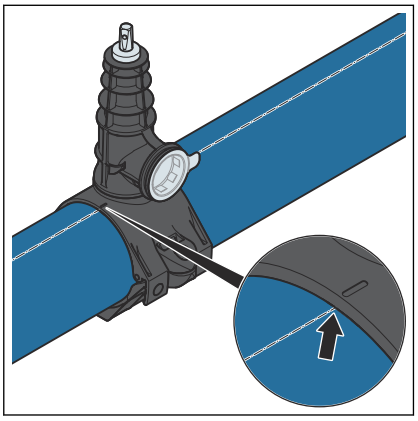
The fitting is pressed onto the supply line. A spring set in the bottom part of the pipe clamp keeps the pressing force on the pipe at a constant level. The integrated cutter is connected to the actuating spindle. The cutter is used for tapping and subsequently remains in the fitting. The cutter holds the cut-out wall of the pipe securely. The sleeve in the drill hole prevents the tapping valve from twisting on the supply line.

The pipeline trench and around the tapping valve must be backfilled and compacted with suitable bedding and backfill materials, for applicable regulations see *Chapter 2.1 'Standards and regulations' on page 5*.

The model is equipped with an operation shut-off for the service connection. The spindle acts as a drilling rod during tapping, and after commissioning as an actuating spindle for the shut-off.

2.3.4 Mark on tapping valves

Alignment markings



The model has a mark for alignment on the supply line.

Traceability code

The position of newly laid pipes and connection lines, including detailed information about pipeline parts, must be documented and regularly updated. The traceability code on the tapping valve allows every connector to be traced back and simplifies the documentation in as-completed drawings.

2.3.5 Compatible connecting pieces for the tapping valve

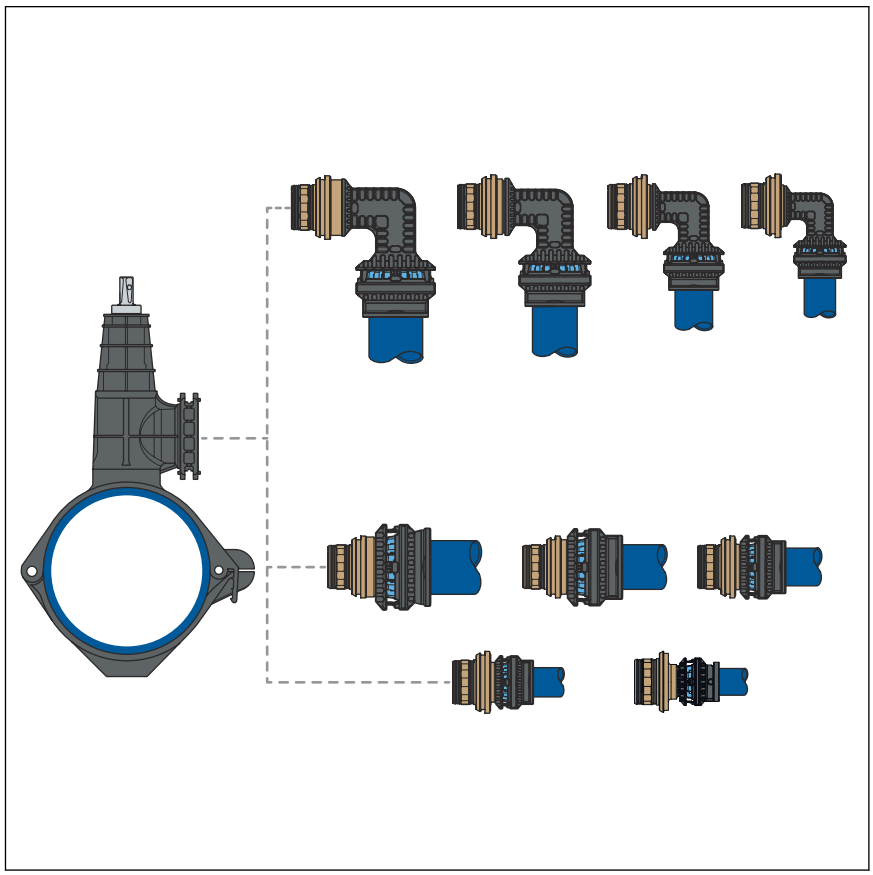


Fig. 3: Connecting pieces Geopress K

The tapping valve is integrated into the Viega product network. At the outlet of the tapping valve, the service connection is connected by means of a connecting piece or connection elbow.

3 Handling

3.1 Transport

Leave the fitting in the original box, in this way spare parts important for mounting won't get lost.

3.2 Storage

Remove the protective cover during mounting, as described in the mounting instructions *Chapter 3.4.1 'Pressing onto the supply line' on page 16*.

3.3 Assembly information

3.3.1 Mounting instructions

The design of the tapping valve for d 63 is different from the other pipe sizes. The pressing takes place on the opposite side of the outlet sleeve.

Checking system components

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

- Check all parts.
- Replace damaged components.
- Do not repair damaged components.

Pipes must be visually inspected before use and must not show the following damage in the area of the tapping valve:

- Ovalities: threshold values must not be exceeded, see *'Regulations from section: Notes on mounting' on page 6*.
  This applies to coiled bundles as well as straight lengths.
- Dents
- Cracks
- Grooves

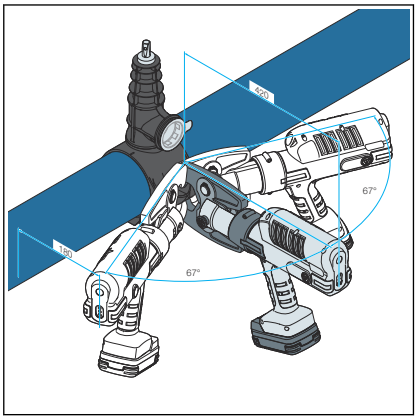
Check scope of delivery

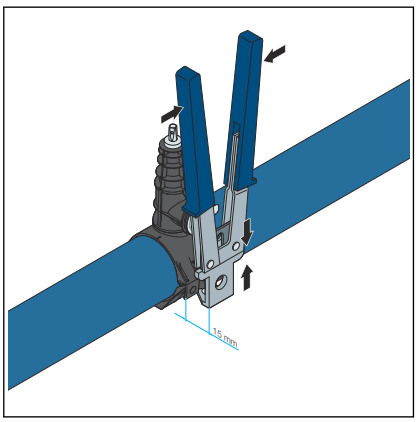
The following components must be included:

- Tapping valve
- Clamping ring
- Locking pin for clamping ring and a replacement pin
- Fixing bolts for tapping valve

3.3.2 Space requirements and intervals

Adequate space is a prerequisite for mounting. Only carry out the pressing when the hinged adapter jaw (model 2296.2, Z2) or Geopress hand press tool is placed exactly in the seat of the tapping valve.





Z dimensions

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

3.3.3 Required tools

The following tools are required for mounting the tapping valve:

- Battery-powered press machine
- Hinged adapter jaw Z2 (model 2296.2)
- Alternatively: Geopress hand press tool (model 9696.5)
- Ratchet or key rod

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

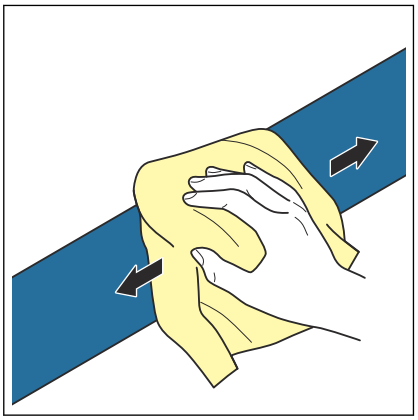
3.4.1 Pressing onto the supply line

Pressing with a battery-powered press machine is described in the following. Alternatively, the Geopress hand press tool can be used.

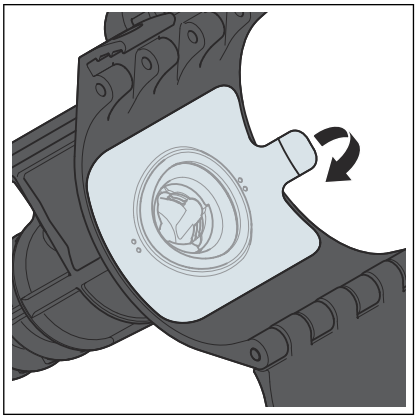
When replacing a faulty tapping valve, observe the instruction in *Chapter 2.2.3 'Replacing a damaged tapping valve' on page 7*.

Requirements:

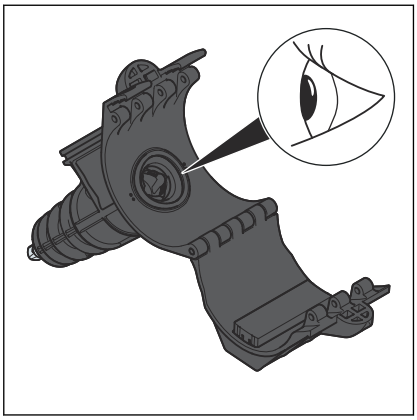
- The pipeline trench has been made properly.
- The main shut off valve for the supply line is accessible.
- The tapping point is 5 x DN, however at least 0.5 m from pipe connections or other pipe fittings.
- Information about the supply line to be tapped are available:
  - General manufacturer's information
  - Experience from previous mountings
- All components are operational.
- The required components of the tapping valve / connecting pieces are the correct sizes.
- Pipes with protective coating have been stripped.
- The tapping point is free of grooves, damage and ovalities.
- All of the required tools are ready for use.



➥ Prepare and clean the tapping point at the supply line. The surface around the mounting point must be clean, undamaged and free from grease.

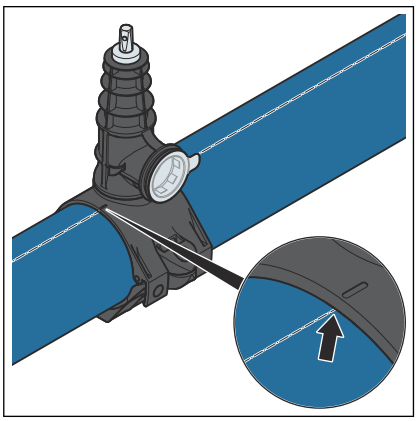


➥ Remove the protective cover from the inlet of the tapping valve.



- Check the seal for damage, contamination and correct positioning.

- Position the tapping valve at the prepared point on the supply pipe.
- Push the bottom part of the pipe clamp into the first notch until it snaps into place.

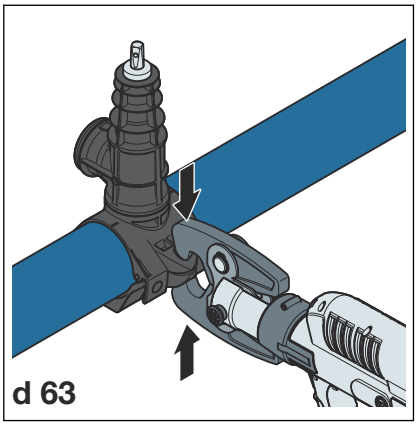


- Alignment: Turn the marking on the tapping valve centrally to the pipe axis. The tapping valve is vertical after pressing.

  NOTICE! Do not re-align the tapping valve after pressing!

Pipe diameter d 63

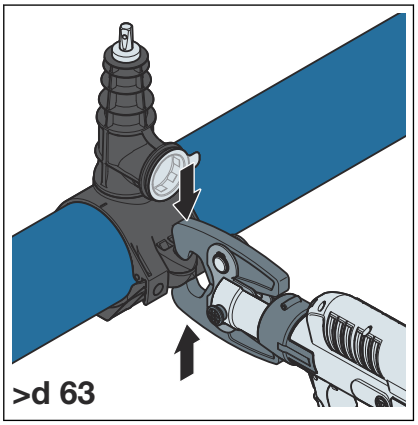
NOTICE!
Keep the hinged adapter jaw and the pressing area of the tapping valve free of contamination.



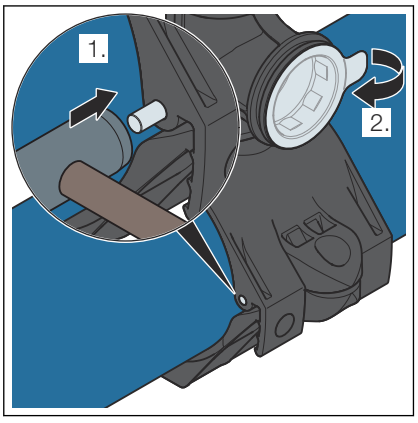
- Place the hinged adapter jaw Z2 accurately in the seat on the opposite side of the outlet sleeve.
- Carry out the pressing process until the machine finishes press cycle.
  - ▷ Connection is pressed.

Pipe diameter larger than d 63

NOTICE!
Keep the hinged adapter jaw and the pressing area of the tapping valve free of contamination.



- Place the hinged adapter jaw Z2 accurately in the seat of the tapping valve.
- Carry out the pressing process until the machine finishes press cycle.
  - ▷ Connection is pressed.

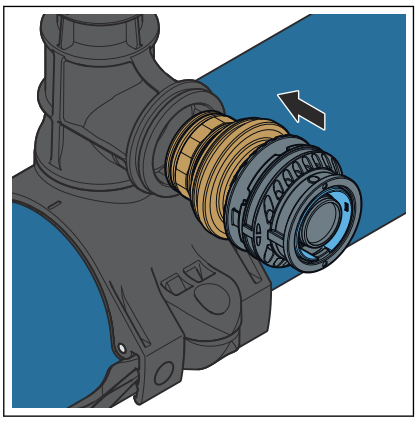


- Hit the fixing bolts in flush with the surface.
- Remove the protective cover from the outlet sleeve.

3.4.2 Producing a service connection

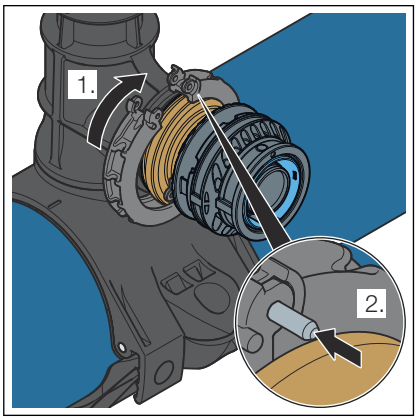
Requirements:

- The protective cover is removed from the outlet sleeve.

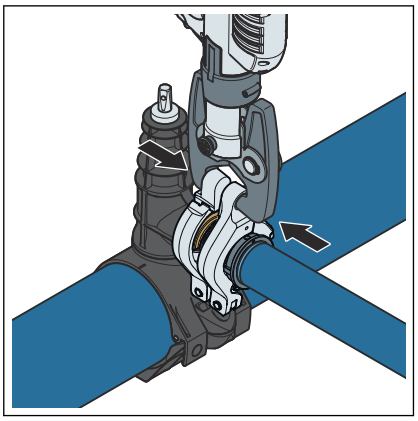


NOTICE! To avoid contamination, do not remove the connector from the bag until immediately before assembly.

- Push the connecting piece as far as it will go into the outlet sleeve.



- Place the clamping ring around the connecting piece and mount the fixing bolt.



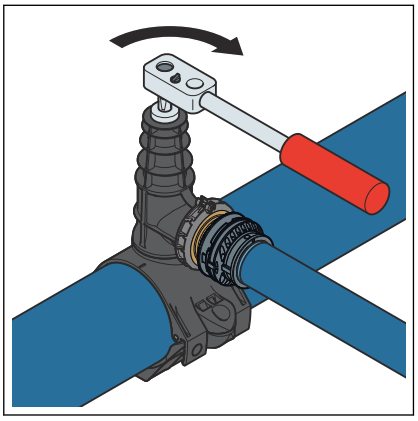
- Mounting of the service connection in accordance with the instructions of the Geopress K system used.
- Perform a leakage test, see ***Chapter 3.4.6 'Leakage test' on page 22***.

3.4.3 Tapping the supply line

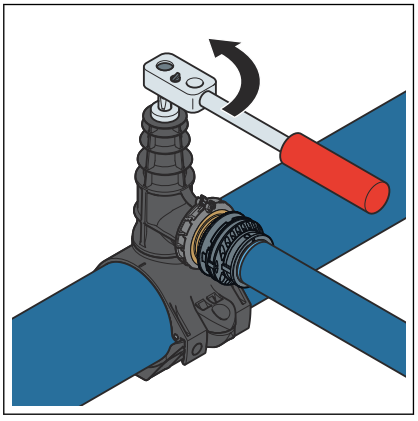
When replacing a faulty tapping valve, observe the instruction in ↳ *Chapter 2.2.3 'Replacing a damaged tapping valve' on page 7*.

Requirements:

- A leakage test has been carried out ↳ *Chapter 3.4.6 'Leakage test' on page 22*.



- Screw the spindle in as far as possible using a ratchet or a spanner.



- Unscrew the spindle to open the operation shut-off.

3.4.4 Commission the service connection

- Check for proper function.
- The pipeline trench and around the tapping valve must be backfilled and compacted with suitable bedding and backfill materials, for applicable regulations see ↳ ***'Regulations from section: Commissioning the service connection' on page 6***.

  Take care to avoid mechanical damage to the tapping valve during backfilling work.

  ▷ The service connection is operational.

3.4.5 Use

Telescopic stem extension

The stem extensions are equipped with a sleeve pipe bell suitable for Geopress tapping valves. This prevents dirt from entering the sleeve pipe and the concrete seat of the tapping valve. The stem extensions are continuously adjustable and are self-supporting in any position.

Delivery sizes / Setting ranges [m]

- 0.70–1.00
- 1.00–1.50
- 1.25–1.80
- 1.50–2.00

If the tapping valve is operated with another support, it is possible to prevent dirt entering the sleeve pipe via the sealing ring adapted to the Geopress tapping valve (model 9696.2).

Media marking

The media markings make the applications distinctly visible.

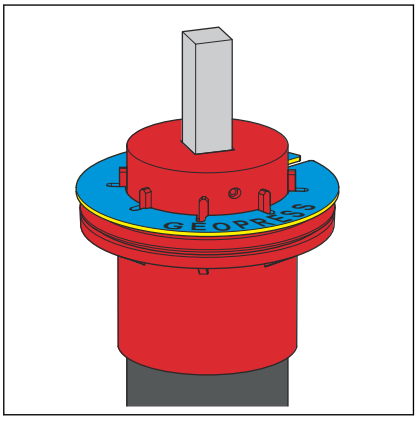


Fig. 4: Marking – potable water = blue

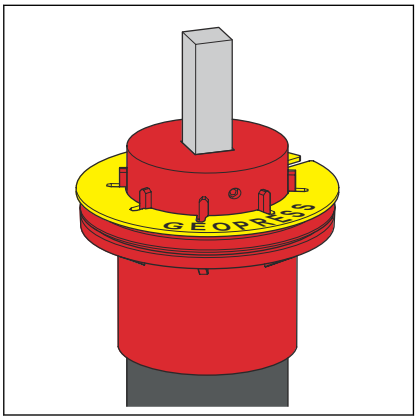


Fig. 5: Marking – gas = yellow

3.4.6 Leakage test

Perform leakage test before tapping.

If performing a dry leakage test or a test with water before the tapping process, the maximum test pressure of 700 kPa (7 bar) must not be exceeded. This is a preliminary test to confirm that the tapping valve seals to the surface of the supply line. The tapping valve is only rated to the maximum operating pressure once the supply line has been tapped.

Carry out the test on a service connection that is finished but not yet covered. The result of the leakage test must be documented as proof of the safety of the pipeline.

If a leak is found in a tapping valve during a leakage test, a new one should be installed.

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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