# oventrop

The Oventrop Quality Management System is certified to DIN EN ISO 9001

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

Oventrop thermostats meet the requirements of the **Energy Saving Directive** and allow the design of thermostatic radiator valves with a proportional control range of 1 or 2 Kelvin (kv-values see technical data sheet "Thermostatic radiator valves").

**Tender specification:**
Oventrop thermostat "Uni XH" with liquid sensor, connection thread M 30 x 1.5, temperature range can be limited and locked by using the limiting elements, marking of a set value by use of the memo disk, tactile setting device, temperature range 7-28°C.

| | | |
|---|---|---|
| white model | | |
| with '0' setting | | 101 13 65 |
| without '0' setting | | 101 13 64 |
| as above but with remote sensor | | |
| white model | | |
| with '0' setting | | |
| capillary | 2 m long | 101 15 65 |
| capillary | 5 m long | 101 15 66 |
| without '0' setting | | |
| capillary | 2 m long | 101 15 82 |

Oventrop thermostat "Uni XHT" with liquid sensor, connection thread M 30 x 1.5, temperature range can be limited and locked by using the limiting elements, marking of a set value by use of the memo disk, tactile setting device, temperature range 7-28°C, max. heating water temperature 90°C.
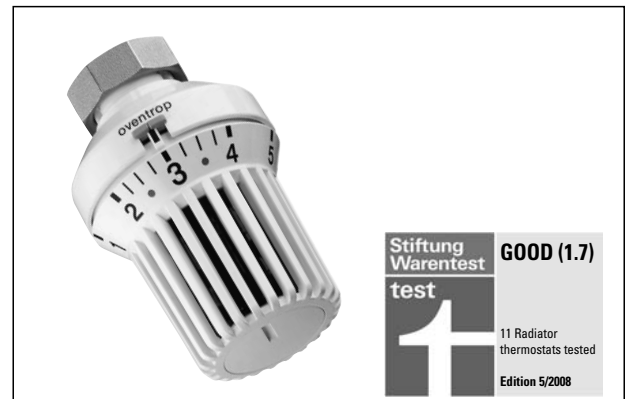
| | |
|---|---|
| transparent model | |
| with '0' setting | 101 13 00 |

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

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

| | |
|---|---|
| white model | |
| with '0' setting | 101 13 60 |

Oventrop thermostat "Uni LH" with liquid sensor, connection thread M 30 x 1,5, temperature range can be limited and locked by using the hidden limiting elements, marking of a set value by use of the memo disk, tactile setting device, temperature range 7-28°C.

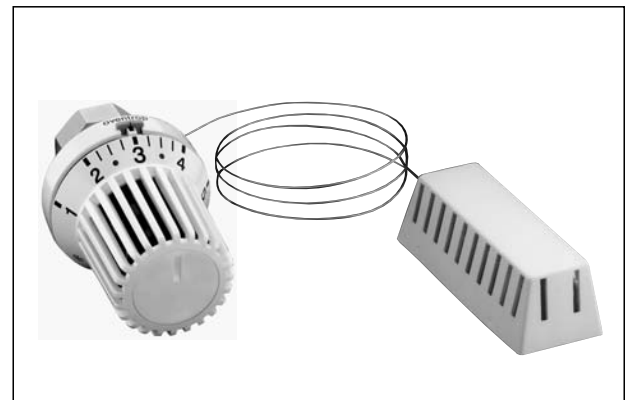| | |
|---|---|
| white model | |
| with '0' setting | 101 14 65 |
| without '0' setting | 101 14 64 |
| signal grey model, with collar nut cover | |
| with '0' setting | 101 14 61 |
| anthracite model, with collar nut cover | |
| with '0' setting | 101 14 67 |
| gold plated model, with collar nut cover | |
| with '0' setting | 101 14 68 |
| chrome plated model, with collar nut cover | |
| with '0' setting | 101 14 69 |



Thermostat "Uni XH"



Thermostat "Uni XH" with remote sensor



Thermostat "Uni XHM"



Thermostat "Uni LH"

as above but with remote sensor
white model
with '0' setting

| | | |
|---|---|---|
| capillary | 2 m long | 101 16 65 |
| capillary | 5 m long | 101 16 66 |
| capillary | 10 m long | 101 16 67 |

without '0' setting

| | | |
|---|---|---|
| capillary | 2 m long | 101 16 82 |

Oventrop thermostat "Uni LH" with liquid sensor for indoor swimming pools and medical baths, connection thread M 30 x 1.5, temperature range can be limited and locked by using the hidden limiting elements, marking of a set value by use of the memo disk, tactile setting device, temperature range 3-38°C.

white model
without '0' setting 101 14 88

as above but with remote sensor
capillary 2 m long 101 16 88

Oventrop thermostat with remote control "Uni FH"
connection thread M 30 x 1.5, temperature range 7-28°C.

white model
with '0' setting

| | | |
|---|---|---|
| capillary | 2 m long | 101 22 95 |
| capillary | 5 m long | 101 22 96 |
| capillary | 10 m long | 101 22 97 |

as above but with additional remote sensor
with '0' setting

| | | |
|---|---|---|
| capillary | 2 m long | 101 23 95 |
| capillary | 5 m long | 101 23 96 |

Oventrop thermostat "Uni LHB", lockshield configuration, with liquid sensor, connection thread M 30 x 1.5, temperature range setting hidden and only possible by using a special tool (the set nominal temperature value is not modified by turning the handgrip), with integrated anti-theft device and increased strength, temperature range 7-28°C.

white model
without '0' setting 101 14 10

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

white/chrome plated model
with '0' setting 101 20 65

chrome plated model
with '0' setting 101 20 69

stainless steel finish
with '0' setting 101 20 85

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

white model
with '0' setting 101 30 66

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

white model
without '0' setting 101 12 65

Oventrop thermostat "Uni DH" with wax sensor, connection thread M 30 x 1.5, temperature range 7-28°C.
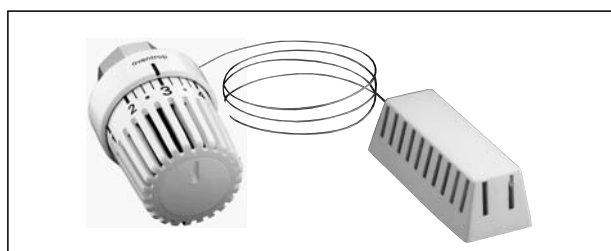
white model
with '0' setting 101 10 65

as above but with remote sensor
white model
without '0' setting
capillary 2 m long 101 11 65


Thermostat "Uni LH" with remote sensor


Thermostat with remote control "Uni FH"


Thermostat "Uni LHB"


Thermostat "Uni SH"


Thermostat "vindo TH"


Thermostat "Uni CH"


Thermostat "Uni DH"

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, temperature range can be limited and locked by using the limiting elements, tactile setting device, marking of a set value by use of the memo disk, temperature range 7-28°C.

| | | |
|---|---|---|
| white model | | |
| with '0' setting | | 101 13 75 |
| without '0' setting | | 101 13 74 |

| | | |
|---|---|---|
| as above but with remote sensor | | |
| white model | | |
| with '0' setting | | |
| capillary | 2 m long | 101 15 75 |

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, temperature range can be limited and locked by using the hidden limiting elements, marking of a set value by use of the memo disk, tactile setting device, temperature range 7-28°C.

| | |
|---|---|
| white model | |
| with '0' setting | 101 14 75 |
| without '0' setting | 101 14 72 |
| signal grey model, with collar nut cover | |
| with '0' setting | 101 14 70 |
| anthracite model, with collar nut cover | |
| with '0' setting | 101 14 78 |
| gold plated model, with collar nut cover | |
| with '0' setting | 101 14 80 |
| chrome plated model, with collar nut cover | |
| with '0' setting | 101 14 79 |

| | | |
|---|---|---|
| as above but with remote sensor "Uni FD" | | |
| white model | | |
| with '0' setting | | |
| capillary | 2 m long | 101 16 85 |

| | | |
|---|---|---|
| as above but with remote control | | |
| white model | | |
| with '0' setting | | |
| without collar nut cover | | |
| capillary | 2 m long | 101 22 75 |

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, temperature range can be limited and locked by using the limiting elements, tactile setting device, temperature range 7-28°C.

| | |
|---|---|
| white model | |
| with '0' setting | 101 30 76 |

Oventrop thermostat "Uni LDV" with liquid sensor, can be fitted without adapter to the thermostatic radiator valves with squeeze connection of the company Danfoss – series RAV, temperature range can be limited and locked by using the hidden limiting elements, marking of a set value by use of the memo disk, tactile setting device, temperature range 7-28°C.

| | |
|---|---|
| white model | |
| with '0' setting | 161 65 75 |

Oventrop thermostat "Uni LDVL" with liquid sensor, can be fitted without adapter to the thermostatic radiator valves with squeeze connection of the company Danfoss – series RAVL, temperature range can be limited and locked by using the hidden limiting elements, marking of a set value by use of the memo disk, tactile setting device, temperature range 7-28°C.

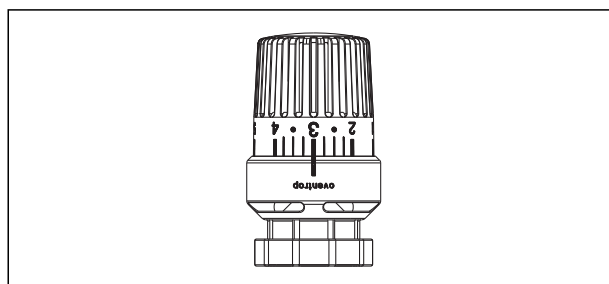| | |
|---|---|
| white model | |
| with '0' setting | 161 66 75 |


Thermostat "Uni XD"
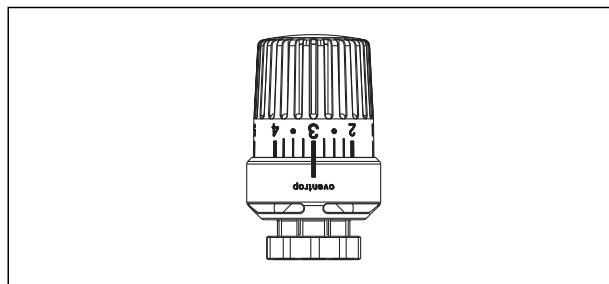

Thermostat "Uni LD"


Thermostat "Uni LD" with remote sensor


Thermostat with remote control "Uni FD"


Thermostat "Uni LDV"


Thermostat "Uni LDVL"
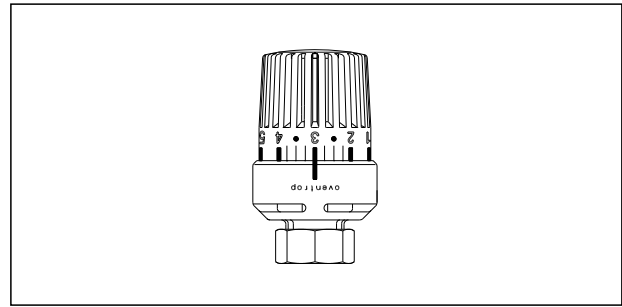
**Thermostats M 30 x 1.0**
Oventrop thermostat "Uni L" with liquid sensor, connection thread M 30 x 1.0, temperature range can be limited and locked by using the hidden limiting elements, marking of a set value by use of the memo disk, temperature range 7-28 °C.

white model
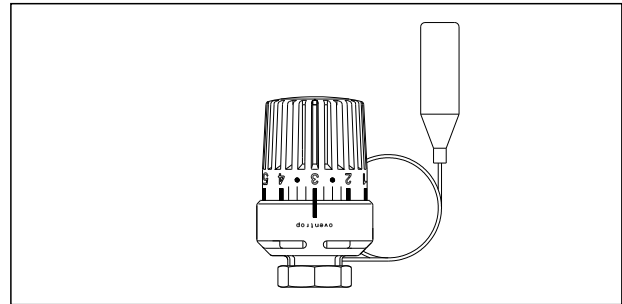with '0' setting                                                101 14 01


as above but with remote sensor
white model
with '0' setting
capillary              2 m long                           101 16 51


Oventrop thermostat "Uni L" with remote control, connection thread M 30 x 1.5, temperature range can be limited and locked by using the hidden limiting elements, temperature range 7-28°C.

white model
with '0' setting
capillary              2 m long                           101 22 60


Thermostat "Uni L"


Thermostat "Uni L" with remote sensor
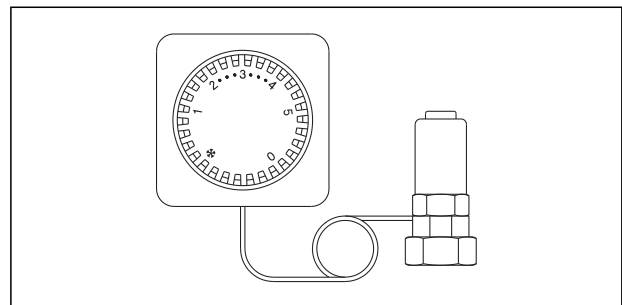

Thermostat "Uni L" with remote control

**Special thermostats**

Oventrop thermostat "Uni LA" with liquid sensor, connection thread M 28 x 1.5, temperature range can be limited and locked by using the hidden limiting elements, marking of a set value by use of the memo disk, tactile setting device, temperature range 7-28 °C. Suitable for Herz thermostatic radiator valves (lower parts).
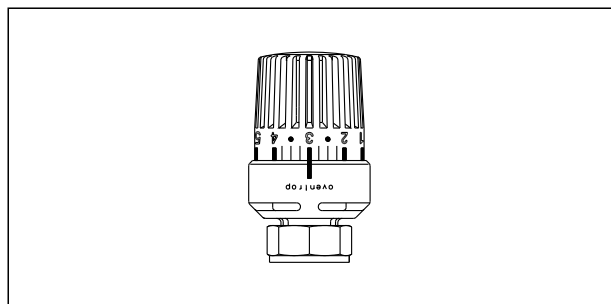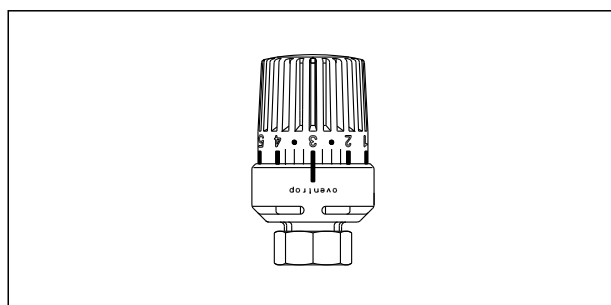
| | |
|---|---|
| white model, with '0' setting | 161 34 01 |
| without '0' setting | 161 34 65 |
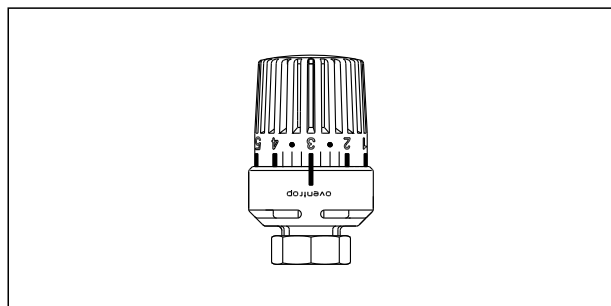
Thermostat "Uni LA" M 28 x 1.5

Oventrop thermostat "Uni LI" with liquid sensor, connection thread M 32 x 1.0, temperature range can be limited and locked by using the hidden limiting elements, marking of a set value by use of the memo disk, tactile setting device, temperature range 7-28 °C. Suitable for Ista thermostatic radiator valves (lower parts).

white model, with '0' setting                                161 62 00
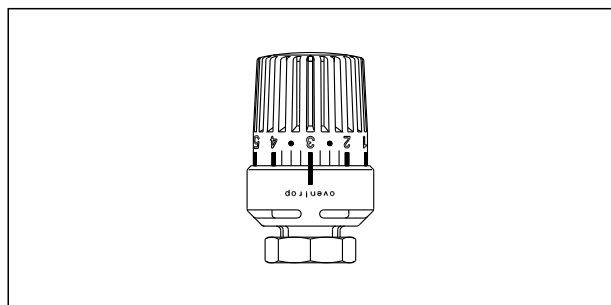
Thermostat "Uni LI" M 32 x 1.0

Oventrop thermostat "Uni LR" with liquid sensor, connection thread M 33 x 2.0, temperature range can be limited and locked by using the hidden limiting elements, marking of a set value by use of the memo disk, tactile setting device, temperature range 7-28 °C. Suitable for Rosswein thermostatic radiator valves (lower parts).

white model, with '0' setting                                161 63 01

Thermostat "Uni LR" M 33 x 2.0

Oventrop thermostat "Uni LK" with liquid sensor, connection thread M 28 x 1.0, temperature range can be limited and locked by using the hidden limiting elements, marking of a set value by use of the memo disk, tactile setting device, temperature range 7-28 °C. Suitable for Kosmia thermostatic radiator valves (lower parts).
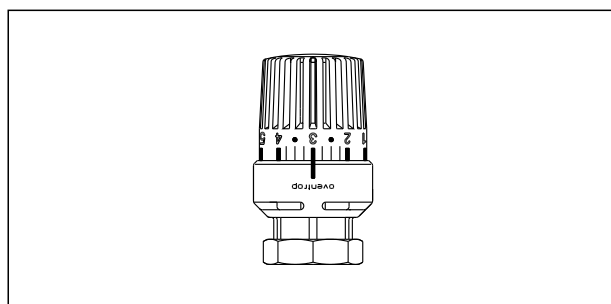
white model, with '0' setting                                161 35 01

Thermostat "Uni LK" M 28 x 1.0

Oventrop thermostat "Uni LV" with liquid sensor, squeeze connection with collar nut, temperature range can be limited and locked by using the hidden limiting elements, marking of a set value by use of the memo disk, tactile setting device, temperature range 7-28 °C.
Suitable for Vaillant thermostatic radiator valves (lower parts).
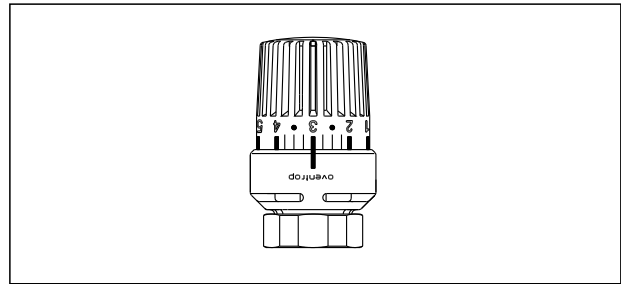
white model, with '0' setting                                161 60 01

Thermostat "Uni LV" with squeeze connection

Oventrop thermostat "Uni LM" with liquid sensor, connection thread M 38 x 1.5, temperature range can be limited and locked by using the hidden limiting elements, marking of a set value by use of the memo disk, tactile setting device, temperature range 7-28°C.
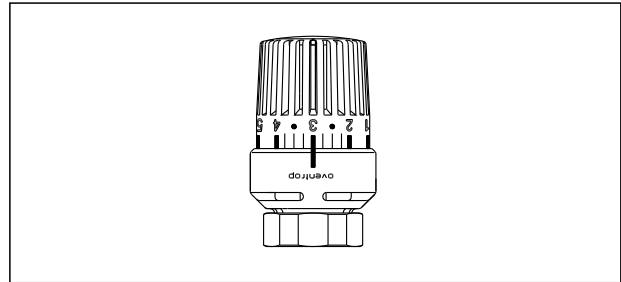Suitable for Meges thermostatic radiator valves (lower parts).
white model, with '0' setting                161 61 00



Thermostat "Uni LM" M 38 x 1.5

Oventrop thermostat "Uni LO" with liquid sensor, connection thread M 38 x 1.5, temperature range can be limited and locked by using the hidden limiting elements, marking of a set value by use of the memo disk, tactile setting device, temperature range 7-28°C.
Suitable for Oreg (Ondal) thermostatic radiator valves (lower parts).
white model, with '0' setting                161 65 00



Thermostat "Uni LO" M 38 x 1.5

Oventrop thermostat with liquid sensor, connection thread M 40 x 1.5, marking of a set value by use of the memo disk, tactile setting device, temperature range 7-28°C.
Only for Oventrop "maxi/mini" thermostatic radiator valves manufactured up to 1974. The valves of this series are no longer produced.
white model, with '0' setting                101 55 00
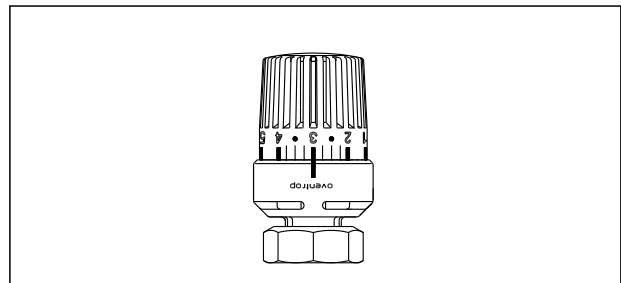


Thermostat for "maxi/mini" valves M 40 x 1.5

Oventrop thermostat "Uni LHZ" with liquid sensor, electric temperature setback (about 7 K), connection 24 V direct or alternating current, connection thread M 30 x 1.5, temperature range can be limited and locked by using the hidden limiting elements, marking of a set value by use of the memo disk, tactile setting device, connection cable 1 m long, temperature range 7-28°C.
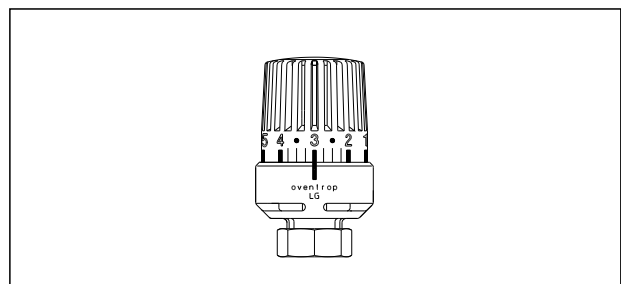white model, without '0' setting                115 03 00
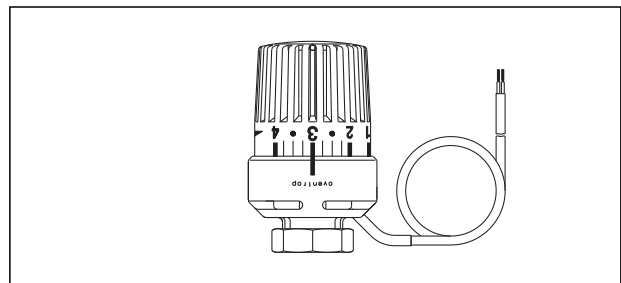


Thermostat "Uni LHZ" M 30 x 1.5

Oventrop thermostat "Uni LG" with liquid sensor, connection thread M 30 x 1.5, temperature range can be limited or locked by using the hidden limiting elements, marking of a set value by use of the memo disk, tactile setting device, temperature range 7-28°C. For special installation, graduation on cap turned by 180° compared to "Uni LH".
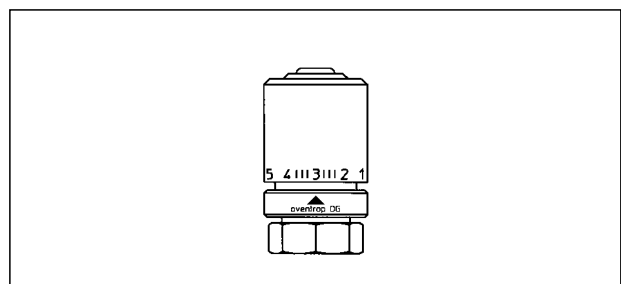white model, with '0' setting                101 85 61



Thermostat "Uni LGH"

Oventrop thermostat "Uni DG" with wax sensor, connection thread M 30 x 1.5, temperature range 7-28°C. For special installation, graduation on cap turned by 180° compared to "Uni DH".
white model, with '0' setting                101 10 61



Thermostat "Uni DGH"

**Thermostats – Accessories**

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

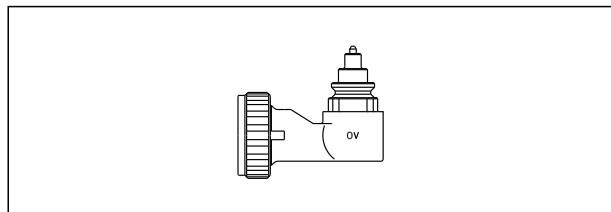| | |
|---|---|
| white model | 101 14 50 |
| anthracite model | 101 14 51 |
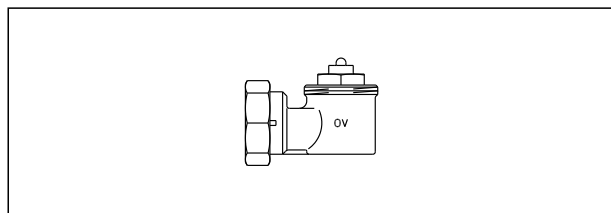

Angle pattern adapter both ports connection thread M 30 x 1.5

both ports squeeze connection           101 14 52

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


Angle pattern adapter both ports squeeze conection

Adapter
for the conversion of thermostatic radiator valves with connection thread, nickel plated

| | | |
|---|---|---|
| M 30 x 1.0 to M 30 x 1.5 | | 101 14 45 |
| 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 | | 166 14 45 |
| Connection to the valve: | M 32 x 1.0 | |
| Connection to the thermostat: | M 30 x 1.5 | |
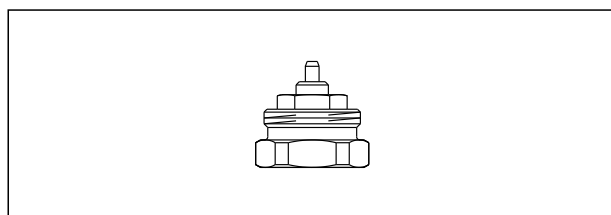

Adapter

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.

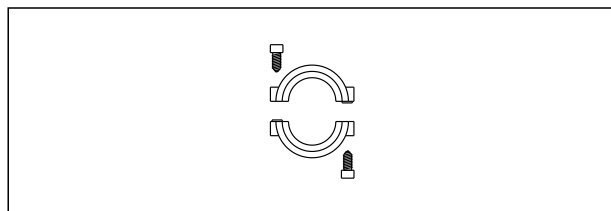| | |
|---|---|
| right hand side installation | 101 13 95 |
| left hand side installation | 101 13 97 |
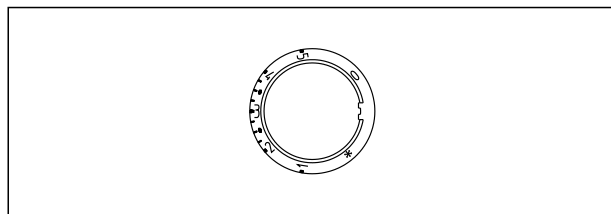

"Uni Clip"

Anti-theft ring
white model

| | |
|---|---|
| for thermostats "Uni XH", "Uni XHM", "Uni LH", "Uni LHZ","Uni SH", "Uni DH", "Uni L", "Uni LA" and "vindo TH" | 101 17 66 |
| for thermostats "Uni XD", "Uni LD" and "vindo TD" | 101 17 75 |


Anti-theft ring

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

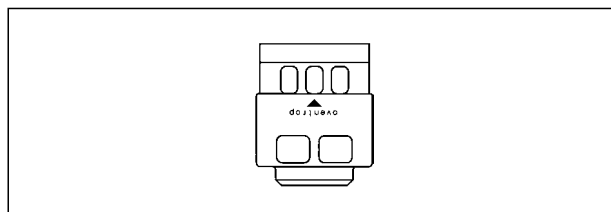| | |
|---|---|
| for thermostats "Uni LH" and "Uni LHZ" | |
| not lockable | 101 18 65 |
| lockable | 101 18 66 |
| for thermostats "Uni L" and "Uni LA" | |
| not lockable | 101 18 01 |
| lockable | 101 18 11 |
| for thermostat "Uni LD" | |
| not lockable | 101 18 75 |


Reinforcing cap for "Uni LH", "Uni LHZ", "Uni L", "Uni LA"

Reinforcing cap for the stabilisation and protection of the thermostat from theft and vandalism.
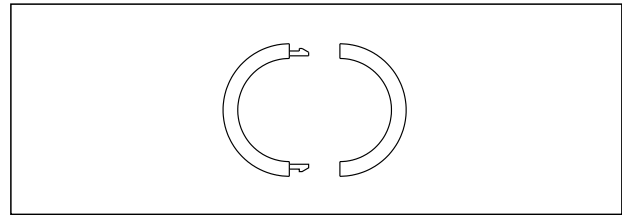
| | |
|---|---|
| for thermostat "Uni DH" | |
| white model | 101 19 11 |
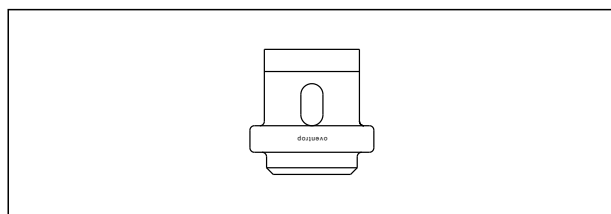

Reinforcing cap for "Uni DH" und "Uni D"

Cover to hide the collar nut of thermostats
white model
for collar nut of the thermostats

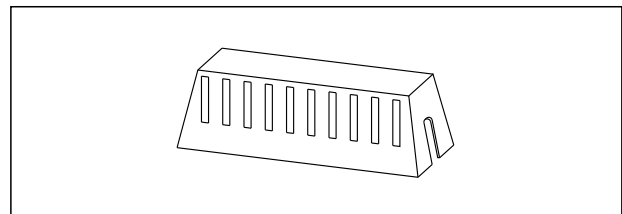| | |
|---|---|
| "Uni XH", "Uni XHM", "Uni LH", "Uni LHZ", "Uni SH", "Uni DH", "Uni LA" and "vindo TH" | 101 13 93 |
| for collar nut of the thermostat "Uni L" | 101 14 93 |

Collar nut cover

Tool for loosening the cap and clips
for thermostats "Uni LH", "Uni L", "Uni LD"
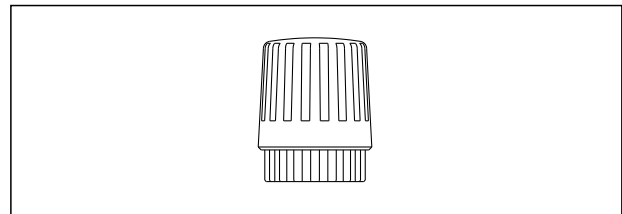and special thermostats                    198 91 00
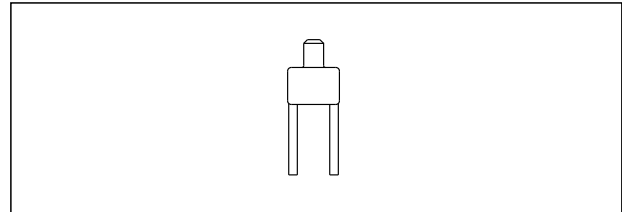
Tool

Cover for remote sensor, suitable for all
remote sensors
white model                                101 16 99

Cover

Manual head
white model

| | |
|---|---|
| Connection thread M 30 x 1.5 | 101 25 65 |
| Squeeze connection | 101 25 75 |

Manual head

"SH-Cap"
Design cover for thermostat "Uni SH"

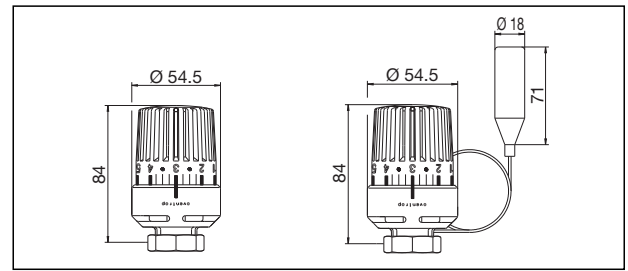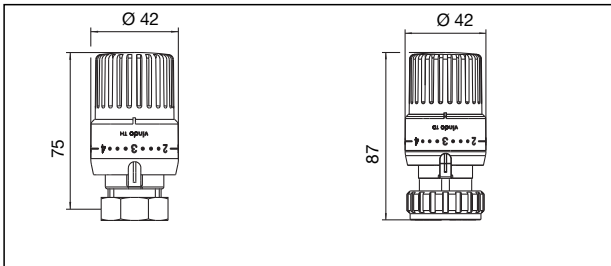| | |
|---|---|
| anthracite model (RAL 7016) | 101 20 80 |
| chrome plated model | 101 20 81 |
| white model (RAL 9016) | 101 20 82 |
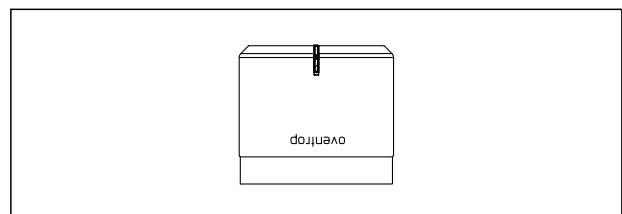
"SH-Cap"
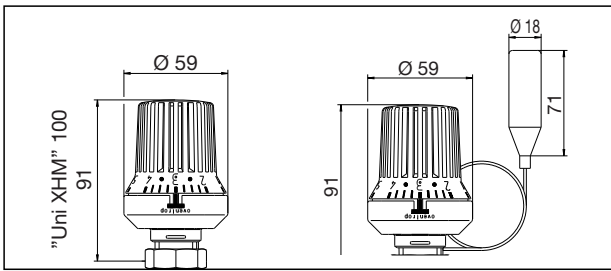
Thermostats "Uni XH",
"Uni XHT" and "Uni XHM"

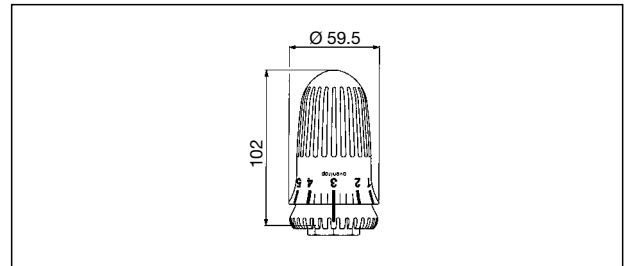Thermostat
"Uni XH" with remote sensor

Thermostat
"Uni LH"

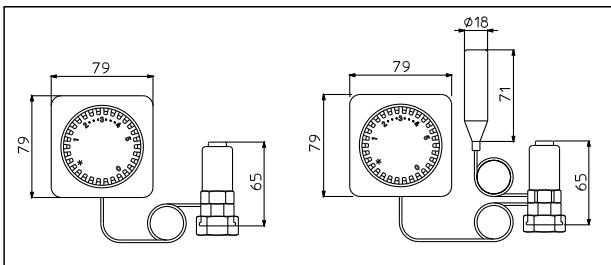Thermostat
"Uni LH" with remote sensor
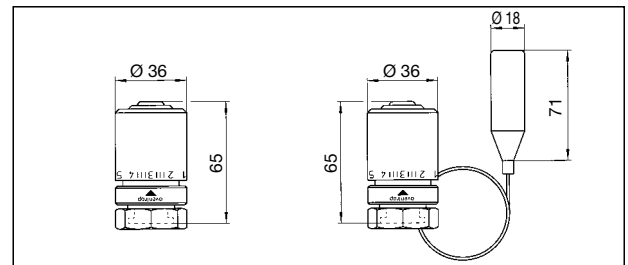
Thermostat "vindo TH"

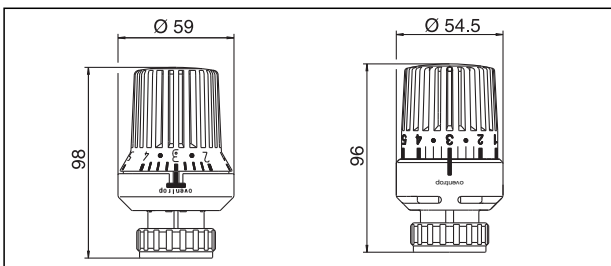Thermostat "vindo TD"

Thermostat "Uni CH"

Remote control
depth 54 mm
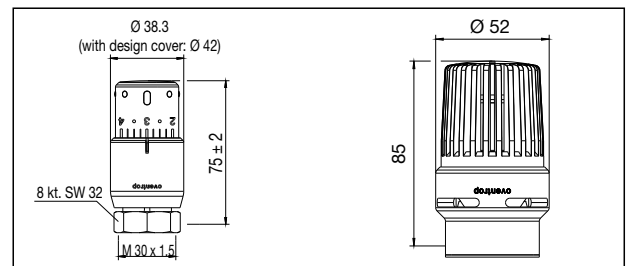
Remote control with additional
remote sensor depth 54 mm

Thermostat "Uni DH"

Thermostat "Uni DH"
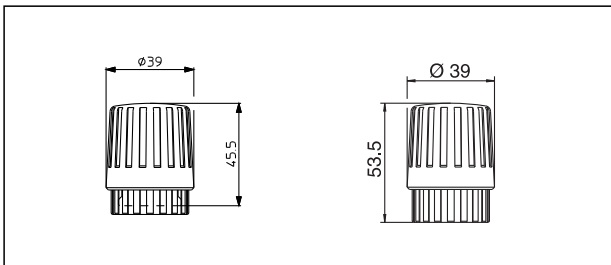with remote sensor

Thermostat "Uni XD"

Thermostat "Uni LD"
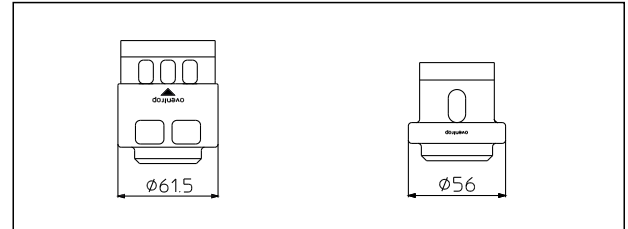
Thermostat "Uni SH"

Thermostat "Uni LHB"

**Manual head**

**Accessories**

Item no. 101 25 65
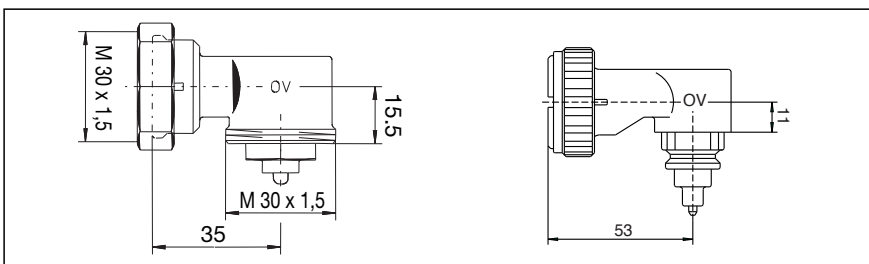
Item no. 101 25 75

Reinforcing cap for "Uni LH",
"Uni LHZ", "Uni L" and "Uni LA"

Reinforcing cap
for "Uni DH"

Angle pattern adapter item no. 101 14 50

Angle pattern adapter squeeze
connection item no. 101 14 52

**Demands and technical data of the thermostats combined with Oventrop valves**

**Demands:**

Oventrop thermostatic radiator valves comply with the EN 215 standard.

In addition, the thermostatic radiator valves of the "Series F" correspond to:

– the directions of the Association for District Heating (AGWF)

– the conditions of the company Esso (TA list)

⍦ The Oventrop valves of the "Series A", "Series RF", "Series AV 6", "Series F" (angle and straight pattern valves DN 10 – DN 20) with the thermostats "Uni XH", "Uni LH", "Uni SH", "vindo TH", "Uni LGH" and "Uni L" as well as "Uni LH" and "Uni L" with remote sensor are CEN tested (Reg.-No. 6T0002).

For further details please see installation instructions.

**Technical data:**

| | |
|---|---|
| – Nominal flow rate: | (see flow chart in Oventrop data sheet "Thermostatic radiator valves) |
| – Max. flow of heating water: | (see flow chart in Oventrop data sheet „Thermostatic radiator valves) |
| – Temperature range: | 7-28°C |
| – Position 3: | ≙ about 20°C |
| – Max. differential pressure against which the valve closes: | |
| | 1 bar: "Series A, AV 6, ADV 6, RF, RFV 6, AZ" |
| | 3 bar: "Series F" |
| – Valve body material: | bronze/brass |

– Hysteresis:

| | |
|---|---|
| "Uni XH": | 0.2 K |
| "Uni LH", "Uni LD", "Uni L" : | 0.2 K |
| "Uni SH": | 0.2 K |
| "vindo TH": | 0.2 K |
| "Uni CH": | 0.2 K |
| "Uni DH": | 0.8 K |

– Heating water temperature effect:

| | |
|---|---|
| "Uni XH": | 0.37/30 K |
| "Uni LH", "Uni LD" "Uni L": | 0.65 K / 30 K |
| "Uni SH": | 0.9 K / 30 K |
| "vindo TH": | 0.9 K / 30 K |
| "Uni CH": | 0.65 K / 30 K |
| "Uni DH": | 1.0 K/30 K |
| "Uni XH", "Uni LH" "Uni L", "Uni DH" with remote sensor: | 0.2 K/30 K |

| | |
|---|---|
| - Differential pressure effect: | 0.1 K – 0.7 K/0.5 bar |

– Closing time:

| | |
|---|---|
| "Uni XH": | 22 minutes |
| "Uni LH", "Uni LD", "Uni L": | 23 minutes |
| "Uni SH": | 16 minutes |
| "vindo TH": | 18 minutes |
| "Uni CH": | 23 minutes |
| "Uni DH": | 20 minutes |

| | |
|---|---|
| - Temperature resistance: | 0°C – 50°C |
| - Max. heating water temperature: | 120°C (90°C for thermostat "Uni XHT") |

Subject to technical modification without notice.

Product group 1
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