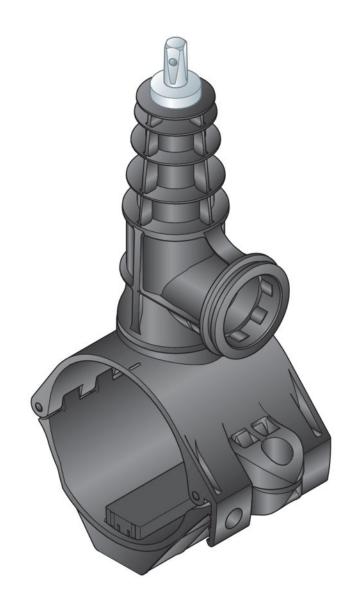
## **Instructions for Use**







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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 gas and potable water house service connections, see & 'Regulations from section: Target group' on page 5.

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.

In addition, the applicable regulations must be observed for potable water house service connections, see  $\mbox{\ensuremath{$^\circ$}}$  '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 website of your country at *viega.com.au/standards*.

#### Regulations from section: Target group

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

#### Regulations from section: Fields of application

Scope / Notice	Regulations applicable in Germany
Planning, execution, operation and maintenance of potable water house service connections	DIN EN 805
Planning, execution, operation and maintenance of potable water house service connections	DVGW-Arbeitsblatt W 400-1
Planning, execution, operation and maintenance of potable water house service connections	DVGW-Arbeitsblatt W 400-2
Planning, execution, operation and maintenance of potable water house service connections	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 piping materials in potable water installations (PE-HD)	DIN 8074, DIN 8075
Permitted use with piping materials in potable water installations (PE-X)	DIN 16893, DIN 16892

#### Regulations from section: Notes on mounting

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

#### 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



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



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

### 2.2.1 Areas of use

The tapping valve is suitable for connecting house service connections on pressurised water supply pipelines.



#### Potable water installation

For planning, execution and operation of potable water house service connections, observe the applicable regulations, see § 'Regulations from section: Fields of application' on page 5.

#### 2.2.2 **Media**

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

Potable water / Class A Recycled Water

Operating pressure p<sub>max</sub> = 1600 kPa (16 bar)

#### 2.2.3 Replacing a damaged tapping valve



#### **CAUTION!**

A hole must be drilled in accordance with \$\&\infty\$ 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

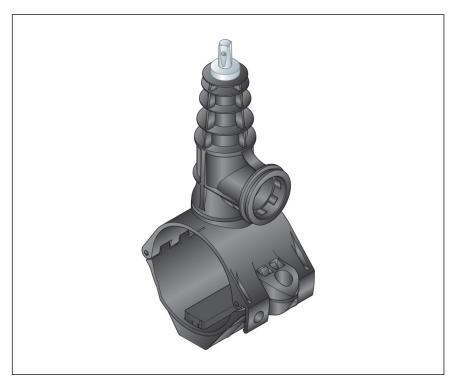


Fig. 1: Geopress tapping valve

The model is available in the following dimensions: d 63/90/110/125/140/160/180/200.

## 2.3.2 **Pipes**

The tapping valve is suitable for the connection of house service connections on supply lines under pressure in acc. with the following tables:



#### Potable water

## Permitted use with piping materials

d [mm]	PE-HD <sup>1)</sup> SDR 11–17.6	PE-X <sup>1)</sup> SDR 11–13.6
63	✓	✓
90	✓	✓
110	✓	✓
125	✓	✓
140	✓	✓
160	✓	✓
180	✓	✓
200	✓	✓

 $<sup>^{1)}</sup>$  see  $\,\,^{\circlearrowright}$  'Regulations from section: Pipes' on page  $\,6\,$ 



### 2.3.3 Tapping valve

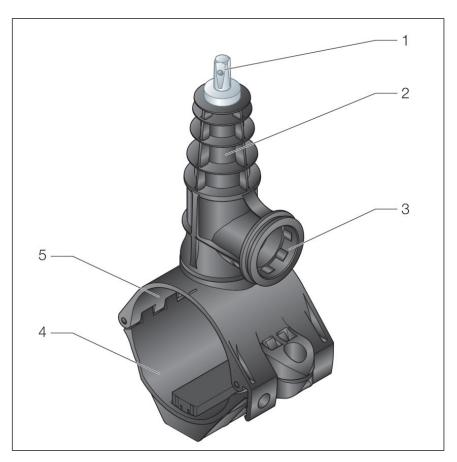


Fig. 2: Components tapping valve

- 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.

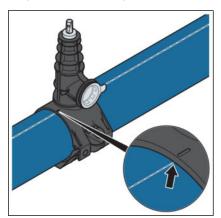
The fitting is pressed onto the supply line. A spring set in the bottom part of the pipe clamp keeps the pressing force on the pipe at a constant level. The integrated cutter is connected to the actuating spindle. The cutter is used for tapping and subsequently remains in the fitting. The cutter holds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

The model is equipped with an operation shut-off for the house 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 house 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 foil 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.

Pipes must be visually inspected for the following damage before installation:

- Ovalities: threshold values must not be exceeded, see & 'Regulations from section: Notes on mounting' on page 6.
   This is valid for coiled bundles as well as rods.
- Dents
- Cracks
- Grooves (maximum depth 10 % of nominal wall thickness)

Only process the sections of the pipes, which do not exhibit these features.

#### Check scope of delivery

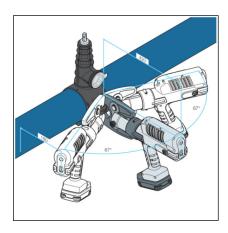
The following components must be included:

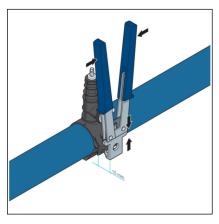
- Tapping valve
- clamping ring
- Locking pin for clamping ring and a replacement pin
- Fixing bolts for tapping valve



### 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 or 0796.2, 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:
  - Pressgun 5 or
  - Pressgun 4B
- hinged adapter jaw Z2 (model 2296.2 or 0796.2)
- alternative: Geopress hand press tool (model 9696.5)
- ratchet or key rod





Recommended Viega press machines:

- Pressgun 5 with rechargeable battery
- Pressgun 4B with rechargeable battery



## 3.4 Assembly

### 3.4.1 Pressing onto the supply line

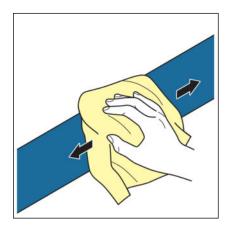


Pressing with a battery-powered press machine is described in the following. Alternatively, the Geopress hand press tool can be used.

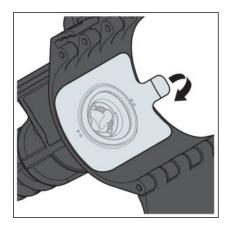
When replacing a faulty tapping valve, observe the instruction in \$\operature{C}\$ Chapter 2.2.3 'Replacing a damaged tapping valve' on page 7.

#### Requirements:

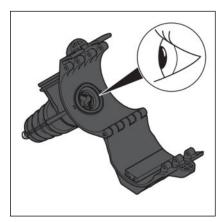
- The supply line has operating pressure.
- The pipeline trench has been made properly.
- The main shut off valve for the supply line is accessible.
- The tapping point is 5 x DN, however at least 0.5 m from pipe connections or other pipe fittings.
- Information about the supply line to be tapped are 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.







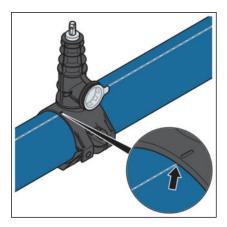
■ Remove the protective foil from the inlet of the tapping valve.



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.

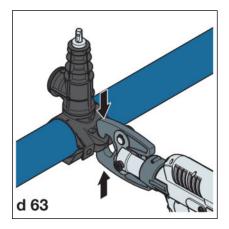


Alignment: Turn the marking on the tapping valve centrally to the pipe axis. The tapping valve is vertical after pressing.

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

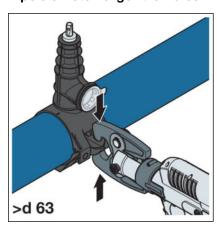


#### Pipe diameter d 63

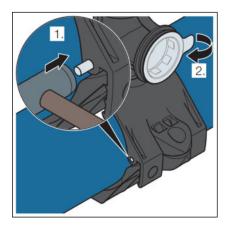


- Place the hinged adapter jaw Z2 accurately in the seat on the opposite side of the outlet sleeve.
- Carry out the pressing process until the machine switches off.
  - □ Connection is pressed.

#### Pipe diameter larger than d 63



- Place the hinged adapter jaw Z2 accurately in the seat of the tapping valve.
- Carry out the pressing process until the machine switches off.
  - □ Connection is pressed.



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



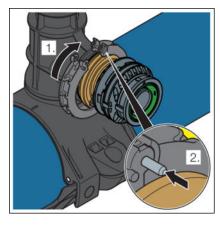
### 3.4.2 Producing a house service connection



- The protective foil is removed from the outlet sleeve.
- Push the connecting piece as far as it will go into the outlet sleeve.

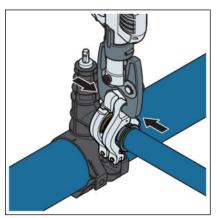


Place the clamping ring around the connecting piece and mount the fixing bolt.



- Mount the house service connection in accordance with the instructions of the Geopress K system.
- Perform a leakage test, see 

  Chapter 3.4.6 'Leakage test' on page 22.



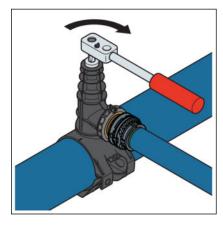


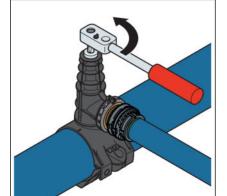
### 3.4.3 Tapping the supply line

When replacing a faulty tapping valve, observe the instruction in \$\operature{C}\$ 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 house service connection

- Check for proper function.
- Carry out floor filling work.

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

□ The house 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 scraper ring adapted to the Geopress tapping valve (model 9696.2).

#### Media labelling



Fig. 5: Marking - potable water = blue



Fig. 6: Marking - gas = yellow

The media labellings make the applications distinctly visible.



#### 3.4.6 Leakage test

Perform leakage test before drilling.

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 band seals to the surface of the mains pipe. The tapping band is only rated to the maximum operating pressure once the mains pipe has been tapped.

Carry out the test on a house 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.



