

# Domestic and Commercial Thermostatic Radiator Valves (TRVs)

### **About Resideo**

Resideo is a leading global manufacturer and distributor of technology-driven products and solutions that provide comfort, security, energy efficiency and control to customers worldwide. Building on a 130-year heritage, Resideo has a presence in more than 150 million homes, with 15 million systems installed in homes each year.

We operate a number of research and development, and manufacturing locations throughout the UK and Europe. These long-established facilities are committed to supplying you with leading-edge technology and first-class products.





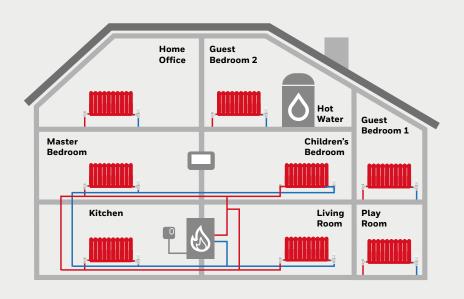






# Thermostatic Radiator Valves (TRVs)

TRVs provide local control of room temperatures to maintain comfort and save energy. TRVs sense the air temperature around them and control the flow of water through the radiator to which they are fitted, to maintain and limit the temperature within the room.





### **TRVs**

### **DOMESTIC TRVS**



Bi-directional flow design

- Can be mounted vertically or horizontally at either end of the radiator
- Integrated radiator balancing insert
- 6 mm of play on radiator tail piece to allow for variation in radiator distance from valve
- Wax sensor provides consistent and reliable performance
- Range stops included in head
- The insert can be removed and replaced without draining down



• Bi-directional flow design

- TELL, EN215 & Keymark certified for 'A' rated efficiency
- Can be mounted vertically or horizontally
- Integrated radiator balancing insert
- Easy grip TRV head with energy saving button that alerts user to economical setting for comfort
- Liquid sensor provides consistent and long-lasting performance
- Frost setting
- 6 mm play on radiator tailpiece to allow for variation in radiator distance from the valve
- Push fit options are available



VILZOU

- Bi-directional flow design
- TELL, EN215 & Key mark certified for 'A' rated efficiency
- Can be mounted vertically or horizontally
- Integrated radiator balancing insert
- Frost setting
- Stylish TRV design with different finish options
- Liquid sensor provides consistent and long-lasting performance
- 6 mm play on radiator tailpiece to allow for variation in radiator distance from valve
- Push fit options are available

### MANUAL RADIATOR VALVE PACK

Using the manual radiator valve pack ensures you can visually match with our TRV heads. The manual valve allows the user to switch the radiator on/off, and the lockshield valve limits water flow through individual radiators in wet central heating systems. The valves can be mounted vertically or horizontally at either end of a radiator.

- Bi-directional flow design
- Positive shut off
- The insert can be removed and replaced without draining down





VHL120

### **DESIGNER TRV HEADS**

Match the TRV head to the decor of the room – easily interchangeable heads available as accessory packs. Will fit all Honeywell Home TRV bodies and many non-Honeywell Home TRVs.



T4221GB Polished Chrome



T4111GB Brushed Chrome



T4321GB Black & Chrome



T4021GB White & Chrome



# **Pressure Independent TRV**

### **KOMBITRV**

### **V2100**

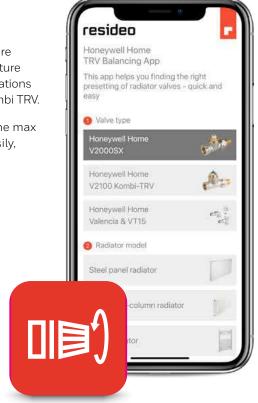
The Kombi TRV is a thermostatic radiator valve with an inbuilt differential pressure controller. This combination of two valves in one ensures optimal room temperature control and easy automatic hydronic balancing. Piping and pressure loss calculations are not needed, it requires only the max design flow to be set directly on the Kombi TRV.

Unlike standard TRV operation, the inbuilt pressure controller ensures that the max flow is maintained under varying system pressure conditions, simply and easily, eliminating common unbalanced heating systems.

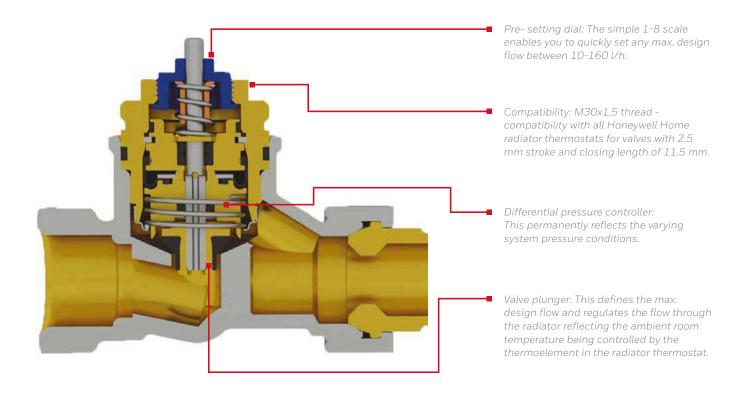
Available for selection on the Honeywell Home TRV balancing app.

### **Features and benefits**

- Automatic hydronic balancing only needs to be installed on each radiator
- No need for complex piping and pressure loss calculations
- Easy pre-setting of max design flow using either a special setting key (see accessories) or a standard 7mm wrench
- · Angled and straight versions with matching lockshield available.
- Accessories available including towel rail applications
- The valve insert can be exchanged whilst the system is in operation



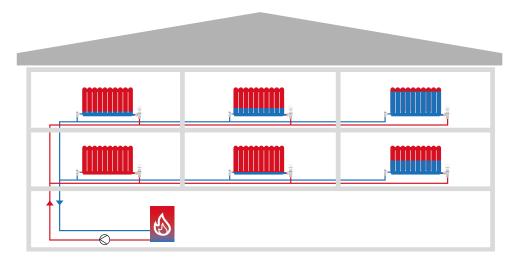






# **Balancing**

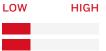
Balanced systems offer many energy efficiency benefits and increased comfort control over an unbalanced system. For a two-pipe system, the Honeywell Home TRVs offer a smart solution for balancing in an easy and reliable way.



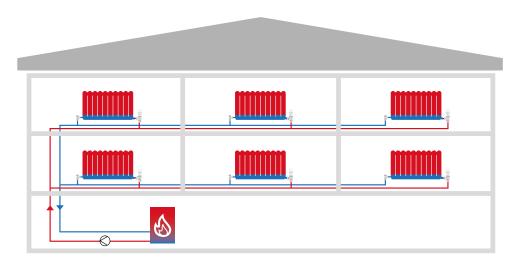
# UNBALANCED HEATING SYSTEM

### **Evaluation**

Energy efficiency Comfort



- Inefficient heating
- Over or underheated rooms
- Decreased room comfort for user



### BALANCED HEATING SYSTEM

### **Evaluation**

Energy efficiency Comfort



- Efficient heating
- Even heat distribution
- Increasing thermal room comfort and user satisfaction



### **BALANCING METHODS**

Traditionally, one way to balance a radiator is to measure the temperature drop across the radiator and set it to the design temperature drop based on the radiator manufacturer's guidance using the lockshield to adjust temperature.

Alternatively you can open up all of your radiators and record which radiators heat up fastest and balance by adjusting the lockshields, which is quite difficult without enlisting assistance to check the temperature at each radiator.



(see product code selector for options)

### HONEYWELL HOME TRV BALANCING APP

Honeywell Home TRV balancing app is now available to make balancing simple.

All Honeywell Home TRVs are fitted with an adjustable insert as standard, this insert can be used to balance the system with the added advantage that the TRV can be closed and re-opened without affecting its setting.

By using the Honeywell Home TRV balancing app you only need to balance once.

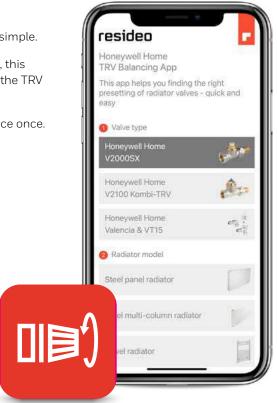


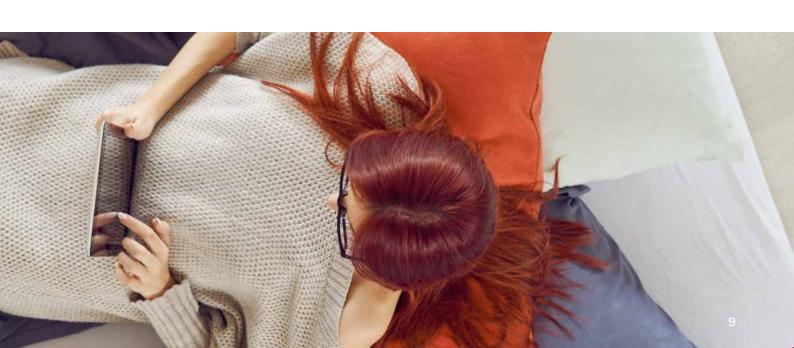






Scan the QR code to download the Honeywell Home TRV balancing app.





### evolome smart TRVs



### evohome features

- With touch-screen control, the user can quickly gain control of exactly where and when the property should be heated
- Remote access is provided via a tablet or smartphone
- Wireless radiator controllers provide an easy way of installing heating zones without draining down or disturbing pipes or decor













evohome is a sophisticated heating system that ensures you can create and individually control up to 12 heating zones in residential properties. The system also controls hot water, time and temperature.

**evohome** is suitable for any home with a hydronic (wet) central heating system.

**evohome** allows you to integrate wet underfloor heating into the main heating control system.





# HR91 wireless radiator controller

- Fits on most standard TRV bodies
- Battery powered with a two-year battery life
- Basic override button for setting frost protection
- 4 pack available HR914



# HR92UK wireless radiator controller

- Backlit LCD screen displays zone name and local set point temperature
- Local set point temperature can be overridden by turning the dial
- Fits on most standard TRV bodies
- 4 pack available HR924UK



### **USING EVOHOME**



### ATP921R3100

- 1 x evohome controller, power lead, table stand and wireless receiver box
- evohome wireless radiator controller (You need one per radiator in the system)
- HR924UK: 4 x wireless radiator controllers
- HR92UK: Single wireless radiator controller



### ATP926G3001

- evohome essentials pack (1 x base unit, 6 x HR91 wireless radiator controllers)
- Optional extras:
   HR914: evohome
   essentials HR91
   wireless radiator
   controllers 4 pack
- HR91: Single wireless radiator controller



### **Commercial TRVs**

The V2000 series of TRVs is a range of valves with various flow rate pre-settings designed for pumped two-pipe heating and cooling systems. The V2000 series is perfect for new build and retro-fit applications and ideal for renewable applications such as heat pumps.

Our commercial TRVs are highly accurate and meet the stringent energy efficiency standard of the new EN215

Each valve has a pre-setting facility to adjust the maximum flow to balance the heating circuit. A setting dial at the top of the valve, with six clearly visible values and a setting reference mark, designed to enable simple setting.

### **V2000FX Low Flow**



- Nominal flow range 10-70 l/hr
- A range of thermostatic radiator valves for balancing pumped twopipe heating systems with low flow requirements
- A superior regulation performance in low flow applications for better comfort and energy efficiency
- The valves have a quiet operation

### V2000SX Standard Flow



- Nominal flow range 20-170 l/hr
- Standard or reverse flow capability
- A range of thermostatic radiator valves with a wide range of flow rate pre-settings for balancing of pumped two-pipe heating and cooling systems
- The valves have a quiet operation in both standard and reverse flow direction
- Covering a wide range of dimensions, patterns and connections, it offers a solution for almost all installation situations in new building, renovation and retrofit projects

### V2000LX High Flow



- Nominal flow range 20 235 l/hr
- A range of thermostatic radiator valves with a stepless pre-settings over a wide range of flow rates for balancing of pumped two-pipe heating and cooling systems with high design flow requirements
- The valve design maximizes the flow rate possibilities of the standard valve bodies, providing an unmatched 2K p-band flows
- The V2000LX are available in straight and angled DN15 and DN20 versions
- High flow capacity makes these versions ideal for use with Heat Pumps, without the need for hydraulic separation



### **CAPRI HEAD**

### T5019/T5029

The Capri TRV head controls the room temperature by adjusting the flow of hot water through a radiator. Equipped with a liquid filled sensor this delivers 'A' class energy efficiency in accordance to TELL and meets the European Standard EN215 when used with certified Honeywell Home TRV bodies. The compact, stylish modern design is available in white or white and chrome and is a good combination product for the Kombi PI TRV and V2000 series.

# Honewell Honewell

### **VERAFIX LOCKSHIELD**

### V2420

The Verafix-E presettable and drainable lockshield valves can be used in typical two pipe heating systems and in special applications in one pipe heating systems for shut-off and regulation of individual radiators. A draining adaptor can be fitted to the lockshield for draining and filling and the brushed chrome finish matches the Kombi PI TRV and V2000 series.



### TAMPER PROOF HEAD

### T100V

Theft-resistant, heavy duty design, for use in public buildings such as offices, schools, barracks or hospitals.

Compatible with all Honeywell Home radiator thermostats with M30 x 1.5mm connection and 11.5 mm closing dimension.

### **Features**

- Thermostat resists extreme loads
- Can only be removed with special tool
- Adjustment of the fixed set point with a setting key (T100V-101 and T100VM-101 only)
- Lock disk against unauthorized adjustment (T100V-101 and T100VM-101 only)
- Reliable wax-filled sensing element





## **Commercial TRVs**

### **ROBUST TRV HEAD**

### T7000

- Heavy duty and robust version, especially designed for industrial, commercial and public buildings
- Conforms to standard EN 215
- Liquid sensor
- Equipped with memory-clip
- Compatible with all Honeywell Home TRV bodies with M30 x 1.5mm connections



T7001W0 Robust TRV head



T700120
Robust TRV head and sensor

### **REMOTE TRV HEAD**

### **T100MZ**

The T100MZ remote TRV sensors are ideal if you want wall mounted external control of radiators that are enclosed.

- Handwheel with socket for wall-mounting
- External liquid-filled sensor with capillary tube
- Easy to read temperature dial
- Compatible with all Honeywell Home TRV bodies with M30 x 1.5mm connections



# **Training**

# Resideo offer an extensive range of training courses across several platforms to cater to your needs.

To find out more please visit our Resideo Installer toolbox. https://www.resideoinstallertoolbox.com/resideo-training-toolbox



# Regulations

### **BUILDING REGULATIONS PART L AND PART F FOR DWELLINGS**

### **Summary of Changes and Timescale**

Self regulating devices, aka TRVs are now a requirement of Building Regulations across the UK and have been recognised in policy and regulation for their energy and carbon savings. Tests at Salford University have revealed that TRVs can save up to 18% energy,

For further information on these regulations please scan the QR codes below for the HHIC guide and Beama guide.



HHIC Guide

https://www.hhic.org.uk/ uploads/5E15C6FD81706.pdf



### BEAMA Guide

https://www.beama.org.uk/resourceLibrary/saving-energy-with-heating-controls.html



# **SIMPLY RELIABLE**

There's now a **5 year warranty\*** on our most popular Honeywell Home heating controls and Resideo Braukmann water products.

Giving you and your customers peace of mind for years to come.



<sup>\*</sup>Terms and conditions apply

# **Product selector**



DOMESTIC TRVS	
VT15 RANGE	
VT15AG	Radiator thermostat 8mm
VT15BG	Radiator thermostat 10mm
VT15EG	Radiator thermostat 15mm
VTL15-15A	TRV & lockshield angled 15mm
L15-15A/U	Lockshield angled 15mm
220 20.00	
VT120 RANGE	
VTL120-08A	TRV & lockshield 8mm angled
VTL120-08S	TRV & lockshield 8mm straight
VTL120-10A	TRV & lockshield 10m angled
VTL120-10S	TRV & lockshield 10mm straight
VTL120-15A	TRV & lockshield 15m angled
VTL120-15A-D	TRV & lockshield & drain off 15mm angled
VTL120-15A-DP	TRV & lockshield & drain off & push fit 15mm angled
VTL120-15A-P	TRV & lockshield & push fit 15mm angled
VTL120-15S	TRV & lockshield 15mm straight
VTL120-15S-D	TRV & Lockshield & drain off 15mm straight
VTL120-15S-DP	TRV & lockshield & drain off & push fit 15mm straight
VTL120-15S-P	TRV & lockshield & push fit 15mm straight
VT117-15A	TRV 15mm angled
VT117-15S	TRV 15mm straight
VT200 RANGE	
VTL200-08A	TRV & lockshield 8mm angled
VTL200-10A	TRV & lockshield 10mm angled
VTL200-10S	TRV & lockshield 10mm straight
VTL200-15A	TRV & lockshield 15mm angled
VTL200-15A-C	TRV & lockshield 15mm angled chromed
VTL200-15A-D	TRV & lockshield & drain of 15mm angled
VTL200-15A-DP	TRV & lockshield & drain off & push fit 15mm angled
VTL200-15A-P	TRV & lockshield & pushfit 15mm angled
VTL200-15S	TRV & lockshield 15mm straight
VTL200-15S-C	TRV & lockshield 15mm straight & chromed
VTL200-15S-D	TRV & lockshield & drain off 15mm straight
VTL200-15S-DP	TRV & lockshield & drain off & push fit 15mm straight
VTL200-15S-P	TRV & lockshield & push fit 15mm straight
VT200-15A	TRV 15mm angled
VT200-15S	TRV 15mm straight
MANUAL DARIATORMANE	
MANUAL RADIATOR VALVE	M
VHL120-08A	Manual valve & lockshield 8mm angled
VHL120-08S	Manual valve & lockshield 8mm straight
VHL120-10A	Manual valve & lockshield 10mm angled
VHL120-10S	Manual valve & lockshield 10mm straight
VHL120-15A	Manual valve & lockshield 15MM angled
VHL120-15A-D	Manual valve & lockshield & drain off 15mm angled
VHL120-15A-DP	Manual valve & lockshield & drain off & push fit 15mm angled
VHL120-15A-P	Manual valve & lockshield & push fit 15mm angled
VHL120-15S	Manual valve & lockshield 15mm straight
VHL120-15S-D	Manual valve & lockshield & drain off 15mm straight
VHL120-15S-DP	Manual valve & lockshield & drain off & push fit 15mm straight
VHL120-15S-P	Manual valve & lockshield & push fit 15mm straight

# **Product selector**



DESIGNER TRV HEADS	
T4021GB	White & chrome
T4111GB	Brushed chrome
T4221GB	Polished chrome
T4321GB	Black & chrome

PRESSURE INDEPENDENT TRV		
V2100API15	Kombi TRV axial body DN15	
V2100DPI15	Kombi TRV straight body DN15	
V2100EPI10	Kombi TRV angled body DN10	
V2100EPI15	Kombi TRV angled body DN15	
V2100EPI20	Kombi TRV angled body DN20	
V2100LPI15	Kombi TRV double angle left body DN15	
V2100RPI15	Kombi TRV double angle right body DN15	
VTL5100EPI15GB	Kombi TRV with matching lockshield and 'Capri' TRV head	
V2100DPI20	Kombi TRV straight body DN20	
V2420E0015	Presettable lockshield valve angled DN15	
V2420E0020	Presettable lockshield valve angled DN20	
V2420D0015	Presettable lockshield valve straight DN15	
V2420D0020	Presettable lockshield valve straight DN20	
T5019W0GB	Capri TRV head, white	

PRESSURE INDEPENDENT TRV ACCESSORIES	ş
TA6900A001	Theft protection ring for T5019 head
FIG1/2CS15	Compr fitt for copper / steel 15mm
FIG3/4CS22	Compr fitt for copper / steel 22mm
VS1200PI01	Kombi PI type valve insert
BALANCING	
VA8201PI04	Kombi TRV metal pre-setting key
VA8201TRV01	Plastic pre-setting key
VS1200SX01	Replacement valve insert for VT15, VT120, VT200, VT117 & V2000SX Standard Flow
VS1200LX01	Replacement valve insert for V2000LX High Flow
VS1200FX01	Replacement valve insert for V2000FX Low Flow
VS1200PI01	Kombi PI type valve insert

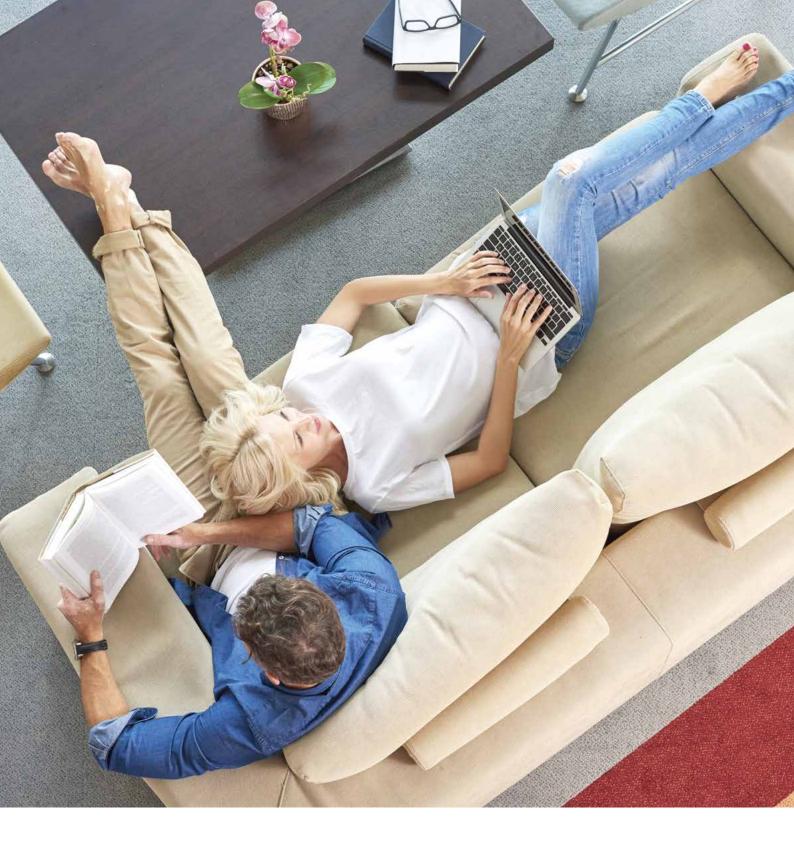
EVOHOME SMART TRVS	
HR91	Single pack of evohome smart TRV heads
HR914	4 pack of evohome smart TRV heads
HR924UK	4 pack of evohome smart TRV heads (with display)
HR92UK	Single pack of evohome smart TRV heads (with display)
ATP921R3100	evohome connected thermostat
ATP926G3001	evohome essentials pack (6 x HR91)

COMMERCIAL TRVS BODIES	
V2000FX LOW FLOW	
V2000EFX15	TRV body angled DN15
V2000DFX15	TRV body straight DN15
V2000AFX15	TRV body axial DN15

# **Product selector**



COMMERCIAL TRVS BODIES	
V2000SX STANDARD FLOW	
V2000ESX15	TRV body angled DN15
V2000ESX20	TRV body angled DN20
V2000DSX15	TRV body straight DN15
V2000DSX20	TRV body straight DN20
V2000ASX15	TRV body axial DN15
V2000BSX15	TRV body straight DN15 with swan neck tailpiece
V2000LX HIGH FLOW	
V2000ELX15	TRV body angled DN15
V2020ELX20	TRV body angled DN20
V2000DLX15	TRV body straight DN15
V2020DLX20	TRV body straight DN20
1202052/120	200j ottaligin 21120
COMMERCIAL TRV ACCESSORIES	
FIG1/2CS15	Compr fitt for copper / steel 15mm
FIG3/4CS22	Compr fitt for copper / steel 22mm
VA5201A015	Radiator tailpiece with thread up to collar DN15
VA5201A020	Radiator tailpiece with thread up to collar DN20
VA5201A015	Extended radiator tailpiece DN15
VA5201A010 VA5201A020	Extended radiator tailpiece DN20
VAUZUIAUZU	Extended fadiator taliproce BN20
COMMERCIAL TRV HEADS & LOCK	(SHIFI DS
CAPRI HEAD	
T5019W0GB	Capri TRV head, white
T5029W0GB	Capri TRV head, white / chrome
13023W0GB	capit the ficac, white tellionic
VERAFIX LOCKSHIELD	
V2420E0015	
	Presettable lockshield valve angled DN15
VYAYNENNYN	Presettable lockshield valve angled DN15
V2420E0020	Presettable lockshield valve angled DN20
V2420D0015	Presettable lockshield valve angled DN20 Presettable lockshield valve straight DN15
	Presettable lockshield valve angled DN20
V2420D0015 V2420D0020	Presettable lockshield valve angled DN20 Presettable lockshield valve straight DN15
V2420D0015 V2420D0020 TAMPER PROOF HEAD	Presettable lockshield valve angled DN20 Presettable lockshield valve straight DN15 Presettable lockshield valve straight DN20
V2420D0015 V2420D0020 TAMPER PROOF HEAD T100VM-101	Presettable lockshield valve angled DN20 Presettable lockshield valve straight DN15 Presettable lockshield valve straight DN20  Heavy duty TRV head with theft protection 6-26°C
V2420D0015 V2420D0020 TAMPER PROOF HEAD T100VM-101 WT100V	Presettable lockshield valve angled DN20 Presettable lockshield valve straight DN15 Presettable lockshield valve straight DN20  Heavy duty TRV head with theft protection 6-26°C Special tool to remove T100VM head
V2420D0015 V2420D0020 TAMPER PROOF HEAD T100VM-101 WT100V AS100VM	Presettable lockshield valve angled DN20 Presettable lockshield valve straight DN15 Presettable lockshield valve straight DN20  Heavy duty TRV head with theft protection 6-26°C Special tool to remove T100VM head Screw lock for T100VM head. 5 pcs
V2420D0015 V2420D0020 TAMPER PROOF HEAD T100VM-101 WT100V	Presettable lockshield valve angled DN20 Presettable lockshield valve straight DN15 Presettable lockshield valve straight DN20  Heavy duty TRV head with theft protection 6-26°C Special tool to remove T100VM head
V2420D0015 V2420D0020 TAMPER PROOF HEAD T100VM-101 WT100V AS100VM FS100V	Presettable lockshield valve angled DN20 Presettable lockshield valve straight DN15 Presettable lockshield valve straight DN20  Heavy duty TRV head with theft protection 6-26°C Special tool to remove T100VM head Screw lock for T100VM head. 5 pcs
V2420D0015 V2420D0020  TAMPER PROOF HEAD T100VM-101 WT100V AS100VM FS100V  ROBUST TRV HEAD	Presettable lockshield valve angled DN20 Presettable lockshield valve straight DN15 Presettable lockshield valve straight DN20  Heavy duty TRV head with theft protection 6-26°C Special tool to remove T100VM head Screw lock for T100VM head. 5 pcs Lock disk for T100VM head. 5 pcs
V2420D0015 V2420D0020  TAMPER PROOF HEAD T100VM-101 WT100V AS100VM FS100V  ROBUST TRV HEAD T700120	Presettable lockshield valve straight DN15 Presettable lockshield valve straight DN20  Heavy duty TRV head with theft protection 6-26°C Special tool to remove T100VM head Screw lock for T100VM head. 5 pcs Lock disk for T100VM head. 5 pcs Heavy duty TRV head with 2m remote sensor 6-28°C
V2420D0015 V2420D0020  TAMPER PROOF HEAD T100VM-101 WT100V AS100VM FS100V  ROBUST TRV HEAD T700120 T7001W0	Presettable lockshield valve straight DN15 Presettable lockshield valve straight DN20  Heavy duty TRV head with theft protection 6-26°C Special tool to remove T100VM head Screw lock for T100VM head. 5 pcs Lock disk for T100VM head. 5 pcs Heavy duty TRV head with 2m remote sensor 6-28°C Heavy duty TRV head with internal sensor 1-28°C
V2420D0015 V2420D0020  TAMPER PROOF HEAD T100VM-101 WT100V AS100VM FS100V  ROBUST TRV HEAD T700120	Presettable lockshield valve straight DN15 Presettable lockshield valve straight DN20  Heavy duty TRV head with theft protection 6-26°C Special tool to remove T100VM head Screw lock for T100VM head. 5 pcs Lock disk for T100VM head. 5 pcs Heavy duty TRV head with 2m remote sensor 6-28°C
V2420D0015 V2420D0020  TAMPER PROOF HEAD T100VM-101 WT100V AS100VM FS100V  ROBUST TRV HEAD T700120 T7001W0 TA2080A001	Presettable lockshield valve straight DN15 Presettable lockshield valve straight DN20  Heavy duty TRV head with theft protection 6-26°C Special tool to remove T100VM head Screw lock for T100VM head. 5 pcs Lock disk for T100VM head. 5 pcs Heavy duty TRV head with 2m remote sensor 6-28°C Heavy duty TRV head with internal sensor 1-28°C
V2420D0015 V2420D0020  TAMPER PROOF HEAD T100VM-101 WT100V AS100VM FS100V  ROBUST TRV HEAD T700120 T7001W0 TA2080A001  REMOTE TRV HEAD	Presettable lockshield valve straight DN15 Presettable lockshield valve straight DN20  Heavy duty TRV head with theft protection 6-26°C Special tool to remove T100VM head Screw lock for T100VM head. 5 pcs Lock disk for T100VM head. 5 pcs Heavy duty TRV head with 2m remote sensor 6-28°C Heavy duty TRV head with internal sensor 1-28°C Theft - protection ring for T7001
V2420D0015 V2420D0020  TAMPER PROOF HEAD T100VM-101 WT100V AS100VM FS100V  ROBUST TRV HEAD T700120 T7001W0 TA2080A001	Presettable lockshield valve straight DN15 Presettable lockshield valve straight DN20  Heavy duty TRV head with theft protection 6-26°C Special tool to remove T100VM head Screw lock for T100VM head. 5 pcs Lock disk for T100VM head. 5 pcs Heavy duty TRV head with 2m remote sensor 6-28°C Heavy duty TRV head with internal sensor 1-28°C



### For more information

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