

## Instructions for Use

### Manifold DN25



For Fonterra radiant heating and cooling

**Model**  
1005

**Year built (from)**  
01/2012

**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](http://viega.com/legal).

## 1.1 Target groups

The information in this instruction manual is directed at the following groups of people:

- 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.

This manual must be handed over to the operator or user after the assembly and commissioning of the product.

## 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/standards](http://viega.com/standards).

#### Regulations from section: Intended use

| Scope / Notice   | Regulations applicable in Germany |
|--|-----------------------------------|
| Installation of underfloor heating                               | DIN EN 1264-4                     |
| Heating circuits / industry manifolds for use in heating systems | DIN EN 12828                      |

### 2.2 Intended use

Manifolds are suitable for use in heating systems according to the applicable standards and guidelines for connection of heating circuits, see ↗ *'Regulations from section: Intended use' on page 5*.

Manifolds furthermore allow for connection and balancing of surface heating and cooling systems, see ↗ *'Regulations from section: Intended use' on page 5*.

### 2.3 Product description

Manifold DN25 for Fonterra radiant heating and cooling

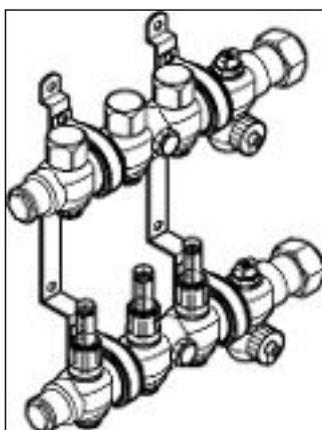


Fig. 1: Overview manifold

Equipment:

- Supply flow beam with adjustable flow sensor 0-5 l/min
- Return flow beam with integrated valve inserts for receiving the Viega actuator M30x1.5
- Connection can be made on left or right side
- One bleeder valve and one KFE tap per manifold beam
- Protective cap
- Galvanised/sound insulated wall bracket

## 2.4 Technical data

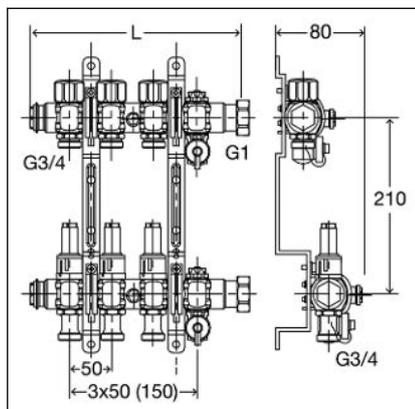


Fig. 2: Dimensional drawing

| L [mm] | Outlets | Art. no. |
|--------|---------|----------|
| 212    | 2       | 695 958  |
| 242    | 3       | 695 965  |
| 292    | 4       | 695 972  |
| 342    | 5       | 695 989  |
| 392    | 6       | 695 996  |
| 442    | 7       | 696 009  |
| 492    | 8       | 696 016  |
| 542    | 9       | 696 023  |
| 592    | 10      | 696 030  |
| 642    | 11      | 696 047  |
| 692    | 12      | 696 054  |

|  |   |
|--|---|
| Maximum operating pressure             | 600 kPa                                     |
| Maximum operating temperature          | 70 °C                                       |
| Distance threaded connection union nut | 50 mm                                       |
| Flow quantity gauge                    | G1  |
| Plugs                                  | 0-5 l/min                                   |
|  | G <sup>3</sup> / <sub>4</sub> nickel-plated |

## 2.5 Accessories



Fig. 3: Concealed manifold cabinet (model 1294)

| Name   | Product description  |
|--|--|
| Concealed manifold cabinet (model 1294)      | <ul style="list-style-type: none"> <li>■ Installation depth 110–150 mm</li> <li>■ for Fonterra radiant heating and cooling</li> <li>■ Hot dip galvanised, white RAL 9016</li> <li>■ Height-adjustable from 675–855 mm</li> </ul> |
| Concealed manifold cabinet (model 1294.3)    | <ul style="list-style-type: none"> <li>■ Installation depth 80–110 mm</li> <li>■ for Fonterra radiant heating and cooling</li> <li>■ Hot dip galvanised, white RAL 9016</li> <li>■ Height-adjustable from 675–855 mm</li> </ul>  |
| Wall-mounted manifold cabinet (model 1294.1) | <ul style="list-style-type: none"> <li>■ for Fonterra radiant heating and cooling</li> <li>■ Hot dip galvanised, white RAL 9016</li> <li>■ Height-adjustable from 630–790 mm, depth 140 mm</li> </ul>                            |



**Fig. 4: Extension set (model 1005.2)**

| Name   | Product description  |
|--|--|
| Extension set flow quantity gauge<br>0-5 l/min<br>(model 1005.2) | <ul style="list-style-type: none"> <li>■ for Fonterra radiant heating and cooling</li> <li>■ Stainless steel</li> <li>■ Euro cone, union nut G1</li> <li>■ Flat sealing</li> </ul> |

## 3 Handling

### 3.1 Transport and storage

Observe the following with transport and storage:

- Avoid heavy blows and vibrations.
- Store the components in a clean and dry place.
- Do not remove the components from the packaging until immediately before use.

### 3.2 General mounting instructions

- The manifold must be installed and adjusted together with original accessories and suitable tools only.
- Always depressurize the system before doing any installation and maintenance work.

### 3.3 Assembly



Use Viega clamping ring screw fittings and press connections for euro cone only.

- Assemble the supply flow beam, the return flow beam, and the wall bracket.

**NOTICE! Ensure central alignment.**

- Mount the manifold to the wall, the ceiling, or in the respective manifold cabinet.
- Check the valve casing for contamination and damage.
- Connect the pipes.

#### Mounting example



When using the control stations model 1253 and 1254, make sure to mount the manifold bars in keeping with the flow direction (supply flow beam on top, return flow beam at the bottom).

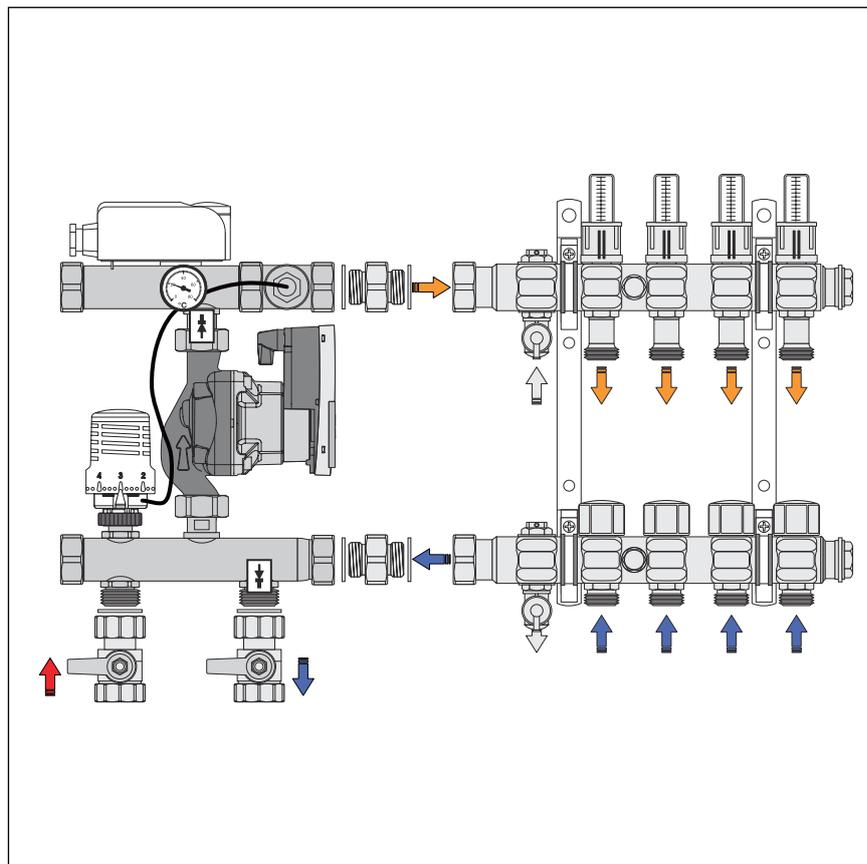
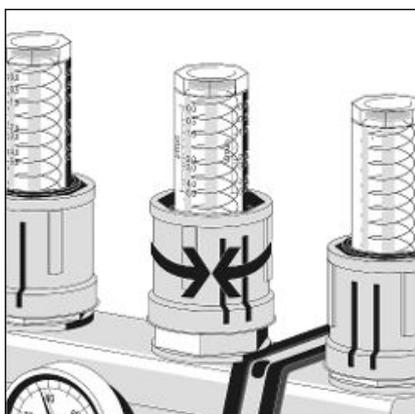


Fig. 5: Mounting example with control station

### 3.4 Settings

#### Setting the flowthrough volume



- Switch the circulation pump on.
- Fully open all manual and thermostat valves of the entire circuit.
- At the first heating circuit, pull the adjusting ring up and turn it to set it to the water volume calculated for the heating circuit.
- Repeat the process analogously for all other heating circuits.
- Check the target values and re-adjust if necessary.
- Push the adjusting ring down into fixing position.

Pressure loss diagram thermostat valve

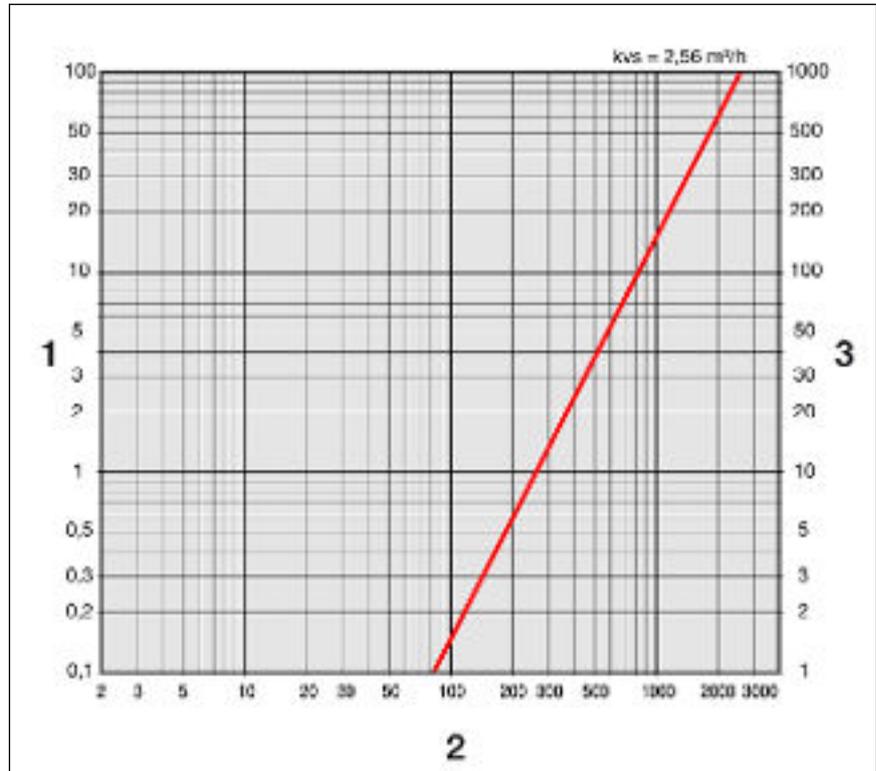


Fig. 6: Pressure loss for the thermostat valve (in return flow)

- 1 Pressure loss  $\Delta p$  [kPa]
- 2 Mass flow  $m$  [kg/h]
- 3 Pressure loss  $\Delta p$  [hPa]

Pressure loss diagram flow quantity gauge

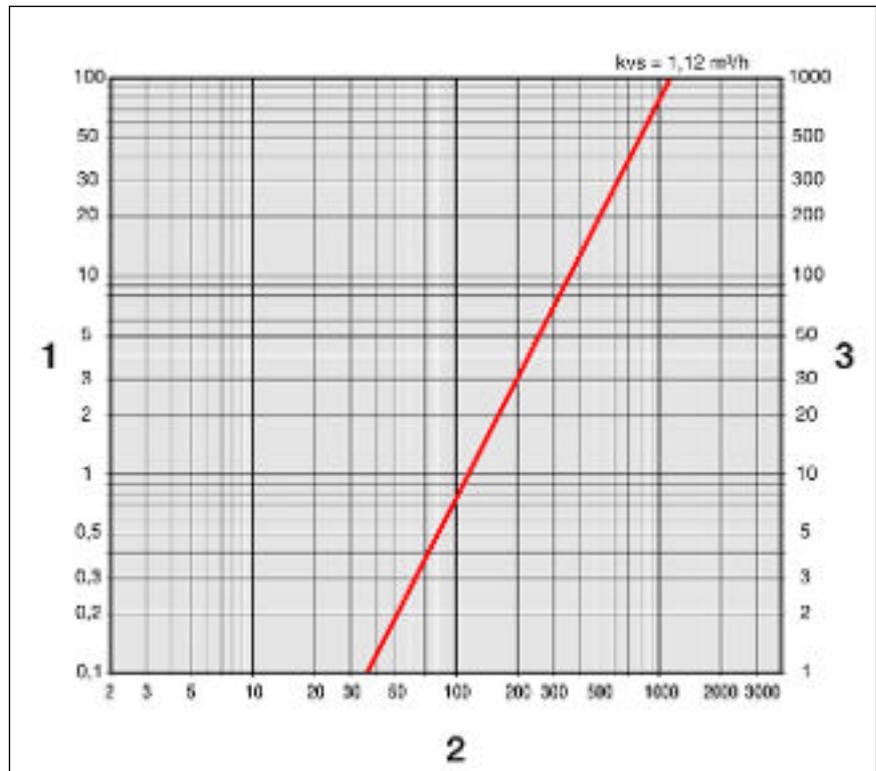


Fig. 7: Pressure loss for flow quantity indicator 0–5 l/min (in supply line)

- 1 Pressure loss  $\Delta p$  [kPa]
- 2 Mass flow  $m$  [kg/h]
- 3 Pressure loss  $\Delta p$  [hPa]

### 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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