

RADIETT, RENOVETT

Thermostatic radiator valve – One- and two-pipe



HEIMEIER >

Pressurisation & Water Quality > Balancing & Control > Thermostatic Control

ENGINEERING ADVANTAGE

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

> **Presetting**

Ensures accurate balancing with a simple allen key operation.

> **PTFE coated spindle**

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

> **Shut-off function**

For easy maintenance.



> Technical description

Application:

Heating systems.

RADIETT: For new installations

RENOVETT: For renovation

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 mVp = 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 PTFE coated.

Surface treatment:

Nickel-plated

Marking:

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

Connection to thermostatic head:

M30x1,5

> 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.

Bottom-entry one-pipe valves can be changed to two-pipe connection by replacing the one-pipe plug by a Article 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:

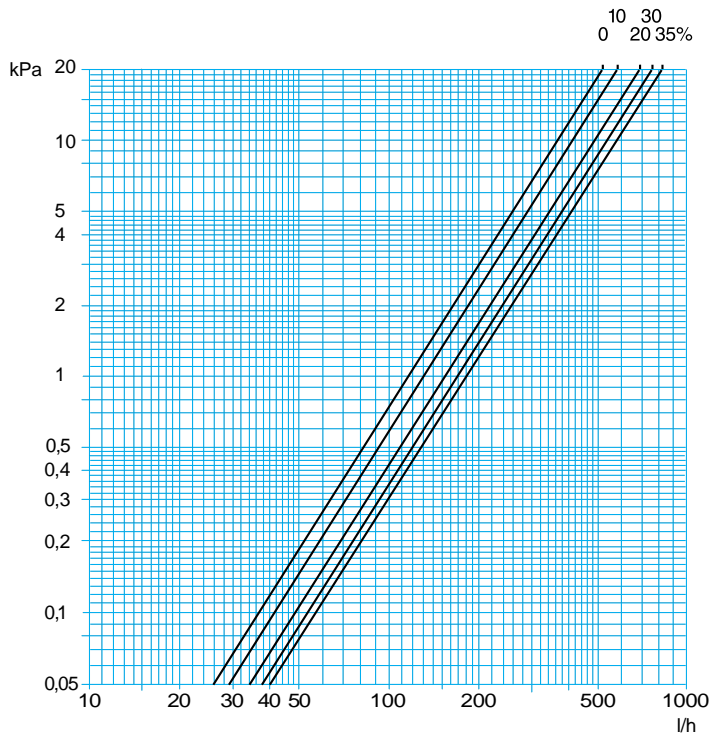
Allen key 4 mm.

RADIETT-S:

Innerspindle: Allen key 2,5 mm.

Outerspindle: Allen key 4 mm.

Diagram RADIETT-U/RENOVETT-U, one-pipe / Thermostatic controlled



Delivery setting 35% to radiator.

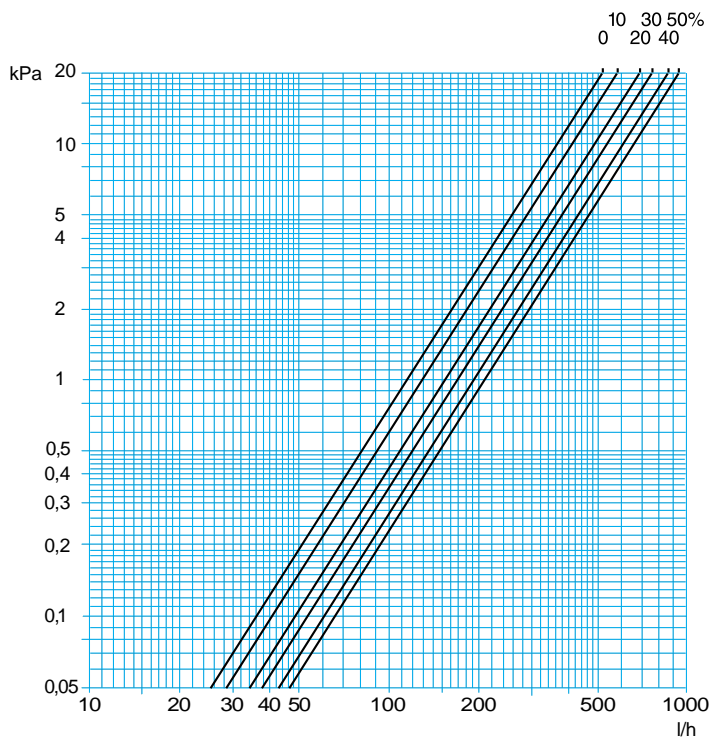
% flow to radiator	Kv ΔT^2K	No of turns
0	1,15	**)
10	1,3	1
20	1,55	2,5
30	1,7	4
35	1,8	*)

*) Fully open

***) Closed

Diagram RADIETT-U/RENOVETT-U, one-pipe / Hand controlled

On/off regulation with thermo actuator EMO T.



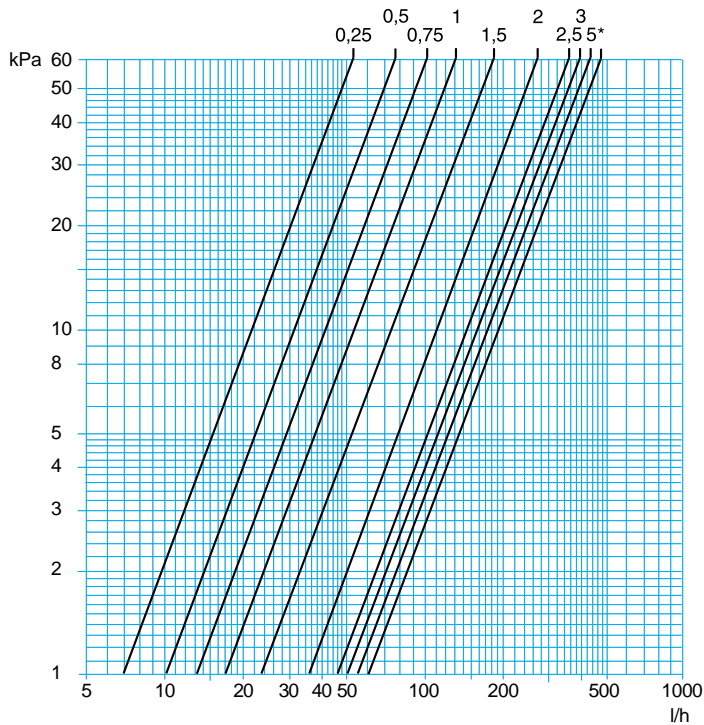
Delivery setting 50% to radiator.

% 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/RENOVETT-U, two-pipe / Thermostatic controlled

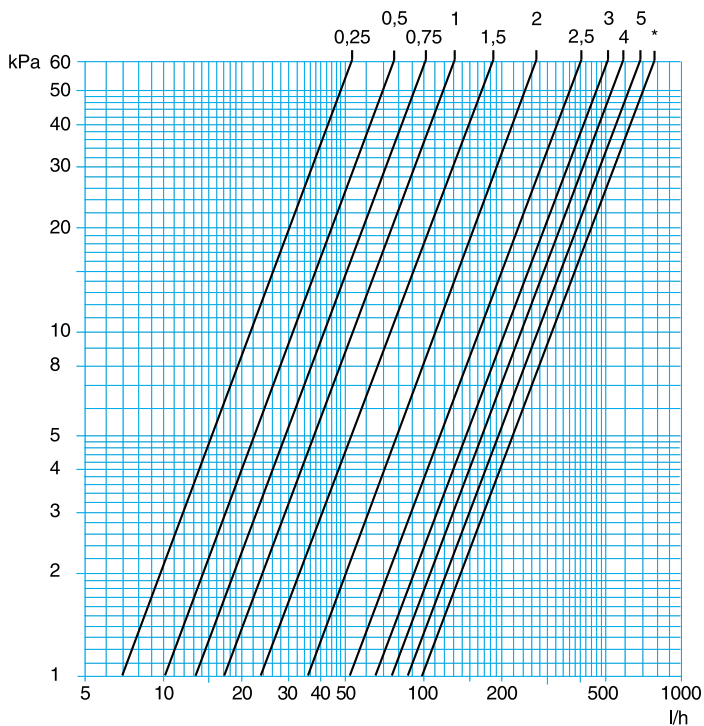


Delivery setting *) = Fully open.

Number of turns	Kv $\Delta T2K$
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/RENOVETT-U, two-pipe / Hand controlled

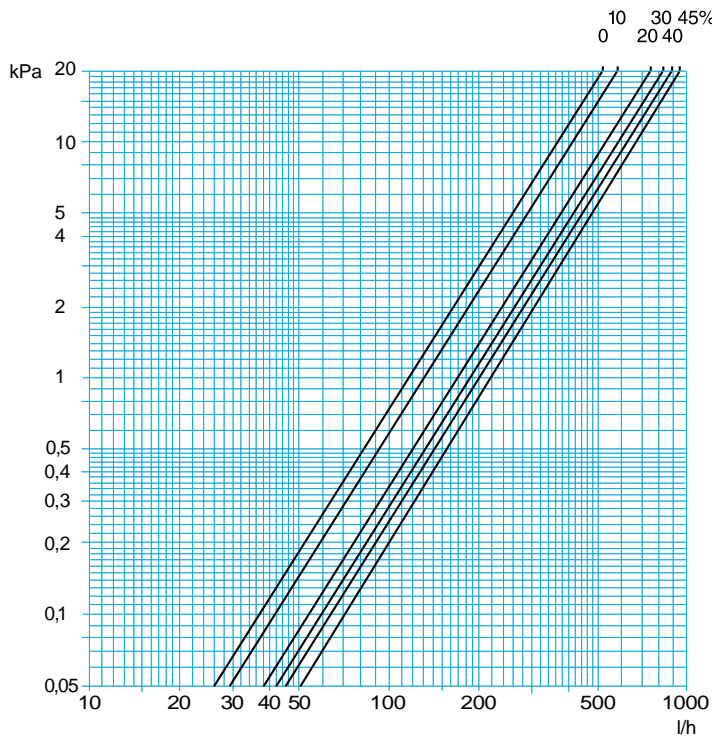
On/off regulation with thermo actuator EMO T.



Delivery setting *) = Fully open.

Number of turns	Kv
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/RENOVETT-S, one-pipe / Thermostatic controlled



Delivery setting 45% to radiator.

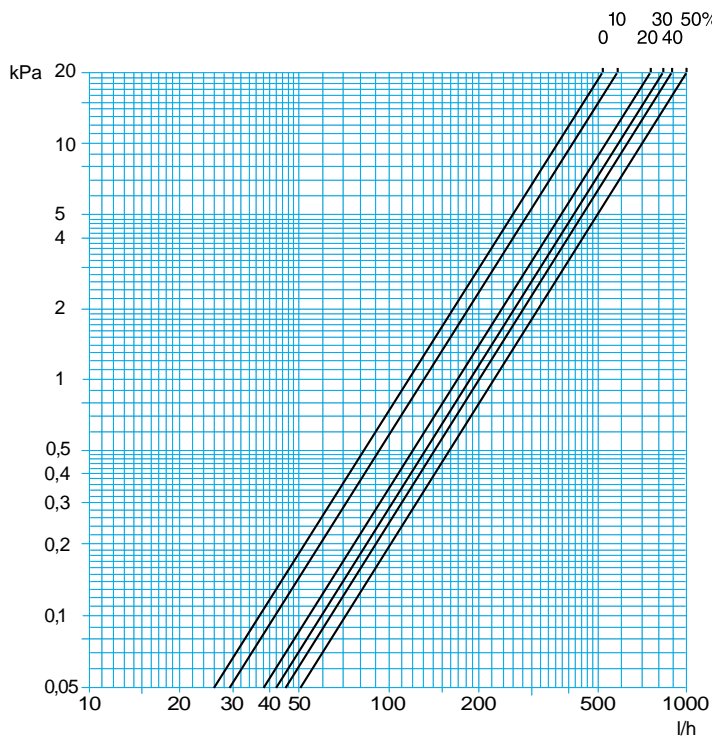
% flow to radiator	Kv ΔT_{2K}	No of turns
0	1,15	**)
10	1,3	1
20	1,7	2
30	1,85	3
40	2,0	4
45	2,1	*)

*) Fully open

**) Closed

Diagram RADIETT-S/RENOVETT-S, one-pipe / Hand controlled

On/off regulation with thermo actuator EMO T.



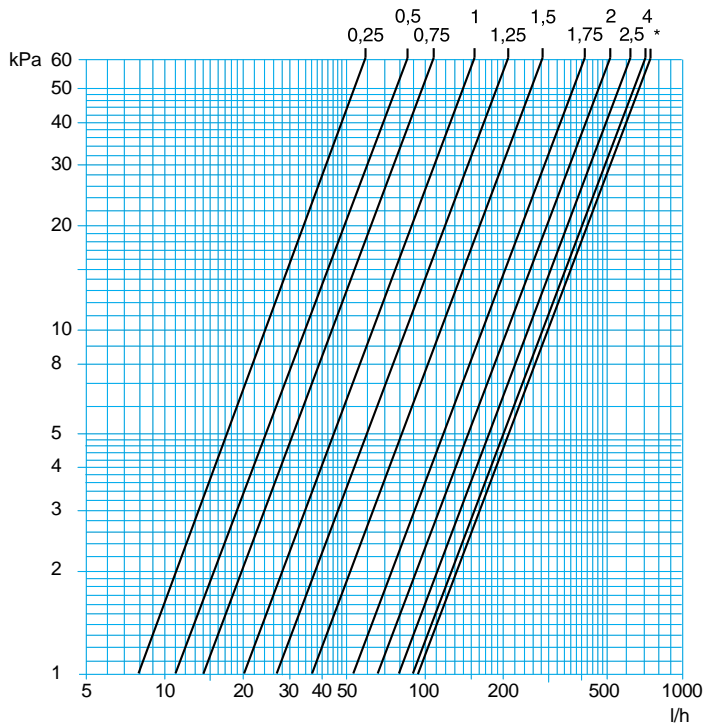
Delivery setting 50% to radiator.

% 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/RENOVETT-S, two-pipe / Thermostatic controlled

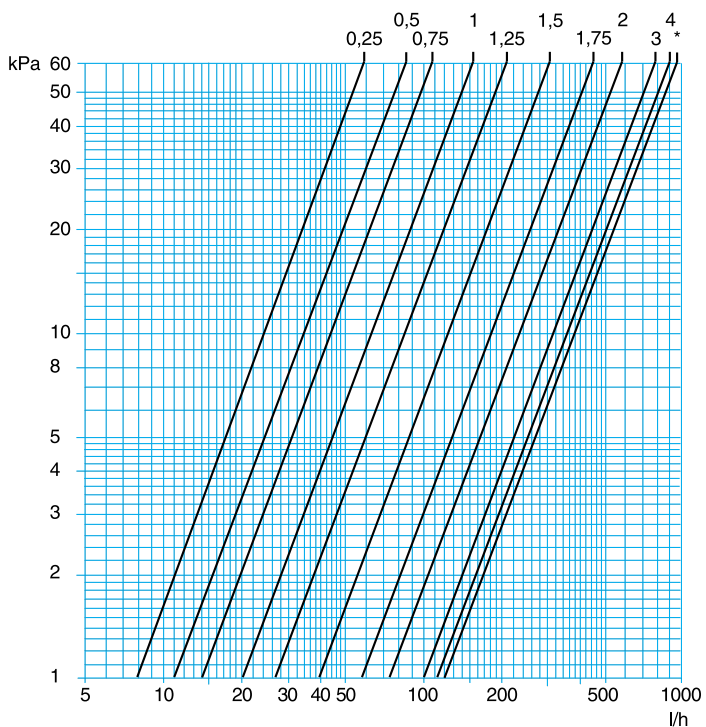


Delivery setting *) = Fully open.

Number of turns	Kv ΔT_{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/RENOVETT-S, two-pipe / Hand controlled

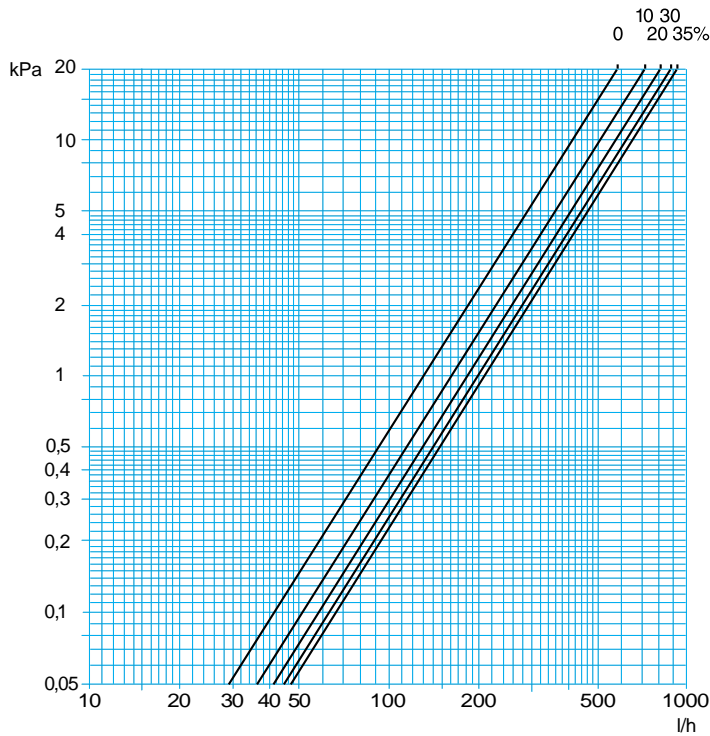
On/off regulation with thermo actuator EMO T.



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

Diagram RENOVETT-RVES, one-pipe / Thermostatic controlled



Delivery setting 35% to radiator.

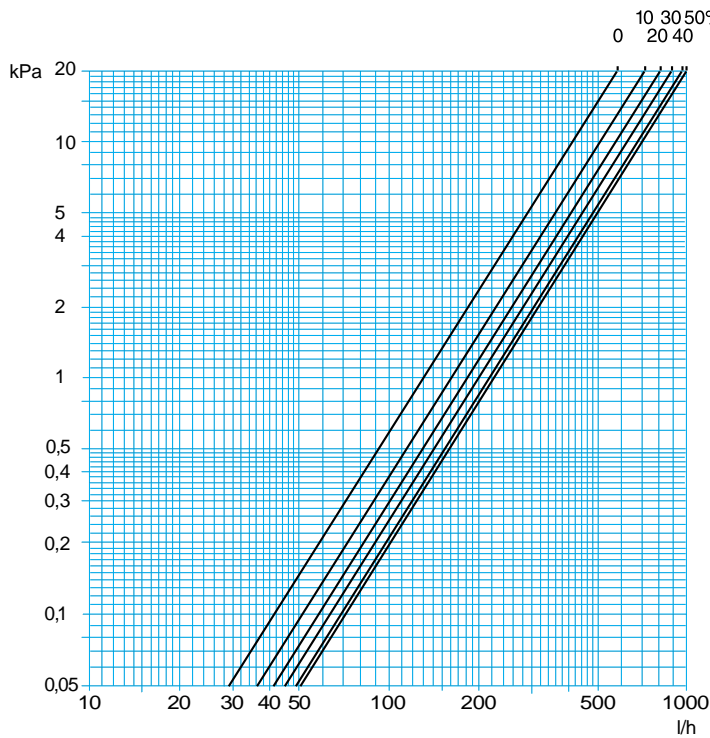
% flow to radiator	Kv ΔT^2K	Number of turns
0	1,3	**)
10	1,6	1
20	1,8	3
30	2	4
35	2,1	*)

*) Fully open

**) Closed

Diagram RENOVETT-RVES, one-pipe / Hand controlled

On/off regulation with thermo actuator EMO T.



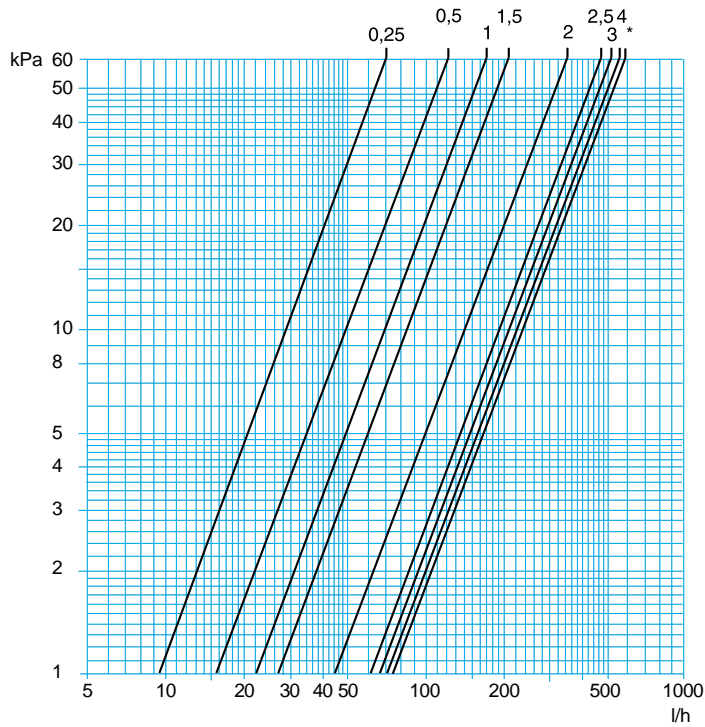
Delivery setting 50% to radiator.

% flow to radiator	Kv	Number of turns
0	1,3	**)
10	1,6	1
20	1,8	2
30	2	2,7
40	2,2	3,5
50	2,3	*)

*) Fully open

**) Closed

Diagram RENOVETT-RVES, two-pipe / Thermostatic controlled

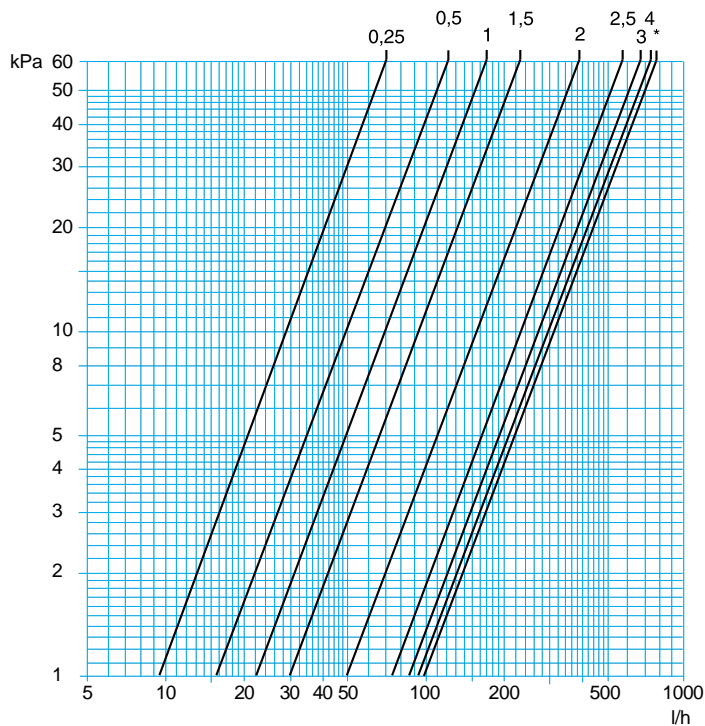


Delivery setting *) = Fully open.

Number of turns	KvΔT2K
0,25	0,09
0,5	0,16
1	0,22
1,5	0,27
2	0,45
2,5	0,6
3	0,67
4	0,72
*)	0,75

Diagram RENOVETT-RVES, two-pipe / Hand controlled

On/off regulation with thermo actuator EMO T.



Delivery setting *) = Fully open.

Number of turns	Kv
0,25	0,09
0,5	0,16
1	0,22
1,5	0,3
2	0,5
2,5	0,75
3	0,88
4	0,95
*)	1

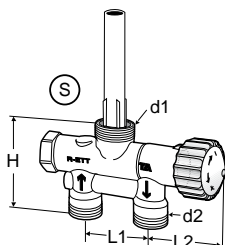
RADIETT

Bottom entry

TA RADIETT-U/S74

Male FPL-thread

1-pipe



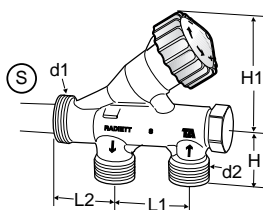
d1	d2	L1	L2	H	EAN	Article No
M26x1,5	M22x1,5	40	40	60	7318792675300	50 670-005

Side entry

TA RADIETT-S

Male FPL-thread

1-pipe



d1	d2	L1	L2	H	H1	EAN	Article No
M28x1,5	M22x1,5	40	31	27	58	7318792680502	50 680-005

2-pipe

d1	d2	L1	L2	H	H1	EAN	Article No
M28x1,5	M22x1,5	40	31	27	58	7318792681004	50 680-205

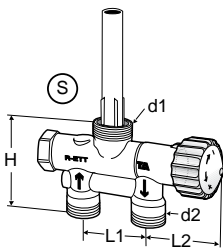
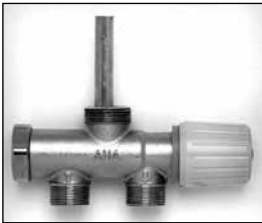
S = Spheric

> RENOVETT for renovation

> TA, AHA, NAF

Bottom entry

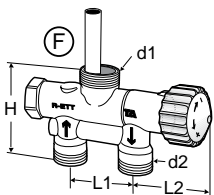
S74/RADIETT-U Male FPL-thread



1-pipe

d1	d2	L1	L2	H	EAN	Article No
M26x1,5	M22x1,5	40	40	60	7318792675300	50 670-005

NAF/AHA S 69 DN 15 Male FPL-thread



1 pipe

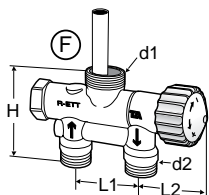
d1	d2	L1	L2	H	EAN	Article No
M26x1,5	M22x1,5	40	40	66	7318792675904	50 671-005

S = Spheric

F = Flat

NAF S 69 DN 10

Male FPL-thread



1-pipe

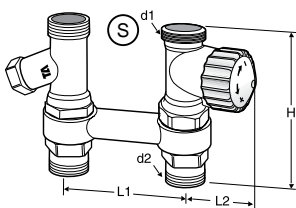
d1	d2	L1	L2	H	EAN	Article No
M26x1,5	M18x1,5	40	40	60	7318792676901	50 673-005

2-pipe

d1	d2	L1	L2	H	EAN	Article No
M26x1,5	M18x1,5	40	40	60	7318792677205	50 673-205

NAF S 65 DN 10

Male FPL-thread



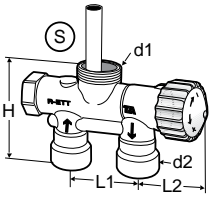
1-pipe

d1	d2	L1	L2	H	EAN	Article No
M22x1,5	M22x1,5	60	40	85	7318792683800	50 686-105

S = Spheric
F = Flat

RVE

G1/2 female thread for KOMBI



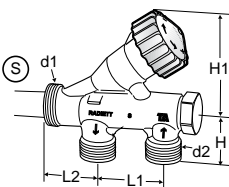
1-pipe

d1	d2	L1	L2	H	EAN	Article No
M26x1,5	G1/2	35	40	65	7318792682704	50 683-005

Side entry

RADIETT-S

Male FPL-thread



1-pipe

d1	d2	L1	L2	H	H1	EAN	Article No
M28x1,5	M22x1,5	40	31	27	58	7318792680502	50 680-005

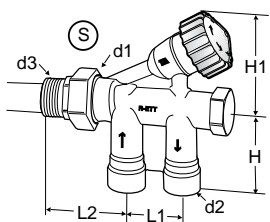
2-pipe

d1	d2	L1	L2	H	H1	EAN	Article No
M28x1,5	M22x1,5	40	31	27	58	7318792681004	50 680-205

S = Spheric

RVES

Incl radiator union
G1/2 female thread for KOMBI



1-pipe

d1	d2	d3	L1	L2	H	H1	EAN	Article No
M28x1,5	G1/2	R1/2	35	55	48	56	7318792683107	50 684-005

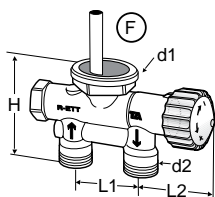
S = Spheric

ARCU

Bottom entry

ACRU K 1000/K 1100

Male FPL-thread



1-pipe

d1	d2	L1	L2	H	EAN	Article No
M34x1,5	M22x1,5	40	40	64	7318792676307	50 672-005

2-pipe

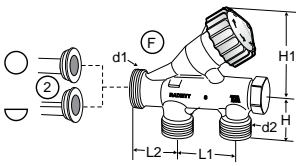
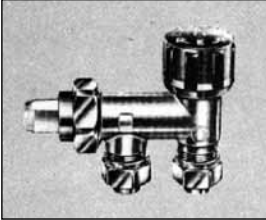
d1	d2	L1	L2	H	EAN	Article No
M34x1,5	M22x1,5	40	40	64	7318792676604	50 672-205

F = Flat

Side entry

ARCU K 100

Male FPL-thread



1-pipe

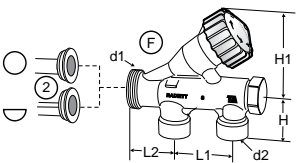
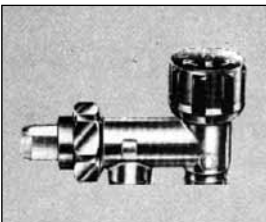
d1	d2	L1	L2	H	H1	EAN	Article No
M34x1,5	M22x1,5	40	27	29	58	7318792681509	50 681-005

2-pipe

d1	d2	L1	L2	H	H1	EAN	Article No
M34x1,5	M22x1,5	40	27	29	58	7318792681806	50 681-205

ARCU K 100

Female thread G3/8



1-pipe

d1	d2	L1	L2	H	H1	EAN	Article No
M34x1,5	G3/8	40	27	29	58	7318792682100	50 682-005

2-pipe

d1	d2	L1	L2	H	H1	EAN	Article No
M34x1,5	G3/8	40	27	29	58	7318792682407	50 682-205

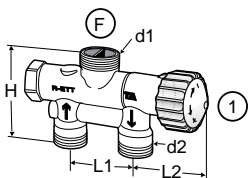
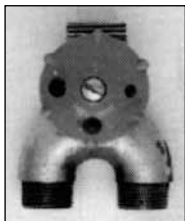
2 = Optional connection points, inlet and outlet (2 different injection pipes incl.).
F = Flat

Fellingsbro

Bottom entry

Fellingsbro TKM cc 35

Male FPL-thread

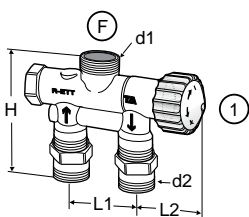
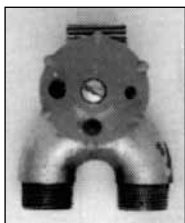


1-pipe

d1	d2	L1	L2	H	EAN	Article No
G3/4	M18x1,5	35	40	72	7318792677908	50 675-005

Fellingsbro TKM cc 40

Male FPL-thread



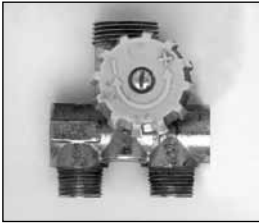
1-pipe

d1	d2	L1	L2	H	EAN	Article No
G3/4	M22x1,5	40	40	78	7318792678608	50 676-005

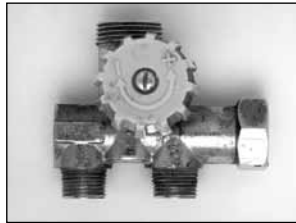
1 = Optional connection points, inlet and outlet (provided by a socket in the radiator).
 F = Flat

Fellingsbro M68 cc 35

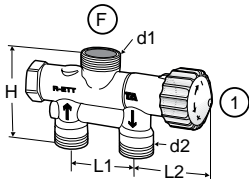
Male FPL-thread



M18x1,5



M21x1,5 / M22x1,5



1-pipe

d1	d2	L1	L2	H	EAN	Article No
G3/4	M18x1,5	35	40	68	7318792679308	50 677-005
G3/4	M21x1,5	35	40	68	7318792680106	50 679-005
G3/4	M22x1,5	35	40	68	7318792679704	50 678-005

1 = Optional connection points, inlet and outlet (provided by a socket in the radiator).

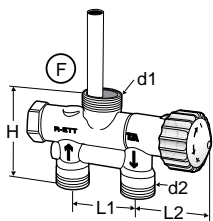
F = Flat

AGA-FRV

Bottom entry

AGA-FRV

Male FPL-thread



1-pipe

d1	d2	L1	L2	H	EAN	Article No
M26x1,5	M22x1,5	40	40	60	7318792677502	50 674-005

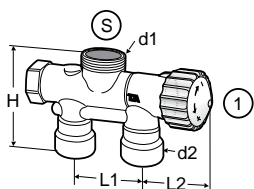
F = Flat

OSBY

Bottom entry

OSBY

Female thread G1/2



1-pipe

d1	d2	L1	L2	H	EAN	Article No
M28x1,5	G1/2	40	40	72	7318792683404	50 685-005

1 = Optional connection points, inlet and outlet (provided by a socket in the radiator).

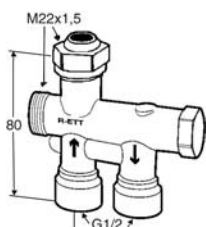
S = Spheric

RVE-S

Bottom entry

RVE-S

1-pipe

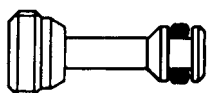


d1	EAN	Article No
M28x1,5	7318792683404	50 601-100

Accessories

Plug, two-pipe

For bottom entry valves



	EAN	Article No
Yellow	7318792675409	50 670-008

Radiator connections, see Accessories and spare parts for thermostatic radiator valves

The products, texts, photographs, graphics and diagrams in this document may be subject to alteration by TA Hydronics without prior notice or reasons being given.

For the most up to date information about our products and specifications, please visit www.tahydraulics.com.

1-20-10 RADIETT, RENOVETT 11.2013