

Zone Valves

Features

- Silent operation
- Heavy duty sector gear and spring for long service
- BSP Connections



Specification

Operation:

2-port	Normally closed, spring return
3-Port	Mixing, spring return

Actuators

Supply:

230Vac ±10% 50/60Hz

24Vac ±10% 50/60Hz

Max. electrical load Aux. switch 3A, 125 to 250Vac

Power consumption 6W

Running time:

Open ≤ 10

Close ≤ 5

Working temp. 0 to +60°C

Working humidity Non-condensing

Housing:

Plate Casting aluminium alloyed

Cover Flame retardant ABS

Valve

Valve type 2 or 3 Port

Fluid temp. 0 to +94°C

Body rating 2.5 MPa

Material:

Valve body Forged brass

Valve rod Stainless steel AISI302

Seal NBR

Storage -20 to +65°C

Protection IP20

Country of origin China

Product Codes

2-Port valves:

VZ-2-15

15mm 1/2" BSP zone valve, 1.5Kv

VZ-2-20

20mm 3/4" BSP zone valve, 2.5Kv

VZ-2-25

25mm 1" BSP zone valve, 4.8Kv

3-Port valves:

VZ-3-15

15mm 1/2" BSP zone valve, 1.5Kv

VZ-3-20

20mm 3/4" BSP zone valve, 2.5Kv

VZ-3-25

25mm 1" BSP zone valve, 4.8Kv

Actuators:

VZ-SM230

230Vac Actuator with auxiliary switch

VZ-SM24

24Vac Actuator with auxiliary switch

Technical Overview

The VZ range of zone valves are designed for On/Off control of fluid flow in a variety of heating and cooling applications, including AHUs and FCUs. They feature a reliable synchronous motor and a spring return mechanism to provide power failsafe position and fitted with an auxiliary switch as standard.

Location

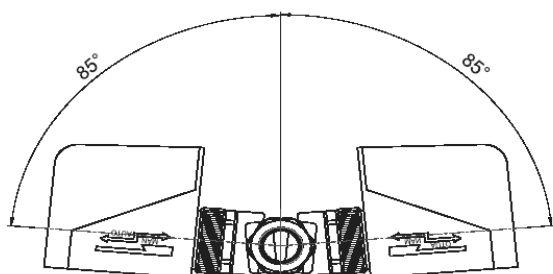
Electric valves, like all other mechanical equipment, should be installed with a degree of accessibility to enable quick and economical servicing or replacement. On high-rise buildings, use reducing valves on branch lines on lower floors.

Mounting

The valve can be mounted vertically or horizontally.

If mounted horizontally, the valve should be mounted within 85° of upright position. If mounted vertically, care should be taken to ensure moisture does not drip onto motor.

The valve should not be mounted upside down.



Piping & Installation

The zone valves must be piped so that the paddle always closes against the direction of flow, except in diverting configurations.

The manual operating lever, provided on all 2-way normally-closed and all 3-way valves, can be used to allow flushing of the hydronic system after installation. Owing to condensation in chilled water applications, install the valve over a drip pan.

Zone valves are designed for use in closed hydronic heating and cooling systems. Use in systems which have substantial make-up water (open systems) is not recommended. High levels of dissolved oxygen and chlorine found in open systems may attack the valve materials and result in premature failure.

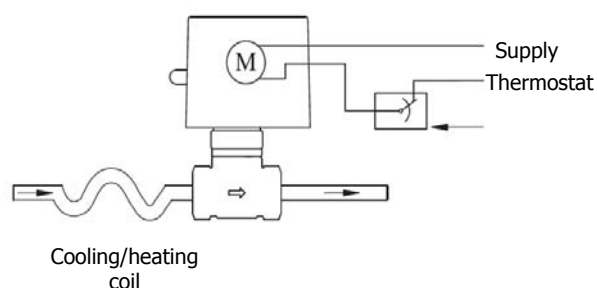
Manual Operating Lever

Move the manual operating lever slowly to the open position and hold in the retaining notch until the gear is taken up by the return spring. When valves are placed in the open position with the manual operating lever, the paddle is removed from the seat or port.

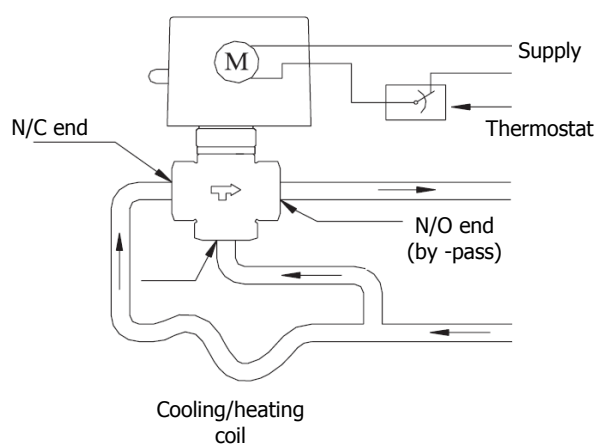
The manual operating lever will reset to the automatic position the first time the valve is cycled electrically.

Example Applications

2-Port:

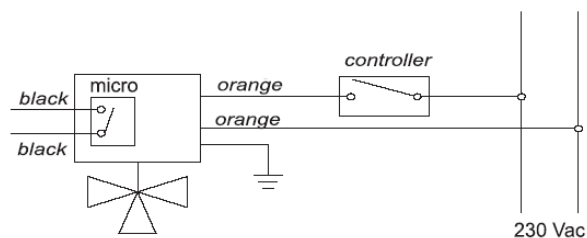


3-Port:

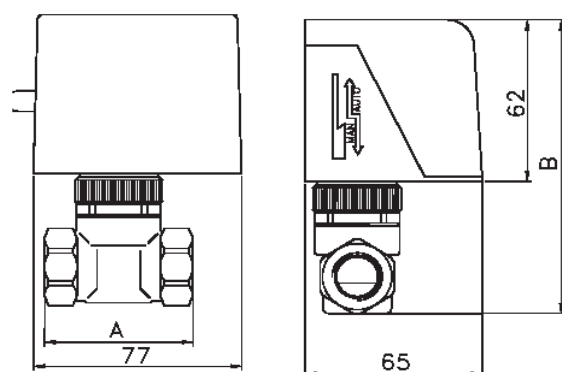


Connections

VZ-SM



Dimensions



2-Port valves: A B Max diff pressure

VZ-2-15 55 113 250kPa

VZ-2-20 66 124 100kPa

VZ-2-25 90 129 60kPa

3-Port valves:

VZ-3-15 55 128 250kPa

VZ-3-20 66 137 100kPa

VZ-3-25 90 145 60kPa