Technical information

Function:

Oventrop thermostats and thermostatic valves are proportional regulators working without auxiliary energy. They regulate the room temperature by varying the volume flow of heating water.

Oventrop thermostats meet the requirements of the German Energy Saving Directive EnEV and allow for the design of thermostatic radiator valves with a proportional control range of 1 or 2 Kelvin (k_V values see technical information "Thermostatic radiator valves").

Tender specification:

Thermostats (M 30 x 1.5)

Oventrop thermostat "Uni XH" with liquid sensor, connection thread M 30 x 1.5, control range may be limited or locked by using the limiting elements, marking of a set value with the help of the memo disk, with tactile setting device, control range 7-28°C.

white, with '0' setting white, without '0' setting	Item no.: 1011365 1011364
as above, but with remote sensor white, with '0' setting capillary 2 m long capillary 5 m long	1011565 1011566
white, without '0' setting capillary 2 m long	1011582

Oventrop thermostat "Uni XHT" with liquid sensor, connection thread M 30 \times 1.5, control range may be limited or locked by using the limiting elements, marking of a set value with the help of the memo disk, with tactile setting device, control range 7-28 °C, max. heating water temperature 90 °C.

transparent, with '0' setting

Oventrop thermostat "Uni XHM" with liquid sensor, connection thread M 30 x 1.5, control range may be limited or locked by using the limiting elements, marking of a set value with the help of the memo disk, with tactile setting device, control range 7-28°C.

In combination with valves, the specific piston stroke and thus the ky value is higher compared to other Oventrop valves.

white, with '0' setting

Oventrop thermostat "Uni LH" with liquid sensor, connection thread M 30 x 1.5, control range may be limited or locked by using the concealed limiting elements, marking of a set value with the help of the memo disk, with tactile setting device, control range 7-28 °C.

white, with '0' setting	1011465
without memo disk, please inquire about customised memo disk white, with '0' setting	1011466
white, without '0' setting	1011464
signal grey (RAL 7004), with collar nut cover with '0' setting	1011461
anthracite (RAL 7016), with collar nut cover with '0' setting	1011467
gold plated, with collar nut cover with '0' setting	1011468
chrome plated, with collar nut cover with '0' setting	1011469
as above but with remote sensor white, with '0' setting	
capillary 2 m long	1011665
capillary 5 m long	1011666
capillary 10 m long	1011667
white, without '0' setting	
capillary 2 m long	1011682
Oventrop thermostat "Uni I H" with liquid sensor, for indoor:	swimmina

Oventrop thermostat "Uni LH" with liquid sensor, for indoor swimming pools and health spa, connection thread M 30 x 1.5, control range may be limited or locked by using the concealed liming elements, marking of a set value with the help of the memo disk, with tactile setting device,

control range 8-38 °C. white, without '0' setting

1011488

as above but with remote sensor white, without '0' setting

capillary 2 m long 1011688



Thermostat "Uni XH"



Thermostat "Uni XH" with remote sensor



Thermostat "Uni XHM"



Thermostat "Uni LH"



Thermostat "Uni LH" with remote sensor

Oventrop thermostat with remote control "Uni FH" with liquid sensor, connection thread M 30 x 1.5, control range may be limited or locked by using the concealed limiting elements, control range 7-28 °C. Item no.:

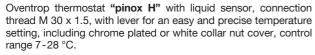
white with '0' setting, capillary 2 m long 1012295 capillary 5 m long 1012296 capillary 10 m long 1012297 as above but with additional remote sensor

white, with '0' setting

capillary 2 m long 1012395 capillary 5 m long 1012396

Oventrop thermostat "Uni LHB", lockshield configuration, with liquid sensor, connection thread M 30 x 1.5, setting of the concealed control range can only be carried out by using a special tool (the set nominal temperature value is not modified by turning the handgrip), with integrated anti-theft device and increased flectional strength (load up to 100 kg), control range 7-28 °C.

white, without '0' setting 1011410



chrome plated, without '0' setting 1012165 white, without '0' setting 1012166

Oventrop thermostat "Uni SH" with liquid sensor, connection thread M 30 x 1.5, with tactile setting device, control range 7-28 °C.

white/chrome plated, with '0' setting 1012065 white, with '0' setting 1012066 chrome plated, with '0' setting 1012069 stainless steel finish, with '0' setting 1012085

Oventrop thermostat "vindo TH" with liquid sensor, connection thread M 30 x 1.5, control range may be limited or locked by using the limiting elements, with tactile setting device, control range 7-28 °C.

white, with '0' setting 1013066

Oventrop thermostat "Uni CH" with liquid sensor and moveable collar nut cover, connection thread M 30 x 1.5, design Colani, control range 7-28 °C.

white, without '0' setting 1011265



Thermostat with remote control "Uni FH"



Thermostat "Uni LHB"



Thermostat "pinox H"



Thermostat "Uni SH"



Thermostat "vindo TH"



Thermostat "Uni CH"

Thermostats (squeeze connection)

Oventrop thermostat "Uni XD" with liquid sensor, can be fitted without adapter to the integrated distributors and thermostatic radiator valves with squeeze connection of the company Danfoss - series RA, control range may be limited or locked by using the limiting elements, marking of a set value with the help of the memo disk, with tactile setting device, control range 7-28 °C.

	Item no.:
white, with '0' setting	1011375
white, without '0' setting	1011374
as above but with remote sensor	
white, with '0' setting	
capillary 2 m long	1011575

Oventrop thermostat "Uni LD" with liquid sensor, can be fitted without adapter to the integrated distributors and thermostatic radiator valves with squeeze connection of the company Danfoss - series RA, control range may be limited or locked by using the concealed limiting elements, marking of a set value with the help of the memo disk, with tactile setting device, control range $7\text{-}28~^\circ\text{C}$.

white, with '0' setting	1011475
without memo disk,	
please inquire about customised memo disk,	
white, with '0' setting	1011476
white, without '0' setting	1011472
signal grey (RAL 7004), with collar nut cover	
with '0' setting	1011470
anthracite (RAL 7016), with collar nut cover	
with '0' setting	1011478
gold plated, with collar nut cover	
with '0' setting	1011480
chrome plated, with collar nut cover	
with '0' setting	1011479
as above but with remote sensor	
white, with '0' setting	
capillary 2 m long	1011685

Oventrop thermostat with remote control "Uni FD" with liquid sensor, can be fitted without adapter to the integrated distributors and thermostatic radiator valves with squeeze connection of the company Danfoss - series RA, control range may be limited or locked by using the concealed limiting elements, control range 7-28 °C.

white, with '0' setting capillary 2 m long 1012275

Oventrop thermostat "pinox D" with liquid sensor, can be fitted without adapter to the integrated distributors and thermostatic radiator valves with squeeze connection of the company Danfoss - series RA, with lever for an easy and precise temperature setting, including chrome plated or white collar nut cover, control range 7-28 °C.

chrome plated, without '0' setting 1012175 white, without '0' setting 1012176

Oventrop thermostat "vindo TD" with liquid sensor, can be fitted without adapter to the integrated distributors and thermostatic radiator valves with squeeze connection of the company Danfoss - series RA, control range may be limited or locked by using the limiting elements, with tactile setting device, control range 7-28 °C.

white, with '0' setting 1013076



Thermostat "Uni XD"



Thermostat "Uni LD"



Thermostat "Uni LD" with remote sensor



Thermostat with remote control "Uni FD"



Thermostat "pinox D"



Thermostat "vindo TD"

Oventrop thermostat "vindo RTD" with liquid sensor, can be fitted without adapter to the integrated distributors and thermostatic radiator valves with squeeze connection of the company Danfoss - series RTD, control range may be limited or locked by using the limiting elements, with tactile setting device, control range 7-28 °C. \underline{Cannot} be used with Oventrop valves with connection thread M 30×1.5 .

white, with '0' setting 1613066

Oventrop thermostat "Uni LDV" with liquid sensor, can be fitted without adapter to the integrated distributors and thermostatic radiator valves with squeeze connection of the company Danfoss - series RAV (thermostat connection Ø 34 mm), control range may be limited or locked by using the concealed limiting elements, marking of a set value with the help of the memo disk, with tactile setting device, control range 7-28 °C.

white, with '0' setting 1616575

Oventrop thermostat "Uni LDVL" with liquid sensor, can be fitted without adapter to the integrated distributors and thermostatic radiator valves with squeeze connection of the company Danfoss - series RAVL (thermostat connection Ø 26 mm), control range may be limited or locked by using the concealed limiting elements, marking of a set value with the help of the memo disk, with tactile setting device, control range 7-28 °C.

white, with '0' setting 1616675

Thermostats (M 30 x 1.0)

Oventrop thermostat "Uni L" with liquid sensor, connection thread M 30×1.0 , control range may be limited or locked by using the concealed limiting elements, marking of a set value with the help of the memo disk, with tactile setting device, control range $7-28\,^{\circ}\text{C}$.

white, with '0' setting 1011401

as above but with remote sensor white, with '0' setting capillary 2 m long Winds of Street, Stree

Thermostat "vindo RTD"



Thermostat "Uni LDV"



Thermostat "Uni LDVL"



Thermostat "Uni L"

1011651



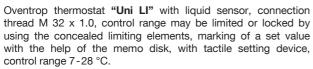
Thermostat "Uni L" with remote sensor

Special thermostats

Oventrop thermostat "Uni LA" with liquid sensor, connection thread M 28×1.5 , control range may be limited or locked by using the concealed limiting elements, marking of a set value with the help of the memo disk, with tactile setting device, control range 7-28 °C.

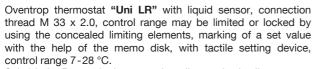
Suitable for Herz thermostatic radiator valve bodies.

white, with '0' setting 1613401 white, without '0' setting 1613465



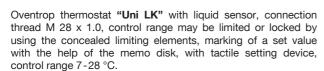
Suitable for Ista thermostatic radiator valve bodies.

white, with '0' setting 1616200



Suitable for Rosswein thermostatic radiator valve bodies.

white, with '0' setting 1616301



Suitable for Kosmia thermostatic radiator valve bodies.

white, with '0' setting 1613501

Oventrop thermostat "Uni LV" with liquid sensor, squeeze connection with collar nut, control range may be limited or locked by using the concealed limiting elements, marking of a set value with the help of the memo disk, with tactile setting device, control range $7\text{-}28\,^{\circ}\text{C}$.

Suitable for Kosmia thermostatic radiator valve bodies manufactured since 1987.

white, with '0' setting 1616001



Thermostat "Uni LA" M 28 x 1.5



Thermostat "Uni LI" M 32 x 1.0



Thermostat "Uni LR" M 33 x 2.0



Thermostat "Uni LK" M 28 x 1.0



Thermostat "Uni LV" with squeeze connection

Oventrop thermostat "Uni LM" with liquid sensor, connection thread M 38×1.5 , control range may be limited or locked by using the concealed limiting elements, marking of a set value with the help of the memo disk, with tactile setting device, control range $7\text{-}28~^{\circ}\text{C}$.

Suitable for Meges thermostatic radiator valve bodies.

white, with '0' setting

Item no.: 1616100

Oventrop thermostat "Uni LO" with liquid sensor, connection thread M 38×1.5 , control range may be limited or locked by using the concealed limiting elements, marking of a set value with the help of the memo disk, with tactile setting device, control range 7-28 °C.

Suitable for Oreg (Ondal) thermostatic radiator valve bodies.

white, with '0' setting

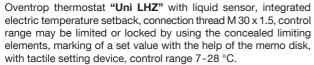
1616500

Oventrop thermostat with liquid sensor, connection thread M 40 x 1.5, marking of a set value with the help of the memo disk, control range 7-28 $^{\circ}\text{C}.$

Only for **Oventrop "maxi/mini" thermostatic radiator valves** manufactured up to 1974. The valves are no longer produced.

anthracite/white, with '0' setting

1015500



Operating current: 24 V AC/DC
Power consumption: about 0.6 W
Temperature setback: up to about 7 K
Connecting cable: 2 x 0.25 mm²
Length 1 m

white, without '0' setting 1150300



Thermostat "Uni LM" M 38 x 1.5



Thermostat "Uni LO" M 38 x 1.5



Thermostat für "maxi/mini"-Ventile M 40 x 1.5



Thermostat "Uni LHZ" M 30 x 1.5

Accessories for thermostats

Angle pattern adapter

For the connection of thermostats at a right angle to the operating direction of the valve, especially suitable for radiators with integrated distributor, connection at the left and right hand side of the radiator.

both ports connection thread M 30 x 1.5

Item no.:

1011450 white anthracite 1641451

both ports squeeze connection

1011452

Thermostatic side suitable for thermostats with squeeze connection ("Uni XD", "Uni LD", "vindo TD" and "pinox D"). Valve side suitable for valves of the company Danfoss, series RA.



Angle pattern adapter both port connection thread M 30 x 1.5



Angle pattern adapter both ports squeeze connection

Adapter, nickel plated

suitable for the conversion of connection thread

M 30 x 1.0 to M 30 x 1.5

(for Oventrop valves manufactured up to 1998) 1011445

Connection to the valve: M 30 x 1.0 Connection to the thermostat: M 30 x 1.5

M 32 x 1.0 to M 30 x 1.5 (for Ista valves) 1661445

M 32 x 1.0 Connection to the valve: Connection to the thermostat: M 30 x 1.5

Graduated collar "Uni Clip" for "Uni XH", "Uni XHM" and "Uni XD"

Due to the vertical position of the figures, the set values can be easily read off in case of lateral connection of the thermostat (for

right hand model 1011396 left hand model 1011397



Adapter

thermostats with '0' setting).



"Uni Clip"

Anti-theft ring

white

for thermostats "Uni XH", "Uni XHM", "Uni LH", "Uni LHZ", "Uni SH", "Uni L", "Uni LA" and "vindo TH" for thermostats "Uni XD", "Uni LD" and "vindo TD" 1011766 1011775



Anti-theft ring

Reinforcing cap, for the stabilisation and protection of the thermostat from theft and vandalism.

for thermostats "Uni LH", "Uni LHZ", "Uni LA" not lockable

1011865 lockable 1011866

for thermostat "Uni L"

not lockable 1011801 lockable 1011811

for thermostat "Uni LD"

not lockable 1011875

"SH-Cap"

Design cover for thermostat "Uni SH"

anthracite (RAL 7016) 1012080 chrome plated 1012081 white (RAL 9016) 1012082



Reinforcing cap



"SH-Cap"

Collar nut cover for thermostats

"Uni XH", "Uni XHM", "Uni LH", "Uni LHZ", "Uni SH", "Uni LAZ", "vindo TH", "pinox H"

Item no.:
1011393
1011380
1011381
1011382
1011383

"Uni L"

white 1011493

Tool for releasing the graduation cap and clips of the thermostats "Uni LH", "Uni L", "Uni LHZ", "Uni LDV", "Uni LDVL" and special thermostats

1989100

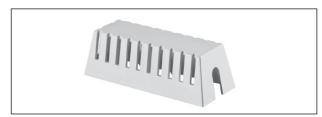




Tool

Cover for remote sensor suitable for all remote sensors

1011698 white



Cover for remote sensor

Manual head

white

Connection thread M 30 x 1.5 1012565 1012575 Squeeze connection



Manual head

Wall connection set for thermostat "Uni LHZ"

as additional protection for the wall installation (in a flush box) of the connecting cable.

white 1150390



Wall connection set for thermostat "Uni LHZ"

Setting key

for nominal temperature setting at the

thermostat "Uni LHB" 1011497



Setting key

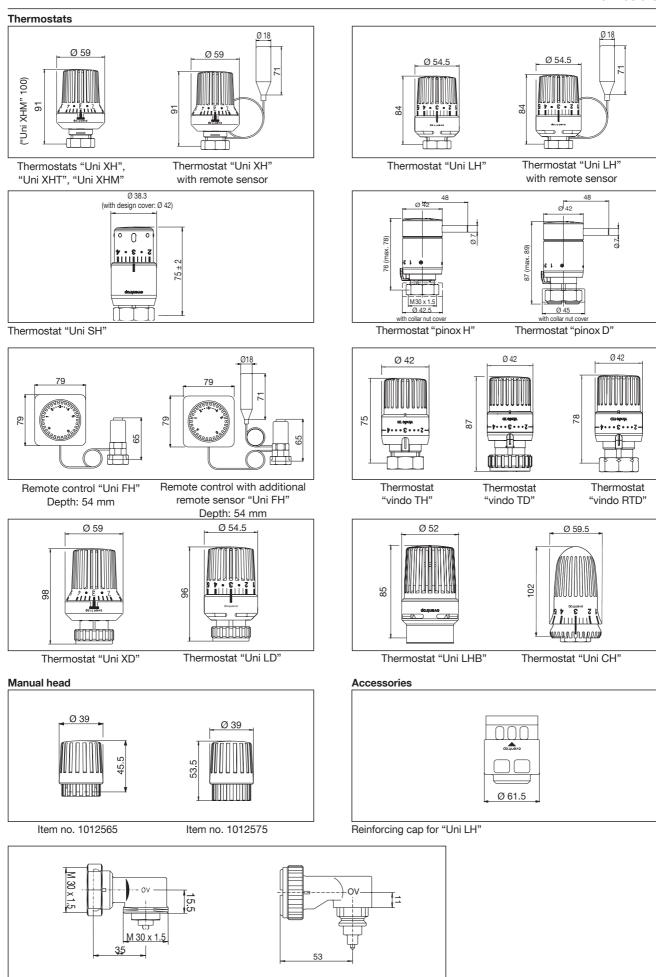
Universal tool

for nominal temperature setting at the thermostat "Uni LHB", presetting of the valve as well as releasing of the graduation cap of the thermostats "Uni LH", "Uni LHZ", "Uni L", "Uni LD", "Uni LDV", "Uni LDVL" and special thermostats. With additional Allen key (2.5 mm) to secure the thermostat "Uni LHB".

for valves "AV 9" and "AQ" 1011489 for valves "AV 6" 1011496



Universal tool



2017

Angle pattern adapter with squeeze connection, item no. 1011452

Angle pattern adapter item no. 1011450

Demands and technical data of the thermostats combined with Oventrop valves

Demands:

Oventrop thermostatic radiator valves comply with the EN 215 standard

The Oventrop thermostatic radiator valves "AF" also comply with:

- the directives of the Association for district heating (AGFW, work sheet FW 507).
- the conditions of the company ESSO AG (TA list).

The Oventrop thermostatic radiator valves fulfil the demands of the German Energy Saving Directive (EnEV). They are automatically working "room by room" regulating devices (EnEV § 14).

The Oventrop thermostatic radiator valves "A", "AV 9", "RF", "AV 6", "AF" (angle and straight pattern valves DN 10 - DN 20) and "AZ H" (straight pattern valves DN 20 + DN 25) with the thermostats "Uni XH", "Uni LH", "Uni SH", "vindo TH", "pinox H", "Uni LGH", "Uni L" and "Uni LH" with remote sensor and the thermostatic radiator valve "VN" with the thermostat "Uni LD" are Keymark tested and certified (Reg.-No. 011-6T0002).

The Oventrop thermostats "Uni XH", "Uni LH", "Uni SH" and "vindo TH" comply with the requirements of the Energy Efficiency Class A of the "Thermostatic Efficiency Label (TELL).

Further details can be obtained from the installation and operating instructions.

Technical data:

- Control range:

- Nominal flow rate: (see charts technical information

"Thermostatic radiator valves")

- Max. flow of heating water: (see charts technical information

"Thermostatic radiator valves")

- Position 3: corresponds to about 20 °C

 Max. differential pressure against which the valve

- Valve body material:

closes: 1 bar: Valves "A, AV 9,

CV 9, E, ADV 9, RF, RFV 9"

Bronze/brass

3 bar: Valve "AF"

- Hysteresis: "Uni XH":

"Uni XH": 0.2 K
"Uni LH", "Uni L": 0.2 K
"Uni LD": 0.15 K
"Uni SH": 0,2 K
"vindo TH": 0.2 K
"Uni CH": 0.2 K
"pinox H": 0.2 K

 Heating water temperature effect:

"Uni XH": 0.22 K
"Uni LH", "Uni L": 0.65 K
"Uni LD": 0.29 K
"Uni SH": 0.9 K
"vindo TH": 0.9 K
"Uni CH": 0.65 K
"pinox H": 1.20 K

"Uni XH", "Uni LH",

"Uni L" with remote sensor: 0.2 K

- Differential pressure

effect:

"Uni XH": 0.4 K
"Uni LH", "Uni L": 0.4 K
"Uni LD": 0.60 K
"Uni SH": 0.4 K
"vindo TH": 0.4 K
"Uni CH": 0.4 K
"pinox H": 1.20 K

- Closing time: "Uni XH": 22 minutes

"Uni LH", "Uni L": 23 minutes
"Uni LD": 26 minutes
"Uni SH": 16 minutes
"vindo TH": 18 minutes
"Uni CH": 23 minutes
"pinox H": 18 minutes

- Sensor temperature: 0°C - 50 °C

- Max. heating water

temperature: 120°

(90 °C for thermostat"Uni XHT")

- Storage temperature: -10 °C - +50 °C

Subject to technical modifications without notice.

Product range 1 ti 112-EN/10/MW Edition 2017