

# INSTALLATION INSTRUCTIONS

# Honeywell

## V4043H Motorised Zone Valve

### Application

The V4043H valve has been designed to control the flow of water in iron and copper pipe systems. Although specifically designed for small bore central heating systems, the valve can be used in commercial and industrial applications.

### Specifications

Voltage: 220-240V ~ 50Hz

Power consumption: 6W

Lead supplied: 1 metre, 5 core

Operating temperature range: +5 to +88°C

Maximum ambient temperature: +52°C

Pipe fitting sizes:

22mm & 28mm compression fitting, 3/4" & 1" BSP

Dimensions and KV values: See diagrams

### Spares available

Powerhead

Part No. 40003916-001

Motor

Part No. 40002737-003

Ball & 'O' Ring Kit

Part No. 272742A CARD

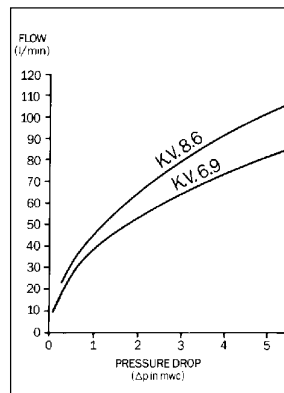
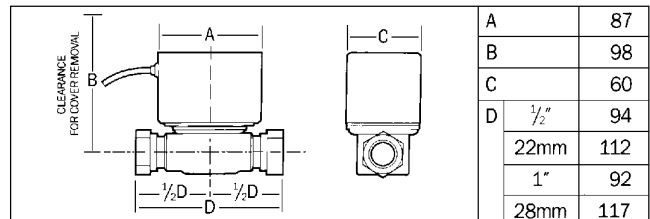
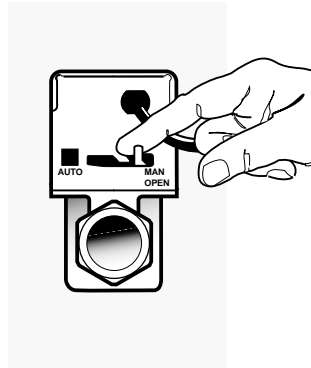
### Installation

V4043H incorporates a manual lever, the lever should normally be in 'AUTO' position, but can be moved to 'MAN OPEN' position for system draindown and filling purposes only.

Before fitting the valve, read through the plumbing and wiring instructions.

This product **MUST** be installed by a competent person. The installation **MUST** conform to I.E.E. Regulations and with The Electricity at Work Regulations.

A Class 'A' switch (having contact separation of at least 3mm in all poles) must be incorporated in the fixed wiring as a means of disconnecting the supply. The system must be appropriately fused.



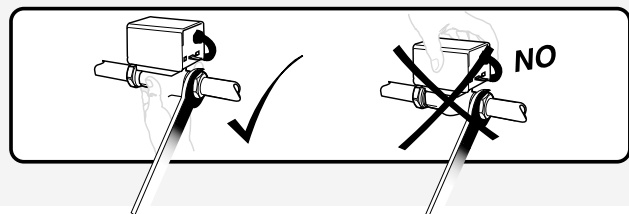
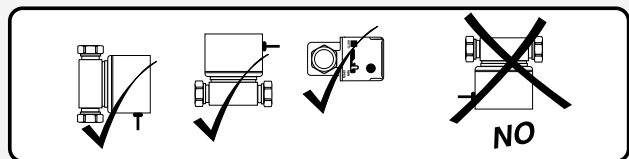
Flow Characteristics

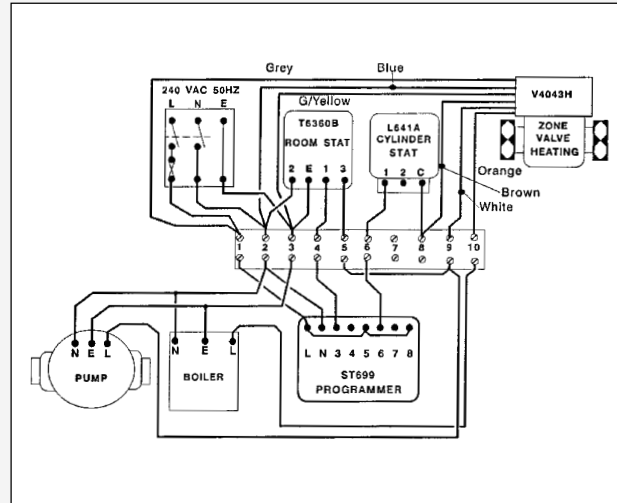
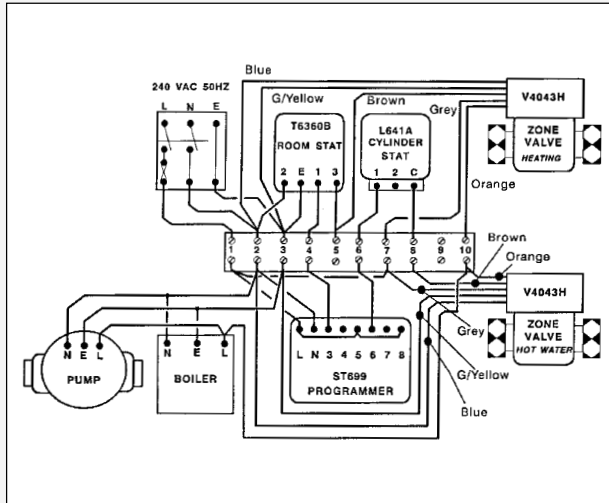
### Plumbing

The valve may be plumbed in at any angle but must not be mounted so that the valve head is below the horizontal level of the pipework. In the unlikely event of a leak a safety hazard could result.

Do not grip the valve head while making and tightening up plumbing connections. Attach a spanner (32mm or 1 1/4" AF) onto the valve body at each port, whilst tightening up the nuts. Tighten compression nuts enough to make a watertight seal.

TAKE CARE NOT TO OVERTIGHTEN.





**NOTE:**

1. If using the V4043H1080 (1" BSP) or V4043H1106 (28mm), the white wire must be electrically isolated. ('S' Plan only.)

## Wiring

The wiring diagram above shows relevant connections to a Honeywell junction box (Part No. 42002116-001). Ensure that each numbered, lettered or coloured wire is connected to the correct terminal in the junction box. Make sure all connections are good and all terminal screws are firmly tightened.

**Notes:**

- a Wiring diagram shows connections to a programmer with separate control of heating and hot water.
- b If single channel time clock is used, connect switched live from time clock to terminal 4 or 6 at junction box, then link terminal 4 to terminal 6 with a link wire.

## Checkout procedure

To ensure the valve is plumbed and wired correctly, carry out the following checks after filling the system and switching on the power.

- 1 a Check manual lever is in 'AUTO' position.
  - b Check programmer has power.
  - c Check boiler is switched on and its thermostat set to maximum.
- 2 Confirm correct hot water functions as follows:
  - a Turn room thermostat to minimum setting or switch off at programmer.
  - b Set cylinder thermostat to maximum and programmer to 'HOT WATER ON'.
  - c Pump should run (S Plan ONLY) and boiler should fire (S and C Plan). Feel pipe approximately 12" from valve port it should get hot.

- 3 Confirm correct heating functions as follows:
  - a Turn cylinder thermostat to minimum or switch off at programmer.
  - b Set room thermostat to maximum and programmer to 'CENTRAL HEATING ON'.
  - c Boiler should fire and pump should run. Feel pipe approximately 12" from pump (C Plan), or valve (S Plan) it should get hot.

## Completion

Reset both thermostats to temperature required, normally 60°C for cylinder thermostat and 20°C for room thermostat. Return programmer to 'Auto' or mode selected by householder. Full installation wiring and operating instructions for SUNDIAL products are included in every product pack. For special wiring diagrams or applications, contact Honeywell. ENSURE THAT VALVE HEADS HAVE FREE AIR MOVEMENT AROUND THEM.

Whilst Honeywell takes all practicable steps to design and manufacture its products to comply with the requirements of the Health and Safety at Work Act 1974, all products must be properly used and Purchasers are reminded that their obligations under the Act are to ensure that the installation and operation of such products at a place of work should be safe and without risk to them.

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The wiring diagrams and installation instructions in this publication are provided for guidance purposes when installing recognised standard systems only. Any application of this product not shown here, or any deviation from these instructions, is neither recommended nor advised. Any such application or deviation should be referred to Honeywell for technical assistance.