

RADIATOR VALVES / RADIATOR VALVES WITH PRESETTING



THERMOSTATIC RADIATOR VALVES – ONE- AND TWO-PIPE

Available in one- or two-pipe variants, the RADIETT-S/U valve delivers optimum balancing and room temperature control functionality.



PRESETTING

Ensures accurate balancing with a simple allen key operation.



TEFLON-COATED SPINDLE

Eliminates sticking, making for trouble-free operation and simpler maintenance.



SHUT-OFF FUNCTION

For easy maintenance.

TECHNICAL DESCRIPTION

Application:

Heating systems

Functions:

Regulating
Presetting
Shut-off
Convertible for one- or two-pipe application

Pressure class:

PN 10

Max differential pressure:

100 kPa = 1 bar

The maximum recommended pressure drop in order to avoid noise:

3 mV_p = 30 kPa = 0.3 bar (for all valves and sizes)

Temperature:

Max working temperature: 120°C

Material:

Valve body: Brass
Valve disc: Brass
Upper part of spindle is Teflon-coated.

Surface treatment:

Nickel-plated

Marking:

TA, RADIETT or R-ETT and flow direction arrows.

Connection to thermostatic head:

M30x1,5

RENOVETT FOR RENOVATION

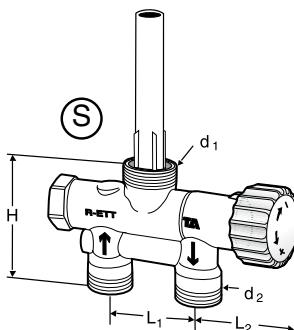
See separate catalogue leaflet RENOVENTT.



Bottom entry

TA RADIETT-U/S74

Male FPL-thread



1-pipe

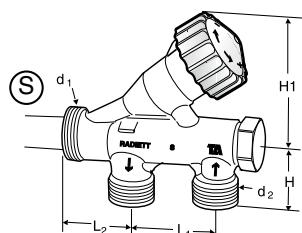
| TA No | d1 | d2 | L1 | L2 | H |
|------------|---------|---------|----|----|----|
| 50 670-005 | M26x1,5 | M22x1,5 | 40 | 40 | 60 |



Side entry

TA RADIETT-S

Male FPL-thread



1-pipe

| TA No | d1 | d2 | L1 | L2 | H | H1 |
|------------|---------|---------|----|----|----|----|
| 50 680-005 | M28x1,5 | M22x1,5 | 40 | 31 | 27 | 58 |

2-pipe

| TA No | d1 | d2 | L1 | L2 | H | H1 |
|------------|---------|---------|----|----|----|----|
| 50 680-205 | M28x1,5 | M22x1,5 | 40 | 31 | 27 | 58 |

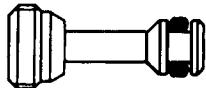
S = Spheric

we know how

ACCESSORIES

Plug, two-pipe

For bottom entry valves



Yellow

TA No

50 670-008

Other accessories, see catalogue leaflet Radiator valve accessories.

ONE-PIPE OR TWO-PIPE FUNCTION

Bottom-entry valves

The plug beneath the adjusting head indicates whether the valve is set for one-pipe or two-pipe connection.

One-pipe: The plug is nickel-plated.

Two-pipe: The plug is untreated (yellow).

Side-entry valves

One-pipe: The innerspindle fully open (anti-clockwise until stop).

Two-pipe: The innerspindle fully closed (clockwise until stop).

CHANGEOVER ONE-PIPE / TWO-PIPE

To convert a **side-entry** valve to a two-pipe arrangement, remove the valve cover and use a 2,5 mm Allen key to close the innerspindle fully (=turn clockwise).

Screwing the innerspindle fully anti-clockwise will make the valve operate as a one-pipe valve. This changeover can be carried out with the valve in operation.

Bottomentry one-pipe valves can be changed to two-pipe connection by replacing the one-pipe plug by a TA No 50 670-008 two-pipe plug.

Note: **Bottom-entry** valves cannot be converted while in operation.

PRESETTING, ONE-PIPE SYSTEMS

General

The valve can be preset and can also be used as a radiator shut-off valve.

Adjustable flow to the radiator

In order to control heat emission in each room, the RADIETT series of valves incorporate individually presettable flow distribution to the radiator, capable of providing 0-50 % adjustment. Temporary excess heat is controlled by the thermostat.

The valves can be preset to different Kv values. Preset the valves as follows:

Bottom entry valves

Remove the cover and close the spindle. Then open the spindle through the number of turns needed to give the required preset and replace the cover.

Side entry valves

Remove the cover and close the outer spindle (allen key 4 mm). Then open the spindle through the number of turns needed to give the required preset and replace the cover.

Adjustment tool:

RADIETT-U:

Allen key 4 mm.

RADIETT-S:

Innerspindle: Allen key 2,5 mm.

Outerspindle: Allen key 4 mm.

PRESETTING, TWO-PIPE SYSTEMS

General

The valve can be preset and can also be used as a radiator shut-off valve.

The valves can be preset to different Kv values. Preset the valves as follows:

Bottom entry valves

Remove the cover and close the spindle. Then open the spindle through the number of turns needed to give the required preset and replace the cover.

Side entry valves

Remove the cover and close the outer spindle (allen key 4 mm). Then open the spindle through the number of turns needed to give the required preset and replace the cover.

Adjustment tool:

RADIETT-U:

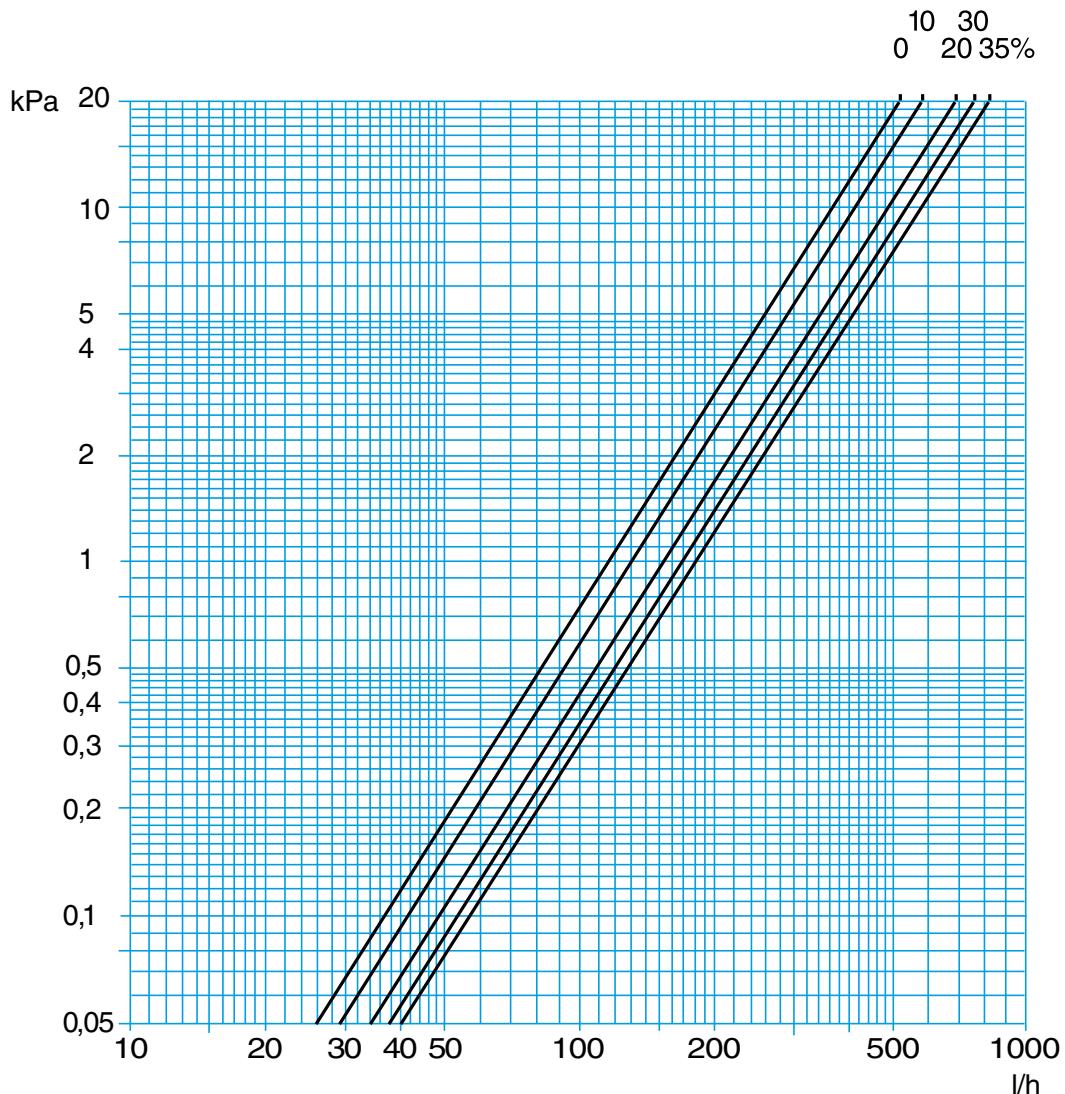
Allen key 4 mm.

RADIETT-S:

Innerspindle: Allen key 2,5 mm.

Outerspindle: Allen key 4 mm.

DIAGRAM RADIETT-U, ONE-PIPE / THERMOSTATIC CONTROLLED



Delivery setting 35% to radiator.

| % flow to radiator | K _v ΔT2K | No of turns |
|--------------------|---------------------|-------------|
| 0 | 1,15 | **) |
| 10 | 1,3 | 1 |
| 20 | 1,55 | 2,5 |
| 30 | 1,7 | 4 |
| 35 | 1,8 | *) |

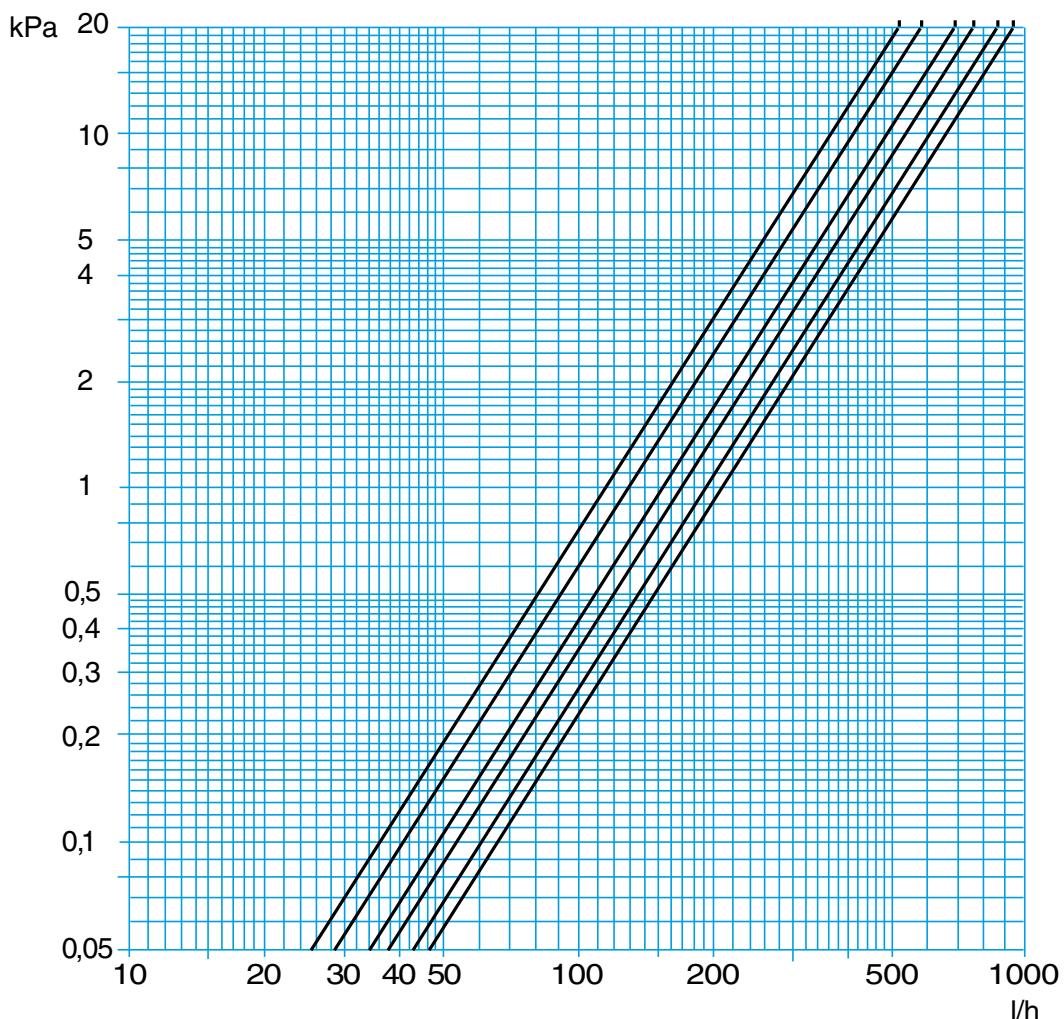
*) Fully open

**) Closed

DIAGRAM RADIETT-U, ONE-PIPE / HAND CONTROLLED

On/off regulation with thermo actuator TSE.

10 30 50%
0 20 40



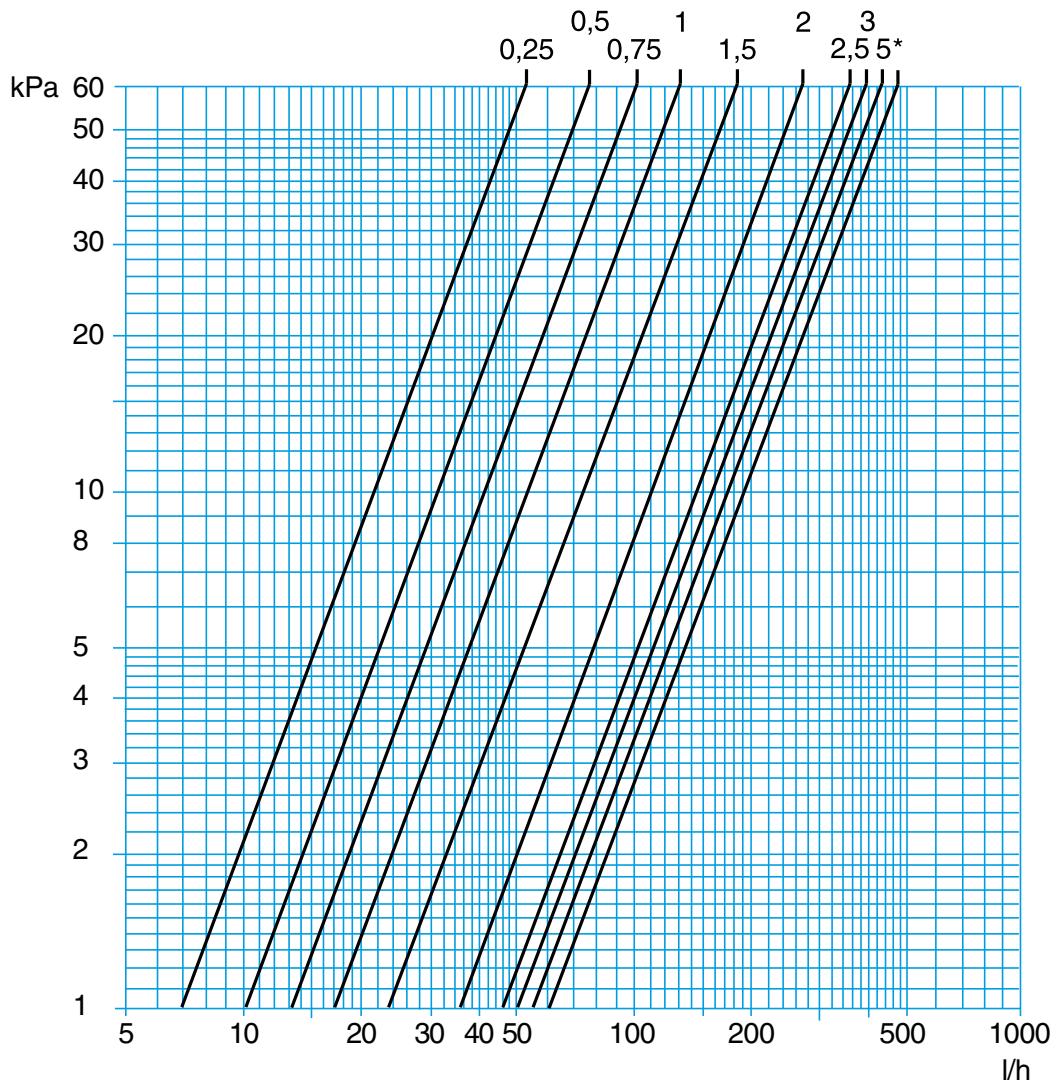
Delivery setting 50% to radiator.

| % flow to radiator | Kv | No of turns |
|--------------------|------|-------------|
| 0 | 1,15 | **) |
| 10 | 1,3 | 1 |
| 20 | 1,55 | 2 |
| 30 | 1,7 | 2,75 |
| 40 | 1,95 | 4 |
| 50 | 2,1 | *) |

*) Fully open

**) Closed

DIAGRAM RADIETT-U, TWO-PIPE / THERMOSTATIC CONTROLLED

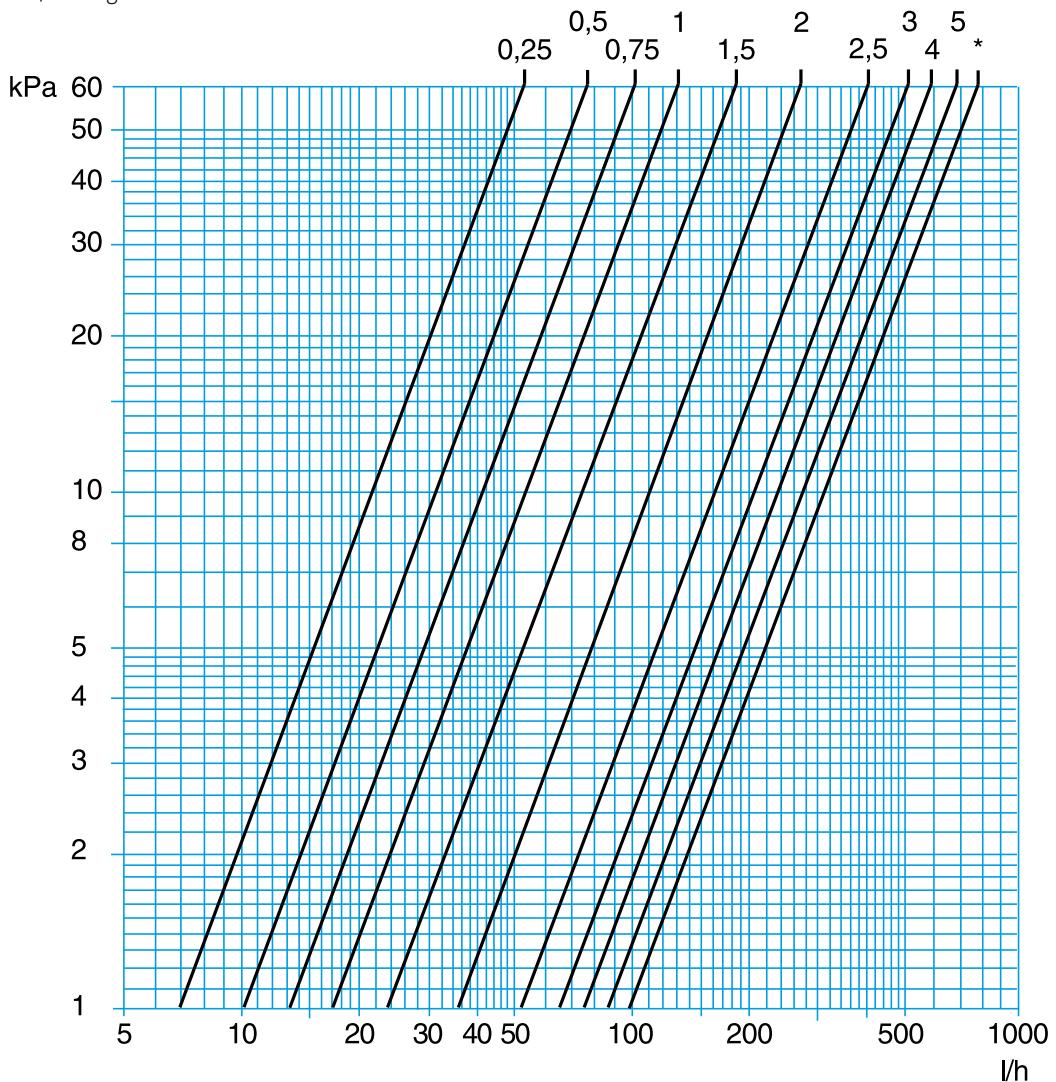


Delivery setting *) = Fully open.

| Number of turns | Kv ΔT 2K |
|-----------------|------------------|
| 0,25 | 0,07 |
| 0,5 | 0,1 |
| 0,75 | 0,13 |
| 1 | 0,17 |
| 1,5 | 0,23 |
| 2 | 0,35 |
| 2,5 | 0,46 |
| 3 | 0,5 |
| 5 | 0,56 |
| *) | 0,6 |

DIAGRAM RADIETT-U, TWO-PIPE / HAND CONTROLLED

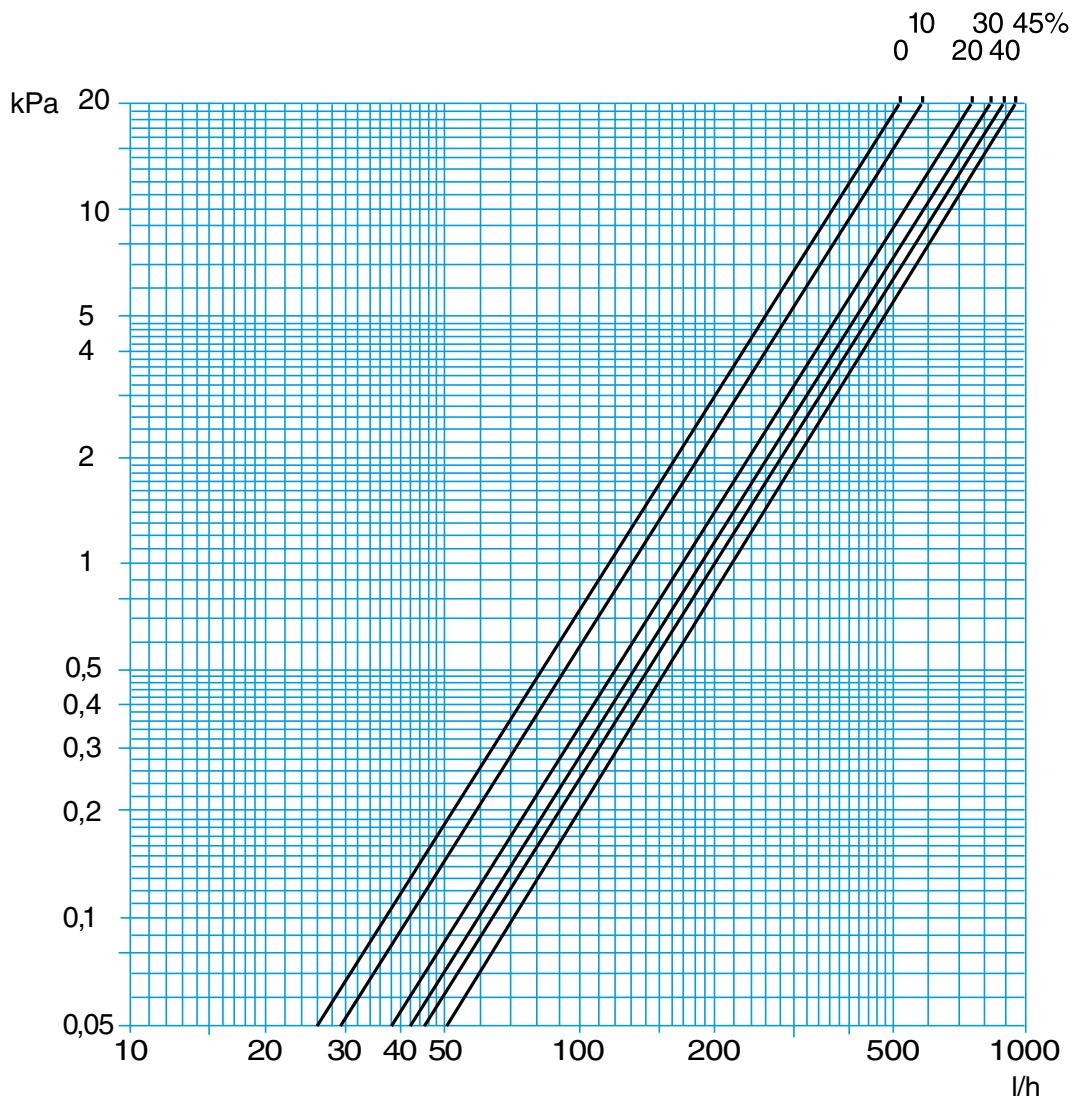
On/off regulation with thermo actuator TSE.



Delivery setting *) = Fully open.

| Number of turns | K_v |
|-----------------|-------|
| 0,25 | 0,07 |
| 0,5 | 0,1 |
| 0,75 | 0,13 |
| 1 | 0,17 |
| 1,5 | 0,23 |
| 2 | 0,35 |
| 2,5 | 0,52 |
| 3 | 0,65 |
| 4 | 0,75 |
| 5 | 0,9 |
| *) | 1 |

DIAGRAM RADIETT-S, ONE-PIPE / THERMOSTATIC CONTROLLED



Delivery setting 45% to radiator.

| % flow to radiator | Kv Δ T2K | No of turns |
|--------------------|-----------------|-------------|
| 0 | 1,15 | **) |
| 10 | 1,3 | 1 |
| 20 | 1,7 | 2 |
| 30 | 1,85 | 3 |
| 40 | 2,0 | 4 |
| 45 | 2,1 | *) |

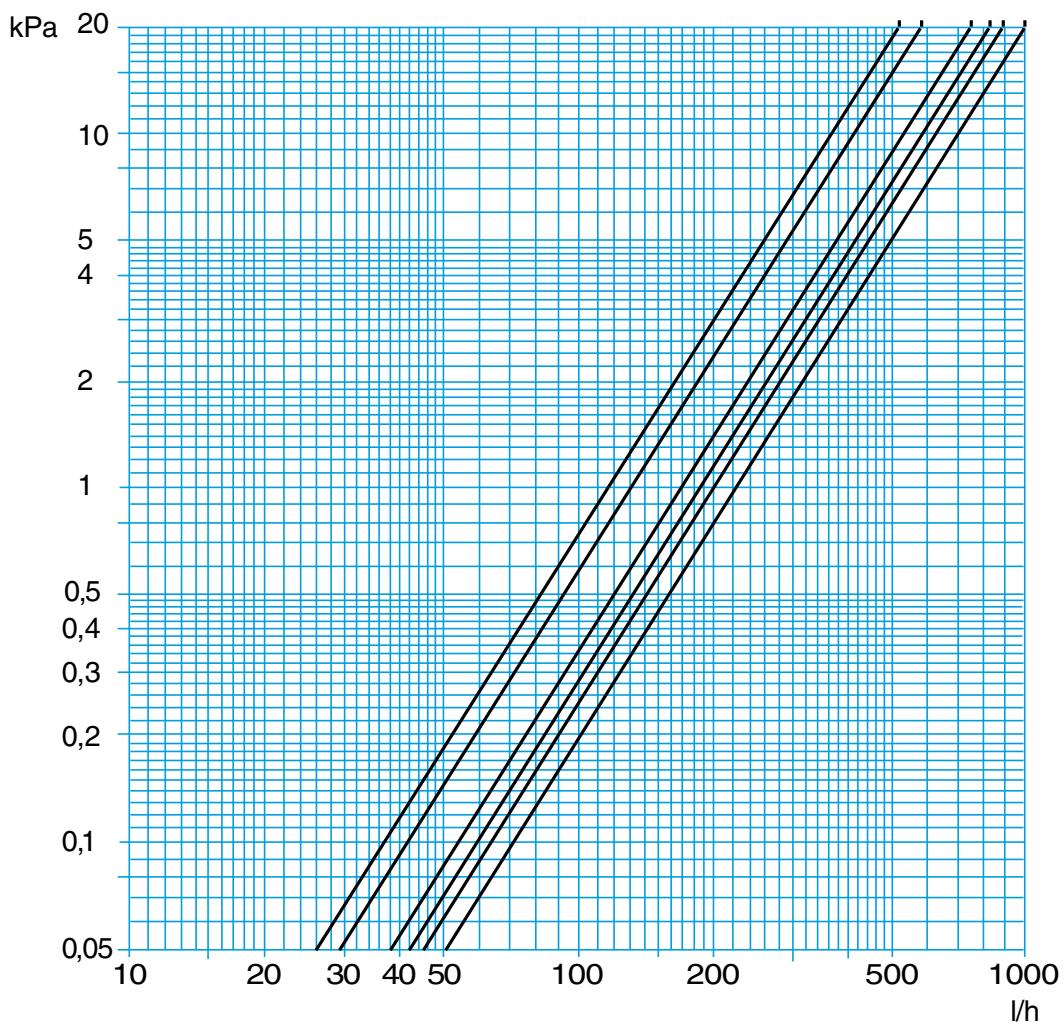
*) Fully open

**) Closed

DIAGRAM RADIETT-S, ONE-PIPE / HAND CONTROLLED

On/off regulation with thermo actuator TSE.

10 30 50%
0 20 40



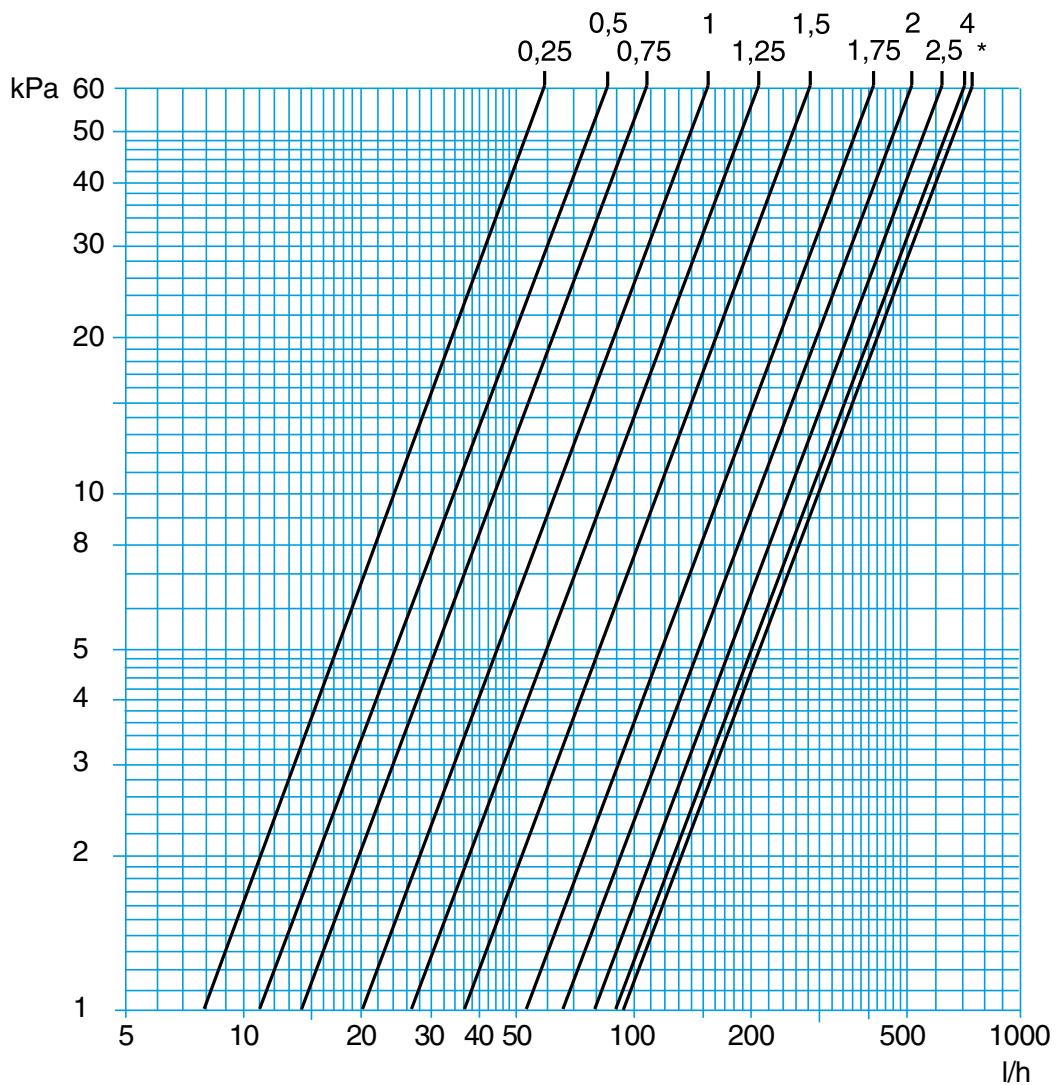
Delivery setting 50% to radiator.

| % flow to radiator | Kv | No of turns |
|--------------------|------|-------------|
| 0 | 1,15 | **) |
| 10 | 1,3 | 1 |
| 20 | 1,7 | 1,7 |
| 30 | 1,85 | 2,3 |
| 40 | 2 | 3 |
| 50 | 2,3 | *) |

*) Fully open

**) Closed

DIAGRAM RADIETT-S, TWO-PIPE / THERMOSTATIC CONTROLLED

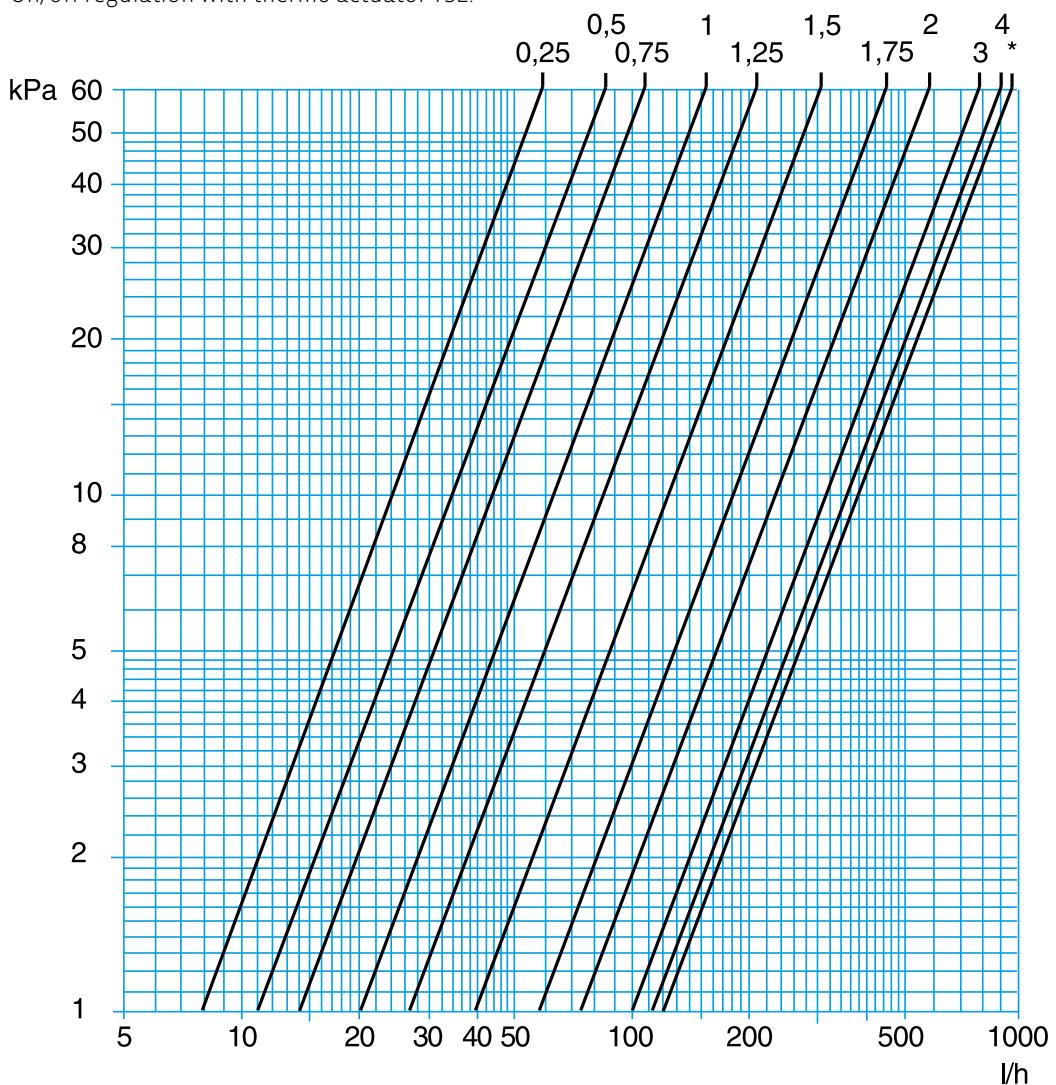


Delivery setting *) = Fully open.

| Number of turns | $Kv\Delta T_{2K}$ |
|-----------------|-------------------|
| 0,25 | 0,08 |
| 0,5 | 0,11 |
| 0,75 | 0,14 |
| 1 | 0,2 |
| 1,25 | 0,27 |
| 1,5 | 0,36 |
| 1,75 | 0,53 |
| 2 | 0,66 |
| 2,5 | 0,8 |
| 4 | 0,9 |
| *) | 0,95 |

DIAGRAM RADIETT-S, TWO-PIPE / HAND CONTROLLED

On/off regulation with thermo actuator TSE.



Delivery setting *) = Fully open.

| Number of turns | Kv |
|-----------------|------|
| 0,25 | 0,08 |
| 0,5 | 0,11 |
| 0,75 | 0,14 |
| 1 | 0,2 |
| 1,25 | 0,27 |
| 1,5 | 0,39 |
| 1,75 | 0,57 |
| 2 | 0,75 |
| 3 | 1 |
| 4 | 1,15 |
| *) | 1,25 |

Tour & Andersson retains the right to make changes to its products and specifications without prior notice.

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