## **Flow Solutions**

# Honeywell



## **Valves for Heating System Control**

Thermostatic Radiator Valves (TRVs) Motorised Zone Valves Domestic Heating System Valves Magnetic Heating Filter Variable Orifice Static Balancing Valves Differential Pressure Control Valves

# Valves for Heating System Control

Controlling domestic heating isn't all about the thermostats, programmers and timers. If these controls are the brains of the systems, it's the valves in the system that control the flow of the heating water around the house, effectively acting as the lungs of the house. It is vital that the heating system has the right valves for the right application but you should also ensure that you make the best possible product selection by:

- Opting for Motorised Zone Valves that are easy to service and have moving parts that are easy to replace without draining the system down
- Choosing the right Thermostatic Radiator Valves with the required functionality and the aesthetics to add to the décor

## Making sure that you source all your components from a recognised manufacturer that can offer you the full range of solutions you need

Ensuring you get the product that gives you the best energy efficiency for the property.

## Why Honeywell Motorised Valves?

- Industry leading 2 port and mid-position motorised valves
- Easy to wire and install
- Used in a wide range of flow control applications in domestic and light commercial central heating systems
- Spare parts available—can be fitted without drain down.

## Why Honeywell Domestic control?

Control valves for a wide variety of applications.



6

# Why Honeywell TRVs?

- Attractive TRV Heads offer choice for the customer
- Matching valve body across the Traditional and Classic designs
- Choice of fitting size and push fit fittings available
- Integrated balancing allows for radiator removal without affecting the balance of the system.



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### Honeywell Heating Valve Accessories

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## HR92 evohome Electronic Radiator Valve Controller



### Attractively designed

These slim, ergonomically designed radiator controllers will fit on most standard TRV bodies. They are

Easily integrated into the evohome control system

battery powered with a two year battery life and a battery low reminder visible on both the radiator controller screen and the evolome controller screen. The flip-up screen is backlit and can be positioned so that it can be easily viewed or folded away flat.

### Full of features

The backlit LCD screen displays the zone name and local set point temperature. The local set point temperature can easily be overridden by turning the dial at the top of the radiator controller. Override temperatures can be set in half degree increments and are effective until the next scheduled temperature change. There is an open window feature that recognises a sudden temperature drop and shuts off the local radiator.

## HR90 Locally Programmable Electronic Thermostatic Radiator Valve Controller



A 'stand alone' electronic thermostatic radiator controller with three levels of preset time control allowing an additional level of control.

Cannot be integrated into the evohome wireless radiator control system

### Simple to install

Radiator controllers provide the optimum solution for installers when considering installing heating zones as there are no additional zone valves required, which makes installation a lot quicker and cleaner. With existing TRV bodies already in place there is no need to drain down the system and they will fit on most compact radiators.

Controllers to be used as part of an evolome multi-zone system are available either individually or as a pack of four.

# The HR92 should be used as part of an evohome multi-zoning system

HR924UK	The evohome Radiator Multi-Zone Kit 4 wireless thermostatic Radiator Controllers
HR92UK	1 x evohome Radiator Controller

For more information about the evolome system and the benefits which it provides go to www.honeywelluk.com/getconnected

- Different operating modes and particular day functions
- Times/Temperatures set locally using the keys and display on the HR90 head
- Easy to read backlit display
- Quick to install.

HR90

Electronic Thermostatic Radiator Controller



Setting measurement provides visual reference of setting points

Unobtrusive stylish design

Replacement heads with different finishes available for all Honeywell TRVs

TRV heads will also fit Valencia manual valve bodies as well as other standard non-Honeywell TRVs (an adaptor may be required)

Stylish fluted body used with the Classic, Traditional and matching manual valves will also fit a wide range of other Honeywell TRV heads including **evohome** Radiator Controllers

## Based around one stylish valve body

## Valencia Classic TRV

The Classic TRV senses the air temperature around it and can limit room temperature by regulating individual radiator output in wet central heating systems. Mounted on the matching Valencia valve body, this TRV can be visually matched with any other Honeywell TRV.



All Honeywell TRVs are easily upgradeable to evohome zoning system using the HR92UK

- A-rated energy saving performance
- Bi-directional flow valves fit to either end of radiator with no need to change valve flow direction after installation
- Liquid sensor provides consistent and long-lasting performance
- Sensor head may be mounted vertically or horizontally by using the interchangeable radiator tail and copper tube fittings
- Set and forget integrated balancing insert reduces risk of call back
- Classic good looks designed to appeal to homeowners
- The insert can be removed and replaced without draining down using a special tool

### Upgradeable TRV heads with different finishes

Match the TRV head to the décor of the room - easily interchangeable heads available as accessory packs. Will fit all Honeywell TRV Bodies and many non-Honeywell TRVs. Contact Honeywell for further information.

## Valencia Traditional TRV

The Valencia valve and matching lockshield valve uses the stylish manual body to ensure that there is a common look and feel in all situations where you need an electronic, a classic or a traditional TRV or a manual valve.



- A-rated energy saving performance
- Liquid sensor provides consistent and long-lasting performance
- Bi-directional flow valves fit to either end of radiator with no need to change valve flow direction after installation
- Sensor head may be mounted vertically or horizontally by using the interchangeable radiator tail and copper tube fittings
- Set and forget integrated balancing insert reduces risk of call back
- 6mm play on radiator tail piece to allow for variation in radiator distance from valve
- Easy grip, non-slip TRV head design
- Energy saving button alerts user to the economical setting for comfort
- The insert can be removed and replaced without draining down using a special tool.

VT200-15A	Classic TRV 15mm Angled Body
VT200-15S	Classic TRV 15mm Straight Body
VTL200-08A	Classic TRV + Lockshield: 8mm Angled Body
VTL200-08S	Classic TRV + Lockshield: 8mm Straight Body
VTL200-10A	Classic TRV + Lockshield: 10mm Angled Body
VTL200-10S	Classic TRV + Lockshield: 10mm Straight Body
VTL200-15A	Classic TRV + Lockshield: 15mm Angled Body
VTL200-15A-D	Classic TRV + Lockshield: 1x Drain-off Tail Piece 15mm Angled Body
VTL200-15A-DP	Classic TRV + Lockshield: 1x Drain-off Tail Piece 2 x 10mm Push fittings; 15mm Angled Body
VTL200-15A-P	Classic TRV + Lockshield: 2 x 10mm Push fittings; 15mm Angled Body
VTL200-15S	Classic TRV + Lockshield: 15mm Straight Body
VTL200-15S-D	Classic TRV + Lockshield: 1x Drain-off Tail Piece 15mm Straight Body
VTL200-15S-DP	Classic TRV + Lockshield: 1x Drain-off Tail Piece; 2 x 10mm Push fittings; 15mm Straight Body
VTL200-15S-P	Classic TRV + Lockshield: 2 x 10mm Push fittings; 15mm Straight Body

6mm play on radiator tail piece to allow for variation in radiator distance from valve.



Polished Chrome

Black & Chrome

Chrome

White & Chrome

VT117-15A	Traditional TRV 15mm Angled Body
VT117-15S	Traditional TRV 15mm Straight Body
VTL120-08A	Traditional TRV + Lockshield: 8mm Angled Body
VTL120-08S	Traditional TRV + Lockshield: 8mm Straight Body
VTL120-10A	Traditional TRV + Lockshield: 10mm Angled Body
VTL120-10S	Traditional TRV + Lockshield: 10mm Straight Body
VTL120-15A	Traditional TRV + Lockshield: 15mm Angled Body
VTL120-15A-D	Traditional TRV + Lockshield: 1 x Drain-off Tail Piece 15mm Angled Body
VTL120-15A-DP	Traditional TRV + Lockshield: 1 x Drain-off Tail Piece 2 x 10mm Push fittings; 15mm Angled Body
VTL120-15A-P	Traditional TRV + Lockshield: 2 x 10mm Push fittings; 15mm Angled Body
VTL120-15S	Traditional TRV + Lockshield: 15mm Straight Body
VTL120-15S-D	Traditional TRV + Lockshield: 1 x Drain-off Tail Piece 15mm Straight Body
VTL120-15S-DP	Traditional TRV + Lockshield: 1 x Drain-off Tail Piece; 2 x 10mm Push fittings; 15mm Straight Body
VTL120-15S-P	Traditonal TRV + Lockshield: 2 x 10mm Push fittings; 15mm Straight Body

## Valencia Manual Radiator Valve Pack





Using the Valencia Manual Radiator Valve Pack ensures you can visually match with our electronic, traditional and classic TRV heads.

Compatible with the evolome radiator controller

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 using a special tool.

## VT15 'Contract' Thermostatic Radiator Valve

The VT15 Radiator Thermostat, which has full CEN Standard approval to EN215, regulates individual radiator output in wet central heating systems.

- Bi-directional valve body and can be mounted vertically or horizontally at either end of the radiator
- 6mm 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

VHL120-08A	Manual Valve + Lockshield: 8mm Angled Body
VHL120-08S	Manual Valve + Lockshield: 8mm Straight Body
VHL120-10A	Manual Valve + Lockshield: 10mm Angled Body
VHL120-10S	Manual Valve + Lockshield: 10mm Straight Body
VHL120-15A	Manual Valve + Lockshield: 15mm Angled Body
VHL120-15A-D	Manual Valve + Lockshield: 1 x Drain-off Tail Piece 15mm Angled Body
VHL120-15A-DP	Manual Valve + Lockshield: 1 x Drain-off Tail Piece 2 x 10mm Push fittings; 15mm Angled Body
VHL120-15A-P	Manual Valve + Lockshield: 2 x 10mm Push fittings; 15mm Angled Body
VHL120-15S	Manual Valve + Lockshield: 15mm Straight Body
VHL120-15S-D	Manual Valve + Lockshield: 1 x Drain-off Tail Piece 15mm Straight Body
VHL120-15S-DP	Manual Valve + Lockshield: 1 x Drain-off Tail Piece; 2 x 10mm Push fittings; 15mm Straight Body
VHL120-15S-P	Manual Valve + Lockshield: 2 x 10mm Push fittings; 15mm Straight Body

VT15AG	Thermostatic Lockshield Valve with Reversible Flow, Angled Body and 8mm Compression connection and 15mm radiator tailpiece
VT15BG	Thermostatic Radiator Valve with Reversible Flow, Angled Body and 10mm Compression connection and 15mm radiator tailpiece
VT15EG	Thermostatic Radiator Valve with Reversible Flow, and 15mm Compression connection and 15mm radiator tailpiece
VX15EG-A	Radiator lockshield valve with 15mm Compression connection and 15mm radiator tailpiece
T9002W0	Replacement Thermostatic Head

The insert can be removed and replaced without draining down using a special tool.

## Honeywell 'Design' Radiator Valve Bodies and matching Lockshield Valves



TRC15DRLLCBG



TRC15DLRLCBG



Compatible with the evolome

radiator controller

TRW15DRLLCBG



Introduced for use with 'Design' Radiators and Towel Rails, Honeywell 'Design' TRV bodies are compatible with all Honeywell TRV heads, including 'evohome' wireless heads. Includes matching 'compression' nuts and olives.

TRC15DRLLCBG	15mm Chrome 'Left' Reverse Angle TRV body and Lockshield Valve
TRC15DLRLCBG	15mm Chrome 'Right' Reverse Angle TRV body and Lockshield Valve
TRW15DRLLCBG	15mm White 'Left' Reverse Angle TRV body and Lockshield Valve
TRW15DLRLCBG	15mm White 'Right' Reverse Angle TRV body and Lockshield Valve

TRW15DLRLCBG

# Honeywell TRV Accessories

Our Thermostatic and manual radiator valves are supported by a wide range of replacement heads and other accessories. These are designed to ensure that, whatever application you need to cater for, there is a Honeywell product that you can use.

## **Robust TRV Heads**

Ideal for public buildings, schools, etc.

T7001W0	Robust TRV Head with inbuilt range stops
T700120	Robust TRV Head with 2.0m remote sensor

## **Remote TRV Heads**

Ideal for concealed and low surface temperature radiators.

T950120W0	2.0m Remote Sensor and control
T950150W0	5.0m Remote Sensor and control

## **Traditional TRV Head**

Replace old, damaged or discoloured Traditional TRV heads with a new Traditional head.

T1001W0GB

Replacement Valencia Traditional TRV Head





## Valve accessories

Choose from a range of useful replacement parts or add integrated balancing or theft protection.

H100-1/2A	Pack of 10 replacement Manual Heads		TA6900A001	White TRV Theft Protection Ring	
	'Angled' Valencia TRV body with integrated balancing insert n also be used with an a replacement TRV body	is et al.	VS1200SLGB11	Replacement Valencia Integrated Balancing Insert	
V120-15S	'Straight' Valencia TRV body with integrated balancing insert		VA8200A001	Valencia Insert replacement and cleaning tool	-

# Motorised Zone Valves

## Control the flow of hot water to the heat source (radiator or stored hot water)

The range of leading motorised zone valves provides a full set of solutions to suit all domestic heating installations. The two port motorised valve has a wide range of flow control applications in domestic and light commercial central heating systems.

The motorised mid-position valves have been designed to control the flow of water in domestic central heating systems,

## V4043 Motorised Two Port Zone Valve

The V4043 series of two port Motorised Valves has a wide range



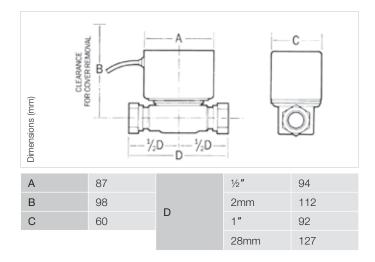
of flow control applications in domestic and light commercial central heating systems.

The V4043H normally closed models have end switches for electrical control of pump and/or boiler. The V4043B normally open models are particularly applicable to control of solid fuel systems, since they will always fail-safe in the event of a power failure.

- Motor open
- Spring return action
- Manual lever for filling and draining the system
- Powerhead replaceable without draining down
- Potential free end switch for electrical control of pump and/or boiler
- Quiet operation, minimal power consumption.

### Options

- Normally open and normally closed versions available
- 22mm/28mm or 1/2", 3/4", 1" BSP connections
- Replacement motor, replacement powerhead and replacement ball
- 'O' ring kit available.



where both radiator and hot water cylinder circuits are pumped. They are typically suited for small to medium sized installations.

The motorised diverter valves are replacement products and have been designed to control the flow of water between heating and hot water in domestic fully pumped central heating systems.

### Specifications - All Motorised Valves

Power Supply	230 VAC 50Hz
Power Consumption	6W
Electrical Connections	1m flying lead, heat resistant cable
Timings (Nominal)	Valve opens to Port A (from Port B) in 18 seconds (under power). Valve opens to Port B in 8 seconds (under spring return). Continuous operation of the valve motor at the fully open position (Port A only) is not recommended
Ambient Temperature Range	5 to 50°C
Flow Temperature	5 to 88°C
Static Pressure	8.6 bar max
Flow Directions	Inlet Port AB: Port A open when energised; Port B open when de-energised
Standards & Approvals	CE, UL, CSA 89/336/EEC & 73/23/EEC
V4043B1257	Normally open, 22mm compression. No end switch. No manual lever. 6.9 kV. Maximum close-off differential pressure 0.55 bar
V4043B1265	Normally open, 28mm compression. No end switch. No manual lever. 8.6 kV. Maximum close-off differential pressure 0.45 bar
V4043C1156	Normally closed, 1/2" BSP female. No end switch. 3.0 KV. 1.38 bar max differential pressure
V4043H1056	Normally closed, 22mm compression. SPST end switch. 6.9 kV. 0.55 bar max differential pressure
V4043H1007	Normally closed, 3/4" BSP connections fittings. SPST end switch. 6.9 kV. 0.55 bar max differential pressure
V4043H1106	Normally closed, 3/4" BSP connections fittings. SPST end switch. 6.9 kV. 0.55 bar max differential pressure
V4043H1080	Normally closed, 3/4" BSP connections fittings. SPST end switch. 6.9 kV. 0.55 bar max differential pressure

## V4073A Motorised **Mid-Position Valve**

The V4073A Motorised Mid-Position Valve has been designed to control the flow of water in domestic central heating systems, where both radiator and hot water cylinder circuits are pumped. It is typically suited for small to medium sized installations.

Powerhead replaceable without draining down

Quiet operation, minimal power consumption

22mm/28mm or 1/2", 3/4", 1" connections

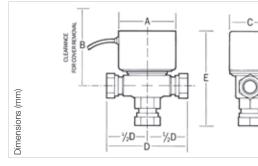
Replacement motor, replacement powerhead

Provides electrical output to boiler and/or pump.

Manual lever for filling/draining down



V4073A1039	22mm compression. 6.0 kV. Maximum close-off differential pressure 0.69 bar
V4073A1054	3/4" BSP Female compression fittings. 6.0 kV. Maximum close-off differential pressure 0.69 bar
V4073A1088	28mm compression. 8.1 kV. Maximum close-off differential pressure 0.55 bar
V4073A1062	1" BSP Female compression fittings. 8.1 kV. Maximum close-off differential pressure 0.55 bar



А	87		E	3/4 <b>"</b>	124
В	98			22mm	133
С	60			1″	124
	3⁄4″	94		28mm	137
D	22mm	112			
D	1"	94			
	28mm	117			

## V4044C Motorised **Diverter Valve**

The V4044C Motorised Diverter Valve has been designed to control the flow of water between heating and hot water in domestic fully pumped central heating systems. The Diverter Valve will only allow flow to one zone at any one time.

The V4044 is used in the Sundial W Plan Hot Water priority system.

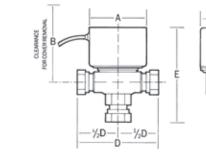
- Spring return action
- Three position operation
- Powerhead replaceable without draining down
- Manual lever for filling/draining down
- Quiet operation, minimal power consumption
- Provides electrical output to boiler and/or pump.

### Options

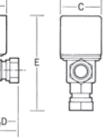
- 22mm/28mm or 1/2", 1" connections
- Replacement motor, replacement powerhead and replacement ball
- 'O' ring kit available.



V4044C1288	22mm compression. 6.0 kV. Maximum close-off differential pressure 0.69 bar
V4044C1098	3/4" BSP Female compression fittings. 6.0 kV. Maximum close-off differential pressure 0.69 bar
V4044C1569	28mm compression. 8.1 kV. Maximum close-off differential pressure 0.55 bar
V4044C1494	1" BSP Female compression fittings. 8.1 kV. Maximum close-off differential pressure 0.55 bar



Dimensions (mm)



А	87		E	3⁄4″	124
В	98			22mm	133
С	60			1"	124
	3⁄4″	94		28mm	137
D	22mm	112			
D	1"	94			
	28mm	117			

Spring return action

and replacement ball 'O' ring kit available.

Three position operation

**Options** 

## Motorised Zone Valve Spares



### Replacement Motor Kit

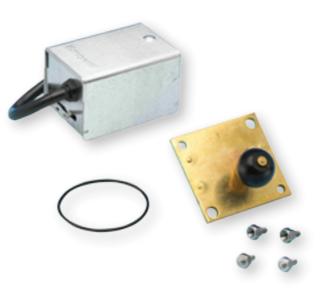
The 40002737-003 Replacement Motor is suitable for all V4043 two port valves, V4044 three port diverter valves, and V4073 mid-position diverter valves, irrespective of valve body size and pipe connection type. The 40001011-002 Replacement Motor is suitable for old style V8043 and V8044 motorised valves.

It may also be used to provide 24 volt 50Hz motor operation on V4043 and V4044 series valves.

- One motor for all V4043, V4044 and V4073 series motorised valves
- Two wire connection polarity free
- Insulated screw connectors provided.

### Option

24 volt 50Hz motor.



Replacement Powerhead and Spares

The 40003916 Powerheads enable the complete powerhead assembly to be replaced without draining down on V4043, V4044 and V4073 series valves. On older style valves pre-1985, which do not have the replaceable head feature, the adaptor plate assembly can be used to upgrade the valves, to allow the replaceable powerhead to be used.

- One powerhead for each valve series
- Powerhead assembly can be replaced without draining down
- VC valve cartridges can be replaced without draining down.

### Options

- Adapter plate assembly allows old style valves to be updated to replaceable powerhead type
- Ball and 'O' ring kit.

Туре	Order Code	Description	For Which Valves		
Replacement Motor Kits	Replacement Motor Kits				
240 VAC replacement motor	40002737-003	Replacement motor kit with spare connectors, screws and full instructions	V4043 Motorised Zone Valve V4073 Motorised Mid-position Diverter Valve V4044 Motorised Diverter Valve		
24 VAC replacement motor	40001011-002	Replacement motor kit for low voltage applications with spare connectors, screws and full instructions	V4043A Motorised Zone Valve V4044C Motorised Diverter Valve		
Replacement Powerheads					
Replacement Powerhead	40003916-001	Complete Powerhead Assembly	V4043 Motorised Zone Valve		
Replacement Powerhead	40003916-002	Complete Powerhead Assembly	V4073 Motorised Mid-position Diverter Valve		
Replacement Powerhead	40003916-003	Complete Powerhead Assembly	V4044 Motorised Diverter valve		
Plate & Assembly Kit					
Plate & ball assembly kit	40003918-006	Plate & ball assembly kit – use with valves that do not have replaceable heads (Pre-1985)	V4043 Motorised Zone Valve V4073 Motorised Mid-position Diverter Valve V4044 Motorised Diverter Valve		
Replacement 'O' Ring Kit					
Replacement 'O'ring kit	272752A/U CARD	Replacement ball & 'O'ring kit	V4043 Motorised Zone Valve V4073 Motorised Mid-position Diverter Valve V4044 Motorised Diverter Valve		

# **Domestic Heating System Valves**

Our range of automatic bypass valves is particularly beneficial in improving boiler efficiency and improving control of systems fitted with TRVs, through effective control of water flow. Our range of valves saves energy by only allowing flow through the bypass when needed. Building regulations state that if a bypass is installed, an automatic bypass valve must be fitted.

## EA122 Automatic Air Vent

The Automatic Air Vent EA122 is suitable for heating systems and other closed circuit hot water systems (not potable water) which require the efficient, automatic removal of air when a system is filling with water.



The vacuum break on the bottom of the valve prevents an air lock forming and encourages air to be released from water. The air vent can be fitted anywhere in the positive pressure side of the system where air is likely to be trapped.

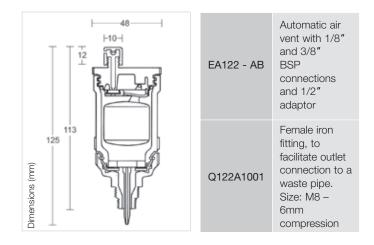
Air vents should always be fitted in an accessible area, which can be seen and serviced easily.

- Integral stop valve. Enables seat to be cleaned without draining the system
- Vacuum break ensures air collection
- Simple servicing and cleaning
- 1/8" and 3/8" BSP connections

- Expanding disc under cap helps prevent leaks due to dirt under seat
- 1/8" to 1/2" adaptor.

### Option

Q122A facilitates waste connection to air vent.



## DU144 Automatic Bypass Valve

The DU144 Automatic Bypass Valve controls the flow of water through a bypass circuit which is installed between flow and return pipework, typically at or near the boiler.

een or

Building regulations advice states that if a bypass is installed, an automatic bypass valve must be fitted.

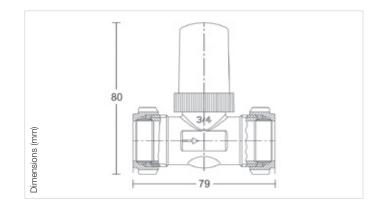
The DU144 saves energy by only allowing flow through the bypass when needed, i.e. when flow through the system is reduced when zone valves or radiator thermostats are closing.

- Unique and simple adjustment mechanism
- Wide differential pressure range from 0.1 to 0.6 bar
- 22mm compression fittings for ease of installation
- Reduces system noise and maintains an even system pressure
- Ensures constant flow through boiler
- Lockable set pressure prevents inadvertent adjustment
- Factory set at 0.2 bar.

### DU144A1001

Automatic bypass valve with set pressure scale and protective cap, with 22mm compression connections

The DU144 Automatic Bypass Valve can serve two functions: a) As a boiler bypass as required by boiler manufacturers b) As a system bypass to accommodate pump overrun and to alleviate system noise that can be caused by increased pressure when thermostatic radiator valves or zone valves close down



## DU145 Angled Automatic Bypass Valve

The DU145 Automatic Bypass Valve controls flow of water through a bypass circuit which is installed between flow and return pipework. Building regulations advice states that if a bypass is installed,



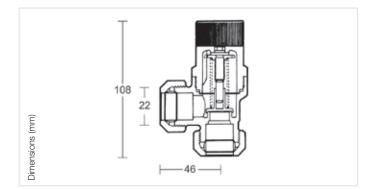
an Automatic Bypass Valve must be fitted. The DU145 saves energy by only allowing flow through the bypass when needed, i.e. when flow through the system is reduced when zone valves or radiator thermostats are closing. The use of an Automatic Balancing Valve is recommended by the UK government as Best Practice in the CHeSS (Central Heating System Specifications) guide to central heating systems.

- Unique and simple adjustment mechanism
- High capacity flow up to 50 litres per minute
- Wide differential pressure range from 0.1 to 0.6 bar
- 22mm compression fittings for ease of installation
- Reduces system noise and maintains an even system pressure
- Ensures constant flow through boiler
- Lockable set pressure prevents inadvertent adjustment.

### DU145 - 3/4B

Automatic bypass valve with set pressure indicator, lockable adjustment knob and 22mm compression connections

DU145 Automatic bypass valve can serve two functions: a) As a boiler bypass as required by boiler manufacturers b) As a system bypass to accommodate pump overrun and to alleviate system noise that can be caused by increased pressure when thermostatic radiator valves or zone valves close down



Locking: Both DU144 & DU145 Valves: Once pressure has been set according to the scale below, the valve locks in position by tightening the screw on the cap.

Scale	1	2	3	4	5	6
Bar	0.1	0.2	0.3	0.4	0.5	0.6

## VF06 Sealed System Filling Valve

The VF06 is a combination filling valve for sealed heating systems, incorporating a pressure-reducing valve, stop valve, a non-return valve and hose connections. Factory set to 1.5 bar, the VF06 can be adjusted on site to between 0.5 and 3.0 bar.



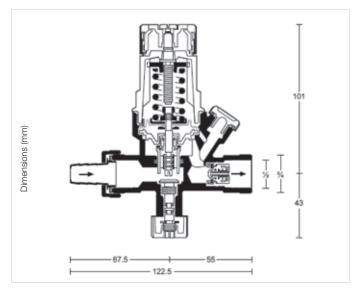
The VF06 ensures that the system is not inadvertently over pressurised while filling, which can cause damage to heat exchangers, expansion vessels and joints. It also enables quick and trouble-free refilling of the system should pressure loss occur.

- Automatic filling
- Unique and simple adjustment mechanism
- Integral stop valve
- Integral non-return valve
- Integral strainer
- Pressure gauge tapping.

### Options

- Hose union or threaded union connector
- Accessory MF126 A4 Pressure gauge with 0 to 4 bar range.

SpecificationsMaximum Working Pressure:16 barMaximum Temperature:70°COutlet Pressure:Adjustable 0.5 to 3.0 barFactory Set:1.5 barConnection Size:1/2" BSP female & 3/4" BSP malePressure Gauge Tapping:1/4" BSPHousing Material:Brass



VF06 - 1/2 A	Filling valve with 1/2" hose connection
VF06 - 1/2 B	Filling valve with 1/2" threaded union connection
MF126 - A4	0 to 4 bar pressure gauge with 1/4" connection
D06FA - 1/2	Spare valve insert complete

# **Magnetic Heating Filters**

## Protect and increase the life of the heating system

Installing a Honeywell Heating Filter will help to maintain an efficient and healthy heating system.

## MHF49 Heating Filter



Fit a Honeywell magnetic heating filter and filter out contaminants (sludge, sand, rust, iron particles etc.) that arise from the regular operation of a heating system.

Extend the life of the system by preventing premature wear.

22mm & 28mm compression fittings

# Protect and increase the life of the heating system

Ensure you deliver maximum efficiency and the heating system remains free from dirt and metallic contamination.

Designed with a strong magnetic element; the Honeywell heating filter is designed to operate efficiently, capturing metallic particles in the water flow and trapping dirt in the easy to clean nonmetallic trap.

- Can be installed on any domestic heating system
- Pipe cutter guide to assist installation
- Connection rotates, install in any position
- Easy to install and maintain; reduce maintenance calls
- Neodymium magnet (tested according to IEC 60404-5 & ASTM A977)
- Can be used as a water treatment dosing point
- Stainless steel gravity filtration system (filter mesh) for non-air vent.

Part Number	Size
MHF49-22A	22mm
MHF49-28A	28mm

### **Range of Application**

The magnetic heating filter is built into the heating circuit (supply and return), and is intended to filter out residue in order to prevent premature wear or failure of the heating system.

### Construction

The magnetic filter consists of:

- Filter cartridge
- Removable sheath
- Filter chamber
- Magnet.

### Materials

- Polyammide filter housing
- Polyammide, glass-fibre reinforced diverter body, ring and magnet housing
- Stainless steel filter mesh EPDM sealing washers
- Neodymium magnet (tested according to IEC 60404-5 & ASTM A977)



Technical Data	
Medium	Water; Water + Glycol
Operating Pressure	Max. 6 bar
Temperature Range	5°C – 90°C
Connection Size	22 mm & 28 mm compression fittings

# Variable Orifice Static Balancing Valves

For many years the most common design for hydronic Heating and Air conditioning systems was based upon constant flow with fixed speed pumps, all sized to match the maximum load of the system and balanced using manually set, 'static' balancing valves. Honeywell Kombi-2-Plus and Kombi-F are combined shut-off and variable orifice, static balancing valves for use in return water flow circuits in both Heating and Chilled Water Systems.

Both Valves use the Honeywell SafeCon<sup>™</sup> leak minimiser measuring connections.

## V5032 Kombi-2-Plus

The Kombi-2-plus is installed in the return mains of pump driven waterbased heating systems and cold water cooling systems to regulate the hydronic balance and as a shutoff valve. The valve body can be insulated easily and is equipped with pressure test cocks for differential pressure or flow measurement.

- Red bronze valve body with brass valve insert and pressure test cocks
- Visible pre-setting dial with concealed pre-setting wheel
- System Pressure rating PN16
- Water/water + glycol mixture 2°C to 130°C
- Zero-maintenance due to double O-ring spindle seals.

Part Number	DN Size	Kvs Value
V5032Y0015A	15	2.8
V5032Y0020A	20	5.8
V5032Y0025A	25	6.9
V5032Y0032A	32	20.1
V5032Y0040A	40	20.2
V5032Y0050A	50	45.3
V5032Y0065A	65	45.3
V5032Y0080A	80	73

## V6000 Kombi-F

The Kombi-2-plus is installed in the return mains of pump driven waterbased heating systems and cold water cooling systems to regulate the hydronic balance and as a shutoff valve. The valve body can be insulated easily and is equipped with pressure test cocks for differential pressure or flow measurement.

- Variable Orifice Balancing Valve
- Grey cast iron Valve body
- System Pressure rating PN16
- Water/water + glycol mixture 2°C to 130°C
- Stainless steel valve insert
- PTFE seat seal
- Sizes: 20mm to 400mm flanged connections
- SafeCon<sup>™</sup> measuring connections



Part Number	DN Size	Kvs Value
V6000D0025A	15	9.80
V6000D0032A	32	15.1
V6000D0040A	40	24.9
V6000D0050A	50	48.5
V6000D0065A	65	74.4
V6000D0080A	80	111
V6000D0100A	100	165
V6000D0125A	125	242
V6000D0150A	150	372
V6000D0200A	200	704
V6000D0250A	250	812
V6000D0300A	300	1380
V6000D00350A	350	1651
V6000D00400A	400	2383

# **Differential Pressure Control Valves**

Variable-flow systems have risen in popularity primarily because they reduce a system's energy consumption. They use variable-speed, inverter-driven pumps, the speed of which is changed to match the system load.

2-port, Motorised Control Valves are used to control the Heating / Chilled Water flow to, typically, Fan Coil Units, or Thermostatic Radiator Valves to regulate flow.

- Easy to install
- Easy to set
- Easy to commission
- Improved efficiency
- Reduces noise
- Minimise leaks with SafeCon<sup>™</sup> connections

## V5001PY Kombi-Auto Differential Pressure Control Valve



The V5001P Kombi-Auto differential pressure control valve is used to automatically maintain a hydronic balance in residential or commercial

hydronic heating and cooling systems. It is installed in the return pipeline. It is used in systems with variable volume flows, for example two-pipe heating systems, and creates a hydronic balance by keeping differential pressure at a constant preset level even under changing flow or pump pressure conditions.

- Red bronze Valve body
- System Pressure rating PN16
- Water/water + glycol mixture 2°C to 130°C
- Stainless steel valve insert
- PTFE seat seal
- 15mm to 50mm Internal Thread connections
- Optional SafeCon<sup>™</sup> measuring connections
- Impulse tube included.

Part Number	DN Size	Kvs Value	Pressure Range	Flow Range L/h
V5001PY1015	15	3.6	5-35kPa	40-1700
V5001PY1020	20	5.8	5-35kPa	60-2600
V5001PY1025	25	7.1	5-35kPa	100-3000
V5001PY1032	32	15.4	5-35kPa	150-6500
V5001PY1040	40	22	5-35kPa	200-9000
V5001PY1050	50	35.8	5-35kPa	450-19000
V5001PY2015	15	3.6	30-60kPa	50-1900
V5001PY2020	20	5.8	30-60kPa	50-3000
V5001PY2025	25	7.1	30-60kPa	100-3500
V5001PY2032	32	15.4	30-60kPa	200-10000
V5001PY2040	40	22	30-60kPa	250-13000
V5001PY2050	50	35.8	30-60kPa	500-20000

## V5001S Kombi-S Matching Differential Valve / Shut-Off Valve



The V5001S Kombi-S shut-off valve is used to shut off pipelines in residential

or commercial hydronic heating and cooling systems. It can be installed in either supply or return pipeline.

- Red bronze Valve body
- System Pressure rating PN16
- Water/water + glycol mixture 2°C to 130°C
- Stainless steel valve insert
- PTFE seat seal
- 15mm to 50mm Internal Thread connections
- Optional SafeCon<sup>™</sup> measuring connections.

Part Number	DN Size	Kvs Value
V5001SY2015	15	4.7
V5001SY2020	20	8.1
V5001SY2025	25	10.7
V5001SY2032	32	23.3
V5001SY2040	40	35.3
V5001SY2050	50	48.8

## V5001PF Kombi-Auto Differential Pressure Control Valve

Pressure regulation with the Kombi-Auto Differential Pressure Control Valve is designed for use in systems with variable flow requirements and is designed to maintain the hydraulic balance by maintaining the pressure

drop at a constant pre-set level (even under changing flow rate) in hydraulic heating and cooling systems.

- Grey cast iron Valve body
- System Pressure rating PN16
- Water/water + glycol mixture 2°C to 130°C
- Stainless steel valve insert
- Pressure ranges 20kPa 100 kPa or 40kPa 200kPa
- 65mm to 100mm flanged connections
- SafeCon<sup>™</sup> measuring connections
- Impulse tube included.

## V6000 Kombi-F Matching Differential Valve / Shut-Off Valve

Whilst the V6000 Kombi-F is used as

a Static Balancing Valve, it has also

been designed to act as a Partner Valve to the V5001PF Kombi-Auto

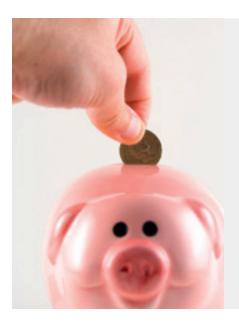
DPCV, when used to control system Pressure Differentials.

This valve also acts as a shut-off valve when required.

Part Number	DN Size	Kvs Value	Pressure Range	Flow Range L/h
V5001PF1065	65	52	20-100kPa	600- 49000
V5001PF1080	80	75	20-100kPa	600- 70000
V5001PF1100	100	96	100kPa	1100- 90000
V5001PF2065	65	52	40-200kPa	750- 75000
V5001PF2080	80	75	40-200kPa	750- 95000
V5001PF2100	100	96	40-200kPa	2000- 136000

- Grey cast iron Valve body
- System Pressure rating PN16
- Water/water + glycol mixture 2°C to 130°C
- Stainless steel valve insert
- PTFE seat seal
- 65mm to 100mm flanged connections
- SafeCon™ measuring connections.

Part Number	DN Size	Kvs Value
V6000D0065A	65	74.4
V6000D0080A	80	111
V6000D0100A	100	165



## The hydronic balancing of heating systems allows you to tap into substantial, immediately available saving potential.

Hydronically balanced heating systems run efficiently and economically. They save energy and enhance heating convenience. Hydronic balancing should be performed independently of boiler and/or heating pump replacement and building insulation. By adjusting volumetric flow and return temperatures, for instance, not only can heat pump efficiency be increased by a factor of 2\*, but condensing technology can also be implemented to achieve energy efficiency. Balancing is essential both in economic and legal terms.

\* Home Exhibition Center, Munich



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