

Climate Control

**IMI Heimeier** 

# Thermostatic head D-U



**Thermostatic heads** With built-in sensor

> Breakthrough engineering for a better world



# **Thermostatic head D-U**

The thermostatic head D-U is used to control the temperature of individual rooms using, for example, heaters, convectors, and radiators.

# **Key features**

Liquid filled sensor element For higher closing power, reduced Maintenance costs and trouble-free operation.

**Temperature limitation** Set maximum and minimum temperatures, helping to reduce running costs.

### **Technical description**

Applications area: Heating systems

**Functions:** Room temperature control. Frost protection. Limiting 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: 6 °C - 28 °C 16 °C - 28 °C

Temperature:

Max. sensor temperature: 50°C (122°F)

Reduced size in length and diameter



#### **Specific extension:** 0.22 mm/K, Valve stroke limiter

Control accuracy, CA value: 0.6 K

Water temperature influence: 0.5 K

Differential pressure influence: 0.3 K

Closing time: 17 min

Hysteresis: 0.6 K

#### Material:

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

Colour: White RAL 9016

Marking: Heimeier. Setting numbers.

**Standard:** KEYMARK certified and tested in accordance with DIN EN 215.



Connection:

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



# **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.

#### Maximum temperature restriction

Set the index opposite to the maximum room temperature required. E.g. number 3 corresponding to 20°C room temperature.

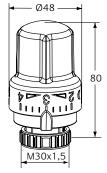
- 1. Put the restriction pin in a little way opposite to number 5 to mark the correct pin position. Close the thermostat a little by turning it clockwise.
- 2. Fully insert the restriction pin.
- 3. Open the thermostat by turning it anti-clockwise and check that the index stops at a position corresponding to desired room temperature.

### **Setting scales**

The various settings give approximately the following room temperatures:

\* 1 2 3 4 5 I I I I I I 6 12 16 20 24 28 °C

#### **Articles**



Standard			
Temperature range	Setting numbers	EAN	Article No
6-28°C	1 - 5	4024052463725	6852-00.500
16-28°C	2 - 5	4024052928019	6852-31.500

## Accessories

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#### 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

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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
Series 2	(20 x 1)	4024052297214	9703-24.700
Series 3	(23,5 x 1,5), since 10/98	4024052313518	9704-24.700

	- M30x1.5 -
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#### Angle connection M30x1,5

EAN	Article No
4024052035724	7300-00.700

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#### 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



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