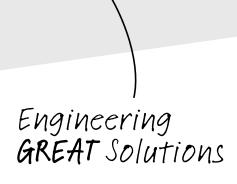


# Halo



### 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 auxilliary 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

#### 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.

#### Normen:

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



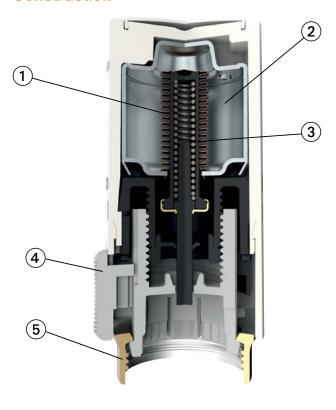
Surface closed on all sides. Particularly suitable for hygienically demanding areas in health care or food / industrial sector.

#### 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 tempreature setting
- 5. IMI Heimeier-Anschlusstechnologie (Rändelmutter M 30 x 1,5)

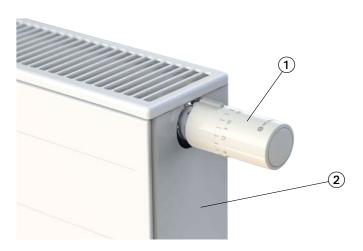
#### **Function**

In terms of controls, thermostatic heads are seen as continuous proportional controllers (P controllers) that require no auxilliary 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.

#### **Application**



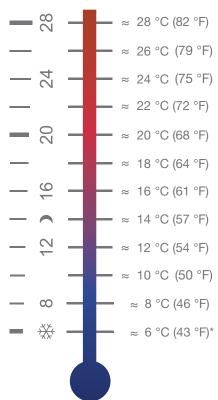
- 1. Thermostatic head Halo
- 2. Radiator with integrated valves

#### **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.

Swimming pool

Bathroom

Work room or children's bedroom

Living or dining rooms (basic setting)

Kitchen, corridor

Hobby room, bedroom

Stairway, vestibule

Basement/cellar rooms (frost protection setting)

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

#### Setting the temperature

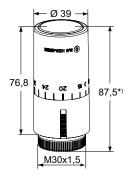
The desired room temperature can be selected by turning the thermostatic head (right = cooler, left = warmer). The arrow must be pointing to the appropriate setting position (number, bar, symbol).

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 (39 °F), from bar to bar approx. 2 °C (36 °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 (34 °F) higher room temperature corresponds to an increase in energy use of around 6 %.



#### **Articles**



#### Halo

With built-in sensor

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

\*) setting at 20.

The groove on the face of the thermostatic head Halo serves to take up specially printed "partner clips". E-mail: Partnerclip.Montage@imi-hydronic.com

#### **Accessories**



#### Connecting to products from other manufacturers

Adapters for mounting all IMI Heimeier thermostatic heads on thermostatic valve bodies from manufacturers listed here. Standard M 30 x 1.5 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*)	4024052297016	9702-24.700
Danfoss RAV	4024052300112	9800-24.700
Danfoss RAVL	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	4024052429714	9700-33.700
Oventrop (M30x1,0)	4024052428519	9700-10.700
Ista	4024052511419	9700-36.700



#### Connection to radiators with integrated valves

Adapters for mounting IMI Heimeier thermostatic heads with an M  $30 \times 1.5$  connection on thermostatic inserts for **clamping connections.** 

Standard M 30 x 1.5 threaded connection.

**Exception:** The thermostatic head WK is designed only for mounting on thermostatic inserts with an M 30 x 1.5 threaded connection.

		EAN	Article No
Series 2	(20 x 1)	4024052297214	9703-24.700
Series 3	(23,5 x 1,5),	4024052313518	9704-24.700
	ainaa 10/00		



#### Spindle extension

for thermostatic valve bodies.

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



