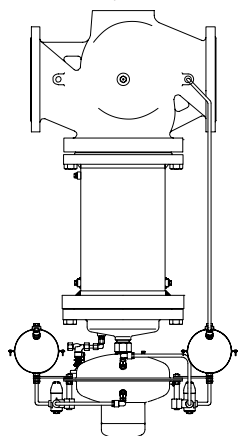
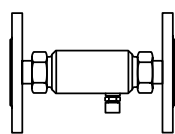


## Installation Guide

### Assembly kit PCV-VFGS 2 DN 150-250



Assembly kit valve unit  
PCV-VFGS 2 DN 150-250

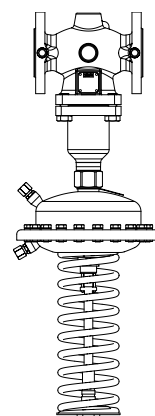


Throttling element

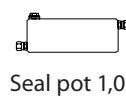


Stainless steel  
Ø 10x0,8x1500 mm

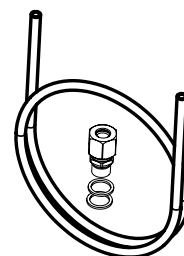
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Pilot controller  
AFP VFG 2 DN 40

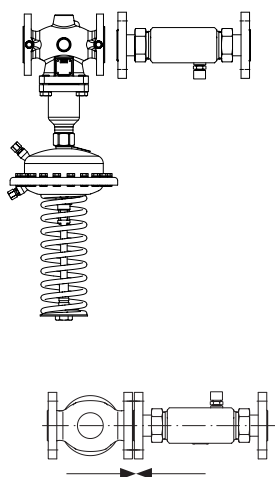


Seal pot 1,0 l

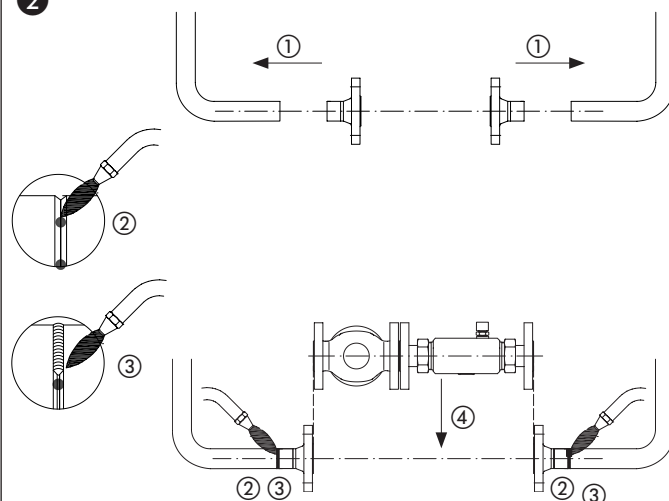


Copper  
Ø 10x0,8x1500 mm

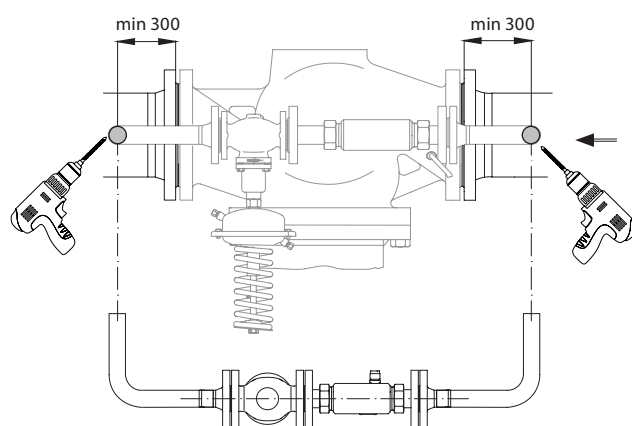
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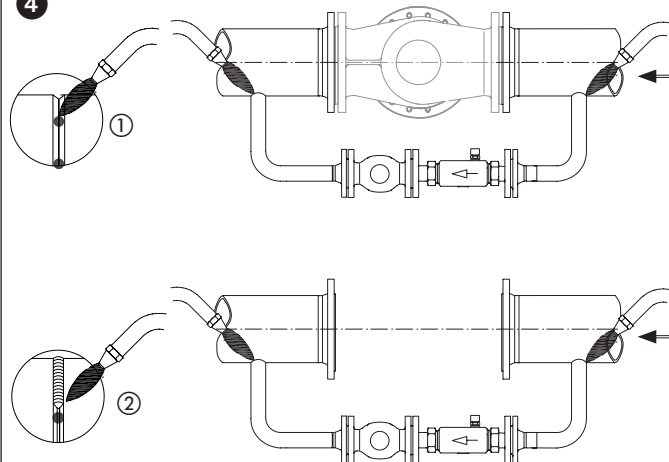
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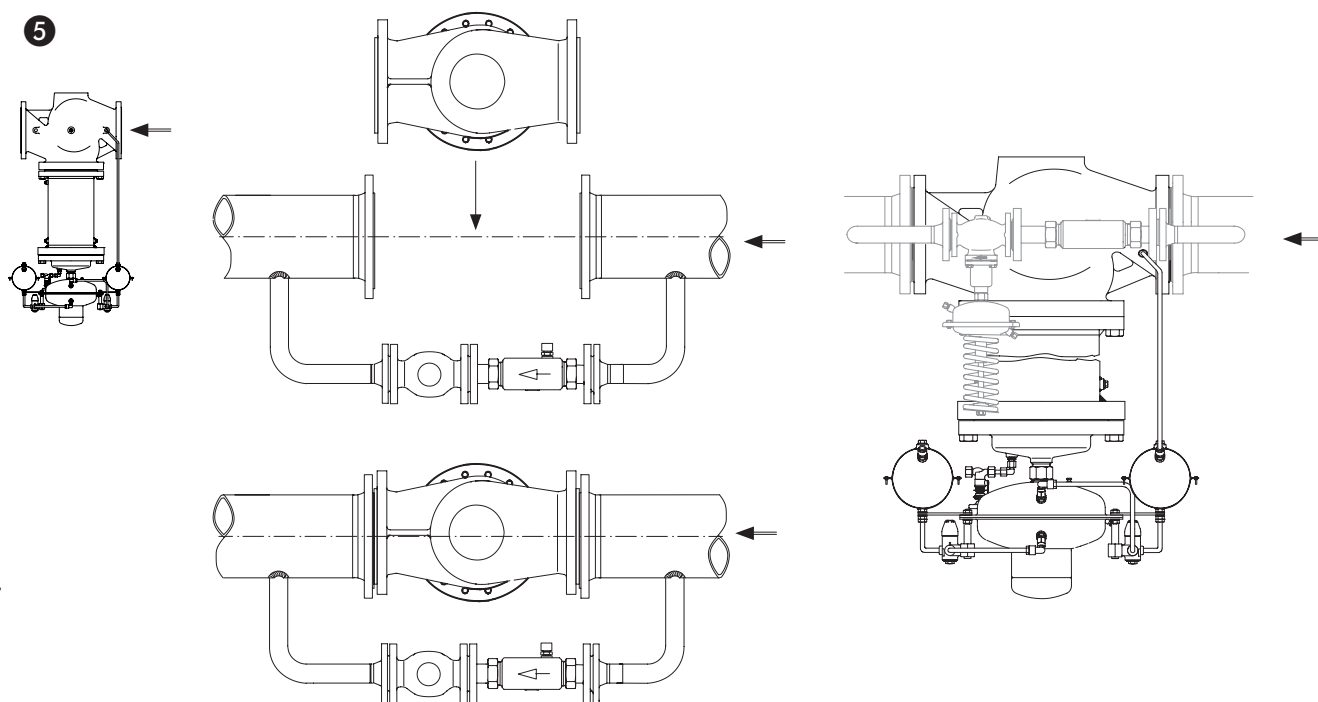
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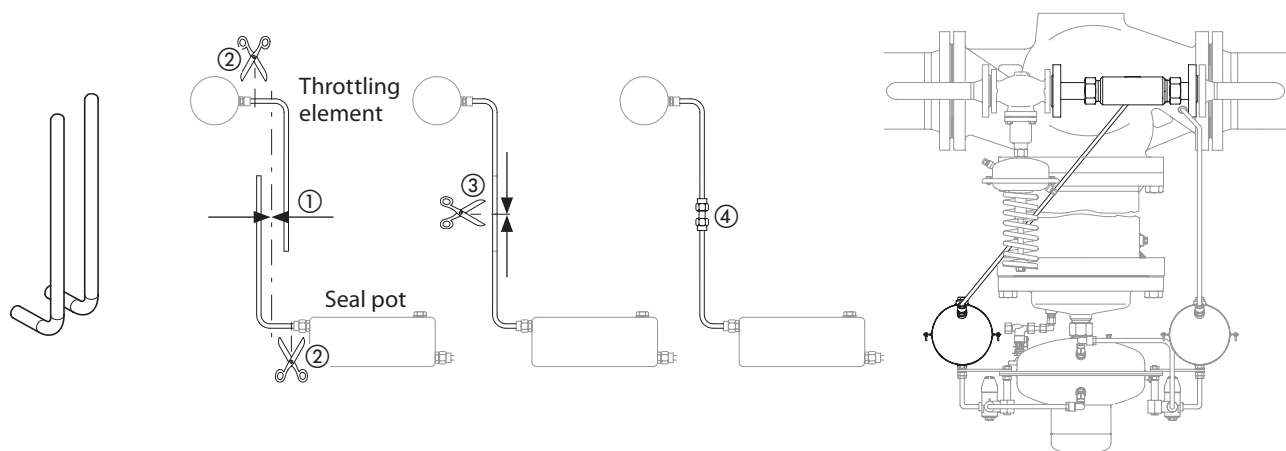
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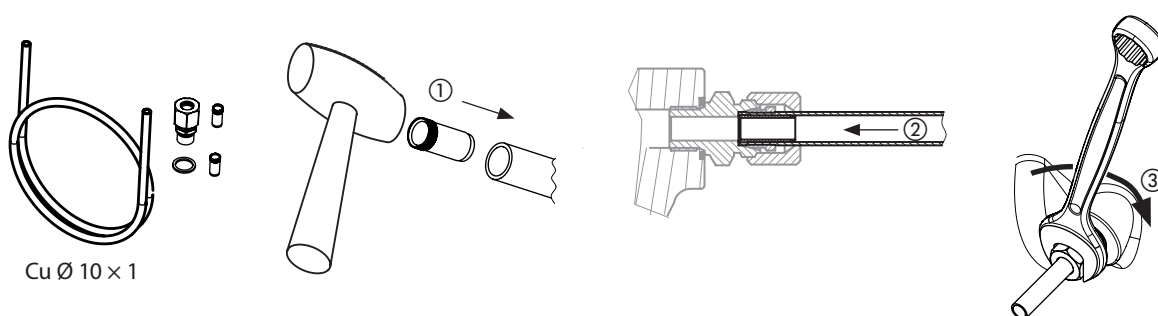
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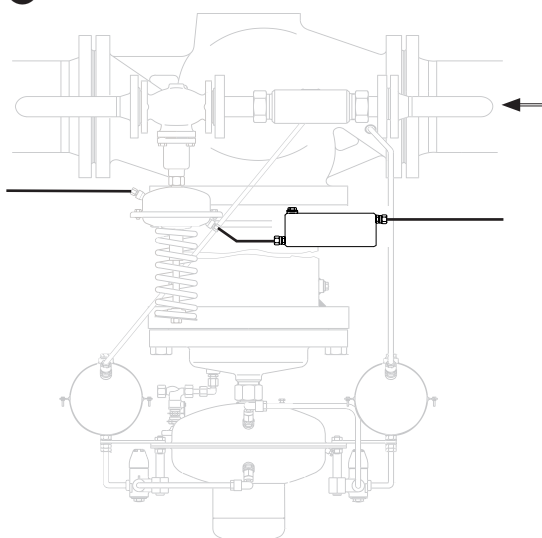
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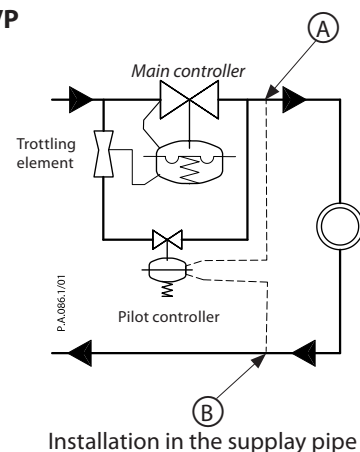
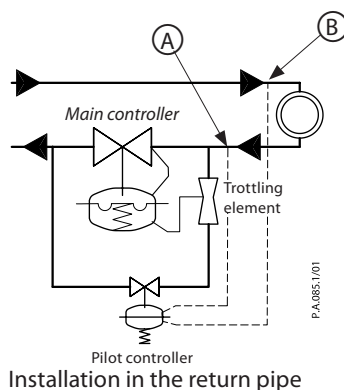
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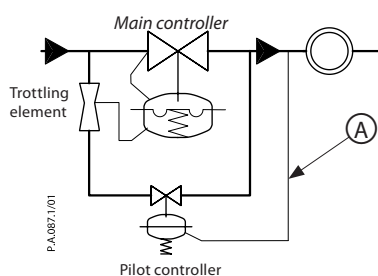
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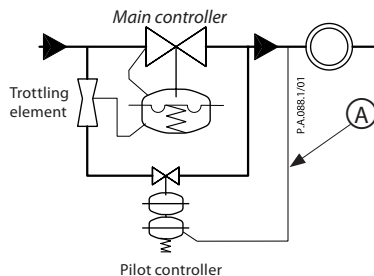
**PCVP**



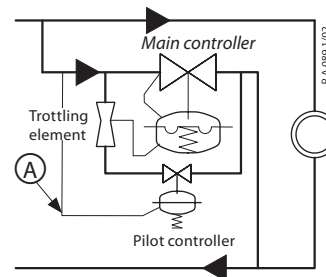
**PCVD**



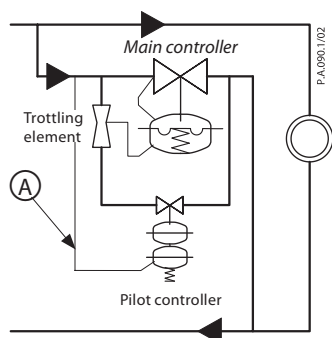
**PCVSD**



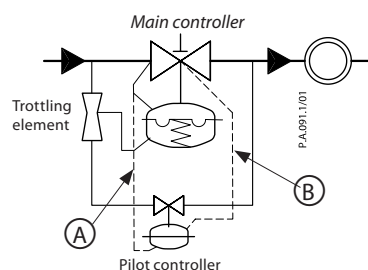
**PCVA**



**PCVSA**



**PCVQ**



### Safety Note



To avoid injury and damage to persons and devices, it is absolutely necessary these instructions are carefully read and observed prior to assembly and commissioning.

Necessary assembly, start-up, and maintenance work must be performed only by qualified, trained and authorised personnel.

Prior to assembly and maintenance work on the controller, the system must be:

- depressurized
- cooled down
- emptied
- cleaned

Please comply with the instructions of the system manufacturer or system operator.

### Disposal instruction



*This product should be dismantled and its components sorted, if possible, in various groups before recycling or disposal.*

Always follow the local disposal regulations.

### Definition of Application

The controller is used for differential pressure control of water and water glycol mixtures for heating, district heating and cooling systems.

The technical data on the rating plates determine the use.

### Scope of Delivery

Assembly kit PCV-VFGS 2:

- main valve assembled with valve body extension and seal pots,
- throttling element,
- impulse tube (throttle to seal pot of main actuator)

To order additionally:

- pilot valve,
- pilot valve actuator,
- seal pot for pilot valve for T<150 °C
- impulse tubes for a pilot valve,
- flange tailpieces.

Not included:

- bypass pipes,
- flat gaskets,
- screws/nuts.

### Bypass pre-assembly ①

1. Connect a throttling element to the pilot valve flange to flange.
2. Align flow direction – throttle in front of the pilot valve.
3. Align valve actuator and throttle impulse connection as shown on a drawing.

### Bypass assembly ②

1. Prepare flange tailpieces and pipes for welding ①.
2. Join bypass pipes to weld tailpieces ②, do the welding ③.
3. Use flat gaskets and screws/nuts to assemble bypass pipeline. Align pipes and valve as shown on a drawing ④.

### Holes for bypass ③

Mark connection points on a main pipe and drill holes for bypass flow.

### Connect bypass ④

1. Make a join ①.
2. Align main and bypass media flow direction.
3. Remove main valve and weld bypass pipe to main pipe ②.
4. Return main valve ⑤, check flow orientation.

### Main impulse tube mounting ⑥

Connect impulse tube from throttling element to seal pot of a main valve pressure actuator.

Lean impulse tubes into holes on throttle element and seal pot. Cut one or both ① to align ② and debur cut edge. Then cut one or both to align for a joining piece and debur cut edge ③. Add the joining piece and tighten all four nuts ④.

### Pilot impulse tube mounting ⑦

1. Put the steel ring into copper impulse tube ①, press it completely in.
2. Immerse the end into connection screw ② and tighten with a key ③.

#### Note:

At max temperatures  $\geq 150$  °C use a seal pot and connect it to main flow with stainless steel impulse tube.

### Connect pilot valve impulse tubes for controllers ⑧