

### 7420/7421

#### Dimensions in mm

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.

**7421** HERZ Thermostat with contact sensor for boiler intake temperature control, otherwise same as 7420.

#### Models

Article number	<b>7420</b>		<b>7421</b>
Handwheel colour Order numbers	white 1 <b>7420</b> 06	brown 1 <b>7420</b> 00	brown 1 <b>7421</b> 00
Set value range	20–50 °C		40–70 °C
Maximum differential pressure	0.75 bars 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		

#### Order Numbers Operating Data

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.

#### Fields of Application

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.

#### Mode of Operation

We reserve the right to make modifications necessitated by technological progress.

1. Unscrew screw cap or handwheel from the the rmostatic valve body.
2. Open the rmostatic head completely, place union nut on the valve. In doing so, turn the the rmostatic 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 the rmostat to the desired temperature.

**Thermostatic Head Installation**

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

**Contact Sensor**

Flawless heat transmission must be ensured.

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

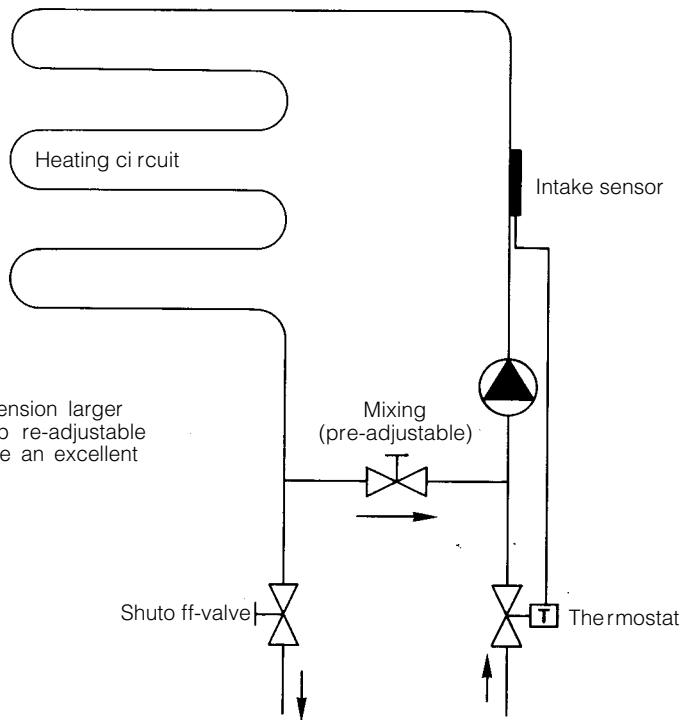
**Theft Protection**

- |           |   |         |
|-----------|---|---------|
| 1 6616 00 | 2 mm Allen key, for HERZ thermostatic valve heads and theft protection                                  | 7552 03 |
| 1 6807 90 | HERZ-TS-90 assembly key   |         |
| 1 7552 03 | Theft protection, 2 clips that are fastened with Allen screws. Locking and unlocking with key 16616 00. |         |
| 1 7555 00 | Retaining clips for mounting capillary tubes  |         |

**Accessories**

**Examples for Application**

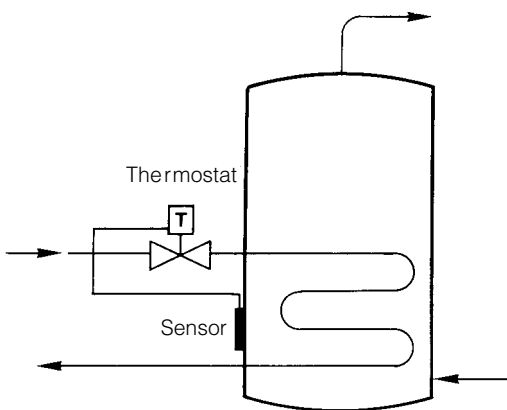
**Floor heating**



The mixing valve should be one dimension larger than the thermostatic valve. The pre-adjustable HERZ-DR-T and HERZ-DR valves are an excellent solution.

**Industrial water heater**

The sensor can also be installed in a submersible sleeve.



**Air heater**

