

**Thermostatic radiator valve
Preset Kv**



Description

Thermostatic radiator valves (TRV) for temperature regulation and flow balancing (kv-setting). The setting of the Kv value is done by actuating a pattern ring by turning the valve stem, either with a specific tool (583730) or with an usual wrench. The valves has 14 position, in order to be the more accurate to the real need of the installation.

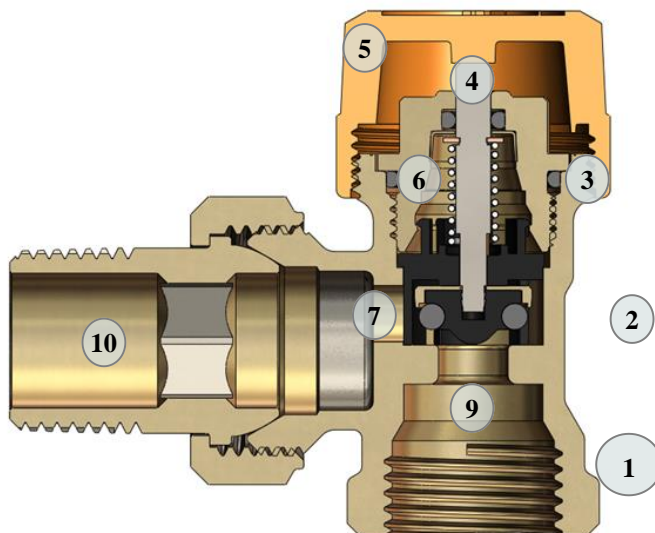
Versions

Functions	Flow regulation With Kv setting
Head connection	M28x1.5 M30x1.5
Pipe connection	Threaded female or male
Radiator connection	Metal / metal: 3/8", 1/2", 3/4", 1" Or With 2 o'rings on the cone and on the radiator side: 3/8" and 1/2"

Benefits

- Bi-directionnal
- No-sticking

Internal construction (for preset kv)



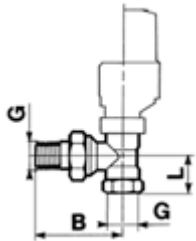
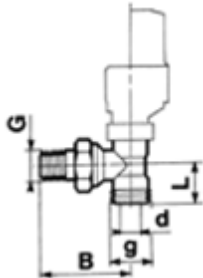
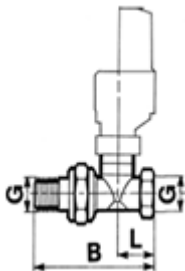
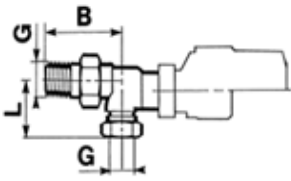
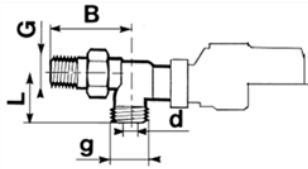
1. Body : Hot stamped brass with nickel plated finish
2. Anti-sticking Valve disc and EPDM o'ring
3. O'rings (insert and stem seals): Ethylene-polypropylene, anti-freeze resistant
4. Single block valve stem (Setting needle):
5. Protective cap : recycled plastic
6. Spring: stainless steel
7. Kv pattern ring
8. Insert : « high resistance » brass
9. Profiled valve seat, suitable for reversed flow direction
10. Union nut : metal / metal or 2 O'ring sealing. Internal hexagonal 13 mm

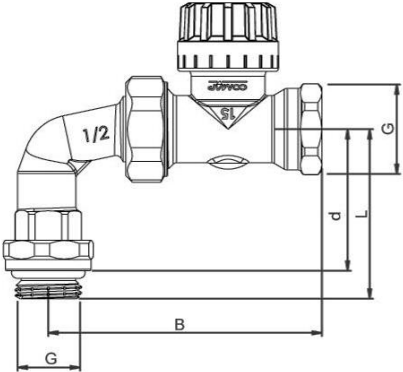
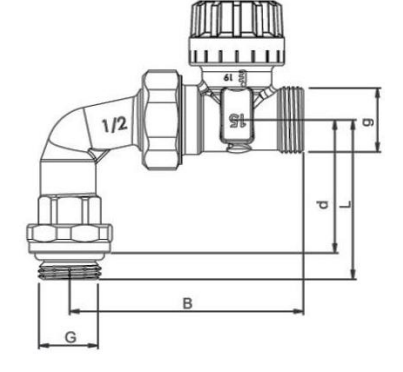
Applications

For standard hot-water heating applications, within the following ratings:

- Maximum pressure of use: 10 bar
- Maximum temperature of use: 110 ° C
- Maximum differential pressure : 0.6 bar
- Maximal stroke : 2 mm




Dimensions










	Shape	Ref	M28/M30	G	g	B	L	Dmax
	Angle	R858623	M28	3/8"		49	20	
		R858624 R858624B*	M28	1/2"		53	23	
		R858626	M28	3/4"		63	26	
		R854423	M30	3/8"		51,5	22,5	
		R854424	M30	1/2"		57,5	26,5	
		R854426	M30	3/4"		66	30	
	Angle	R858724	M28	1/2"	M22 x 1.5	54	21	16
		R854324	M30	1/2"	3/4" E	53	26.5	18
	Straight	R855423	M30	3/8"		84.5	30	
		R855424	M30	1/2"		94	33	
		R855426	M30	3/4"		106	37	
		R859623	M28	3/8"		75	28	
		R859624 R859624B*	M28	1/2"		82	32.5	
		R859626	M28	3/4"		98	33.5	
	Reversed angle	R857624	M28	1/2"		54	38	
		R857424	M30	1/2"		54	38	
		R857724B*	M28	1/2"	M22 x 1.5	53	34	16
		R857324	M30	1/2"	3/4 E	53	39.5	16




	Straight with elbow	R859624C	M28	1/2"		85.5	53	44
		R859724CB	M28	1/2"	M22 x 1.5	77.5	53	44

*2 o'ring

Product line








Photo	Figure	Dim EN 215*	Head connection	Shape	Pipe connection	Radiator connection	Part number
	R858	F	M28x1.5	Angle	Rp 3/8	R 3/8	R858623
					Rp 1/2	R 1/2	R858624
					Rp 3/4	R 3/4	R858626
	R858B				Rp 1/2	R 1/2 2JT	R858624B
	R858E				Male M22	R 1/2	R858724

	R859			Straight	Rp 3/8	R 3/8	R859623
					Rp 1/2	R 1/2	R859624
					Rp 3/4	R 3/4	R859626
	R859B				Rp 1/2	R 1/2 2JT	R859624B
	R859E				Male M22	R 1/2	R859724
	R859C			Straight with elbow	Rp 1/2	R 1/2	R859624C
	R859EC				Male M22	R 1/2 2JT	R859724CB
	R857			Reversed angle	Rp 1/2	R 1/2	R857624
	R857EB				Male M22	R 1/2 2JT	R857724B
	R854	D	M30x1.5	Angle	R 3/8	Rp 3/8	R854423
					R 1/2	Rp 1/2	R854424
					R 3/4	Rp 3/4	R854426
	R854E			Male M22	R 1/2	R854324	
	R855			Straight	Rp 3/8	R 3/8	R855423
					Rp 1/2	R 1/2	R855424
		Rp 3/4	R 3/4		R855426		

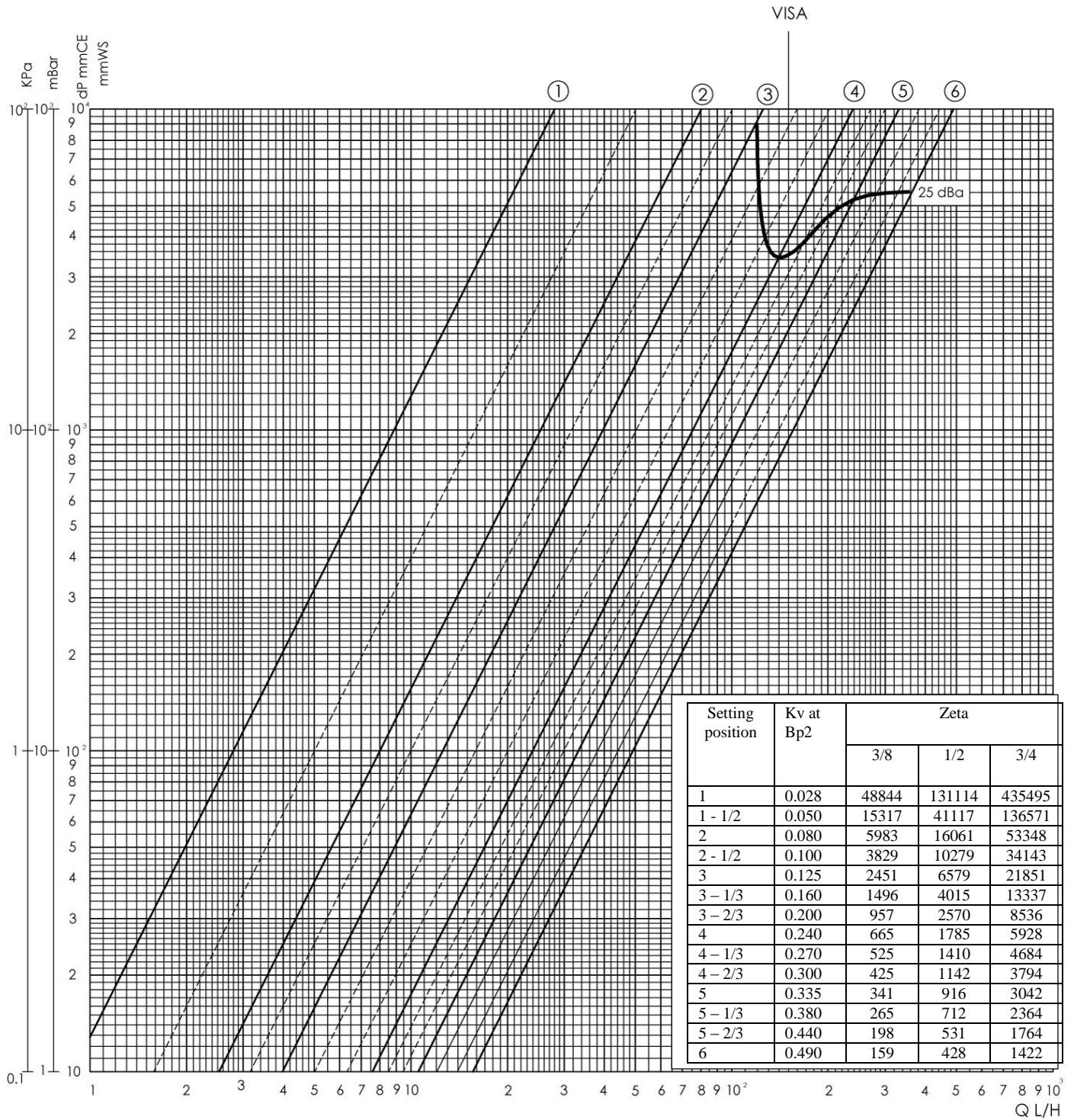
	R855E				Male M22	R 1/2	R855324
	R857			Reversed angle	Rp 1/2	R 1/2	R857424
	R857E				Male M22	R 1/2 2JT	R857324

*The mention (D) or (F) means that the overall dimensions are similar to the size indicated between brackets in the EN215 standard, but the EN215 does not include external threads. For example (D) means that the overall dimensions of the valve are compliant with the EN215 DIN format, except the external thread.

Installation method

Valve / Pipe	M22	EUROCONE	
834	835 S	835	
835 E			
Cu			
PEX - PB			
	835 P	835 P	
			
MultiLayer			
	835	835 PE	
			

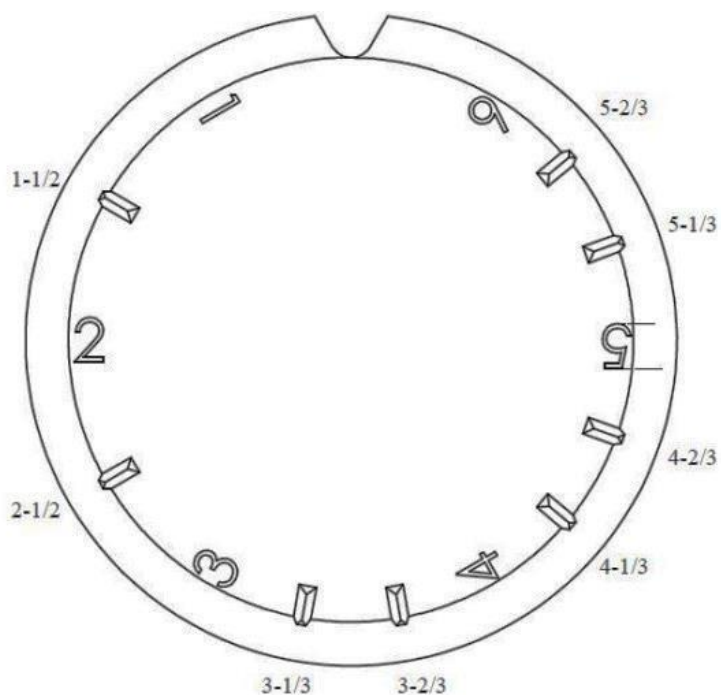
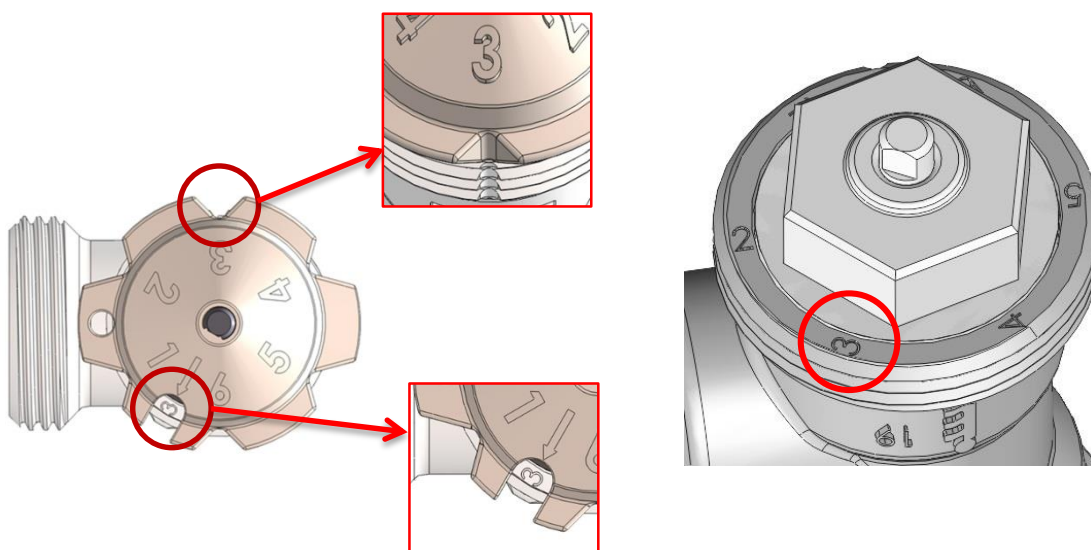
Kv setting curves



Kv setting principle

The presetting of the preset kv-valves should be done using a special tool (R583730). Place the tool onto the valve spindle and turn it to the desired value.

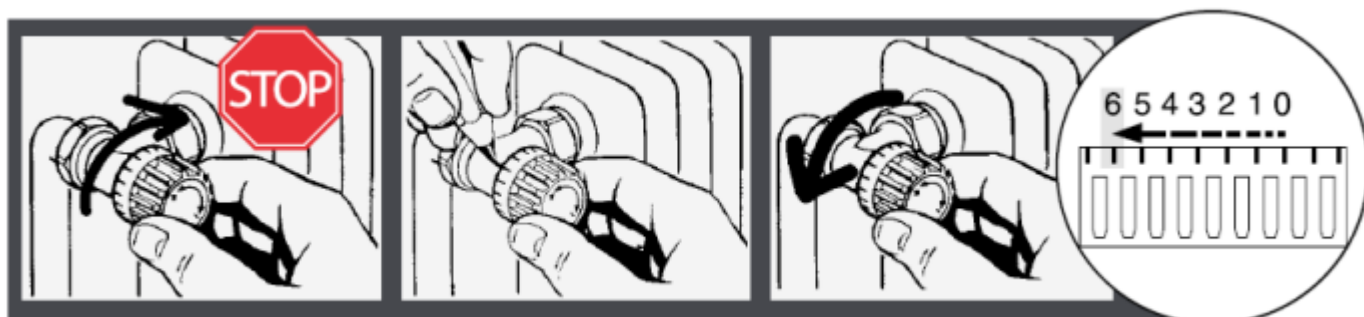
The value is indicated by an opening on the tool. It is also visible when the tool is removed; it is the position in front of the flat part of the spindle.



Setting thanks to 14 positions

Setting position	BP			Accuracy
	1 K	2K	3K	
1	0,028	0,028	0,028	40%
2	0,076	0,080	0,080	20%
3	0,114	0,125	0,127	18%
4	0,181	0,240	0,269	14%
5	0,237	0,335	0,398	12%
6	0,288	0,490	0,625	10%

Nominal level setting



- Close the valve completely and mark it with one position
- Open and count 6 marks. The valve is now open at nominal opening.

Guide to set the kv position



For an installation up to 10 radiator, with the hypothesis $\Delta P=0,1$ bar

Delta P (bar)		Delta T in K		
0,1		10	15	20
Position	Kv (BP2)	Watt		
1	0,028	80	121	161
.1-1/2	0,050	143	215	287
2	0,080	230	344	459
.2-1/2	0,100	359	538	717
3	0,125	448	672	897
.3-1/3	0,160	574	861	1148
.3-2/3	0,200	717	1076	1435
4	0,240	861	1291	1721
.4-1/3	0,270	968	1453	1937
.4-2/3	0,300	1076	1614	2152
5	0,335	1201	1802	2403
.5-1/3	0,380	1363	2044	2726
.5-2/3	0,440	1578	2367	3156
6	0,490	1757	2636	3515

Delta P (bar) = 0,1			
Delta T in K			
10	15	20	
Radiator power in Watt			Position
80	120	150	1
150	200	300	.1-1/2
250	350	450	2
350	550	700	.2-1/2
450	650	900	3
550	850	1150	.3-1/3
700	1050	1400	.3-2/3
850	1250	1700	4
950	1450	1950	.4-1/3
1100	1600	2150	.4-2/3
1200	1800	2400	5
1350	2050	2700	.5-1/3

1550	2350	3150	.5-2/3
1750	2650	3500	6

Accessories

Photo	Designation	Code
	Kv setting tool	R583730
	Cartridge M28 3/8,1/2,3/4" Kv 0.028-0.490	R581400
	Cartridge M30 3/8,1/2,3/4" Kv 0.028-0.490	R581430