

VZ Zone Valves



Features:

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

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.

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 (32 to 140°F)	
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 (32 to 201°F)	
Body rating	2.5MPa (362psi)	
Material:	Valve body	Forged brass
	Valve rod	Stainless steel AISI302
	Seal	NBR
Storage	-20 to +65°C(-4 to +149°F)	
Protection	IP20	
Country of origin	China	



24Vac actuator versions

The products referred to in this data sheet meet the requirements of EU Directive 2004/108/EC

230Vac actuator versions

The products referred to in this data sheet meet the requirements of EU 2004/108/EC and 2006/95/EC

Part Codes:

2-Port valves:

VZ-2-15

½" BSP zone valve, 1.5Kv

VZ-2-20

¾" BSP zone valve, 2.5Kv

VZ-2-25

1" BSP zone valve, 4.8Kv

3-Port valves:

VZ-3-15

½" BSP zone valve, 1.5Kv

VZ-3-20

¾" BSP zone valve, 2.5Kv

VZ-3-25

1" BSP zone valve, 4.8Kv

Actuators:

VZ-SM230

230Vac Actuator with auxiliary switch

VZ-SM24

24Vac Actuator with auxiliary switch

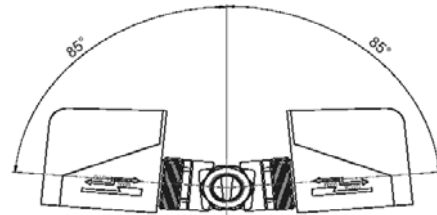
Location & Mounting:

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.

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.

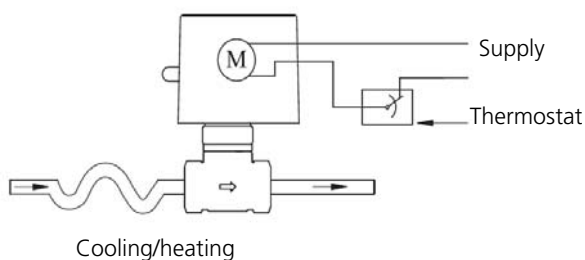
Zone valves are designed for use in closed hydronic heating and cooling systems. Use in systems which have substantial make-up water (open systems) is not recommended. High levels of dissolved oxygen and chlorine found in open systems may attack the valve materials and result in premature failure.

Manual Operating Lever:

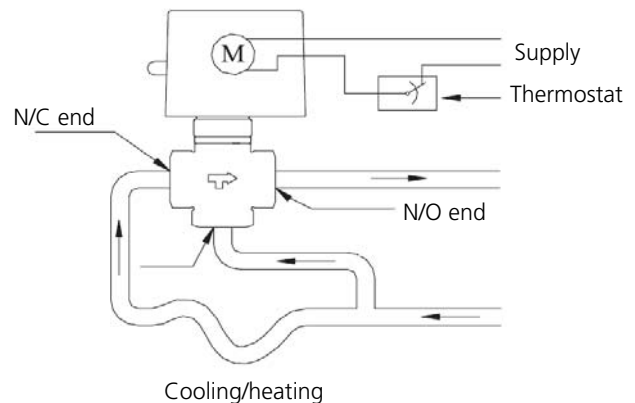
Move the manual operating lever slowly to the open position and hold in the retaining notch until the gear is taken up by the return spring. When valves are placed in the open position with the manual operating lever, the paddle is removed from the seat or port.

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

2-Port example application



3-Port example application

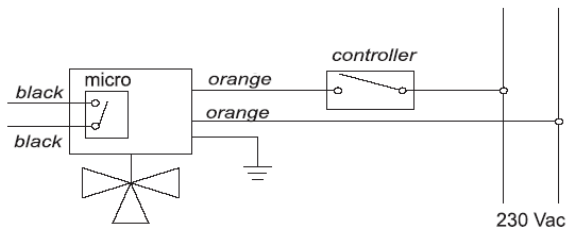


Tel: +44 (0) 1732 861200. - E-mail: sales@sontay.com. - Web: www.sontay.com.

© 2012 Sontay Limited. All rights reserved

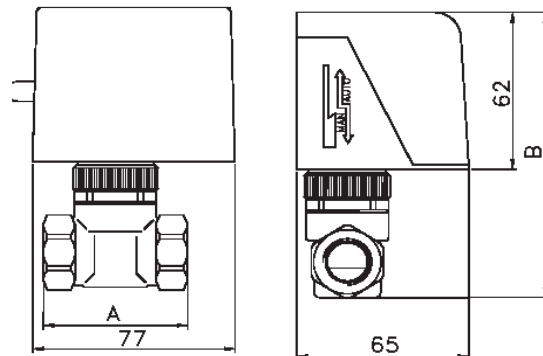
Connections:

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



Whilst every effort has been made to ensure the accuracy of this specification, Sontay cannot accept responsibility for damage, injury, loss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.

Tel: +44 (0) 1732 861200. - E-mail: sales@sontay.com. - Web: www.sontay.com.

© 2012 Sontay Limited. All rights reserved