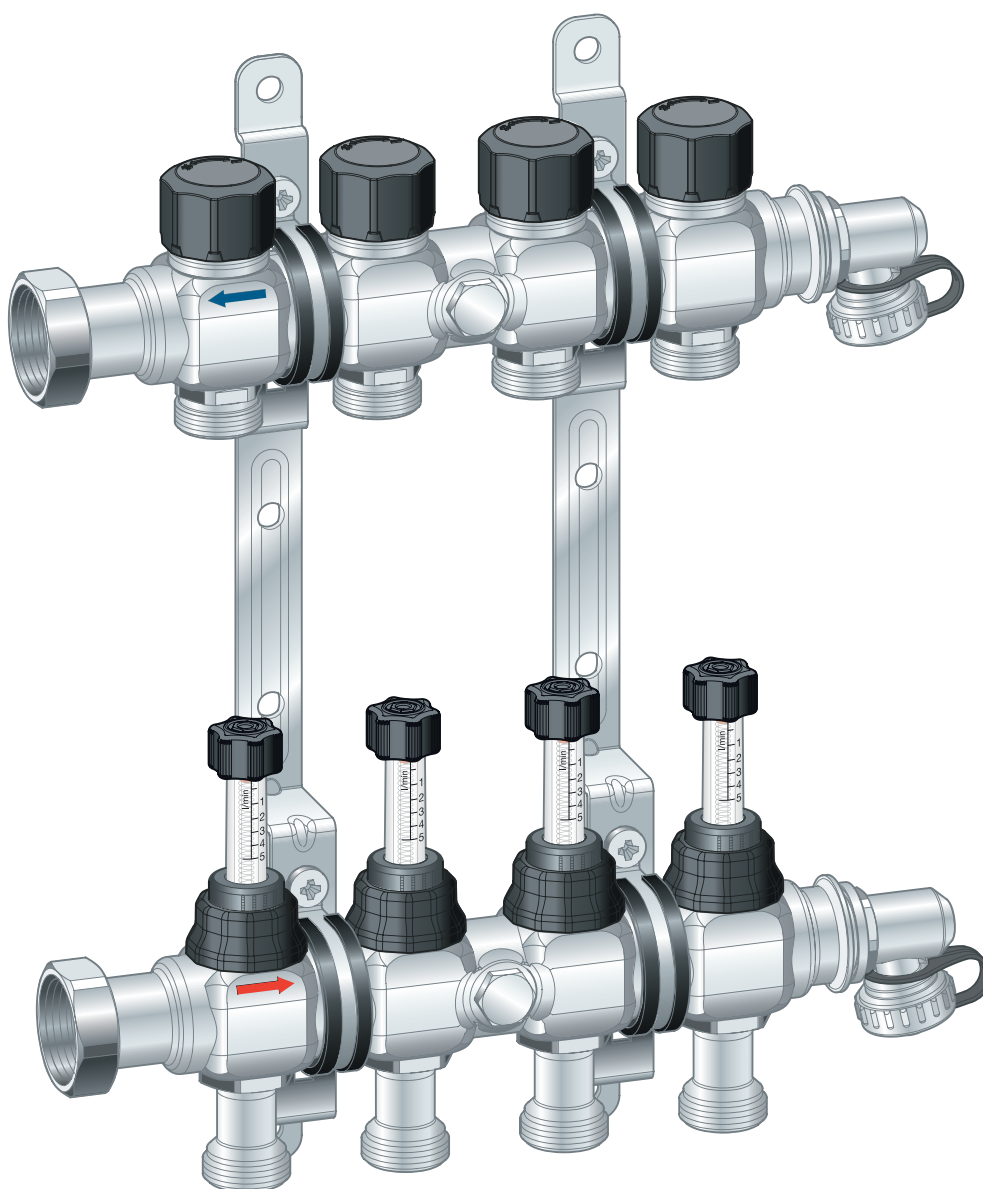


Instructions for Use

Manifold DN25



For Fonterra radiant heating and cooling

Model
1010

Year built (from)
01/2019

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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 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.

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 and are provided as a support feature.

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

2.3 Product description

Overview

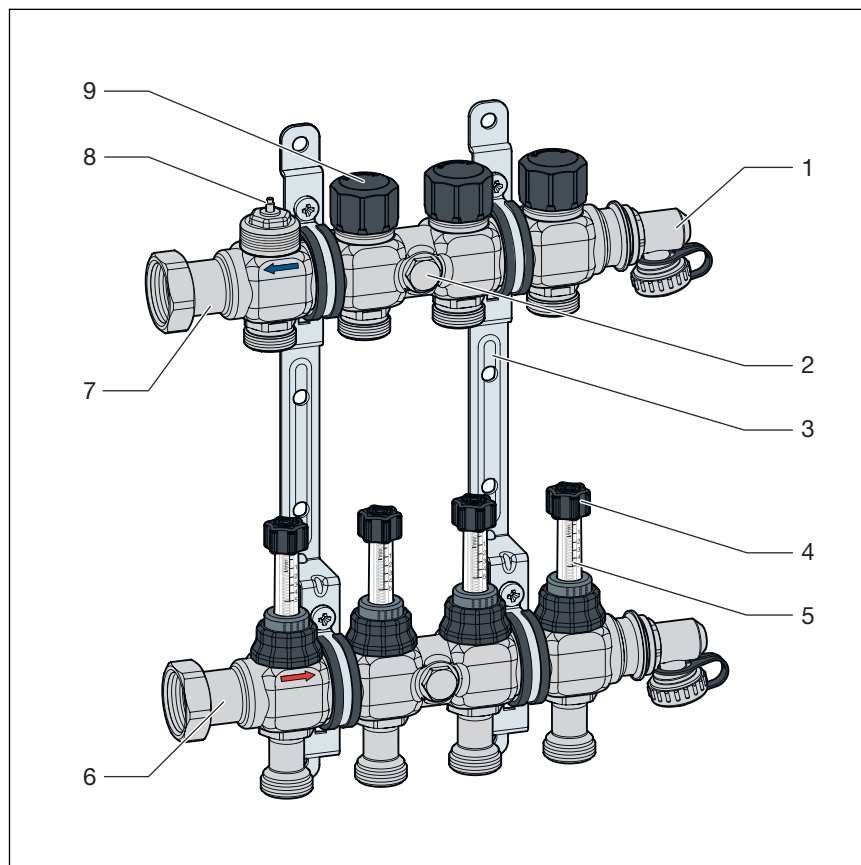


Fig. 1: Manifold overview

- 1 Filling, draining and vent cock G $\frac{3}{4}$
- 2 Plug G $\frac{3}{8}$
- 3 Wall bracket, galvanised and sound insulated
- 4 Adjustment wheel
- 5 Flow quantity gauge
- 6 Supply flow beam with union nut G1, flat sealing
- 7 Return flow beam with union nut G1, flat sealing
- 8 Valve insert
- 9 Protective cap

Equipment

- Supply flow beam with adjustable flow quantity gauge (0–5 l/min) with memory function
- Return flow beam with integrated valve inserts for receiving the Viega actuator M30 x 1.5, including protective cap
- Connection and installation position are freely selectable.
- Two plugs G $\frac{3}{8}$ per manifold beam (for optional mounting of a thermometer)

2.4 Technical data

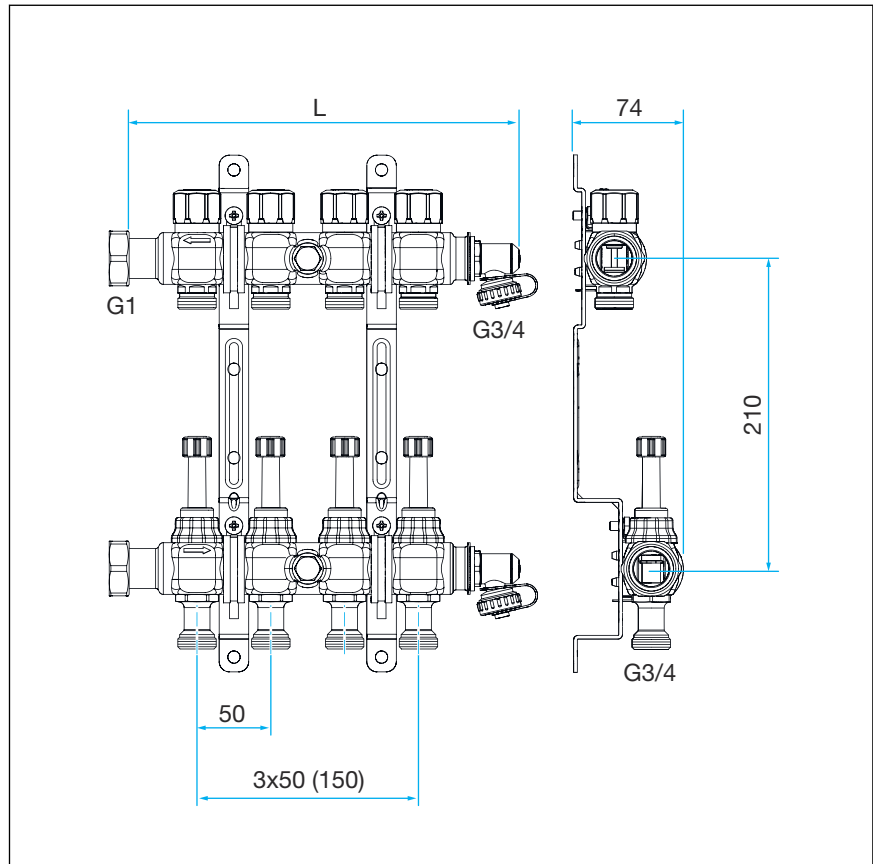


Fig. 2: Dimensional drawing

L [mm]	Outlets	Art. no.
238	2	786 823
238	3	786 830
268	4	786 847
318	5	786 854
368	6	786 861
418	7	786 878
468	8	786 885
518	9	786 892
568	10	786 908
618	11	786 915
668	12	786 922

Maximum operating pressure	600 kPa
Maximum operating temperature	70 °C

Distance threaded connection	50 mm
Union nut	G1
Flow quantity gauge	0–5 l/min

2.5 Accessories

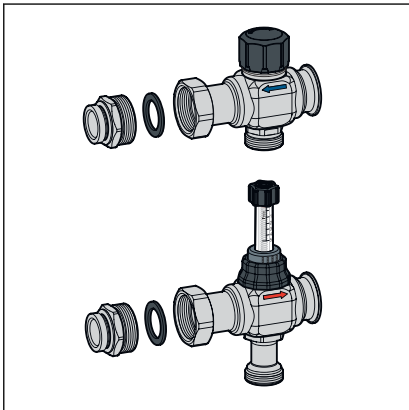


Fig. 3: Extension set (model 1010.2)

Name	Product description
Extension set flow quantity gauge 0–5 l/min (model 1010.2)	<ul style="list-style-type: none"> ■ For Fonterra radiant heating and cooling ■ Stainless steel ■ Euro cone, union nut G1 ■ Flat sealing

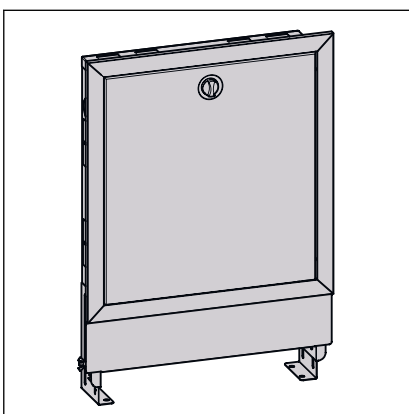


Fig. 4: Concealed manifold cabinet (model 1294)

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

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.
- The manifold can be mounted in vertical position, with outlet facing up or down, or in horizontal position at a storey floor.
- Always depressurize the system before doing any installation and maintenance work.

3.3 Assembly



Use connection screw fittings for euro cone only.

- Connection screw fitting with clamping connection, model 1037
- Connection screw fitting with SC-Contur, model 1236

- Assemble the supply flow beam, the return flow beam, and the wall bracket.
- Mount the manifold to the wall, the ceiling, or in the respective manifold cabinet.
- Check the valve casings for contamination and damage.
 - Clean soiled valves.
 - Replace damaged valves.
- Connect the pipes.

Mounting example



If you use the manifold control station (model 1254.2) together with the manifold, you need to mount the manifold bar in accordance with the flow direction (supply flow beam at the top and return flow beam at the bottom).

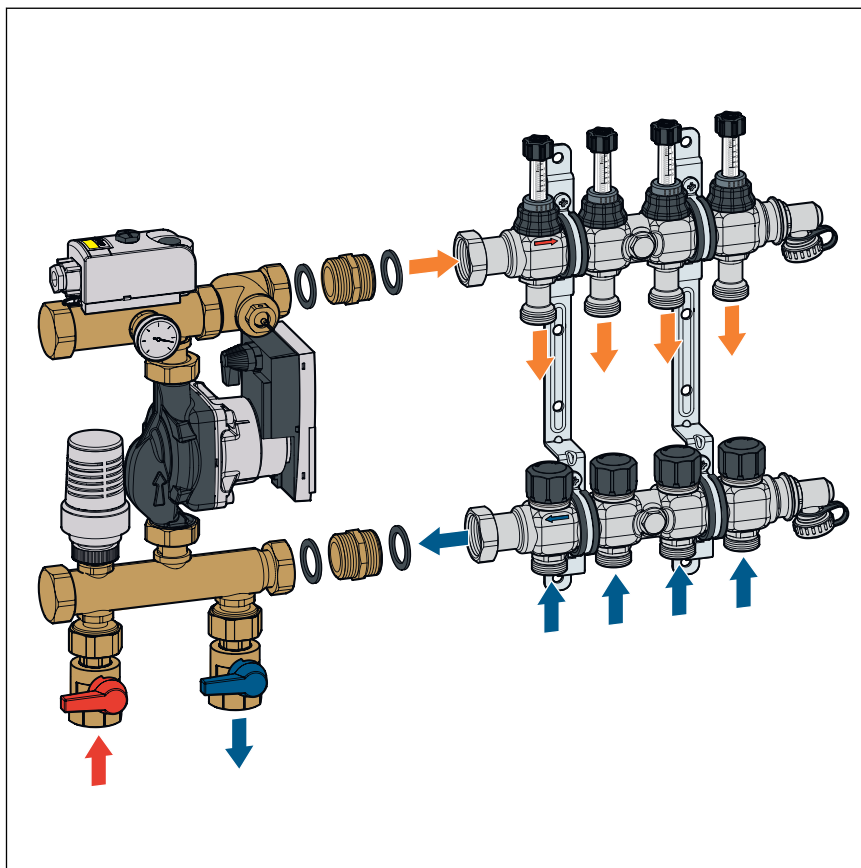


Fig. 5: Mounting example with control station

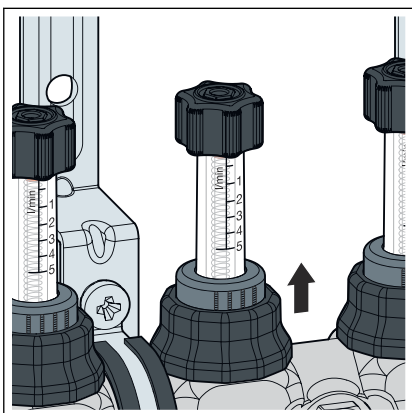
3.4 Settings

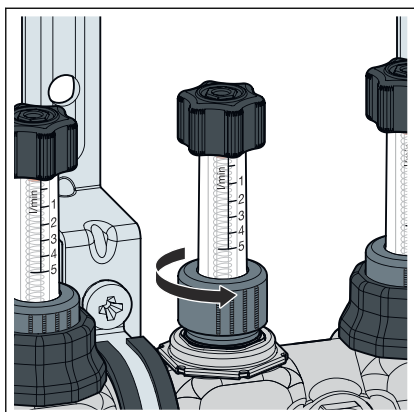
Setting the flowthrough volume

- Switch the circulation pump on.
- Fully open all manual and thermostat valves of the entire circuit.

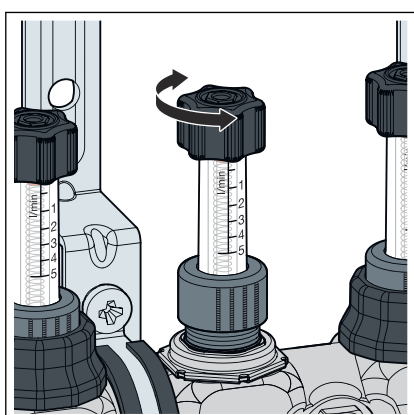
INFO! The flow quantity gauges have a memory function. After closing and opening the heating circuits the preset hydraulic values remain intact.

- Pull the fixing ring off upwards.

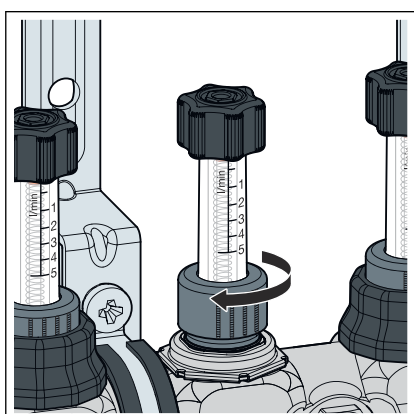




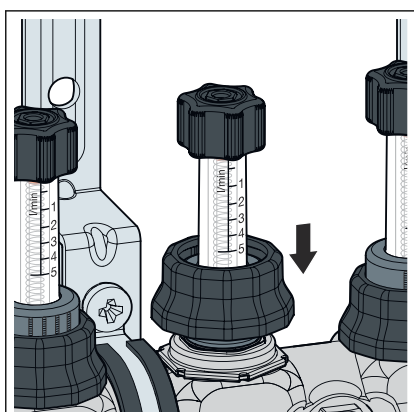
- Turn the union nut anti-clockwise.



- Use the adjustment wheel to set the calculated flowthrough volume in l/min.
 - Turning clockwise = reduces the flow volume
 - Turning anti-clockwise = increases the flow volume

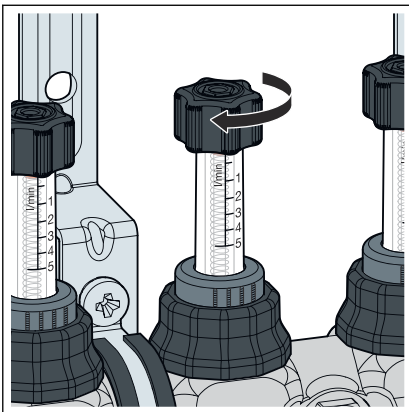


- Turn the union nut clockwise as far as it will go.

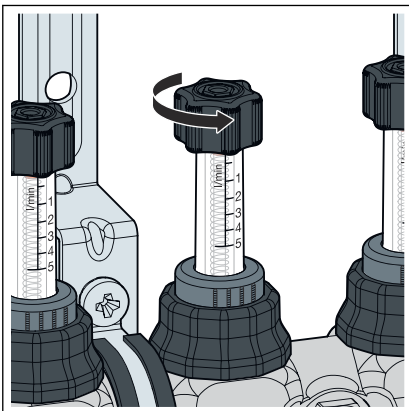


- Place the fixing ring and press downwards.
 - The set value for the flow rate [l/min] is specified.
- Repeat the process analogously for all other heating circuits.
- Check the values and re-adjust them if necessary.

Opening and closing the heating circuit



- To close the heating circuit, turn the adjustment wheel clockwise as far as it will go.
- The heating circuit is closed.



- To open the heating circuit, turn the adjustment wheel anti-clockwise as far as it will go.
- The heating circuit is open to the preset value (memory function).

Pressure loss diagram thermostat valve

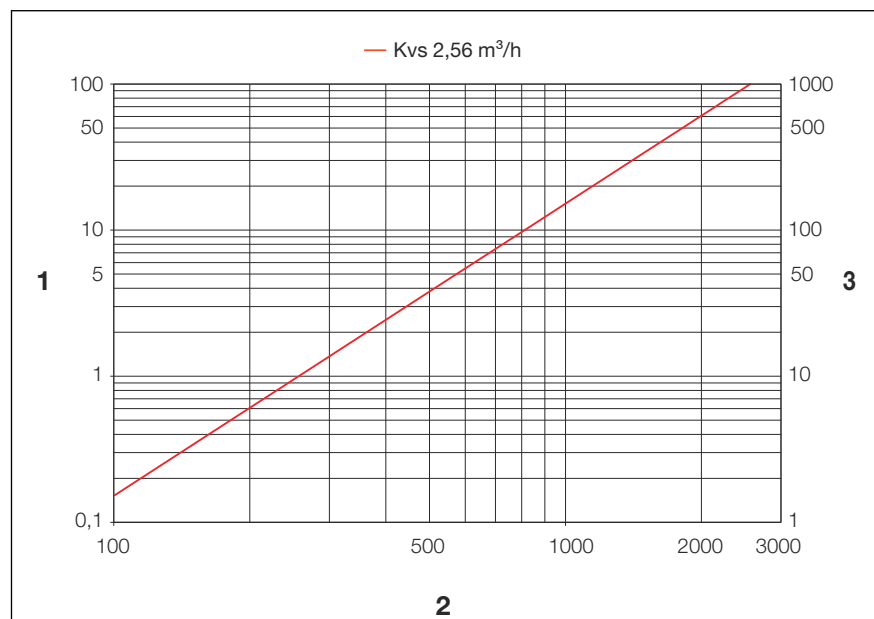


Fig. 6: Pressure loss for the thermostat valve (in return flow)

- 1 Pressure loss Δp [kPa]
- 2 Mass flow m [kg/h]
- 3 Pressure loss Δp [hPa]

Pressure loss diagram flow quantity gauge

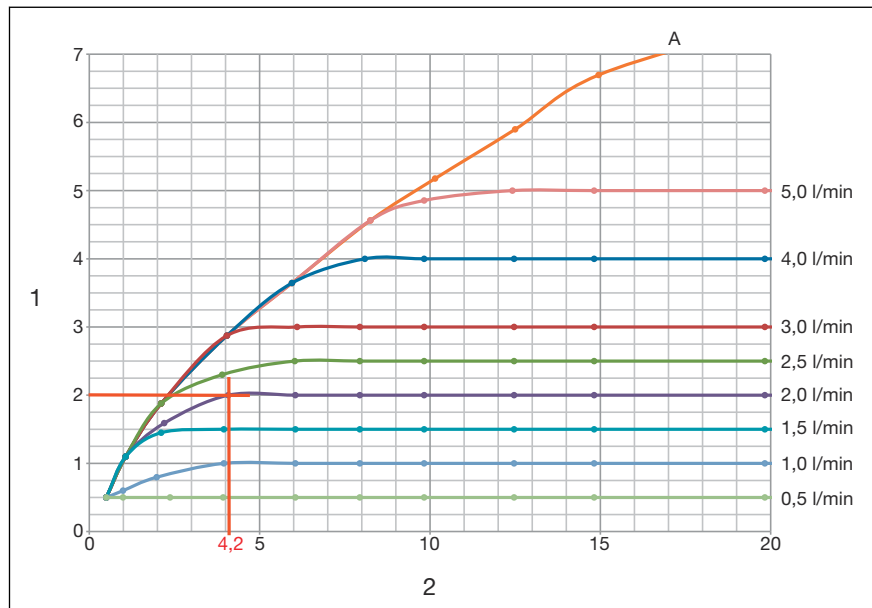


Fig. 7: Pressure loss for flow quantity indicator 0–5 l/min (in supply line)

- 1 Volume flow [l/min]
- 2 Pressure loss [kPa]
- A Fully open

Example application

The pump output is increased, the target volume flow is to remain constant.

- Target volume flow is 2 l/min.
- The pressure loss at the start is 4.2 kPa.
- Increase the pump output.
- Set the volume flow at the sight glass back to 2 l/min.
- The pressure loss increases.

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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