TRV4
Thermostatic Radiator Valves

Drayton
by Schneider Electric

TRV4 Range

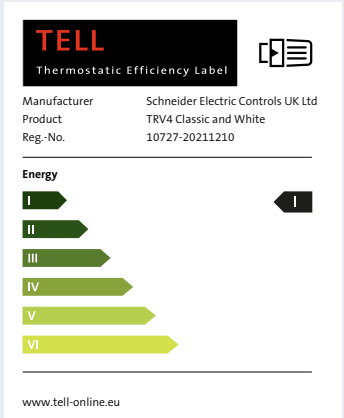
Made for simplicity

- Contemporary slim-line design
- Ultra sensitive liquid-filled sensor
- Easy to clean smooth surfaces
- Half/full click stop settings
- Frost protection position
- Flow rate adjustment
- Four stylish options of Classic, Chrome, White and Anthracite
- Complete with chrome valve
- Non-stick internals
- Pre-setting
- Double gland seal

Britain's best loved TRV4 range now includes a new Anthracite version to match the very popular anthracite radiators. The TRV4 Classic and TRV4 White have achieved the highest Class I rating for energy efficiency under the certification scheme of the European valve manufacturers association (TELL).

The rating is based on how quickly a TRV reacts to changes in room temperature; how effectively it maintains stable room temperature; and how it performs after changes in water temperature and system pressure. Replacing a less efficient TRV with the Drayton Class I rated TRV4 will show immediate and real saving in energy usage.

Over and above energy efficiency, the TRV4 sets the standards for design, performance and quality. The TRV4 range includes matching chrome lockshields and pushfit packs to suit most domestic and commercial heating systems.



TRV4
Classic and
White only

TRV4 White

Product	Part No.
10mm Angle TRV4 white	07 07 152
10mm Straight TRV4 white	07 07 155
15mm Angle TRV4 white	07 07 015
15mm Straight TRV4 white	07 07 115
TRV4 Integral head white	07 07 007
TRV4 15mm Angle + lockshield white	07 07 260

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TRV4 Classic

Product	Part No.
10mm Angle TRV4	07 05 152
10mm Straight TRV4	07 05 155
15mm Angle TRV4	07 05 150
15mm Straight TRV4	07 05 151
1/2" Angle TRV4	07 05 153
1/2" Straight TRV4	07 05 156
3/4" Angle TRV4	07 05 154
3/4" Straight TRV4	07 05 157
TRV4 Integral (standard) head	07 25 006
TRV4 15mm Angle 2m remote	07 05 158
TRV4 2M Remote head only	07 25 007
TRV Remote head only	07 25 008
TRV4 15mm Angle + lockshield	07 05 180
Auto-balancing TRV4 Angle with lockshield	07 05 560
Auto-balancing TRV4 Straight with lockshield	07 05 561

Auto-balancing TRV4

NEW

- Reduces energy use by 8.8%
- Saves installation time as flow rate is set when fitting the valve
- Automatically adjusts radiators according to pressure changes / TRVs opening and closing
- Permanently maintains correct flow to each radiator
- Ensures lower return flow temperatures to aid condensing – improving boiler efficiency
- Eliminates cold spots around the home
- Use new Drayton balancing key to adjust setting

TRV4 Chrome

Product	Part No.
Chrome TRV4 15mm angle boxed	07 05 150C
Chrome TRV4 15mm straight boxed	07 05 151C
TRV4 Integral (Chrome) Head	07 03 013
Chrome 15mm angle with matching lockshield	07 05 174
Chrome 15mm straight with matching lockshield	07 05 175

NEW
TRV4 Anthracite

Product	Part No.
With 15mm angle valve and chrome lockshield	07 05 210
With 15mm straight valve and chrome lockshield	07 05 211

TRV4 Accessories

Lockshields and manual valves

Suitable for domestic radiator and towel rails. The chrome finish matches the TRV4 body.

LST Radiators

For details of the Drayton EB Valve body range, which includes 3⁄8", 1⁄2", 3⁄4" and 1" variants, and side angle bodies for LST radiators, please refer to our datasheet D40 available on request. Our price list contains reference to all models.

Flow noise through valves

It is strongly recommended that the differential pressure across the thermostatic valves should not exceed 0.2 bar to avoid flow related noise. A differential pressure regulating device, e.g. the Drayton DTB Automatic By-Pass Valve should be used. Please refer to our datasheet D30.

System cleansing

To avoid damage to the valves and heating system components, and the formation of scale deposit in the hot water heating system, the system should be flushed and a proprietary inhibitor added. Please refer to our datasheet D34.

Accessories

Product	Part No.
15mm Angle lockshield with white cap	07 05 900
15mm Angle lockshield with drain off tap	07 05 901
15mm Drain off tap	07 05 902
15mm Angle lockshield with integral drain off tap	07 05 903
10mm Push-fit elbow	07 05 904
15mm Push-fit elbow	07 05 905
15mm Straight lockshield with white cap	07 05 906
15mm Angle lockshield with chrome cap	07 05 917
15mm Straight lockshield with chrome cap	07 05 918
10mm Compression elbow	07 05 907
15mm Compression elbow	07 05 908

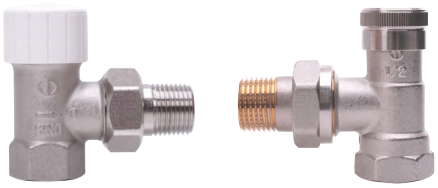
TRV4 Accessories and Adapters

Product	Part No.
16 x 2mm PEX/multi layer pipe adapter (5 Pack)	07 35 016
15mm to 8mm copper adapter (50 pack)	07 35 408
15mm to 10mm copper adapter (50 pack)	07 35 410
2m extension kit to mount head away from radiator	07 55 002
Tamper guard (6 Pack)	07 35 269
White manual wheel head/isolating cap	07 35 123

TRV4 Commercial Packs

Suitable for commercial applications and iron pipe applications.

Product	Part No.
TRV4 commercial radiator pack (TRV4 head with 1/2" angle valve and 1/2" angle lockshield)	07 05 187



Setting the standards

Made for performance

TRV4 has been designed to provide years of trouble-free service:

- Valve internals are specially formulated to ensure they never stick
- Preset internals make system balancing far simpler
- Flow-rate adjustable insert means you can balance the system from the TRV
- REVERSE FLOW capability enables installation on the flow or return with the head either vertical or horizontal
- Double gland seal to protect against water leakage with a top seal that allows removal without draining down the system.

With its easy-to-set range-limiting function and a positive head-to-body fixing that is infinitely adjustable, the TRV4 is easy to fit and simple to use. Its liquid-filled chrome head provide optimum sensitivity meaning maximum energy efficiency.

Since TRV1 was launched in 1964, Drayton has lead the field in TRV design and manufacturing. As a result Drayton has been the TRV brand of choice for installers, specifiers and architects. Today's TRV4 continues to lead the market with its iconic compact design and energy efficient features.

Style

The iconic TRV4 was first launched in 1993 and the range has since been developed to include three stylish options: the original Classic, the contemporary Chrome, White and Anthracite. The stylish range of heads are available with a comprehensive selection of valve body types and sizes, and a complete range of accessories including lockshield and pushfit solutions make the TRV4 ideal for all domestic and commercial applications.

Getting technical

Heads

- Integral heads are available as a separate item. Conversion head available to fit TRV3 valves.
- Remote sensing heads with a 2m stainless steel capillary supplied with a white plastic wall mounting enclosure for its sensing bulb.

	Heads
Maximum Sensor Temperature	50°C
Setting numbers	1 to 5 then "MAX"
* Frost protection	Below 8°C
Temperature setting range	Integral sensor 10ºC to 30ºC Remote sensor 10ºC to 30ºC
Sensitivity	0.22mm/°C
Hysteresis	0.4 K
Response time	20 minutes
Water temperature influence	0.8K
Differential pressure influence	0.15K
Control accuracy	0.6K

Valves

- Non-stick internals
- Presetting function to balance heating system from TRV

	Valves
Maximum test pressure	20 bar
Maximum flow temperature	110ºC
Maximum static pressure	Valves with BSP threads: 10 bar Valve bodies with compression fittings: 10 bar at 65ºC, 6 bar at 110ºC
Maximum differential pressure	1 bar (To ensure valve closure)
Maximum recommended differential pressure	0.2 bar for quiet operation (0.6 bar max)

The TRV4 range – Range/Kv Values – Valve Bodies

	Part No.	Kv (1K)	Kv (2K)	Kvs (max)	a (2K)
EB 8mm EB 10mm EB 15mm	1	0.10	0.10	0.10	-
	2	0.14	0.14	0.14	-
	3	0.19	0.22	0.22	-
	4	0.25	0.35	0.38	0.16
	5	0.28	0.47	0.66	0.48
	6	0.32	0.57	1.01	0.68

Kv is flowrate in m3/h at a differential pressure of 1 bar

$$Kv = \frac{Q}{Dp}$$

Q = Flowrate m3/h

Dp = $\sqrt{\text{Differential pressure bar}}$

NB: 8mm and 10mm valves comprise of a standard 15mm body with reducers.

Refer to datasheet D40 for flow capacity graph

How we measure up

Connections

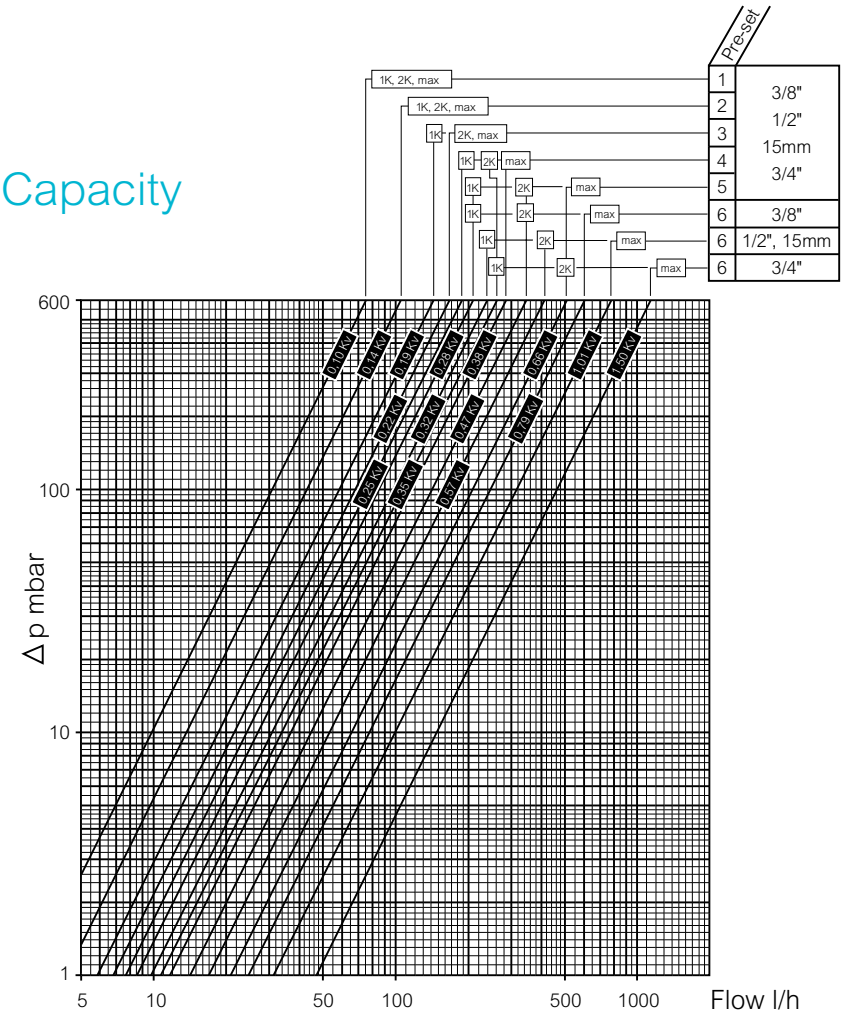
Compression fittings to BS EN 1254-2 1⁄2" BSP threaded radiator connections to BS EN 10226 standards

Materials

Sensing head: Chrome plated brass and plastic bezel
Valve Body: Chrome plated brass

EB Valve Flow Capacity

Flow capacity graph



PRE-SETTING	Pre-setting Nr.	Kv (IK)	Kv (2K)	Kvs (max)	a (2K)
EB 3/8”	1	0.10	0.10	0.10	-
	2	0.14	0.14	0.14	-
	3	0.19	0.22	0.22	-
	4	0.25	0.35	0.38	0.16
	5	0.28	0.47	0.66	0.48
	6	0.28	0.47	0.79	0.64
EB 15mm & 1/2”	1	0.10	0.10	0.10	-
	2	0.14	0.14	0.14	-
	3	0.19	0.22	0.22	-
	4	0.25	0.35	0.38	0.16
	5	0.28	0.47	0.66	0.48
	6	0.32	0.57	1.01	0.68
EB 3/4”	1	0.10	0.10	0.10	-
	2	0.14	0.14	0.14	-
	3	0.19	0.22	0.22	-
	4	0.25	0.35	0.38	0.16
	5	0.28	0.47	0.66	0.48
	6	0.35	0.66	1.50	0.80
EB 1/2” ASP/SSP	-	-	1.40	2.50	-
EB 3/4” ASP/SSP	-	-	1.40	4.50	-
EB 1” ASP/SSP	-	-	1.40	5.00	0.92

Kv is flowrate in m^3/h at a differential pressure of 1 bar

$$Kv = \frac{Q}{\sqrt{\Delta p}}$$

Q = Flowrate m^3/h

Δp = Differential pressure bar