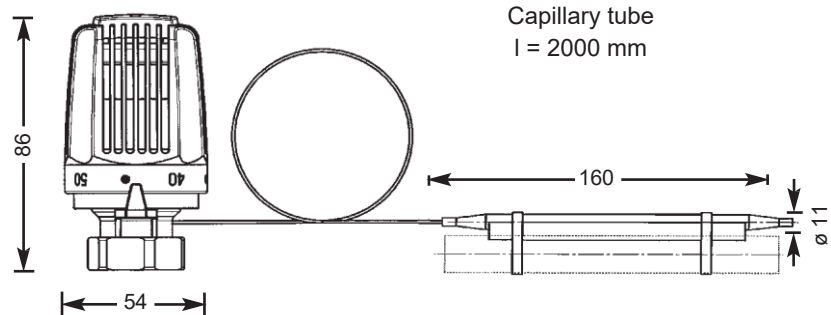


HERZ-Thermostat

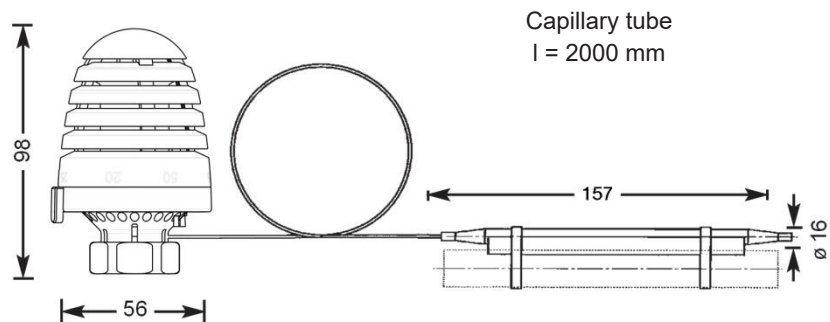
Temperature Controller with Contact Sensor

Data sheet for 7420/21 9420/9421, Issue 0322

☑ Dimension in mm



7420/7421



9420/9421

☑ Models

The HERZ-Thermostat with contact sensor is a proportional controller without power requirement for temperature control and/or limitation in hot water circuits and air heaters.

7420 HERZ Thermostat with contact sensor for floor heating systems, consisting of a thermostatic head with hydrosensor (liquid filled), capillary tube, pipe contact sensor and fastening material for affixing it to the pipe. M28 x 1,5. Set point range 20–50°C, capillary tube length 2000 mm.

7421 HERZ Thermostat with contact sensor for boiler intake temperature control, otherwise same as 7420. M28 x 1,5. Set point range 40–70°C, capillary tube length 2000 mm.

9420 HERZ thermostat with contact sensor, consisting of thermostat with liquid sensor (hydrosensor), capillary tube, set point range 20–50°C. Capillary tube length: approx. 2000 mm. M 30 x 1.5

9421 HERZ thermostat with contact sensor, consisting of Thermostat with liquid sensor (hydrosensor), capillary tube, set point range 40–70°C, incl. 2x limiting pins. Capillary tube length: approx. 500 mm. M 30 x 1.5

☑ Order Numbers. Operating Data

Article number	7420 / 9420	7421 / 9421
Handwheel colour	white	white
Order numbers	1 7420 06 1 9420 88	1 7421 00 1 9421 98
Set value range	20-50 °C	40-70 °C
Maximum differential pressure	0,75 bar 0.2 bars for low-noise operation	
Hysteresis	0,3 K	
Effect of heating medium temperature	0,15 K / 10 K	
Excess temperature safety function	10 K above max. scale value	

☑ Fields of Application

For installation on all HERZ valves suitable for thermostatic operation. For article and order numbers, dimensions and forms of delivery see the respective product standard sheets.

☑ Mode of Operation

In the HERZ-Thermostat with contact sensor, the change of volume of the hydrosensor liquid filling is transmitted through a capillary tube into a system of bellows which on its part actuates the valve spindle. The thermostatic valve (control element) is closed when the pipe temperature rises. The temperature scale is directly on the handwheel, temperature adjustment is performed by means of this scale.

☑ Setting options, handwheel scale, maximum setting for 9420

By setting the scale marks opposite the pointer it is possible to achieved approximately the following temperatures in the room. Deviations of a few degrees of temperature (K) are possible according to the mode of installation and the design of the heating system.

Mark	1	2	3	4	5	6	7
~ °C	20	25	30	35	40	45	50

☑ Setting options, handwheel scale, maximum setting for 9421

Mark	1	2	3	4	5	6	7
~ °C	40	45	50	55	60	65	70

☑ Thermostatic Head Installation

1. Unscrew screw cap or handwheel from the thermostatic valve body.
2. Open thermostatic head completely, place union nut on the valve. In doing so, turn the thermostatic head in such a way that the handwheel scale can be read easily.
3. Tighten union nut moderately with 30 mm open-end-wrench.
4. Test for proper functioning by turning the handwheel and set the thermostat to the desired temperature.

☑ Contact Sensor

The contract sensor and its base are attached to the pipe by means of clips; however, it can also be placed in a submersible sleeve.

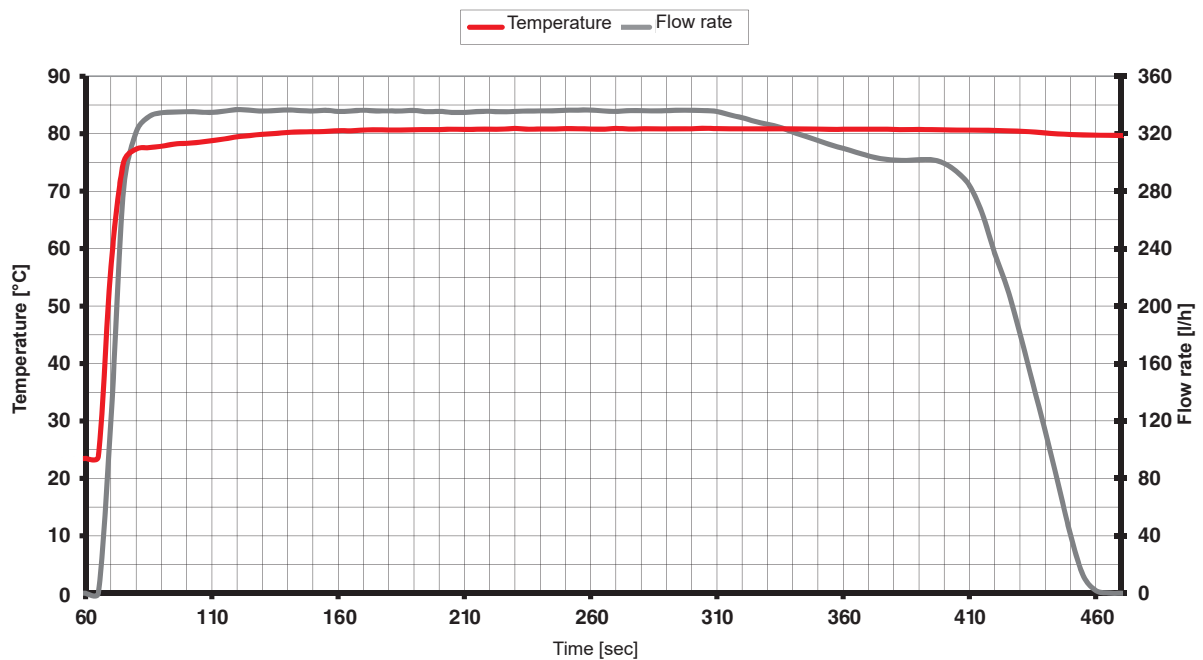
Flawless heat transmission must be ensured.

☑ Theft Protection

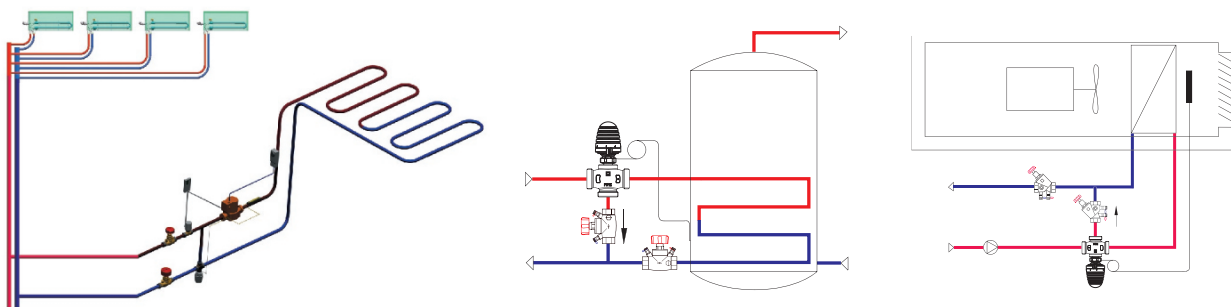
To prevent theft retaining clips are available that are installed over the fastening nut and which can only be opened with a special key.

☑ Accessories

- 1 **6640 00** - Universal key, for opening of theft protection **9552**
- 1 **9552 03** - Theft protection: Snap clips, opening with universal key 1 **6640 00**,
for HERZ thermostatic heads series 7000 and 9000 with threaded connection M 28 x 1,5.
- 1 **9552 98** - Theft protection „H“: Snap clips, opening with universal key 1 **6640 00**,
for HERZ thermostatic heads series 7000 and 9000 with threaded connection M 30 x 1,5.
- 1 **7555 00** - Retaining clips for mounting capillary tubes
- 1 **6313 01** - Brass insertion pocket with screw-in thread 1/2.



☑ Examples for Application



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