

TRV4 Thermostatic Radiator Valve

Lockshield and Pushfit Packs



Britain's best selling range of thermostatic radiator valves set the standards for design, performance and quality. The Drayton TRV4 Lockshield and Pushfit Packs to suit most domestic and commercial heating systems.

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Application

Suitable for domestic heating, providing individual room temperature control with either compression connections 8mm, 10mm, 15mm, or pushfit connection providing a means of connection to plastic and copper pipe. Suitable for plastic pipes 15mm within +/- 0.1mm of nominal size (BS7291 Class S) and copper pipe to BS EN 1057.

The pushfit connection is suitable for use on central heating systems and can withstand temperatures up to 110°C intermittently for short periods.

Meeting standards

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

Lockshield valve

The lockshield valve is approved to BS 2767-10. The valve is fitted on the opposite end of the radiator to the TRV and is solely used by the installer to regulate the flow of water/ balance the system, or to isolate the radiator.

Connections

Compression fittings to BS EN 1254-2 1/2" BSP threaded radiator connections to BS EN 10226.

Refer to data sheet D40 for flow capacity graph.

Materials

| | |
|--------------------|---|
| Sensing head | Chrome plated brass and plastic bezel |
| Valve Body | Chrome plated brass |
| Pushfit connection | Polyketone or brass and stainless steel |

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.

invensys
Controls

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Technical Data Heads

| | |
|---------------------------------|--|
| Maximum Sensor Temperature | 50°C |
| Setting numbers | Integral sensor 1 to 5 then "MAX" Remote sensor 1 to 7 then "MAX" |
| * Frost protection | Integral and Remote sensor below 8°C |
| Temperature setting range | Integral and Remote sensor 1 to MAX = approx. 10°C to 30°C |
| Sensitivity | 0.22mm/°C |
| Maximum closing force | 70N |
| Hysteresis | Integral sensor 0.4 K Remote sensor 0.6 K |
| Water temperature influence | Integral sensor 0.8 K Remote sensor 0.4 K |
| Differential pressure influence | Integral sensor 0.15 K Remote sensor 0.10 K |
| Response time | Integral sensor 20 minutes Remote sensor 20 minutes |

Valves

| | |
|---|---|
| Maximum test pressure | 20 bar |
| Maximum flow temperature | Valve bodies: 110°C Pushfit connection: 92°C |
| Maximum static pressure | Valve bodies with compression fittings: 10 bar at 65°C, 6 bar at 110°C Pushfit connection: 3 bar at 92°C |
| Maximum differential pressure | 1 bar (To ensure valve closure) |
| Maximum recommended differential pressure | 0.2 bar (To ensure low noise operation) |

Note: Technical data refers to Drayton head and valve body combinations

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.

Product range

| Part no. | Description |
|---|--|
| TRV4 Integral Head + 15mm Angle + Lockshield packs | |
| 07 05 180 | TRV4 Integral Head + 15mm Angle + Lockshield – boxed |
| 07 05 181 | TRV4 Integral Head + 15mm Angle + Lockshield + 8mm and 10mm reducers – boxed |
| TRV4 Integral Head + 15mm Angle + Pushfit packs | |
| 07 05 251 | TRV4 Integral Head + 15mm Angle + 15mm Pushfit chrome elbow – boxed |
| 07 05 253 | TRV4 Integral Head + 15mm Angle + 10mm Pushfit chrome elbow – boxed |
| TRV4 Integral Head + 15mm Angle + Lockshield + Pushfit packs | |
| 07 05 182 | TRV4 Integral Head + 15mm Angle + Lockshield with 15mm Chrome Elbow – boxed |
| 07 05 183 | TRV4 Integral Head + 15mm Angle + Lockshield with 10mm Chrome Elbow – boxed |

Available from:



D56-4