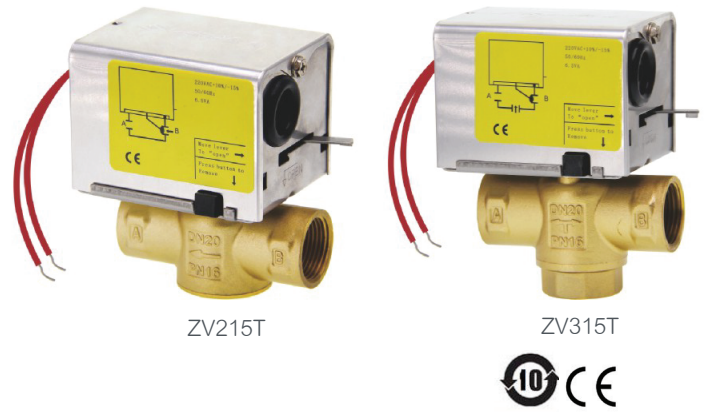


# ZV Series

## Zone Valve Assemblies



### Product Description

The ZV zone valves are designed to control water flow in hydronic heating and cooling systems. The easy to install valves and removable actuators can be used in a variety of HVAC applications. The motorized two position, on/off, spring return actuators are typically controlled by a thermostat or Building Management System (BMS).

When a call for heating or cooling is required to maintain room temperature, power is provided to the actuator, thus opening the valve and allowing water to flow through the coil. Once the temperature set point is reached, power is removed from the actuator, thus allowing the actuator to spring return and closing the valve from water flow through the coil.

### Specifications

Service	Hot and chilled water models, up to 50% glycol.
System Static Pressure Limits	1.6 MPa (PN16)
Max Close-Off Pressure Differential	200 kPa
Seat Leakage	< 0.01% Kvs, ANSI (IV)
Fluid Temperature Limit	5...60° C
Ambient Temperature Limit	5...40° C
Travel time open	18 seconds
Travel time close	7 seconds
Materials	
Body	Forged Brass
Stem	Nickel Plated Brass
Seat	Brass
Paddle	Styrene Butadiene Rubber (SBR)
Actuator Voltage	
ZVxxT-x-B	220 VAC ±10% 50/60Hz
ZVxxT-x-A	24 VAC ±10% 50Hz
Power Requirements	6.2 Watts
Housing Type	IP20, Indoor Use Only
Noise Level	<35db

### Features

- Hysteresis synchronous motor for long life
- Spring return operation provides a fail-safe
- Actuator mounts directly onto valve body without need for linkages or calibration
- Manual override lever to manually open the valve
- Actuator can be replaced without any tools, or removal of valve from system

### Two-Position Motorized Valve Assembly (G Thread)

Part Number	Ports	Pipe Size	Kv	Actuator Voltage
ZV215T-2-B	2-Way	DN15 1/2"	2.2	220 Vac
ZV220T-3-B	2-Way	DN20 3/4"	2.6	
ZV225T-3-B	2-Way	DN25 1"	3.2	
ZV315T-2-B	3-Way	DN15 1/2"	2.2	
ZV320T-3-B	3-Way	DN20 3/4"	2.6	
ZV325T-3-B	3-Way	DN25 1"	3.2	
ZV215T-2-A	2-Way	DN15 1/2"	2.2	24 Vac
ZV220T-3-A	2-Way	DN20 3/4"	2.6	
ZV225T-3-A	2-Way	DN25 1"	3.2	
ZV315T-2-A	3-Way	DN15 1/2"	2.2	
ZV320T-3-A	3-Way	DN20 3/4"	2.6	
ZV325T-3-A	3-Way	DN25 1"	3.2	

## Installation

Inspect the package for damage. If package is damaged, notify the appropriate carrier immediately. If undamaged, open the package and inspect the device for obvious damage. Return damaged products.

### Required Tools

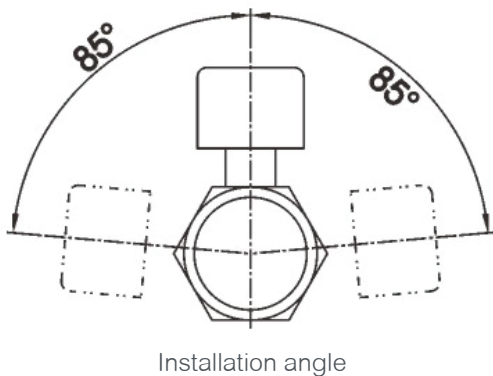
- Tools (not provided)
- Wrench 1 to 1-5/8" (if threaded valve)
- Soldering equipment (if sweat fit) or flare
- Training: Installer must be a qualified, experienced technician
- Other accessories as appropriate

### Mounting

The valves can be mounted in horizontal or vertical piping. When installed in horizontal piping, the actuator must be above the valve body and can be tilted up to 85 degrees from vertical.

Make certain there is no overhead water source that may drip onto valve actuator.

In normal service, some condensation may occur on or around the valve. A drip pan may be necessary or the valve body may be insulated.



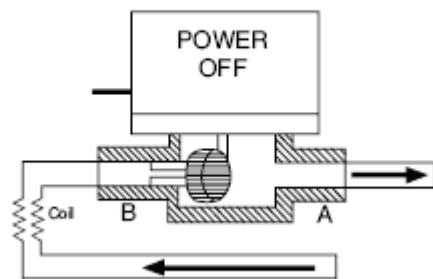
## Installing Actuator on Valve Body

Slowly latch the manual operating lever in the open, engaged position. Depress the release button. Align the body with the actuator to ensure the stem is inserted into the large mating hole on the bottom side of the actuator. Engage the actuator on the body and release the button.

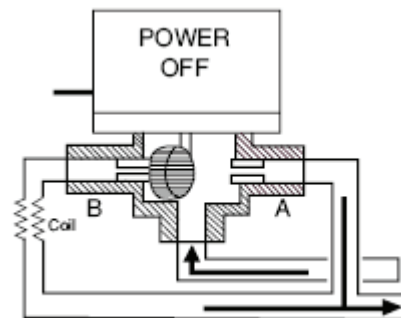
### Notes

- For high-rise buildings, a reduction valve should be used to ensure static and differential pressure requirements are met.
- Manual open lever: When the manual open lever is in the locked position (valve open), it will remain locked until power is applied to the actuator. When power is applied, the manual open lever will automatically disengage and the actuator will function per the control signal.
- The direction of water flow should be the same as the arrow on the valve body.
- The actuator should not be used as the fulcrum of force during installation.

2-Way Valve with Normally Closed Actuators



3-Way Valve in Diverting Configuration, Normally Closed to the Coil



**⚡ ⚠ DANGER**

**HAZARD OF ELECTRIC SHOCK**

- Follow safe electrical work practices. See NFPA 70E in the USA, or applicable local codes.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Read, understand and follow the instructions before installing this product.
- Turn off all power supplying equipment before working on or inside the equipment.
- Use a properly rated voltage sensing device to confirm power is off.

**DO NOT DEPEND ON THIS PRODUCT FOR VOLTAGE INDICATION**

**Failure to follow these instructions will result in death or serious injury.**

A qualified person is one who has skills and knowledge related to the construction and operation of this electrical equipment and the installation, and has received safety training to recognize and avoid the hazards involved. NEC2011 Article 100  
 No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

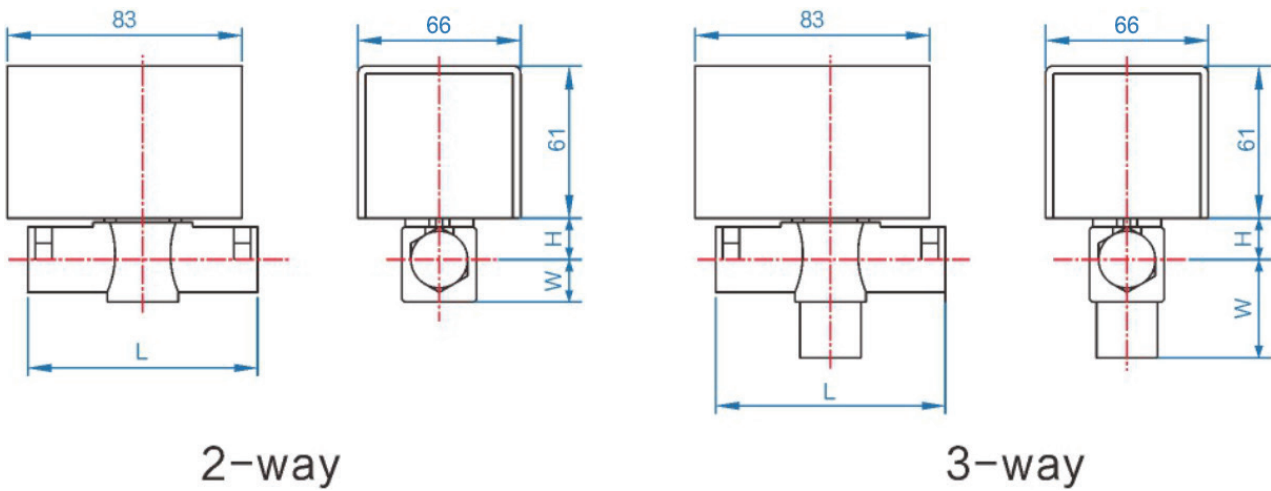
**NOTICE**

**RISK OF EQUIPMENT DAMAGE**

- Avoid electrical noise interference.
- Do not install near large contactors, electrical machinery, or welding equipment.
- Only use manual override when power is off.
- Do not use manual override with actuators mounted in tandem.

**Failure to follow these instructions will result in damage to the gear train or other mechanical damage.**

### Dimensions - mm



DN	Model No.	Valve Type	Thread Size	Kvs	kPa	Dimensions (mm)			Weight (kg)
						W	L	H	
15	ZV215T-2-A / ZV215T-2-B	2-way	G1/2	2.3	200	21	81	19	0.7
20	ZV220T-3-A / ZV220T-3-B	2-way	G3/4	2.8		21	81	19	0.7
25	ZV225T-3-A / ZV225T-3-B	2-way	G1	3		25	88	23	0.8
15	ZV315T-2-A / ZV315T-2-B	3-way	G1/2	2.3		35	81	19	0.7
20	ZV320T-3-A / ZV320T-3-B	3-way	G3/4	2.8		35	81	19	0.8
25	ZV325T-3-A / ZV325T-3-B	3-way	G1	3		42	88	23	0.9