

## TRV4 Thermostatic Radiator Valves



Britain's best selling range of thermostatic radiator valves sets the standard for design, performance, efficiency and quality with models to suit all domestic and commercial applications.





## Setting the standard for performance

TRV4 has been designed to provide years of trouble free service. Valve internals are made from a specially formulated material which prevents a build-up of lime scale which can cause TRVs to stick. All Drayton two pipe bodies come with pre-setting internals as standard, making system balancing far simpler and more accurate. 15mm angle TRV4 bodies feature REVERSE FLOW capability enabling installation on the flow or return, with the head either vertical or horizontal. It also has a 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 proven liquid filled chrome head provides optimum sensitivity.

## Setting the standard for quality

The TRV4 is rigorously tested and manufactured in our ISO 9001 certified factory in the UK to conform to the EN215 European standard which is the recognised standard for TRVs throughout Europe.





## Setting the standard for design

Since TRV1 was launched in 1964, Drayton has led the field in TRV design and manufacturing. As a result Drayton has been the TRV brand of choice for specifiers, architects, installers and end users alike for millions of radiators in domestic and commercial buildings throughout the country.

Today's Drayton TRV4 carries on this tradition and pedigree with a smart compact design and feature set that will complement any environment. TRV4 incorporates many practical design features too, including click-stop half increment settings which are particularly useful to the partially sighted, a highly visible graduated scale tape and a head and body that is easy to clean without slots that can collect dust and grime.

## Setting the standard for energy efficiency

The iconic Drayton TRV4 has achieved the highest A-rating for energy efficiency, under the certification scheme of the European valve manufacturers association (Tell.eu). The rating is based on how quickly a TRV reacts to changes in room temperature, how effectively it maintains stable room temperatures and how it performs after changes in water temperature and system pressure.

Under this classification scheme, TRVs can receive a rating of A - F, with A being the most energy efficient. The labeling scheme is similar to the energy efficiency ratings used on many domestic appliances. As stated by Tell.eu a householder can be sure that the A rated TRV4 installed in place of a less efficient TRV will show immediate and real savings in energy usage.

TELL Thermostatic Efficiency Label	
Manufacturer:	Invensys Controls
Model:	TRV4
Registration number:	10421-20091002
<b>A</b>	<b>A</b>
B	
C	
D	
E	
F	
Information: <a href="http://www.tell-online.eu">www.tell-online.eu</a>	
A Label of EUnited Valves European Valve Manufacturers Association	





# TRV4 - A complete Range

Britain's best selling range of TRVs are available in a complete range of body types and sizes. Comprehensive accessory options plus lock shield and pushfit solutions makes the TRV4 ideal for all domestic and commercial applications.

## Key features at a glance

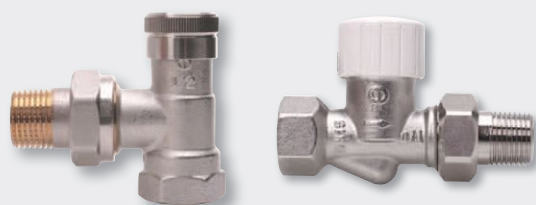
- Ultra sensitive liquid filled chrome head
- Non stick valve internals
- Half/full click stop setting
- Iconic design
- Radiators can be balanced from the TRV
- Comprehensive range of products and accessories





## TRV4

Product	Part No.
10mm Angle or straight TRV4	07 05 152/155
15mm Angle or straight TRV4	07 05 150/151
1/2" Angle or straight TRV4	07 05 153/156
3/4" Angle or straight TRV4	07 05 154/157
All Chrome TRV4 15mm Angle boxed	07 05 150C
All Chrome TRV4 15mm Straight boxed	07 05 151C
TRV4 Integral (ALL CHROME) Head	07 03 013
TRV4 15mm Angle + L/S (ALL CHROME)	07 05 170
TRV4 15mm Straight + L/S (ALL CHROME)	07 05 171
TRV4 Integral (standard) Head	07 25 006
TRV4 15mm Angle 2M remote	07 05 158
TRV4 2M Remote Head only	07 25 007
TRV 6M Remote Head only	07 25 008
TRV4 15mm Angle + L/S	07 05 180



## 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



## Lockshields and manual valves

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

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 with chrome cap	07 15 215
15mm Straight with chrome cap	07 15 216
10mm Compression elbow	07 05 907
15mm Compression elbow	07 05 908

## TRV4 Accessories and Adapters



Product	Part no.
14 x 2mm PEX/multi layer pipe adapter (5 Pack)	07 35 014
16 x 2mm PEX/multi layer pipe adapter (5 Pack)	07 35 016
15 x 8mm Copper adapter (5 Pack)	07 35 108
15 x 10mm Copper adapter (5 Pack)	07 35 110
ETF 2m remote setting kit	07 55 002
ETF 6m remote setting kit	07 55 006
Tamper Guard (6 Pack)	07 35 296
White manual wheel head/isolating cap	07 35 123
Pre Setting Key	07 35 162

# Specifications

## Meeting standards

The TRV4 range of thermostatic radiator valves meet with the stringent EN215 European standard.

## The TRV4 range - Range/Kv Values - Valve Bodies

	Pre-setting Nr.	Kv (1K)	Kv (2K)	Kvs (max)	a (2K)
EB 8, 10, 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 m<sup>3</sup>/h at a differential pressure of 1 bar

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

Q = Flowrate m<sup>3</sup>/h

Δp = Differential pressure bar

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

Refer to data sheet D40 for flow capacity graph

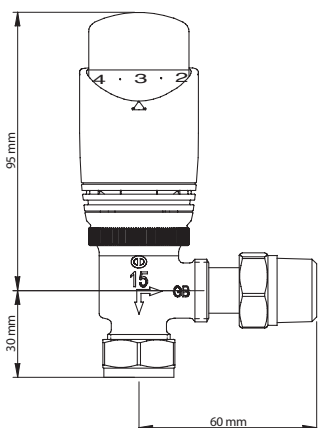
## Connections

Compression fittings to BS EN 1254-2 1/2" BSP threaded radiator connections to BS EN 10266 standards

## Materials

Sensing head Chrome plated brass and plastic bezel

Valve Body Chrome plated brass



**invenSYS**  
Controls

Sales: +44 (0) 845 130 5522 | Technical: +44 (0) 845 130 7722 | Fax: +44 (0) 845 130 0622 | Email: customer.care@invensys.com

# Technical Data

## Heads

- Integral heads are available as a separate item.  
Conversion head available to fit TRV3 valves.
- Remote sensing heads with either a 2m or 6m stainless steel capillary supplied with a white plastic wall mounting enclosure for its sensing bulb.

Maximum Sensor Temperature	50°C
Setting numbers	1 to 5 then "MAX"
* Frost protection	Below 8°C
Temperature setting range	Integral sensor 10°C to 30°C Remote sensor 10°C to 30°C
Sensitivity	0.2mm/°C
Hysteresis	0.4 K
Water temperature influence	0.8 K
Differential pressure influence	0.15 K
Response time	20 minutes

## Valves

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

Maximum test pressure	20 bar
Maximum flow temperature	110°C
Maximum static pressure	Valves with BSP threads: 10 bar Valve bodies with compression fittings: 10 bar at 65°C, 6 bar at 110°C
Maximum differential pressure	1 bar (To ensure valve closure)
Maximum recommended differential pressure	0.2 bar (To ensure low noise operation)

## 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 data sheet 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 data sheet 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.

Available from:



Scan to watch the TRV4 'A' rated video



Learn more about our full product range  
[www.draytoncontrols.co.uk](http://www.draytoncontrols.co.uk)



Our thoughts on the world of heating controls  
[@DraytonHeating](https://twitter.com/DraytonHeating)



Help and how to video guides  
[www.youtube.com/draytoncontrols](http://www.youtube.com/draytoncontrols)

