

Tender specification:

Oventrop return temperature limiter, body nickel plated, stem made of stainless steel, connection for threaded pipe or copper pipe.

Technical data:

Operating temperature t_s : 2 °C up to 100 °C
 Max. operating pressure p_s : 10 bar
 Max. differential pressure: 1 bar
 Medium: Water or suitable ethylene/propylene glycol water mixtures according to VDI 2035/ÖNORM 5195 (max. glycol proportion 50 %, ph value 6.5-10).
 Not suitable for steam, oily and aggressive fluids.

Connection thread M 30 x 1.5

Models:

Thermostat "Uni RTLH"
 may be limited or locked, with '0' setting
 Permissible max. temperature: 100 °C

white 1027165
 chrome plated 1027172

Temperature range: 10-40 °C factory setting
 (return temperature may be increased to 50 °C by cancelling the limitation)

anthracite 1149068
 Temperature range: 10-70 °C (return temperature)

Reversed angle pattern valve for the return pipe

DN 10 1024363
 DN 15 1024364

Straight pattern valve for the return pipe

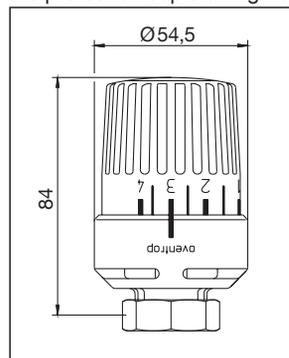
DN 10 1024463
 DN 15 1024464

Application:

Return temperature limiters are, for instance, used to limit the return temperature of radiators or, in the low temperature range, of combined radiator/surface heating systems for temperature control of small surfaces. In surface heating systems, the return temperature has to be limited to a maximum of 40 °C (factory setting). Here the thermostat is influenced by the heating medium, not the air temperature. Once the set temperature is exceeded, the valve closes and re-opens only when the temperature has dropped below the set value. The maximum permissible screed temperature of the surface heating system has to be observed.

RTLH valve insert:

The Oventrop return temperature limiters are equipped with a valve insert with double disc. The maximum flow rate is reached at medium lift position (approx. 1.5 mm = approx. one turn of the protection cap starting from the shut position).

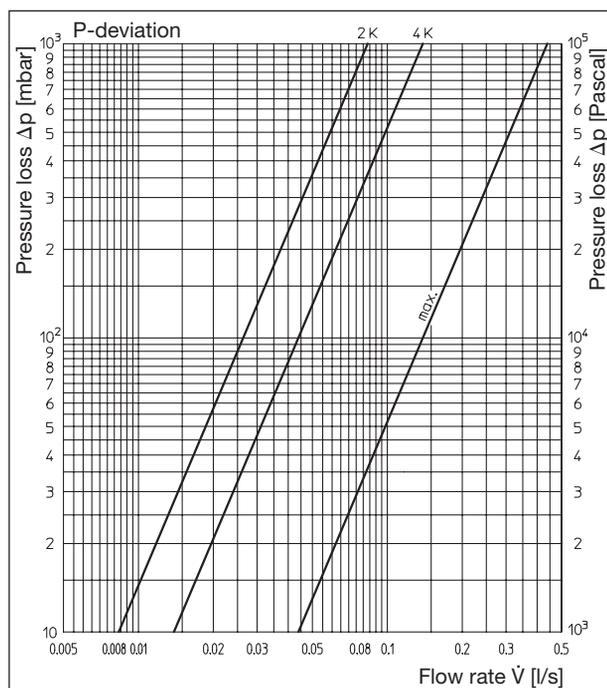


Thermostat "Uni RTLH"

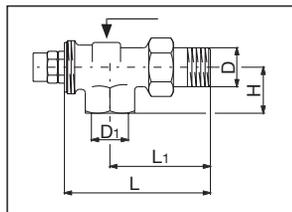
If the thermostat "Uni RTLH" or the protection cap are removed, the double disc closes the valve to a low residual volume flow. This way, frost protection is guaranteed in surface heating systems and inadvertent overheating of the screed is avoided.



Return temperature limiter

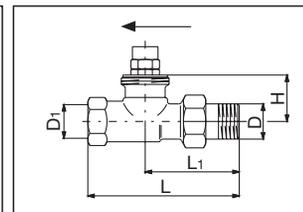


Flow chart



D	D	H	L	L ₁
EN 10226-1	EN 10226-1			
R 3/8	Rp 3/8	23	74,5	52
R 1/2	Rp 1/2	26	82	58

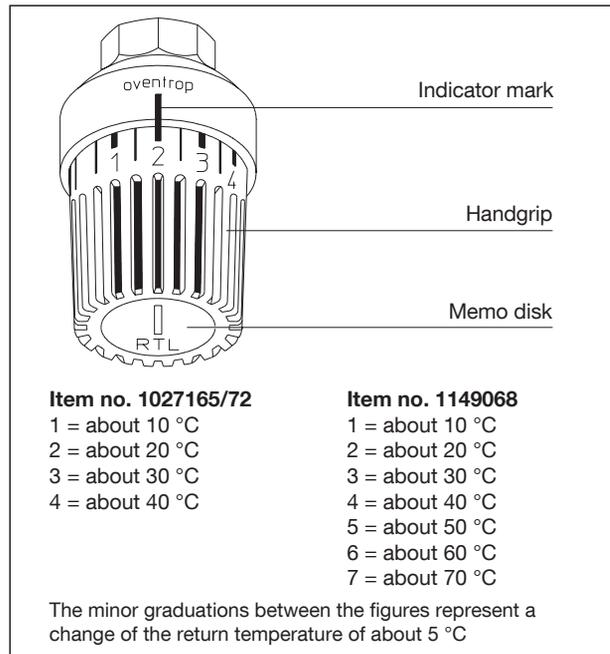
Dimensions reversed angle pattern valve



D	D	H	L	L ₁
EN 10226-1	EN 10226-1			
R 3/8	Rp 3/8	28,5	85	52
R 1/2	Rp 1/2	28,5	95	59

Dimensions straight pattern valve

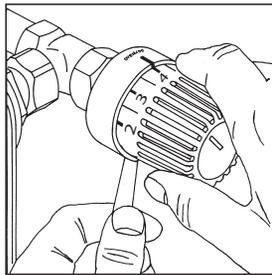
Figures and symbols on the thermostat:



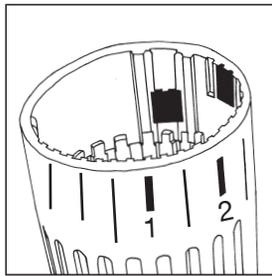
Limitation of the control range:

The control range is limited at works to about 40 °C (applies to item no. 1027165 and 1027172).

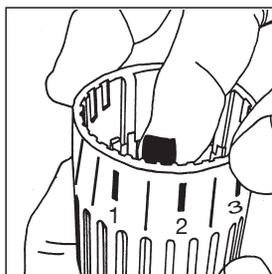
Other temperature values can be limited or locked as follows:



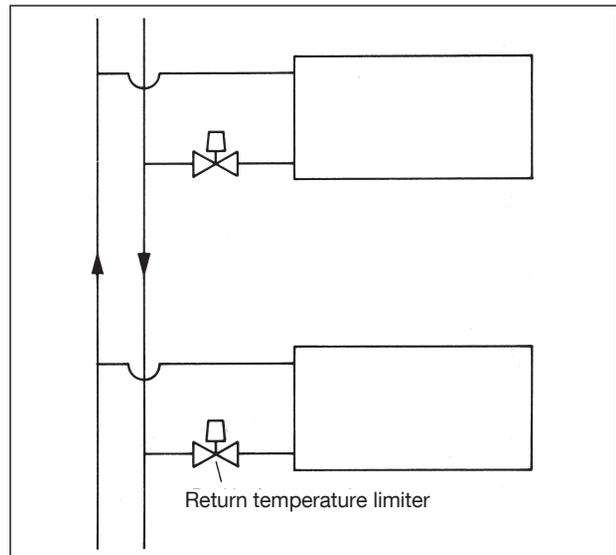
1. Remove the handgrip with the tool (item no. 1989100) or a pen, e.g. with the push button of a pen. Insert the tool/pin in the hole provided on the lower side of the thermostat "Uni RTLH". By turning the handgrip to the shut-off position, it is easily removed. After having removed the handgrip, turn the knurled screw to the left until the white calibration mark is in line with the indicator mark.



2. On the inner side of the handgrip you will find two clips in the "parking position". One of them limits the control range to position 4 (limitation to about 40 °C) as illustrated (applies to item no. 1027165 and 1027172).

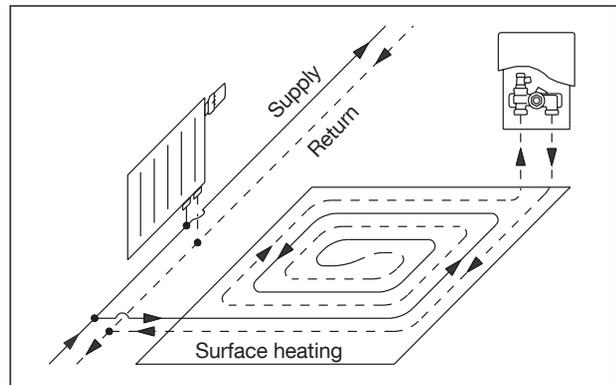


3. To limit the control range to the lower nominal value, e.g. to figure "2" (equals about 20 °C), one clip is fitted into the groove **before** figure "2" as illustrated. (The groove right in front of figure "2" thus remains free). Refit the handgrip so that figure "3" is in line with the indicator mark. Push down the handgrip with the hand until it engages.



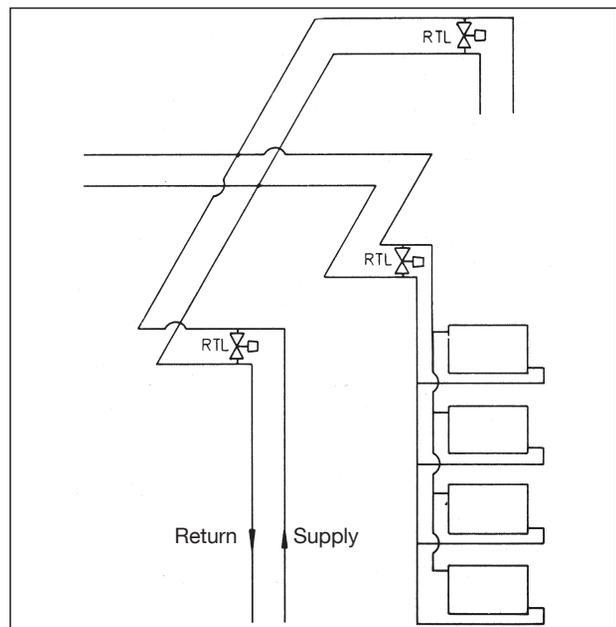
System illustration

Limitation of return temperature at radiators



System illustration

Control in combined radiator/surface heating systems with "Unibox RTL"



System illustration

Frost protection for upper distribution

Cancellation of the limitation see at www.oventrop.de

– Installation instructions for the specialised installer Thermostats "Uni LH" and "Uni LD" –

Subject to technical modifications without notice.

Product range 1
ti 52-EN/10/MW
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