

TRV4 Thermostatic Radiator Valve



Britain's best selling range of thermostatic radiator valves sets the standard for design, performance and quality with models to suit most Domestic and Commercial applications.

Setting the standard for design

Since TRV1 was launched in 1964, we have led the field in design. With its distinctive chrome head, chrome plated body and white bezel, Drayton has been the product of choice by 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 new compact design and many advanced features 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 of course, a head and body that is easy to clean without slots that can collect dust and grime.



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 limescale which can cause TRV's to stick. All Drayton 2 pipe bodies now 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 now infinitely adjustable, the TRV4 is easy to fit and simple to use. Its proven liquid filled chrome head provides optimum sensitivity for fast reaction to temperature changes and the unique conduction space airway ensures minimum heat conduction from the body.





Setting the standard for quality

Overall, the TRV4 is rigorously tested and manufactured in our own factory in the UK to conform to the CEN EN215 standard which is the recognised standard for TRVs throughout Europe. A complete range of body types and sizes, including single pipe versions and gold plated versions for that extra touch of luxury, are available through the most extensive network of builders merchants, plumbing outlets and DIY stores.

Key features at a glance

- Ultra sensitive liquid filled chrome head
- Reverse flow feature on 15mm angle version
- Non sticking valve internals
- Pre-setting as standard on all valve bodies
- Double gland seal
- Easy to set range limiting
- Frost protection setting
- Half/full click stop setting
- Optional tamper proof cover
- Gland seal replaceable (without draining down)
- Standard M30 x 1.5 head connection
- Remote sensing heads available (2m or 6m)
- Range of adapters available for plastic (PEX) and multi layer pipe
- Radiators can be balanced from the TRV
- Suitable for LST radiators
- Plated body in 14 sizes for single or twin pipe applications
- Vertical or Horizontal Mounting
- White manual caps available, converts TRV bodies to a wheel head/isolating valve, which can replace conventional lockshields
- TRV3 conversion head available

Specifications

Meeting standards

The TRV4 range of thermostatic radiator valves meet with the stringent European standard EN215 and are manufactured in factories assessed and certified to BS EN ISO 9001.

The TRV4 range – Range/ Kv Values – Valve Bodies

	Pre-setting Nr.	Kv (1K)	Kv (2K)	Kvs (max)	α (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 m³/h at a differential pressure of 1 bar

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

$$Q = \text{Flowrate m}^3/\text{h}$$

$$\Delta p = \text{Differential pressure bar}$$

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

Adapters and Accessories

Description	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
1/2" x 15mm Copper adapter (5 Pack)	07 35 254
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

invenSYS
Controls

Customer Service Tel: 0845 130 5522
Customer Service Fax: 0845 130 0622
Technical Helpline Tel: 0845 130 7722
Email: customer.care@invensys.com
Website: www.draytoncontrols.co.uk

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

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:



D10-11