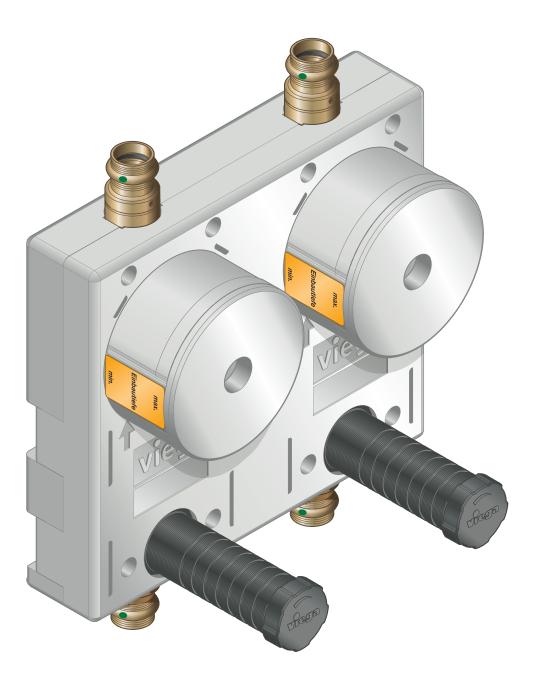
**Instructions for Use** 

# Easytop concealed domestic water meter unit with SC-Contur



viega

for potable water installation

**Model** 2231.04

Year built (from) 04/2017 INT

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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: Application areas**

Scope / Notice	Regulations applicable in Ger- many
Planning, execution, operation and maintenance of potable water installations	DIN EN 806, part 1
Planning, execution, operation and maintenance of potable water installations	DIN EN 806, part 2
Planning, execution, operation and maintenance of potable water installations	DIN EN 806, part 3
Planning, execution, operation and maintenance of potable water installations	DIN EN 806, part 4
Planning, execution, operation and maintenance of potable water installations	DIN EN 806, part 5
Planning, execution, operation and maintenance of potable water installations	DIN EN 1717
Planning, execution, operation and maintenance of potable water installations	DIN 1988
Planning, execution, operation and maintenance of potable water installations	VDI/DVGW 6023
Planning, execution, operation and maintenance of potable water installations	Trinkwasserverordnung (TrinkwV)

#### **Regulations from section: Media**

Scope / Notice	Regulations applicable in Ger- many
Suitability for potable water	Trinkwasserverordnung (TrinkwV)



#### **Regulations from section: Product description**

Scope / Notice	Regulations applicable in Ger- many
Suitability for potable water instal- lations	Trinkwasserverordnung (TrinkwV)
Suitability for potable water instal- lations	DIN 50930-6
Requirements in plastic compo- nents in potable water installa- tions	DVGW-Arbeitsblatt W270

#### **Regulations from section: Compatible components**

Scope / Notice	Regulations applicable in Ger- many
Permitted pipe types	DVGW-Arbeitsblatt W 534
Permitted copper pipes	DVGW-Arbeitsblatt GW 392
Permitted copper pipes	DIN EN 1057
Permitted stainless steel pipes	DVGW-Arbeitsblatt GW 541
Permitted stainless steel pipes	DIN EN 10312
Permitted stainless steel pipes	DIN EN 10088

# **Regulations from section: Corrosion**

Scope / Notice	Regulations applicable in Ger- many
External corrosion protection	DIN EN 806-2
External corrosion protection	DIN 1988-200
External corrosion protection	DKI-Informationsdruck i. 160

#### **Regulations from section: Leakage test**

Scope / Notice	Regulations applicable in Ger- many
Leakage test for potable water installations	DIN EN 806, part 4
Leakage test for potable water installations	ZVSHK-Merkblatt "Dichtheitsprüfungen von Trink- wasserinstallationen mit Druckluft, Inertgas oder Wasser"



#### **Regulations from section: Maintenance**

Scope / Notice	Regulations applicable in Ger- many
Operation and maintenance of potable water installations	DIN EN 806-5

# 2.2 Intended use



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

#### 2.2.1 Areas of application

Use is possible in the following areas among others:

Potable water installations

The model serves as a shut-off for the storey units.

It provides the possibility to attach a Koax G 2 measuring capsule.

The general rules of engineering and the applicable regulations must be observed for planning, execution, operation and maintenance of potable water installations, see '*Regulations from section: Application areas*' on page 5.

### 2.2.2 Media

The model is also suitable for the following media, amongst others:

- Potable water without limitations acc. to the applicable directives, see & 'Regulations from section: Media' on page 5
- Maximum chloride concentration 250 mg/l pursuant to applicable regulations, see & 'Regulations from section: Media' on page 5

# 2.3 Product description

According to the applicable regulations, Easytop system fittings can be used for all types of potable water and are DVGW certified, see & *'Regulations from section: Product description' on page 6.* Their plastic components comply with the KTW recommendation and the requirements pursuant to the applicable regulations.

## 2.3.1 Overview

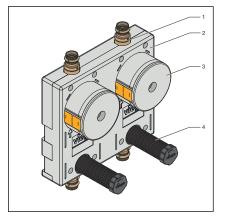


Fig. 1: Overview

- 1 concealed straight seat valve
- 2 Insulating box
- 3 Site protection
- 4 Protective sleeve

The model is equipped as follows:

- All parts that come into contact with water are made of gunmetal/ silicon bronze
- 🔳 Тор
- Site protection
- Dual-sided press connection with SC-Contur
- Valve seat and valve plate unit made of stainless steel
- sealing elements made of EPDM
- Two concealed straight seat valves
- Recess for two Coax measuring capsules G 2
- Two blind flanges
- Insulating box (sound and heat insulation)
- Green dot for potable water

The model is available in the following dimension: d 22.

### 2.3.2 Press connection with SC-Contur

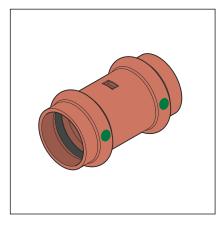


Fig. 2: Press connection using a press connector as an example

The press connection has a circumferential bead in which the sealing element lies. The press 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

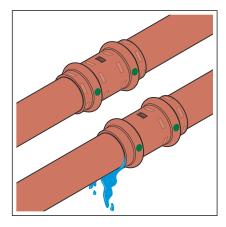


Fig. 3: SC-Contur

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 connection is guaranteed to be leaky in an unpressed state. In this way, inadvertently unpressed connections are noticed immediately during a leakage test.

Viega guarantees that 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)

# 2.3.3 Sealing elements

# NOTICE!

Only EPDM sealing elements are approved in potable water installations. The use of other sealing elements is not permitted.

The model is factory-fitted with EPDM sealing elements.

Area of application	Potable water
Use	all pipeline sections
Operating temperature [T <sub>max.</sub> ]	90 °C
Operating pressure [P <sub>max</sub> ]	1.0 MPa (10 bar)
Comments	see notes



#### 2.3.4 Markings on components

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.

The model is marked as follows:

- Flow direction indicator
- Dimension
- DVGW writing
- Green dot for potable water
- Position indicator

#### 2.3.5 Compatible components

The model is equipped with press connections and compatible with the Profipress, Sanpress and Sanpress Inox system.

#### Pipes

The press connections are tested and approved according to the applicable regulations with the following pipe types:

- Copper pipes
  - see & 'Regulations from section: Compatible components' on page 6
- Stainless steel pipes (material 1.4401 / 1.4521)
  - see & 'Regulations from section: Compatible components' on page 6

#### Water meter / Measuring capsule

Observe the manufacturer's instructions for mounting and use.

#### 2.3.6 Technical data

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

Operating temperature [T <sub>max.</sub> ]	90 °C
Operating pressure [P <sub>max</sub> ]	1.0 MPa (10 bar)

# 2.4 Information for use

# 2.4.1 Corrosion

Overground pipelines and fittings in rooms do not normally require external corrosion protection.

There are exceptions in the following cases:

- Contact with aggressive building materials such as nitrite or materials containing ammonium
- in aggressive surroundings

If external corrosion protection is required, observe the pertinent guidelines, see  $\notin$  *Regulations from section: Corrosion' on page 6*.

● Ea

Easytop fittings made of gunmetal/silicon bronze are suitable 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).

# 2.5 Optional accessories

The following optional accessories are available:

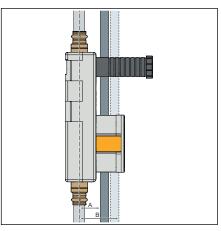
- Equipment sets
- Public building model
- Mounting set



# 3 Handling

# 3.1 Assembly information

# 3.1.1 Installation dimensions



- A at least 45 mm
- B maximum 77 mm

# 3.1.2 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 exchanged for a designated spare part for the intended application  $\bigotimes$  *Chapter 2.3.3 'Sealing elements' on page 9.* The use of other sealing elements is not permitted.

# 3.1.3 Mounting instructions

#### **Checking system components**



Do not remove the model from the packaging until immediately before use.



**During assembly** 

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.

A blind flange ensures unhindered operation until assembly is completed.

Observe the following when mounting:

- Flow direction indicator
- Minimum / maximum installation depth
- Use suitable tools

Choose the place of installation so that the fitting is easily accessible and simple to operate.

Laying and fixing pipes

For information, refer to the instructions for use of the Profipress, Sanpress and Sanpress Inox systems.

Length expansion

For information, refer to the instructions for use of the Profipress, Sanpress and Sanpress Inox systems.

#### 3.1.4 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 with suitable profile



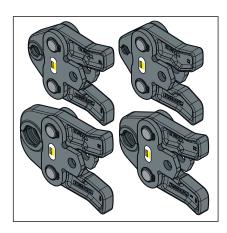


Fig. 4: Press jaws

# 3.2 Assembly

# 3.2.1 Replacing the sealing element

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.



#### Inserting the sealing element



Insert a new, undamaged sealing element into the bead.

Remove the sealing element from the bead.

Ensure that the complete sealing element is in the bead.



#### 3.2.2 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:

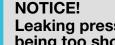
- Do not use cutting discs (angle grinders) or flame cutters when cutting to length.
- Do not use grease or oils (e. g. cutting oil).

For information about tools, also see & Chapter 3.1.4 'Required tools' on page 13.

- Cut the pipe at a right angle using a pipe cutter or fine-toothed hacksaw.

Avoid grooves on the pipe surface.

3.2.3 Pressing the connection

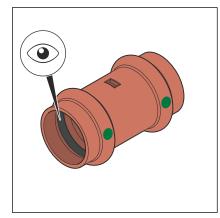


### Leaking press connections due to pipes being too short

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.

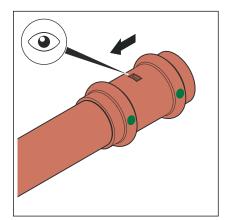
In the case of pipes with a diameter of d 15–28 mm, the pipe must be at least as long as the total insertion depth of both press connectors.



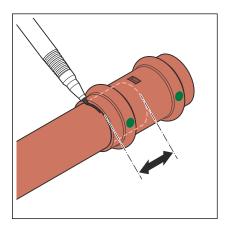


#### **Requirements:**

- 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.

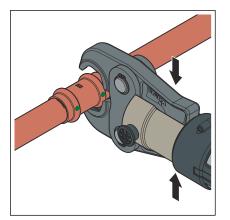


Push the press connector onto the pipe as far as it will go.



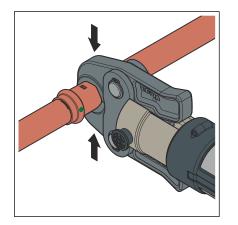
- Mark the insertion depth.
- Place the press jaw onto the press machine and push the retaining bolt in until it clicks into place.

**INFO!** Observe the press tool instruction manual.



- Open the press jaw and place it at a right-angle onto the press 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.
  - $\square$  Connection is pressed.

3.2.4 Mounting the valve



Carry out a function test after mounting.

Installation is possible in masonry (wet construction) and in dry constructions (pre-wall / duct installations).

#### Attaching in dry constructions

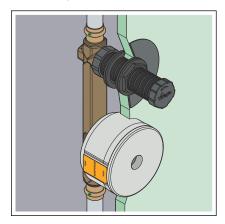


Fig. 5: 2235.90 Fixing set front

Actuating the valve

- Attach the protective sleeve of the valve in front of and behind the cladding (e.g. sheetrock or Fermacell panels) with lock nuts.
- Seal the wall lead-in on the front side of the wall with the self-adhesive sealing flange.

- Open or close the valve clockwise or anti-clockwise respectively.
- During the preliminary building work phases:
  - Actuate the valve via the protective cap.



#### 3.2.5 Leakage test

The installer must perform a leakage test before commissioning.

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

Comply with the general rules of engineering and the applicable directives, see  $\notin$  'Regulations from section: Leakage test' on page 6.

Document the result.

# 3.3 Maintenance



# NOTICE!

Inform your customer or the operator of the potable water installation that the system has to be maintained on a regular basis.

Observe the applicable regulations for the operation and maintenance of potable water installations, see '*Regulations from section: Maintenance'* on page 7.



Viega recommends actuating the fitting regularly and checking its function.

# 3.4 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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