IMI HEIMEIER
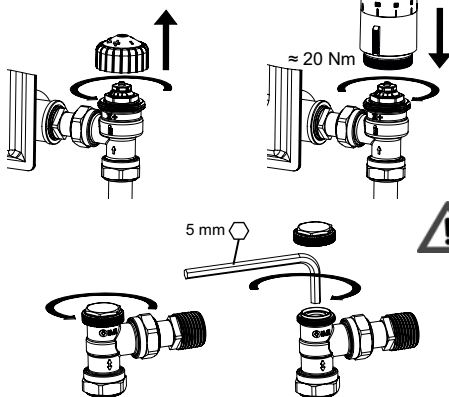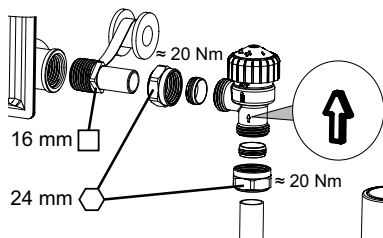
TRV pack Eclipse GB
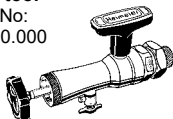Thermostatic radiator valve with automatic flow control and lockshield

Installation and operating instructions

Automatic Flow Control

Installation thermostatic radiator valve

The IMI thermostatic radiator valve can be fitted either vertically or horizontally giving the installer total flexibility. For the best performance we recommend fitting the valve with the head mounted horizontally.

Note the flow direction arrow!

Installation thermostatic head

Remove the protection cap from the valve body. Before installing, check that the thermostatic head is turned to number **IIIII**. Position the thermostatic head onto the thermostatic valve body, screw on and tighten with a rubber jawed wrench (do not overtighten). Adjust the head to the setting you want (see Temperature settings).

≈ 20 Nm

16 mm

24 mm

≈ 20 Nm

< 60 kPa = 600 mbar

5 mm
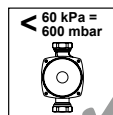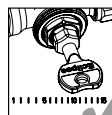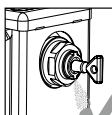
Lockshield

Shut-off
To isolate the lockshield remove the cap and rotate the insert clockwise with a 5 mm allan key.

Fitting tool
Article No:
9721-00.000

Replacement insert
Article No:
3930-02.300
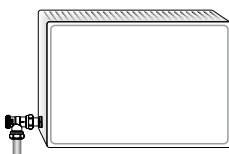
Fitting tool

Replacement of the insert is possible whilst the system is still live by using the IMI fitting tool. It is also possible to measure available pressure to retrieve diagnostic information that can also help optimize the system pressures (Article no: 9790-01.890).
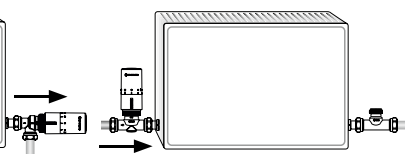
Angle connection
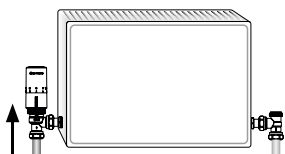
Reversed connection

Straight connection

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Function of *Eclipse* thermostatic radiator valves (TRV) with automatic flow control (AFC) – Homeowner guide

TRVs are autonomously operating temperature controllers which do not require any electric power supply or connection or any other kind of external energy. They serve to control the individual room temperature and, thus, save energy.

They consist of the thermostatic head and the thermostatic valve body. The thermostatic head allow different temperature settings which can be limited.

If temperature rises e.g. due to insolation, electric appliances or people in the room, the liquid in the temperature sensor of the thermostatic head will expand and so throttles the water supply to the radiator by means of the valve spindle. Should the room temperature drop the described procedure will be reversed. Therefore, the thermostatic head only needs actuation in order to change the individual setting of the room temperature (see „Temperature settings").

The required design flow for each radiator is set directly by the installer on the **Eclipse valve** (see below). This automatic flow control **(AFC)** is done with a twist and the adjusted flow will then not be exceeded. Even if there is an oversupply of pressure, due to load changes in the system, for example other valves closing or during morning start up, Eclipse will guarantee the requested flow.

Thermostatic heads may not be covered by curtains, radiator facings, or other obstructions. Otherwise it will not be possible to precisely control the temperature.

TRVs do not control or turn off the boiler. The boiler is controlled by a room thermostat or timers etc..

For further information to your heating system please ask your installer.
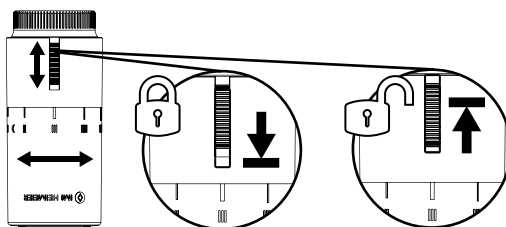
Temperature settings

- ≈ 28 °C
- ≈ 24 °C
- ≈ 20 °C
- ≈ 16 °C
- ≈ 14 °C
- ≈ 12 °C
- ≈ 6 °C
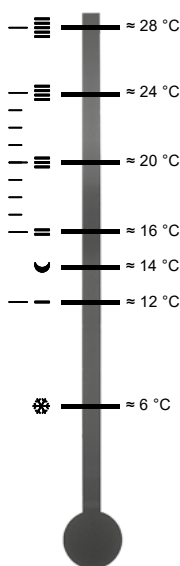
KEYMARK certified and tested according to EN 215

011

Locking of the setting

Flow setting (Balancing)
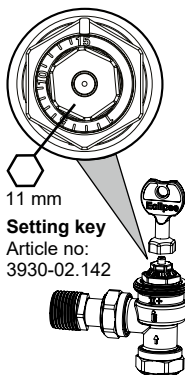
11 mm
Setting key
Article no:
3930-02.142

1 W = 3.4120 BTU/h
1 l/h = 0.0003 l/s

Setting values with different radiator performances and system differential temperatures

Q̇[W]	Δt=10 K	Δt=15 K	Δt=20 K
200	2	1	1
250	2	1	1
300	3	2	1
400	3	2	2
500	4	3	2
600	5	3	3
700	6	4	3
800	7	5	3
900	8	5	4
1000	9	6	4
1200	10	7	5
1400	12	8	6
1600	14	9	7
1800	15	10	8
2000		12	9
2200		13	10
2400		14	10
2600		15	11
2800			12
3000			13
3200			14
3400			15

Example:
Q̇= 1000 W
Δt= 15 K
Setting value: 6
(≈ 60 l/h)

1 = 10 l/h
…
5 = 50 l/h
…
10 = 100 l/h
…
15 = 150 l/h

Δp min.
10−100 l/h
= 10 kPa

Δp min.
100−150 l/h
= 15 kPa

Δp max.
= 60 kPa

Q̇ = Radiator performance, Δt = System differential temperature,
Δp = Differential pressure

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