INT

Instructions for Use

Return temperature limiter set

for Fonterra radiant heating and cooling, manifold with max. three outlets, maximum limitation of the return temperature

Model
1255.1

viega

Table of contents

1 About these instructions for use

1.1 Target groups

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

- Heating and plumbing experts 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: Technical data

Scope / Notice	Regulations applicable in Germany
Maximum supply temperature of the heating water	DIN EN 1264-4
Maximum supply temperature of the heating water	DIN 18560

Regulations from section: General notes on mounting

Scope / Notice	Regulations applicable in Germany
Composition of the heat carrier medium	VDI-Richtlinie 2035

Regulations from section: Settings

Scope / Notice	Regulations applicable in Germany
Functional heating with standard screeds	DIN EN 1264-4

Regulations from section: Disposal

Scope / Notice	Regulations applicable in Germany
Disposal of electronic components	WEEE-Richtlinie 2012/19/EU

2.2 Intended use

The return temperature limiter set is suitable for keeping the return temperature constant in surface heatings with maximum three heating circuits.

It is designed for direct mounting to the right or left side of manifolds.

Conversions or modifications of the product are not considered intended use, and are not permitted.

2.3 Product description

The return temperature limiter set consists of an automatically operating temperature control and a ball valve. The temperature of the flowing medium is transmitted via heat conduction to the sensor of the temperature control. It keeps the target value within the range which is required for the control technology. The valve opens when the actual value falls below the set limit.

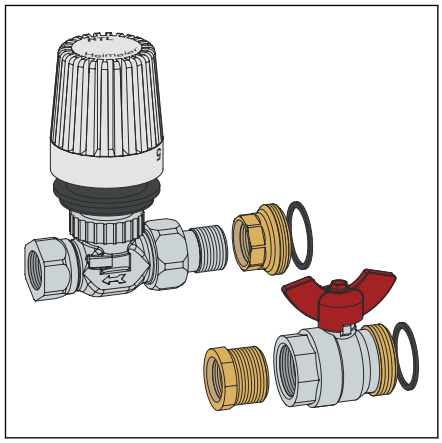


Fig. 1: Return temperature limiter set overview

- Sensor with concealed upper and lower limits of a temperature range
- Blocking of a setting by means of limit clips
- Thermostat filled with expansion material
- Overlifting protection
- Valve bottom made of gunmetal/silicon bronze, nickel-plated

Installation dimensions

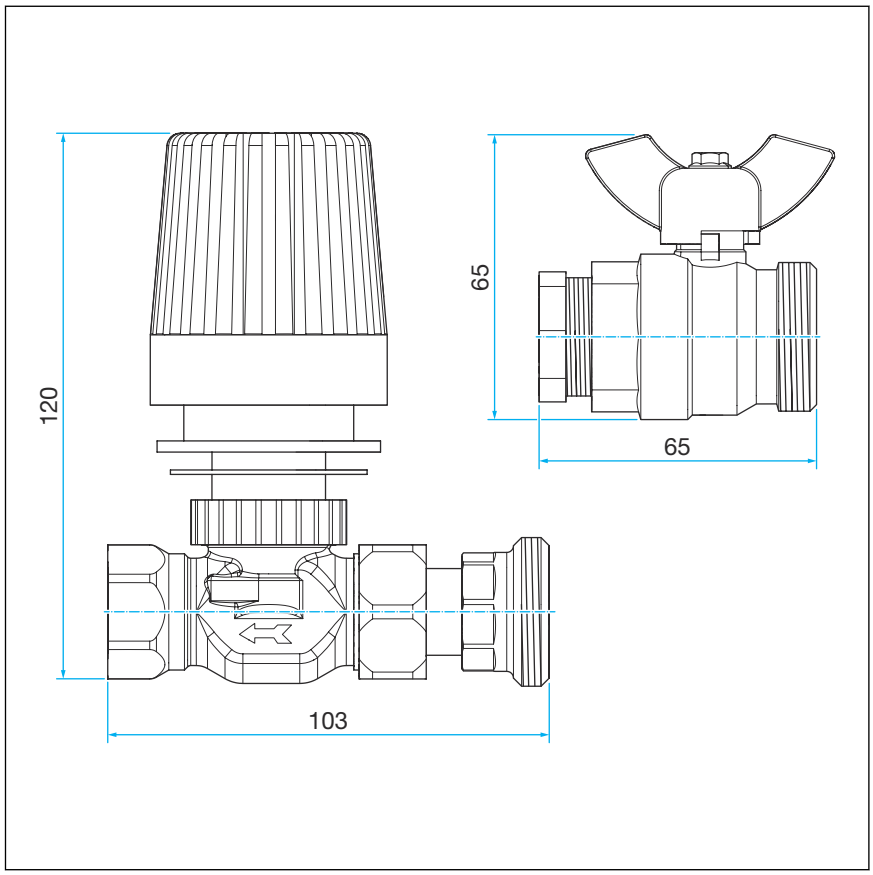


Fig. 2: Installation dimensions return temperature limiter set

2.4 Technical data

Maximum permitted operating temperature		70 °C
Maximum operating pressure		600 kPa
Kvs value		1.35 m^3/h
Temperature control range		10–50 °C
Connections		
Primary	Internal thread	G½
Secondary	External thread	G1 flat sealing

Max. heating circuit length*

Pipe dimensions	PB 12 x 1.3	PB 15 x 1.5	PE-Xc 17 x 2.0
Manifold, 2-fold	70 m**	90 m**	100 m**
Manifold, 3-fold	60 m**	70 m**	80 m**

* with an assumed temperature difference of 8–10 K and a maximum installation distance of 11 cm

** the data is approximate values and can deviate in practical application (do a pressure loss calculation)

Maximum supply temperature of the heating water*

For wall heating		For floor heating	
Gypsum or lime plaster	50 °C	Calcium sulphate and cement screeds	55 °C
Loam rendering	50 °C	Reno	50 °C
Lime-cement plaster	70 °C		
Side 12 (plaster boards)	50 °C		

* according to applicable standards and regulations, see *'Regulations from section: Technical data' on page 5*

3 Handling

3.1 Transport and storage

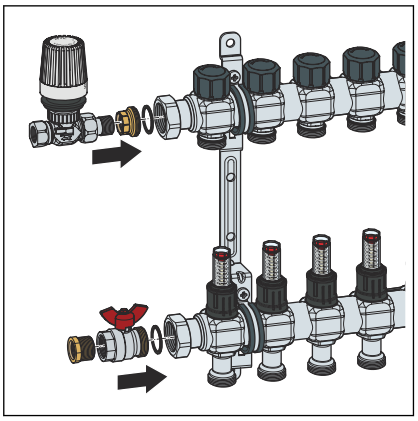
Observe the following with transport and storage:

- 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

- To avoid damage and calcification in hot water heating systems, the composition of the heat carrier medium should comply with the applicable standards and regulations, see *'Regulations from section: General notes on mounting' on page 5*.
- The temperature control consists of a special valve bottom and a sensor. Thermostat valve bottoms cannot be used for this purpose.

3.3 Assembly



▶ Make the hydraulic connections as shown in the figure.

3.4 Settings

Setting the return temperature

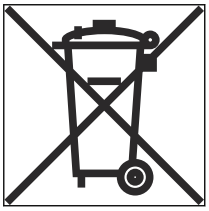
- Set the return temperature at the thermostat valve.
  - 1=10 °C
  - 2=20 °C
  - 3=30 °C
  - 4=40 °C
  - 5=50 °C

  INFO! The set target value must not be lower than the ambient temperature; otherwise, the temperature control will close and not open again.

- Carry out functional heating with standard screeds according to the applicable standards and guidelines, see ***Chapter 2.1 'Standards and regulations' on page 5***.

  INFO! To carry out functional heating, control the supply temperature via the boiler control.

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.

Electronic components and batteries must not be put in the domestic waste but must be disposed of appropriately in conformity with the applicable directives, see *'Regulations from section: Disposal' on page 5*.

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