

THERMO SET
Angled



THERMOSTATIC HEAD type GZ.08A compliant with PN-EN 215

1. Intended use

Thermostatic heads are used in any type of central heating systems as radiator valve controlling elements. Automatic control of temperature in premises enables User's setting an individual comfort level (condition) at significant saving of heat energy and hence heating cost reduction.

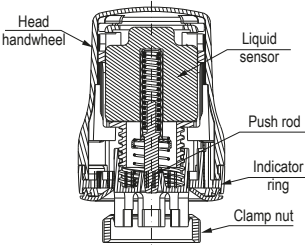
TYPE	INTENDED USE
GZ.08A	<ul style="list-style-type: none"> ① Used to control thermostatic radiator valves ② Used to control compact radiators with HEIMEIER valve inserts (radiator manufacturer list is included in the assembling instructions)

2. Operation

Upon a change in the room temperature the liquid contained in the head's sensor changes its volume causing a motion of the pressure capsule. The motion is transferred to the valve head. The valve head's dislocation against the valve seat increased, decreases or cuts-off hot water flow through the radiator. Automatic control of the heating water flow depending on air temperature in the heated premises ensures unquestionable benefits for the User.

Using in a central heating system of a set of a thermostatic head together with a thermostatic radiator valve shall enable:

- significant (up to 25%) heating cost reduction,
- enhanced „heat comfort“,
- avoided overheating of premises,
- maintained fixed pre-set temperature in heated premises, regardless of outdoor temperature changes,
- use of „free“ heat given up by lighting, electrical equipment, sunlight and people inside.



GZ.08A thermostatic head construction

3. Technical specification

PARAMETERS	VALUE
Lowest set value	280 K (7°C) marked*
Temperature setting range (in head's surroundings)	280 K to 301 K (7°C to 28°C)
Highest allowable static pressure	1 MPa
Highest allowable pressure drop	0,1 MPa
Maximum heating water temperature	383 K (110°C)
Transportation temperature	253 K to 323 K (-20°C to +50°C)

4. Temperature setting

The following room temperatures correspond to individual temperature setting of GZ.08A thermostatic head:

Setting	Room temperature ca.	Premises type
5	28 [°C]	Swimming pool
4	24	Bathroom
3	22	Study
2	20	Living room, dining room
1	18	Bedroom, kitchen
*	16	Hobby room, corridor
	14	Nighttime temperature reduction
	12	Staircase, entrance enclosure
	8	Basement
	7	Anti-freezing protection

It's been known from many years' experience that maintaining the foregoing temperatures in each premises is a reasonable compromise between heat comfort and energy saving.

By turning the head handwheel a chosen point is set on the scale that corresponds to the desired temperature, just in front of the indicator. After ca. 1 hour the temperature shall be checked in the room's representative spot using a room thermometer. If the room temperature slightly differs from that set on the setter, the setting should be adjusted accordingly (i.e. gradually increased or decreased and the room temperature re-checked).

It should be remembered that:

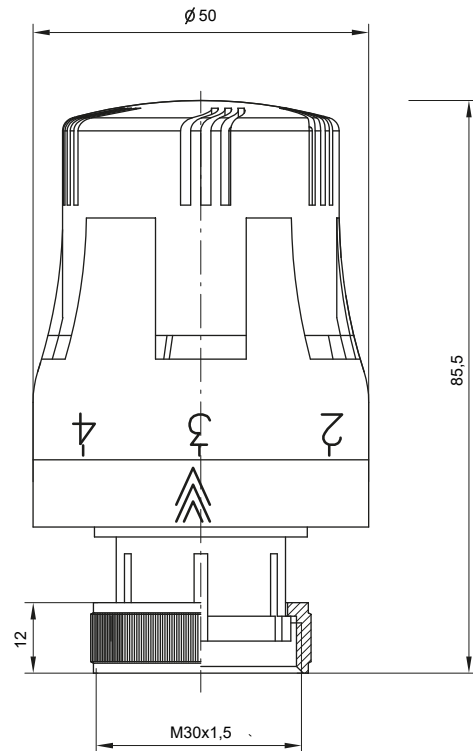
Turning counter-clock wise increases the room temperature.

Turning clock wise decreases the room temperature.

Anti-freezing protection (max. to the right) – if you intend to leave the premises for a longer time in winter, the thermostatic head should be turned up to the position that protects against freezing – marked *. The * setting guarantees that with the heating system working the room temperatures will not fall below 7°C, and hence the system will be protected against freezing. Using this setting is recommended also in a room that is not currently used.

5. Assembling instructions

TYPE	ASSEMBLING
GZ.08A ①	<ul style="list-style-type: none"> ✓ unscrew the protective cap from the previously mounted thermostatic valve, ✓ turn the head handwheel counter-clock wise as far as possible (i.e. to position „5“), ✓ put the head on the valve in such a manner that the setting indicator is clearly visible, ✓ screw down the clamp nut with fingers with no additional tools, ✓ check the assembly by turning the head handwheel from left to right, ✓ select setting that corresponds to the desired room temperature.
GZ.08A ②	<ul style="list-style-type: none"> ✓ turn the head handwheel counter-clock wise as far as possible (i.e. to position „5“), ✓ put the head on the HEIMEIER valve insert in such a manner that the setting indicator is clearly visible, be sure that protrusions in the head base fit precisely into matching recesses in the HEIMEIER valve flange. <p>Note! Manufacturers of radiators with HEIMEIER valve inserts: Biasi, Celikpan, Demrad, Dianorm, Diatherm, Henrad, Kermi, Korado, Manaut, Purmo, Radson, Stelrad, Superia, U.S. Steel, Veba.</p> <ul style="list-style-type: none"> ✓ screw down the clamp nut with fingers with no additional tools, ✓ check the assembly by turning the head handwheel from left to right, ✓ select setting that corresponds to the desired room temperature.



Position 0

In the "0" position of the head setting, valve automatically opens at temperatures below 4°C.

Proper airing

The thermostat quickly reacts to cold air inflow. Short and intense airing is therefore recommended. If a longer airing is required, the thermostatic head handwheel should be turned right as far as possible.

It should be remembered that:

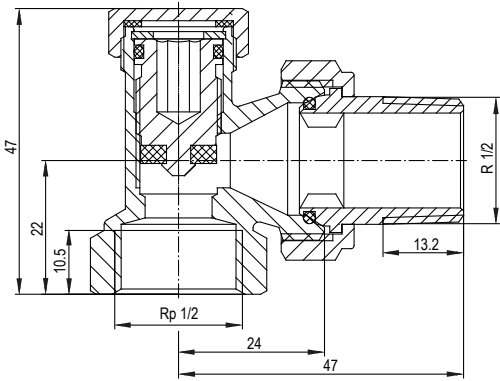
- the head should be exposed to neither sunlight, nor any other heat source,
- the head should not be covered with curtains, covers, furniture etc. because this creates a heat build-up zone, where the thermostat can not sense the representative room temperature, and therefore can not control it properly,
- after the heating season it is recommended to set the head handwheel to „5“ position,
- the head may be cleaned with lukewarm water and delicate household cleaning agents.
- in case of removal of the radiators, the head should be replaced by a protection cap of a thermostatic radiator valve, tightening it clockwise until it stops.

1. Intended use

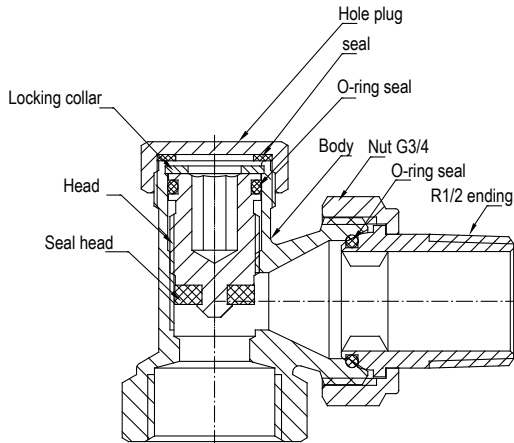
As valve regulating-shut-off valves in water and heating systems, especially for connection to radiators

2. Technical specification

SPECIFICATION	VALUE
Maximum operating pressure	1,0 MPa
Maximum operating temperature	100°C



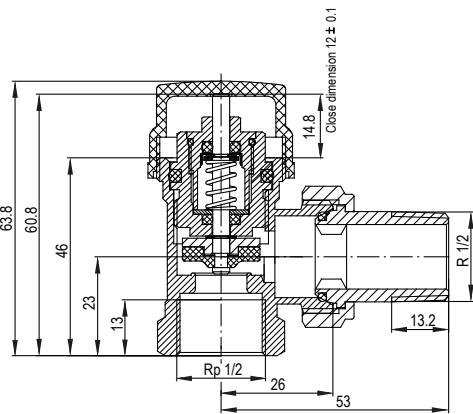
Cut-off valve



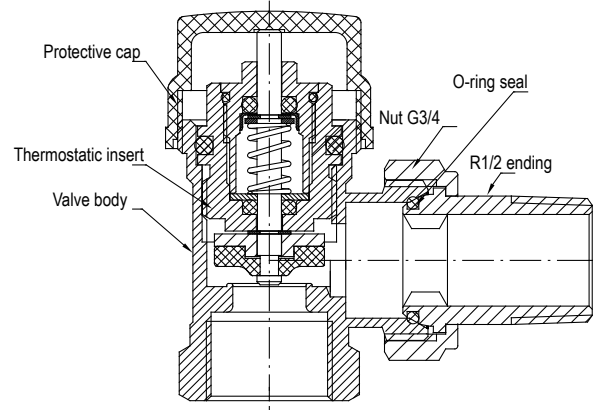
Cut-off valve construction

3. Installation cut-off valve:

- screw the R1/2 terminal along with the nut into the radiator (seal it with Teflon tape, anaerobic leak stoppers or other type of sealing used in installation techniques),
- mount the valve on a pipe section matched to the system,
- screw the nut onto the valve and position it properly (vertically or horizontally),
- put the valve in the open position the plug is screwed with its front and the protective cap is tightened.



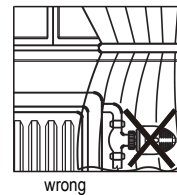
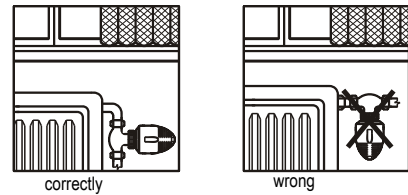
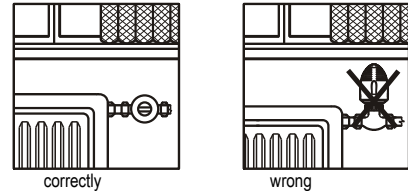
Thermostatic valve



Thermostatic valve construction

4. Installation thermostatic valve:

- thermostatic valve should be installed with the protective cap screwed on to protect the head's thread and assembling surface,
- installed valve should be so positioned as to ensure horizontal setting of the thermostatic head's axis (according to the figure below).



5. Operation

Valve open – valve turned all the way to the left.

Valve closed - valve turned all the way to the right. No water flows out of the installation system.