

Climate  
Control

IMI Heimeier

Halo



**Thermostatic heads**  
With built-in sensor

# Halo

The thermostatic head Halo is used to control the temperature of individual rooms using, for example, heaters, convectors, and radiators. The Halo head combines high precision control with slim, cylindrical design.

## Key features

**Surface closed on all sides**

**Particularly suitable for hygienically demanding areas**

**Liquid-filled thermostat with high pressure power and precision control**

**Locking of temperature setting by locking slider**

**Slim, cylindrical design**



## Technical description

### Applications area:

Heating systems

### Functions:

Room temperature control.  
Frost protection.  
Locking of a setting.

### Control behavior:

Proportional controller without auxiliary energy. Liquid-filled thermostat. High pressure power, lowest hysteresis, optimal closing time.  
Stable control behavior even in the case of small calculated p-band variation (<1K).

### Nominal temperature range:

0 °C - 28 °C  
6 °C - 28 °C

### Temperature:

Max. sensor temperature: 50°C (122°F)

### Specific extension:

0.22 mm/K,  
Valve stroke limiter

### Control accuracy, CA value:

0.6 K

### Water temperature influence:

0.7 K

### Differential pressure influence:

0.2 K

### Closing time:

16 min

### Hysteresis:

0.7 K

### Material:

ABS, PA6.6GF30, brass, steel,  
Liquid-filled thermostat.

### Marking:

IMI Heimeier and KEYMARK symbol.  
Setting scale with temperature values.  
Symbols for basic setting and nighttime reduction.

### Standard:

KEYMARK certified and tested according to EN 215. See also leaflet "Thermostatic Heads - General".



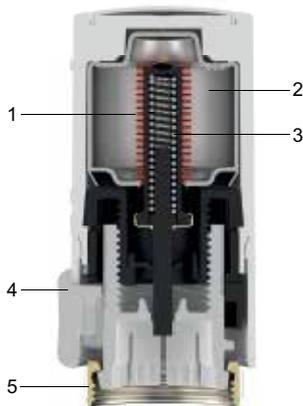
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Surface closed on all sides. Particularly suitable for hygienically demanding areas in health care or food / industrial sector.

### Connection:

Designed to be mounted on all IMI Heimeier thermostatic valve bodies and radiators with integrated valves which have an M30x1.5 thermostatic insert.

## Construction



1. Corrugated pipe
2. Liquid-filled thermostat with high pressure power and precision control
3. Safety spring
4. Locking slider for variable locking of temperature setting
5. IMI Heimeier connection technology (swivelling nut M30x1.5)

## Function

In terms of controls, thermostatic heads are seen as continuous proportional controllers (P controllers) that require no auxiliary energy. They do not need an electrical connection or other source of energy. Changes in room air temperature are proportional to changes in the valve stroke.

If the temperature of the air in the room increases due to sunshine, for example, the liquid in the temperature sensor expands and affects the corrugated pipe. This chokes the water supply to the radiator via the valve spindle. If the temperature in the room decreases, the opposite process occurs. The change in valve stroke caused by a change in temperature can be quantified as 0.22 mm per K room temperature change.

## Operation

### Recommended room temperatures

The following temperature settings are recommended for the corresponding rooms based on heating with cost savings in mind:

Setting/Position	Room temperature approx.	Recommended for e.g.
28	≈ 28 °C (82 °F)	Swimming pool
26	≈ 26 °C (79 °F)	
24	≈ 24 °C (75 °F)	Bathroom
22	≈ 22 °C (72 °F)	Work room or children's bedroom
20	≈ 20 °C (68 °F)	Living or dining rooms (basic setting)
18	≈ 18 °C (64 °F)	Kitchen, corridor
16	≈ 16 °C (61 °F)	Hobby room, bedroom
14	≈ 14 °C (57 °F)	
12	≈ 12 °C (54 °F)	Stairway, vestibule
10	≈ 10 °C (50 °F)	
8	≈ 8 °C (46 °F)	
6	≈ 6 °C (43 °F) *	Basement/cellar rooms (frost protection setting)

\*) For thermostatic heads with an auxiliary zero position, the lowest setting is 0 °C (32 °F).

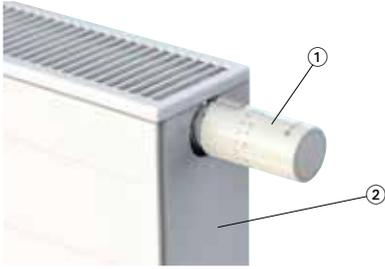
### Setting the temperature

The desired room temperature can be selected by turning the thermostatic head (right = cooler, left = warmer). The arrow must be pointing to the appropriate setting position (number, bar, symbol).

All IMI Heimeier thermostatic heads are adjusted in a climatic chamber, free of external influences such as heat build-up, sunshine, etc. The number 20 corresponds to a temperature of approximately 20 °C (68 °F). The difference between each number is approximately 4 °C (7.2 °F), from bar to bar approx. 2 °C (3.6 °F).

We recommend setting at the number 20 which corresponds to the basic setting of about 20 °C (68 °F) room temperature. Settings above 24 should be avoided if a lower setting satisfies the comfort level, as a 1 °C (1.8 °F) higher room temperature corresponds to an increase in energy use of around 6 %.

## Application



1. Thermostatic head Halo
2. Radiator with integrated valves

IMI Heimeier thermostatic heads are used to control the temperature of individual rooms using, for example, heaters, convectors, and radiators.

They are designed to be mounted on all IMI Heimeier thermostatic valve bodies and on radiators with integrated valves which have an M30x1.5 connecting thread on the thermostatic insert. Adapters and models with direct connections enable mounting onto thermostatic valve bodies from other manufacturers.

The thermostatic heads use the energy of internal and external heat sources including solar heat, the heat radiated from people and electrical devices, and other sources, in order to keep the room air temperature constant. This helps to avoid wasting energy. Thermostatic heads with built-in sensors may not be covered by curtains, radiator facings, or other obstructions, or mounted vertically or in tight niches. Otherwise it will not be possible to precisely control the temperature.

In other cases, it may be necessary to install a remote sensor or remote dial (see leaflet "Thermostatic head F").

### Notes on installation



**Correct**  
Circulation of air around the thermostatic head is not hindered.



**Correct**  
The remote sensor enables an unhindered reading of the air temperature in the room.



Underfloor convector  
(Thermostatic head F)



**Incorrect**  
The thermostatic head with built-in sensor may not be mounted vertically.

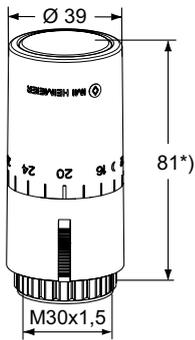


**Incorrect**  
The thermostatic head with built-in sensor may not be covered by curtains.



Built-in cabinet  
(Thermostatic head F)

## Articles



### Halo

With built-in sensor.  
Setting scale with temperature values.

Model	Setting range	EAN	Article No
Cap with graduation RAL 9016, <b>white</b>	6 °C – 28 °C	4024052988815	7500-00.500
Cap with graduation <b>chrome</b>	6 °C – 28 °C	4024052988914	7500-00.501
Cap with graduation RAL 9016, <b>white</b>	0 °C – 28 °C	4024052989010	7550-00.500
Cap with graduation <b>chrome</b>	0 °C – 28 °C	4024052989119	7550-00.501

\*) at setting 20

## Accessories



### Connecting to products from other manufacturers

Adapters for mounting all IMI Heimeier thermostatic heads on thermostatic valve bodies from manufacturers listed here. Standard M30x1.5 threaded connection. Refer also "Thermostatic head with direct connection to thermostatic valve bodies from other manufacturers".

\*) can not be used on radiators with integrated valves

Manufacturer	EAN	Article No
Danfoss RA (Ø≈20 mm) *)	4024052297016	9702-24.700
Danfoss RAV (Ø≈34 mm)	4024052300112	9800-24.700
Danfoss RAVL (Ø≈26 mm)	4024052295913	9700-24.700
Vaillant (Ø≈30 mm)	4024052296019	9700-27.700
TA (M28x1,5)	4024052336418	9701-28.700
Herz (M28x1,5)	4024052296316	9700-30.700
Markaryd (M28x1,5)	4024052296514	9700-41.700
Comap (M28x1,5)	4024052296712	9700-55.700
Giacomini (Ø≈22,6 mm)	4024052429714	9700-33.700
Oventrop (M30x1,0)	4024052428519	9700-10.700
Ista (M32x1,0)	4024052511419	9700-36.700

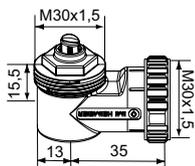


### Connection to radiators with integrated valves

Adapters for mounting IMI Heimeier thermostatic heads with an M30x1.5 connection on thermostatic inserts for **clamping connections**. Standard M30x1.5 threaded connection.

**Exception:** The thermostatic head WK is designed only for mounting on thermostatic inserts with an M30x1.5 threaded connection.

	EAN	Article No
<b>Series 2</b> (20 x 1)	4024052297214	9703-24.700
<b>Series 3</b> (23,5 x 1,5), since 10/98	4024052313518	9704-24.700



### Angle connection M30x1,5

EAN	Article No
4024052035724	7300-00.700



**Spindle extension**  
for thermostatic valve bodies.

L	EAN	Article No
<b>Brass nickel-plated</b>		
20	4024052528813	2201-20.700
30	4024052528912	2201-30.700
<b>Plastic, black</b>		
15	4024052553310	2001-15.700
30	4024052165018	2002-30.700



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