

# Microstation with pump (PVST) [1/3]

Fixed value control station for surface heating  
with existing main pump

Immersion sleeve with  
flow temperature sensor  
with heat transfer paste  
(Safety data sheet: [www.variotherm.at](http://www.variotherm.at))

230V AC, 50 Hz,  
provided connection cable: 3 x 0,5 mm<sup>2</sup> (max. 3 A),  
please note the electrical protection!

Flow valve  
adjustable via  
protection cap



WILO Yonos PARA



h = 400 mm

2-14 heating circuits

- ↑ **Boiler flow:** 3/4" female thread
- ↓ **Boiler return:** 3/4" female thread
- ↗ **Surface heating flow:** 3/4" Eurocone
- ↘ **Surface heating return:** 3/4" Eurocone
- ⊠ **Check valve**
- ⊙ **Main pump**

The flow rate in the boiler circuit is adjusted using the regulating valve when the fixed-value regulator is fully opened (↗)

Deaerator

Feed /  
drain cock

Fixed value  
regulator  
with remote sensor

Regulating valve

Consumers with  
presettable  
flow rate

Observe the required capa-  
city (pipe diameter).  
Primary pressure required!

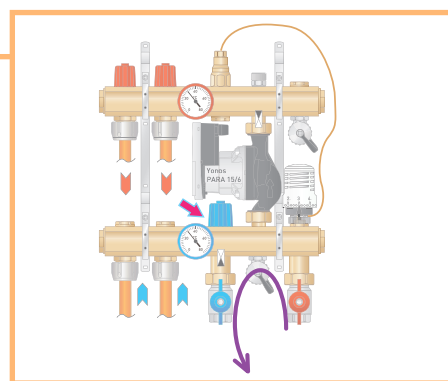
Heat generator  
e.g. gas, oil, solid  
fuel boiler, remote  
heating and buffer

Installation depth PMST:

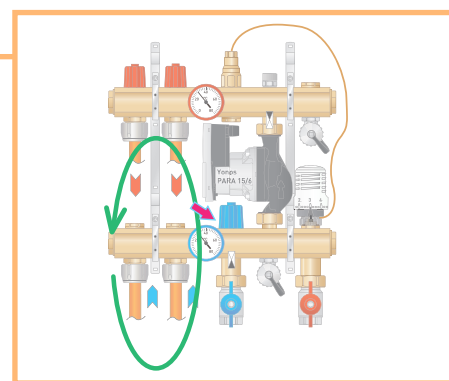
100 mm

Installation length PMST:

310 mm

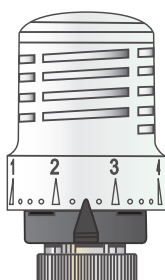


Boiler circuit



Surface heating circuit

## Setting the fixed value regulator



- The boiler flow temperature ↑ must be at least 10 K higher than the set flow temperature of the surface heating ↓.
- The temperature can be continuously adjusted between 20 and 70 °C. The scale of 1-7 on the handwheel gives the following target temperatures (guideline):

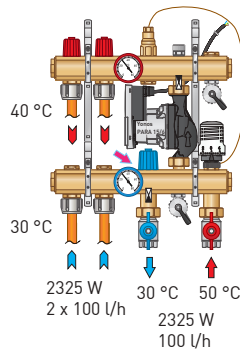
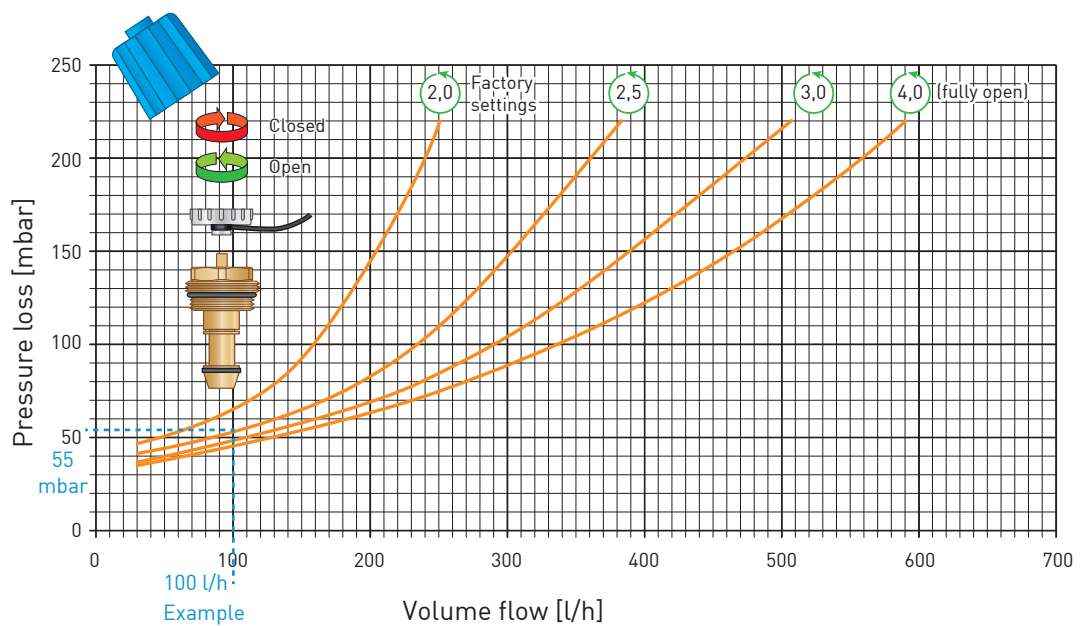
1	2	3	4	5	6	7
20 °C	28 °C	37 °C	45 °C	53 °C	62 °C	70 °C

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# Microstation with pump (PVST) [2/3]

Fixed value control station for surface heating  
with existing main pump

Pressure loss in the boiler circuit with fully open fixed value regulator - balance with regulating valve



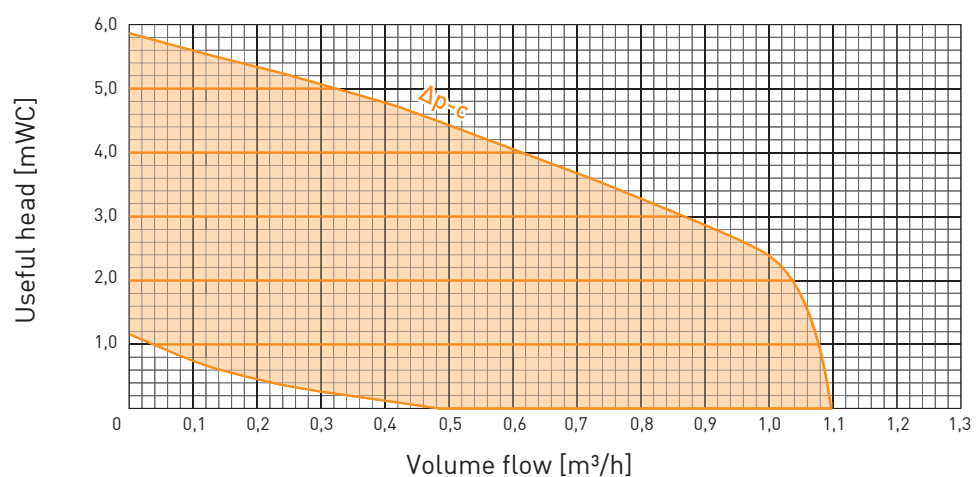
## Example PMST 2 heating circuits:

Desired: Pressure loss = 55 mbar

Required: Turns when open

→ 2.5 turns

## Useful head of PMST pump (WILO Yonos PARA 15/6)



## Settings via operating knob



☐ Constant differential pressure ( $\Delta p_c$ ), for surface heating

☐ Entlüftungsfunktion

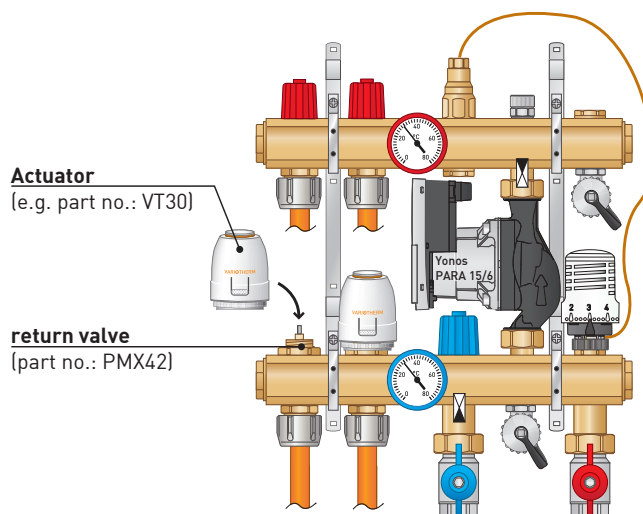
☒ Variable differential pressure ( $\Delta p_v$ )

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# Microstation with pump (PVST) [3/3]

Fixed value control station for surface heating  
with existing main pump

## Modification for operation with thermoelectric actuator



## Troubleshooting

Fault	Troubleshooting
<ul style="list-style-type: none"> <li>• Surface heating circuit temperature too low</li> </ul>	<ul style="list-style-type: none"> <li>• Main pump must be available and running</li> <li>• Switch main pump to a higher setting level</li> <li>• Increase flow in the boiler circuit (regulating valve)</li> <li>• Check if the flow/return in the boiler circuit has been reversed</li> <li>• Flush the heating circuit</li> <li>• Switch on the pump PVST</li> <li>• Adjust the surface heating circuit flow</li> </ul>
<ul style="list-style-type: none"> <li>• Surface heating circuit temperature too high</li> </ul>	<ul style="list-style-type: none"> <li>• Fixed value regulator is not screwed all the way to the end stop</li> </ul>

## ⚠ Safety information

- The electrical and hydraulic connection and service work on the device may only be provided by authorised specialist personnel.
- The devices are designed for use in dry, closed rooms.
- The electrical installation standards and regulations specified by the local energy supply companies should be observed, together with the locally applicable regulations and standards for heating installations.
- Faults in the connection can cause damage to the device! We bear no liability for damage caused by incorrect connection and/or inappropriate handling of the device.
- If the system components are installed or commissioned incorrectly, all claims on the basis of the manufacturer's warranty and guarantee become void.