



## **Product Overview**

The AX-ZV range of two and three port Zone Valves for use in standard applications. The valves have been designed to operate as on/off regulators in closed water circuits in central heating, hot water and climate control installations. They can be either 230 or 24 Vac operation.

# **Features**

**Response Time:** 

- Actuator with spring return
- Normally open and Normally closed options
- Two and three port options
- 230Vac and 24Vac options

# **Product Specifications**

**Power Supply:** 24Vac @50Hz +/- 10%

230Vac @50Hz +/-10%

**Operation:** AX-ZV-2 2 port valve

AX-ZV-3 3 port valve

Max Consumption: 6W

Opening <12 sec

Closing < 5 sec

Static Pressure Limit: non-removable 10 bar

removable 40 bar

 ${\bf Maximum\, Differential\, Pressure:}$ 

DN15 (1/2") 1.4 bar DN20 (3/4") 0.7 bar

DN25 (1") 0.6 bar

Media Temperature:5 to 88 deg CAmbient Temp. Range:0 to + 50°C

Cable: 60 cm

Materials: Valve body Stamped brass (EN 12165)

seal Ethylene propylene

"O" rings EPDM (3 off)

Conformity: CE marked
Country of Origin: Spain

AX-ZV - Issue 1.0 - Date 16/3/2006

Page 1 of 4



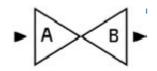
### **Order Codes**

AX-ZV-2-15-230	2 Port 15mm Zone Valve 230Vac
AX-ZV-2-22-230	2 Port 22mm Zone Valve 230 Vac
AX-ZV-2-28-230	2 Port 28mm Zone Valve 230 Vac
AX-ZV-3-15-230	3 Port 15mm Zone Valve 230 Vac
AX-ZV-3-22-230	3 Port 22mm Zone Valve 230 Vac
AX-ZV-3-28-230	3 Port 28mm Zone Valve 230 Vac
AX-ZV-2-15-24	2 Port 15mm Zone Valve 24Vac
AX-ZV-2-22-24	2 Port 22mm Zone Valve 24Vac
AX-ZV-2-28-24	2 Port 28mm Zone Valve 24Vac
AX-ZV-3-15-24	3 Port 15mm Zone Valve 24Vac
AX-ZV-3-22-24	3 Port 22mm Zone Valve 24Vac
AX-ZV-3-28-24	3 Port 28mm Zone Valve 24Vac

## **Description**

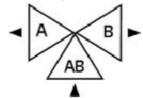
## 2 Port Valves:

The two port valves are direct flow models, with the circulation direction from A to B, and normally closed in A (powered down). When power s applied to the motor, the valve opens and the microswitch closes (if there is one).



#### 3 Port Valves:

The three port valves are of the diverter type with an inlet through ABand outlets through A and B with way A normally closed (powered down). When power s applied to the motor, way A opens, B closes and the microswitch closes (if there is one).



#### Microswitch:

The end of stroke signal microswitch behaves like a switch that is activated when the valve is powered up, thereby enabling the activation of any device to be controlled by the microswitch . e.g staring up a circulation pump

#### NOTE

In the event of a power failure, the valve automatically returns to the closed position at A. in this case, a cam enables the valve to be activated manually, as well as for the filling, bleeding or emptying of the system.

## Installation

## Hydraulic:

Always mount the valve with the motor in the upright vertical position, not up side down, to prevent any possible condensation in the connection pipes getting inside the motor

Before installing the valve, check that the pipes are clean, paying particular attention to any welding residue, cuttings or other waste.

Respect the flow direction indicated.

## Electrical:

without microsw	itch	with microswitch	1
Blue -	Motor	Blue -	Motor
Brown -	Motor	Brown -	Motor
Yellow/green	Earth	Grey -	Normally Closed
		Orange -	Normally open
		Yellow/green	Earth

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AX-ZV - Issue 1.0 - Date 16/3/2006

Page 2 of 4



# **Commissioning and Operation:**

Before filling the system, the manual control must be moved to the manual position (MAN). After filling, and during the normal operation of the valve, move the control position to the automatic position (AUTO).

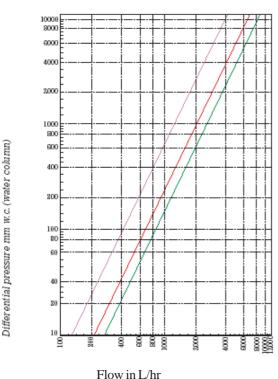
If there is a power failure, and also when filling, bleeding or emptying the installtion, the valve can operate in the manual position (MAN) with the following result

2 way Valve: the valves remain open

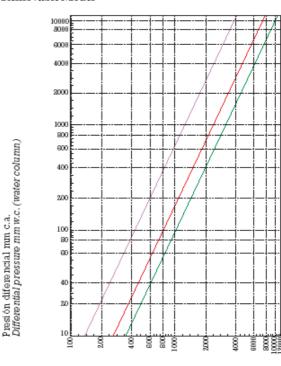
3 way valve: the flow entering from AB is diverted through both A and B.

# **Hydraulic Specification:**

## Non Removable Model



#### Removable Model



Flow in L/hr

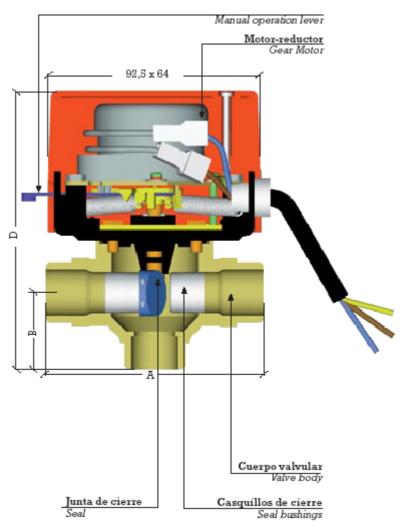
Purple (first line) 2 port 1/2" and 3 port 1/2"

Red (second line) 2 port 3/4" and 3 port 3/4" and 2 port 1"

Green (third line) 3 port 1"



## **Dimensions:**



# **Dimensions**

CODE	Length	Height	Overall
	Valve Body	Centre A & B	Height
	mm	to AB	mm
	A	B	D
AX-VZ-2-15	94.5	21	108
AX-VZ-2-22	94.5	21	108
AX-VZ-2-28	94.5	21	108
AX-VZ-3-15	94.5	33.5	120.5
AX-VZ-3-22	94.5	33.5	120.5
AX-VZ-3-28	94.5	33.5	120.5