Brunata

▶ Brunata Radiator Thermostat Type: 148

Characteristics

- Standard design
- Liquid filled sensor element
- High closing pressure
- Can be delivered with remote control
- Can be delivered with remote sensor
- Can be delivered with a protective cap against tampering
- Solid design
- Approved to European Standard EN 215-1

Further information

Brunata radiator thermostat type 148 is used for the automatic regulation of room temperature directly on radiators in a central heating system.

The thermostats are mounted on valve heads type 130, which transform changes in room temperature into a movement affecting the movements of the valve.

Application

Together with the radiator valve the thermostat provides adjustment of the amount of thermal energy emitted from the radiators in order to obtain the temperature desired. The thermostats secure a high degree of comfort as well as considerable energy saving by exploiting the possible "free heat" provided by for instance sunbeams etc.

Mode of operation

The radiator thermostats operate by means of a liquid filled sensor element placed inside the handwheel. By either expansion or contraction the sensor element affects the valve seat and stem according to the difference between the temperature desired and the actual room temperature. When the room temperature exceeds the temperature desired the sensor element gradually closes the valve and thereby reduces the flow of hot heating water. When the room temperature goes down the thermostat opens the valve and increases the circulation of hot heating water in the radiator. In that way the temperatures set are kept constant.

Thanks to the liquid filled sensor element these radiator thermostats have high closing pressures as opposed to manufactures using air filled sensor elements. By these means problems with valve stems getting stuck are avoided.

Pressure drop charts

Please see data sheet QB 10.1162

Type	Item no..
Radiator thermostat	
148BRU	09-3100-H
Radiator thermostat with remote sensor	
148SDBRU	09-3101-H
Radiator thermostat with remote control	
148CD	09-3102-H
Protective cap to offer protection against tampering	
148GA	09-3110-H

Technical data

Adjustment range:	8 - 28 °C
Temperature range:	- 15 °C - 60 °C
Hysteresis:	0,4 K
Proportional band:	2 K
Time constant:	25 min.
Effect of liquid temperature:	1,5 K
Effect of pressure difference:	0,5 K
Lenght of capillary tube (148 SD - 148 CD):	2 m

Materials

Sensor element cap:	CuSn8
Springs:	Stainless steel
Compression bar:	Nylon 30 %
Handwheel:	ABS

Adjustment

The desired room temperature is adjusted by turning the handwheel until the indicator reaches the chosen value:

⓪	❄	1	2	③	4	5
Closed	8 °C (Frost proof)	12 °C	16 °C	20 °C	24 °C	28 °C

"Frost proof" garantees a minimum temperature of 8 °C in order to protect the heating system in cases of intense cold.
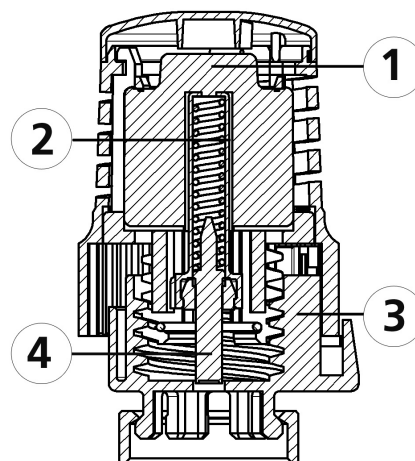
Temperature lock

In order to secure a fast and ideal adjustment for every single room the thermostat head is equipped with a temperature lock for every constant. The lock makes it possible to:

- Limit the adjustment to a specific temperature range

- Choose a constant value

This system makes it possible to "remember" the adjustments and these can easily be changed to fit everyday needs.

The use of a protective cap against tampering

Radiator thermostats 148 with valve case type 130 can be equipped with a protective cap 148GA. The cap protects the valve stem against vandalism and tampering of the adjustments of the thermostat. When the protective cap has been mounted is it not possible to change the adjustments.

1. Liquid filled sensor element
2. Equalising mechanism
3. Adjustment range for limitation and locking of temperature
4. Valve seat and stem

Dimensions (mm)

148BRU   **148SDBRU**

148CD   **148GA**