TRV-2, TRV-2S

Thermostatic radiator valves with presetting

HEIMEIER

Pressurisation & Water Quality › Balancing & Control › Thermostatic Control

ENGINEERING ADVANTAGE

Thermostatic radiator valve primary for radiators in heating systems and secondary for small cooling terminals.

› **Stepless presetting**
Accurate balancing.

› **Max Δp 30 kPa**
Better comfort.

› **Double O-rings**
Trouble free operation.

› Technical description

Applications:
Heating and cooling systems

Function:
Control
Stepless presetting
Shut-off

Dimensions:
DN 10-20

Pressure class:
PN 10

Max. differential pressure:
Maximum differential pressure to ensure that the valve does not open against a closed thermostat: 100 kPa.

Temperature:
Max. working temperature: 120°C
Min. working temperature: -10°C

Materials:
Valve body: Straight and angle of AMETAL®. Reversed angle of brass.
O-rings: EPDM rubber
Valve disc: EPDM rubber
Return spring: Stainless steel
Valve insert: Brass, PPS (polyphenylsulphide)
Spindle: Stainless steel

AMETAL® is the dezincification resistant alloy of TA.

Surface treatment:
Valve body and fittings are nickel-plated

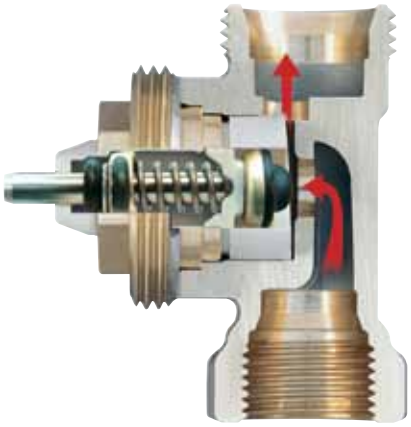
Marking:
TA, country code, flow direction arrow, size and KEYMARK symbol.
TRV-2: White protection cap.
TRV-2S: Red protection cap. The locking nut at the valve insert is marked in red.

Standards:
KEYMARK certified and tested to EN 215.

026

Connection to thermostatic head:
M30x1.5

Operating instruction



The valve is supplied with a protective wheel. The protective wheel can easily be replaced by a handwheel, thermostatic head or an actuator.
If the protective wheel is used to isolate when dismounting the radiator, the outlet must be plugged or capped.

Attention! TRV-2/TRV-2S requires clean system water to work properly without disturbance because of clogging.

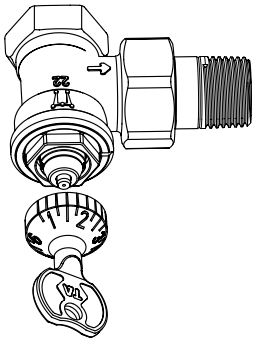
Noise

The following conditions must be fulfilled in order to avoid noise in the heating system:

- Flows correctly balanced
- The water in the system must have been de-aerated
- Circulation pumps which do not give too high differential pressure (alternative use a differential pressure controller, e.g. STAP).

The maximum recommended pressure drop in order to aviod noise: 30 kPa = 0,3 bar.

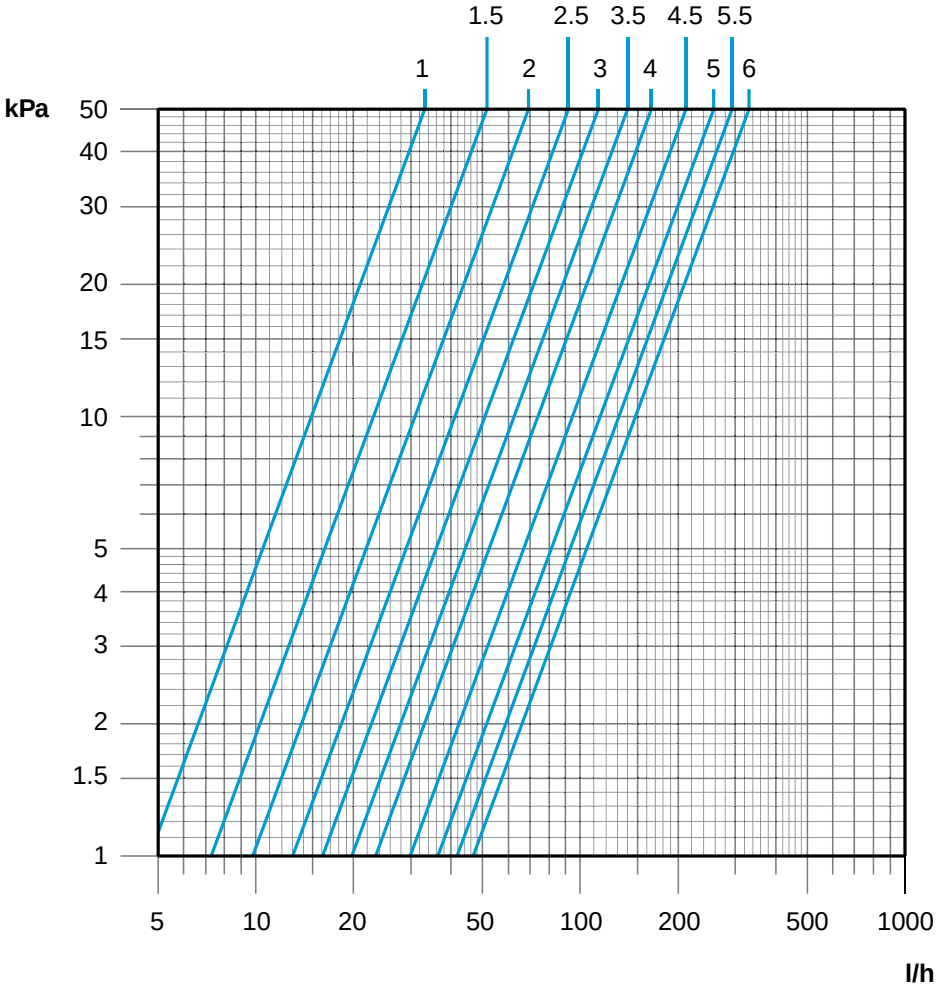
Setting



The valve has stepless pre-setting which can be adjusted by the pre-setting tool.
The valve is delivered with the pre-setting of 6, i.e. fully open valve.
1. Remove the protective wheel.
2. Set the required value using the pre-setting tool (Article No 50 198-004).
3. Refit the protective wheel (alternatively the thermostat head or the handwheel).

Diagram TRV-2 Straight and angle

(KvΔT2K)

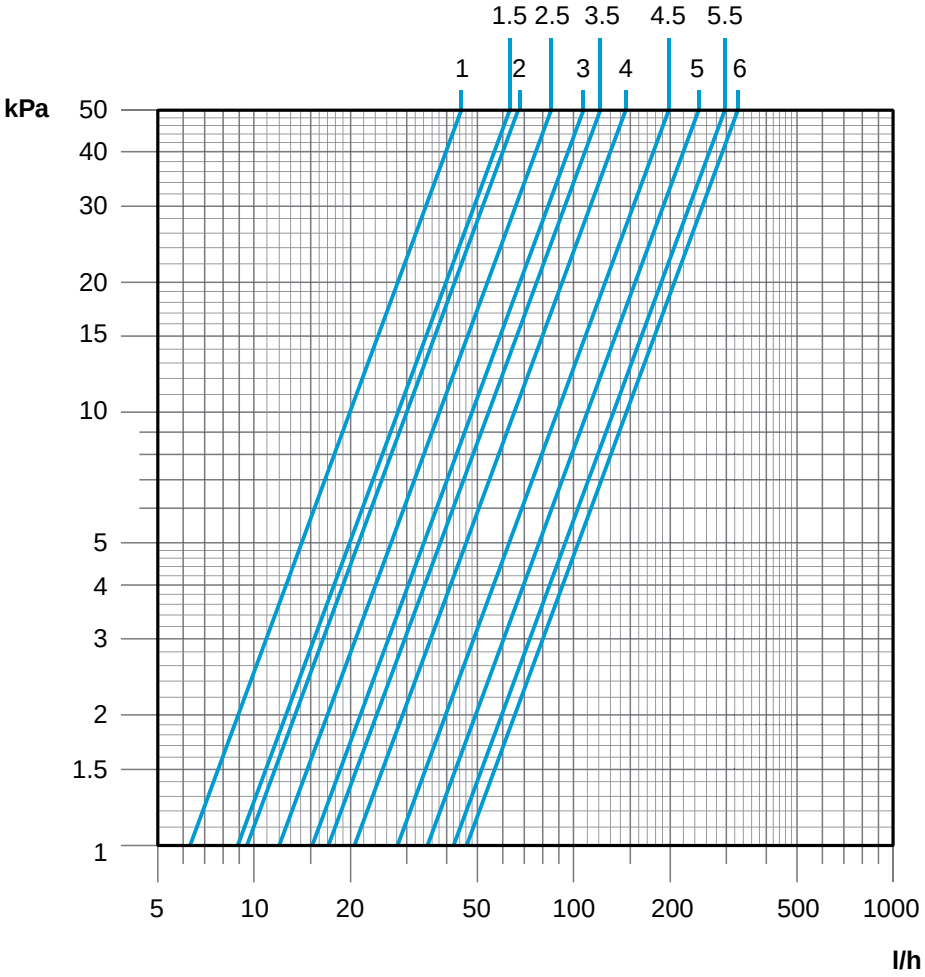


Pre-setting value	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
KvΔT2K*	0,047	0,073	0,098	0,130	0,161	0,198	0,234	0,299	0,364	0,416	0,468
Fully open valve disc**	0,054	0,079	0,104	0,139	0,174	0,211	0,247	0,353	0,459	0,630	0,800***

*) The values are valid when used together with thermostic head TRV 300.
**) The values are valid for on/off regulation with, for example, thermo actuator EMO T.
***) Fully open valve.

Diagram TRV-2 Reversed angle

(KvΔT2K)

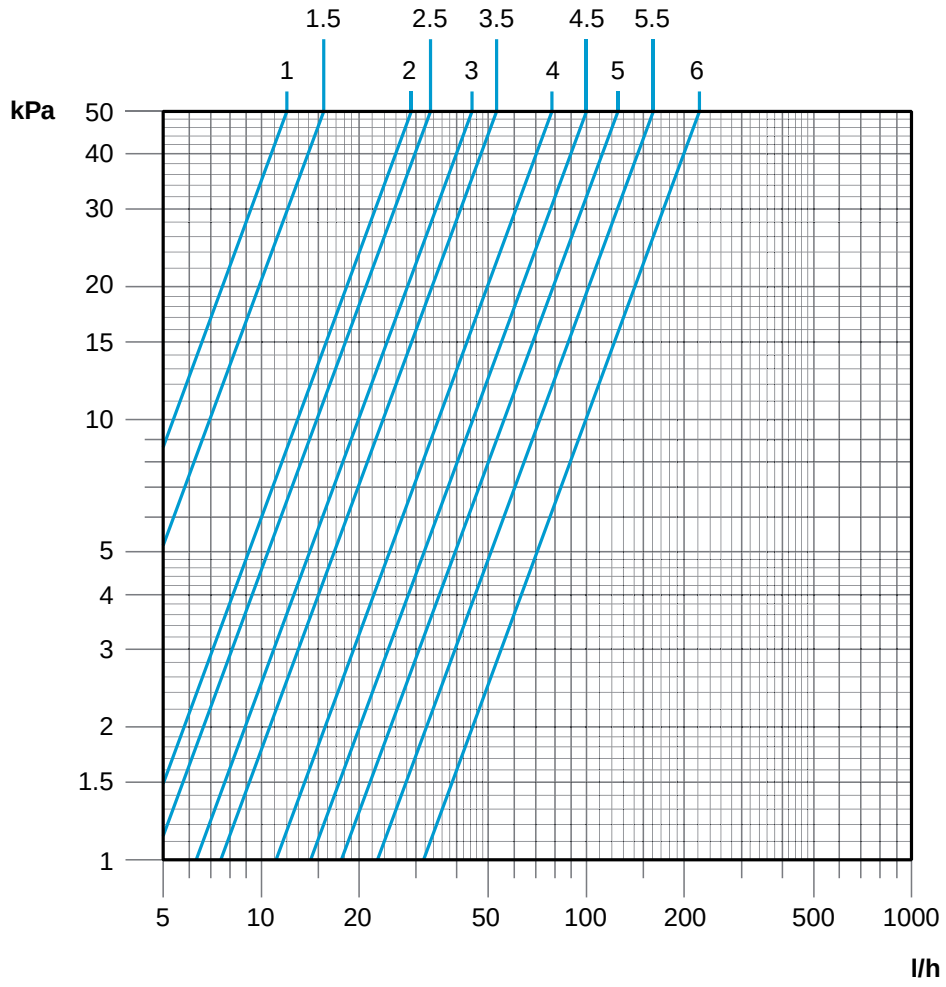


Pre-setting value	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
KvΔT2K*	0,063	0,089	0,095	0,120	0,152	0,171	0,206	0,281	0,348	0,421	0,462
Fully open valve disc**	0,063	0,089	0,095	0,123	0,158	0,180	0,221	0,323	0,430	0,626	0,727***

*) The values are valid when used together with thermostic head TRV 300.
**) The values are valid for on/off regulation with, for example, thermo actuator EMO T.
***) Fully open valve.

Diagram TRV-2S Low flow

(KvΔT2K)

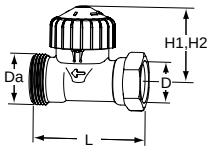


Pre-setting value	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
KvΔT2K*	0,017	0,022	0,041	0,047	0,063	0,075	0,111	0,142	0,177	0,228	0,316
Fully open valve disc**	0,017	0,022	0,041	0,047	0,063	0,078	0,114	0,150	0,187	0,240	0,350***

*) The values are valid when used together with thermostic head TRV 300.
**) The values are valid for on/off regulation with, for example, thermo actuator EMO T.
***) Fully open valve.

Excluding radiator union

Straight

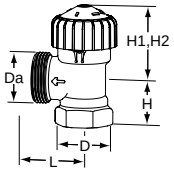


Article No	EAN	DN	D	Da	L	H1	H2*	KvΔT2K
50 861-610	7318793757500	10	G3/8	M22x1,5	50	36	107	0,047-0,468
50 861-615	7318793757609	15	G1/2	M26x1,5	58	38	109	0,047-0,468
50 861-620	7318793757708	20	G3/4	M34x1,5	68	38	109	0,047-0,468

TRV-2S, low flow

Article No	EAN	DN	D	Da	L	H1	H2*	KvΔT2K
50 861-010	7318793788009	10	G3/8	M22x1,5	50	36	107	0,017-0,316
50 861-015	7318793788108	15	G1/2	M26x1,5	58	38	109	0,017-0,316
50 861-020	7318793788207	20	G3/4	M34x1,5	68	38	109	0,017-0,316

Angle

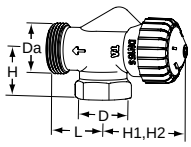


Article No	EAN	DN	D	Da	L	H	H1	H2*	KvΔT2K
50 863-610	7318793758309	10	G3/8	M22x1,5	23	20	36	107	0,047-0,468
50 863-615	7318793758408	15	G1/2	M26x1,5	26	24	38	109	0,047-0,468
50 863-620	7318793758507	20	G3/4	M34x1,5	31	28	36	107	0,047-0,468

TRV-2S, low flow

Article No	EAN	DN	D	Da	L	H	H1	H2*	KvΔT2K
50 863-010	7318793946805	10	G3/8	M22x1,5	23	20	36	107	0,017-0,316
50 863-015	7318793946904	15	G1/2	M26x1,5	26	24	38	109	0,017-0,316
50 863-020	7318793947000	20	G3/4	M34x1,5	31	28	36	107	0,017-0,316

Reversed angle



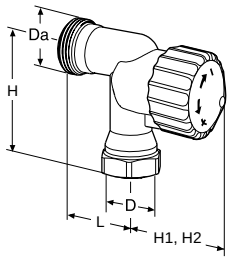
Article No	EAN	DN	D	Da	L	H	H1	H2*	KvΔT2K
50 864-610	7318793759009	10	G3/8	M22x1,5	23	21	47	119	0,063-0,462
50 864-615	7318793759108	15	G1/2	M26x1,5	26	25	47	119	0,063-0,462

TRV-2S, low flow

Article No	EAN	DN	D	Da	L	H	H1	H2*	KvΔT2K
50 864-010	7318793787606	10	G3/8	M22x1,5	23	21	47	119	0,017-0,316
50 864-015	7318793787705	15	G1/2	M26x1,5	26	25	47	119	0,017-0,316

*) Valve with fitted thermostat.
Kv = m^3/h at Δp = 1 bar.
KvΔT2K = The values are valid when used together with thermostatic head TRV 300.

All valves can be connected to smooth pipes by means of the KOMBI compression coupling - See catalogue leaflet KOMBI.



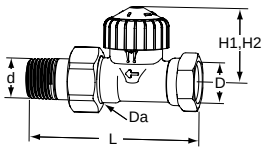
Angle

For replacement of radiator valve in manifold assemblies.

TRV-2S, low flow

Article No	EAN	DN	D	Da	L	H	H1	H2*	KvΔT2K
50 864-210	7318793947703	10	G3/8	M22x1,5	27	46,5	37	108	0,017-0,316

Including radiator union

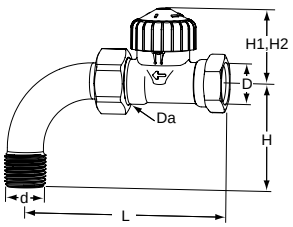


Straight

Article No	EAN	DN	d	D	Da	L	H1	H2*	KvΔT2K
50 861-110	7318793757807	10	R3/8	G3/8	M22x1,5	75	36	107	0,047-0,468
50 861-115	7318793757906	15	R1/2	G1/2	M26x1,5	88	38	109	0,047-0,468
50 861-120	7318793758002	20	R3/4	G3/4	M34x1,5	102	38	109	0,047-0,468

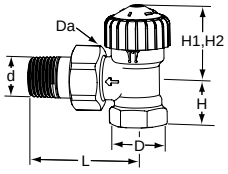
TRV-2S, low flow

Article No	EAN	DN	d	D	Da	L	H1	H2*	KvΔT2K
50 861-510	7318793788306	10	R3/8	G3/8	M22x1,5	75	36	107	0,017-0,316
50 861-515	7318793788405	15	R1/2	G1/2	M26x1,5	88	38	109	0,017-0,316



Straight

Article No	EAN	DN	d	D	Da	L	H	H1	H2*	KvΔT2K
50 862-110	7318793758101	10	R3/8	G3/8	M22x1,5	93	46	36	107	0,047-0,468
50 862-115	7318793758200	15	R1/2	G1/2	M26x1,5	106	52	38	109	0,047-0,468



Angle

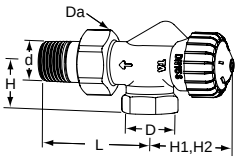
Article No	EAN	DN	d	D	Da	L	H	H1	H2*	KvΔT2K
50 863-110	7318793758606	10	R3/8	G3/8	M22x1,5	48	20	36	107	0,047-0,468
50 863-115	7318793758705	15	R1/2	G1/2	M26x1,5	56	24	38	109	0,047-0,468
50 863-120	7318793758804	20	R3/4	G3/4	M34x1,5	65	28	36	107	0,047-0,468

TRV-2S, low flow

Article No	EAN	DN	d	D	Da	L	H	H1	H2*	KvΔT2K
50 863-510	7318793947109	10	R3/8	G3/8	M22x1,5	48	20	36	107	0,017-0,316
50 863-515	7318793947208	15	R1/2	G1/2	M26x1,5	56	24	38	109	0,017-0,316
50 863-520	7318793947307	20	R3/4	G3/4	M34x1,5	65	28	36	107	0,017-0,316

*) Valve with fitted thermostat.
Kv = m^3/h at Δp = 1 bar.
KvΔT2K = The values are valid when used together with thermostatic head TRV 300.

All valves can be connected to smooth pipes by means of the KOMBI compression coupling - See catalogue leaflet KOMBI.



Reversed angle

Article No	EAN	DN	d	D	Da	L	H	H1	H2*	KvΔT2K
50 864-110	7318793758903	10	R3/8	G3/8	M22x1,5	48	21	47	119	0,063-0,462
50 864-115	7318793759603	15	R1/2	G1/2	M26x1,5	56	25	47	119	0,063-0,462

TRV-2S, low flow

Article No	EAN	DN	d	D	Da	L	H	H1	H2*	KvΔT2K
50 864-510	7318793787804	10	R3/8	G3/8	M22x1,5	48	21	47	119	0,017-0,316
50 864-515	7318793787903	15	R1/2	G1/2	M26x1,5	56	25	47	119	0,017-0,316

*) Valve with fitted thermostat.
Kv = m^3/h at Δp = 1 bar.
KvΔT2K = The values are valid when used together with thermostatic head TRV 300.

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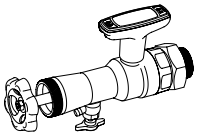
Accessories

Pre-setting tool

Article No	EAN
50 198-004	7318793748102



Servicing tool TRV-2, TRV-2S
When changing of valve insert during operation

Article No	EAN
50 600-005	7318793811509

Spare parts

The valve insert can be exchanged during operation - please contact TA for more information.

1-5-5 TRV-2, TRV-2S 09.2013