

Easytop backflow preventer with G-thread

Instructions for Use



for drinking water installation

Model
2239.3

Year built:
from 04/2017

en_INT

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 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. |
|  | <i>This symbol gives additional information and hints.</i> |

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

| Scope / Notice | Regulations applicable in Germany |
|---|-----------------------------------|
| 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 Germany |
|--------------------------------|-----------------------------------|
| Suitability for drinking water | Trinkwasserverordnung (TrinkwV) |

Regulations from section: Product description

| Scope / Notice | Regulations applicable in Germany |
|--|-----------------------------------|
| Suitability for drinking water installations | Trinkwasserverordnung (TrinkwV) |
| Suitability for drinking water installations | DIN 50930-6 |
| Requirements in plastic components in drinking water installations | DVGW-Arbeitsblatt W270 |

Regulations from section: Overview

| Scope / Notice | Regulations applicable in Germany |
|--|-----------------------------------|
| Compliance with the inspection requirements (fittings group I) | DIN EN 1213 |

Regulations from section: Marking on components

| Scope / Notice | Regulations applicable in Germany |
|-------------------------------|-----------------------------------|
| Designation noise class I | DIN EN 1213 |
| EA marking for classification | DIN EN 1717 |

Regulations from section: Compatible components

| Scope / Notice | Regulations applicable in Germany |
|--------------------|-----------------------------------|
| G-external threads | DIN EN ISO 228 |

Regulations from section: Corrosion

| Scope / Notice | Regulations applicable in Germany |
|-------------------------------|-----------------------------------|
| 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 Germany |
|--|---|
| Leakage test for potable water installations | DIN EN 806, part 4 |
| Leakage test for potable water installations | ZVSHK-Merkblatt „Dichtheitsprüfungen von Trinkwasserinstallationen mit Druckluft, Inertgas oder Wasser“ |

Regulations from section: Maintenance

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

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.

2.2.1 Areas of use

Use is possible in the following areas among others:

- Drinking water installations
- Industrial units

The general rules of engineering and the applicable regulations must be observed for planning, execution, operation and maintenance potable water installations, see „Regulations from section: Fields of application“ on page 6.

2.2.2 Media

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

- Drinking water without limitations acc. to the applicable directives, see „Regulations from section: Media“ on page 6
- maximum chloride concentration 250 mg/l pursuant to applicable regulations, see „Regulations from section: Media“ on page 6

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 7](#). Their plastic components comply with the KTW recommendation and the requirements pursuant to the applicable regulations.

2.3.1 Overview



The Easytop system fittings comply with the test requirements specified in the applicable regulations, see [„Regulations from section: Overview“ on page 7](#).

Sound protection $L_{ap} \leq 20 \text{ dB(A)}$

The model is equipped as follows:

- valve casing made of gunmetal/silicon bronze
- valve top made of gunmetal/silicon bronze (dead space free)
- dual-sided G external thread
- valve seat and valve plate unit made of stainless steel
- backflow preventer (BP)
- drainage / testing plugs G $\frac{1}{4}$ upstream and downstream from the backflow preventer
- key surface on the casing
- valve and spindle seal made of EPDM (maintenance-free)

Backflow preventer

The model is fitted with a backflow preventer.

Backflow preventers only allow flowthrough in one direction (in the direction of flow). If the direction of flow changes, e.g. due to back suction, the backflow preventers close automatically.

| | | | | | | |
|----|---------------|----|----------------|----------------|----------------|----------------|
| DN | 15 | 20 | 25 | 32 | 40 | 50 |
| G | $\frac{3}{4}$ | 1 | $1\frac{1}{4}$ | $1\frac{1}{2}$ | $1\frac{3}{4}$ | $2\frac{3}{8}$ |

2.3.2 Threaded connection

Only flat sealing connection screw fittings may be used for the threaded connection.

2.3.3 Markings on components

The model is marked as follows:

- flow direction indicator
- noise class I pursuant to applicable regulations, see [„Regulations from section: Marking on components“ on page 7](#)
- dimension
- DVGW writing
- EA marking for classification in accordance with the applicable regulations, see [„Regulations from section: Marking on components“ on page 7](#)

2.3.4 Compatible components

The model is equipped with G-external threads according to the applicable regulations and compatible with the Profipress, Sanpress, and Sanpress Inox system, see [„Regulations from section: Compatible components“ on page 7](#).

2.3.5 Operating mode

Combined backflow preventer (CBP)

Backflow preventers protect fittings and installation systems against unintended backflow, back pressure or back suction of the contaminated wastewater or dirty water in the piping system. This can occur after pressure fluctuations in the distributor circuit, which can cause a change in the direction of flow.

The backflow preventer prevents the pushing back, backflow or back suction of liquids, which may be a health hazard, into the public drinking water network, with the help of a spring-loaded valve cone. The dimension is dependent on the peak pressure and it complies with the nominal width of the pipeline. The backflow preventer must be fitted with testing equipment.

In many countries, standards and technical guidelines stipulate the use of backflow preventers or other suitable safety equipment that protect drinking water against contamination.

2.3.6 Technical data

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

| | |
|-------------------------------------|------------------|
| Operating temperature [T_{max}] | 90 °C |
| Operating pressure [P_{max}] | 1.6 MPa (16 bar) |

The performance diagram shows the pressure losses (in hPa) in relation to the volume flow and the nominal width.

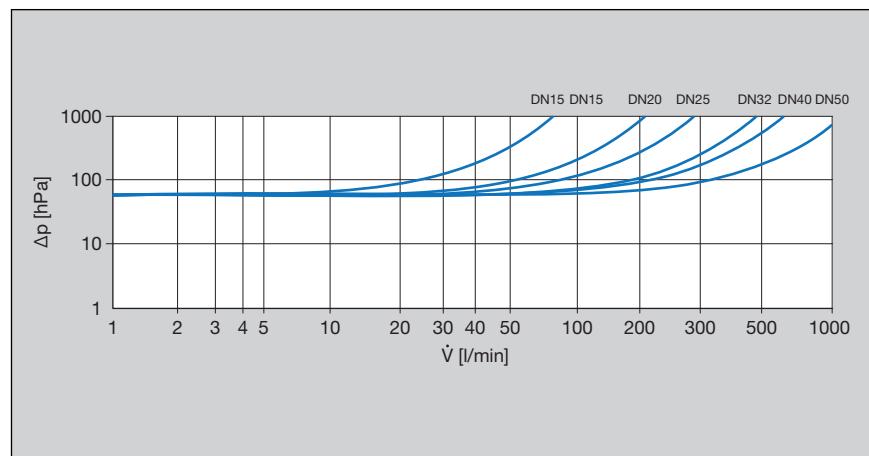


Fig. 1: Performance diagram pressure loss backflow preventer press/threaded connection

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  „Regulations from section: Corrosion“ on page 7.



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:

- Drainage valve
- Extension for drainage valve when using an insulating shell
- Insulating shells



Fig. 2: Model 2234 Easytop drainage valve



Fig. 3: Model 2234.5 Easytop extension

Insulating shells

EPS insulating shells are available for all sizes of valves. The two-piece shells are self-securing and mounted with tools and holding clamps: they connect seamlessly onto the flat surface of the pipe insulation. When installing a drainage valve or an extension with drainage valve, a predetermined breaking point is broken out of the insulating shell.



Fig. 4: Model 2210.12 Easytop insulating shell

3 Handling

3.1 Assembly information

3.1.1 Mounting instructions

Checking system components



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

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.

During assembly

Observe the following when mounting:

- flow direction indicator
- use suitable tools
- When tightening the connection screw fitting, counter by holding the key surface of the valve.



Choose the place of installation so that the fitting is easily accessible, simple to operate and the insulating shell can be well mounted.

Laying and fixing pipes

For information, refer to the instructions for use of the Viega system of the product you are using.

Length expansion

For information, refer to the instructions for use of the Viega system of the product you are using.

3.2 Assembly

3.2.1 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.

Comply with the general rules of engineering and the applicable directives, see  „Regulations from section: Leakage test“ on page 8.

Document the result.

3.3 Maintenance



NOTICE!

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

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



Viega recommends actuating the fitting regularly and checking its function.

Replacing the valve top

If the valve top needs to be replaced, model 2239.22 can be used.

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.