

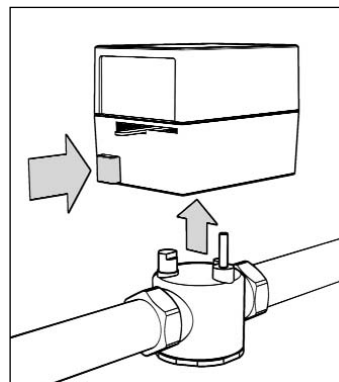
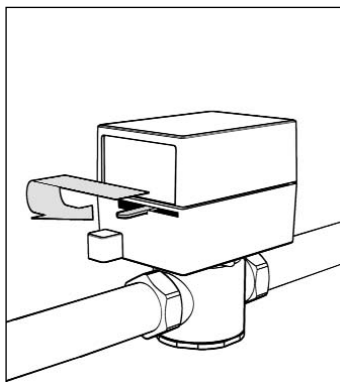


| | |
|-----------------------------|---------------------------------|
| ZONE 2...N | Two-way (NPT) |
| ZONE 2...S | Two-way (Sweat) |
| ZONE 3...N | Three-way Diverting (NPT) |
| ZONE 3...S | Three-way Diverting (Sweat) |
| 1/2" and 1" | |
| Service: | Chilled/hot water 50% glycol |
| C_v Range: | 1.0 – 8.0 |
| Material: | Brass body |
| Control: | On/Off Spring Return |

Features

Zone Valves – ZONE2... and ZONE3... Series

- Push button for quick removal of actuator
- Easy manual open lever with automatic return
- Up to 75 psi close-off
- Only 2-3/8" wide to fit most baseboards
- Spring return normally closed or normally open
- Quiet operation



Electronic Zone Valves, Spring Return Actuator



Two-way and Three-way Valves with NPT or Sweat Ends



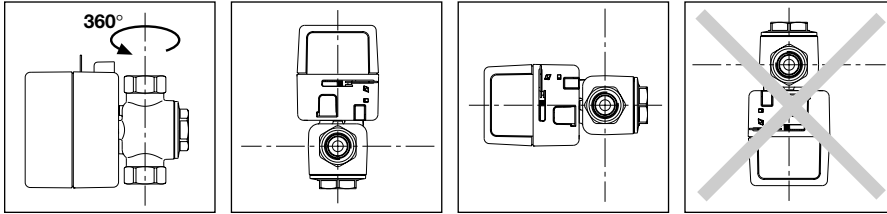
| Model # Valve | Valve | | | | Actuator | | | |
|--|--------------------------|------------------------------|------------------------|-------------------------------------|-----------------------------------|---------------------------------------|-------------------------------------|---------|
| | C _v Rating | Nominal Size Inches mm | Close- off (psi) | 24 V Normally Closed ZONE24NC | 24 V Normally Open ZONE24NO | 120 V Normally Closed ZONE120NC | 120 V Normally Open ZONE120NO | |
| Two-way with NPT Female Connection | | | | | | | | |
| ZONE215N-10 | 1.0 | 1/2" | 15 | 75 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 |
| ZONE215N-25 | 2.5 | 1/2" | 15 | 50 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 |
| ZONE215N-35 | 3.5 | 1/2" | 15 | 30 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 |
| ZONE220N-35 | 3.5 | 3/4" | 20 | 30 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 |
| ZONE220N-50 | 5.0 | 3/4" | 20 | 25 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 |
| ZONE225N-80 | 8.0 | 1" | 35 | 20 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 |
| Three-way with NPT Female Connection | | | | | | | | |
| ZONE315N-10 | 1.0 | 1/2" | 15 | 75 | ☐ Pg 10 | † | ☐ Pg 10 | † |
| ZONE315N-25 | 2.5 | 1/2" | 15 | 50 | ☐ Pg 10 | † | ☐ Pg 10 | † |
| ZONE315N-35 | 3.5 | 1/2" | 15 | 30 | ☐ Pg 10 | † | ☐ Pg 10 | † |
| ZONE320N-35 | 3.5 | 3/4" | 20 | 30 | ☐ Pg 10 | † | ☐ Pg 10 | † |
| ZONE320N-50 | 5.0 | 3/4" | 20 | 25 | ☐ Pg 10 | † | ☐ Pg 10 | † |
| ZONE325N-80 | 8.0 | 1" | 35 | 20 | ☐ Pg 10 | † | ☐ Pg 10 | † |
| Two-way with Sweat Connection | | | | | | | | |
| ZONE215S-10 | 1.0 | 1/2" | 15 | 75 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 |
| ZONE215S-25 | 2.5 | 1/2" | 15 | 50 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 |
| ZONE215S-35 | 3.5 | 1/2" | 15 | 30 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 |
| ZONE220S-35 | 3.5 | 3/4" | 20 | 30 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 |
| ZONE220S-50 | 5.0 | 3/4" | 20 | 25 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 |
| ZONE225S-80 | 8.0 | 1" | 35 | 20 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 |
| Three-way with Sweat Connection | | | | | | | | |
| ZONE315S-10 | 1.0 | 1/2" | 15 | 75 | ☐ Pg 10 | † | ☐ Pg 10 | † |
| ZONE315S-25 | 2.5 | 1/2" | 15 | 50 | ☐ Pg 10 | † | ☐ Pg 10 | † |
| ZONE315S-35 | 3.5 | 1/2" | 15 | 30 | ☐ Pg 10 | † | ☐ Pg 10 | † |
| ZONE320S-35 | 3.5 | 3/4" | 20 | 30 | ☐ Pg 10 | † | ☐ Pg 10 | † |
| ZONE320S-50 | 5.0 | 3/4" | 20 | 25 | ☐ Pg 10 | † | ☐ Pg 10 | † |
| ZONE325S-80 | 8.0 | 1" | 35 | 20 | ☐ Pg 10 | † | ☐ Pg 10 | † |
| Built-in auxiliary switch ZONE215N-10+ZONE24NC-S | | | | | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 | ☐ Pg 10 |

(add -S to model number)

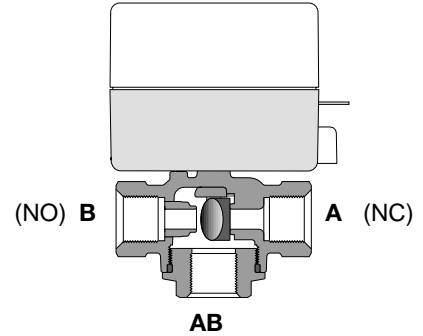
†Three-way valve can be NC or NO depending on installation always using the NC actuator. See technical literature for details.

Installation

The valve can be installed vertically or horizontally, but not turned upside down.

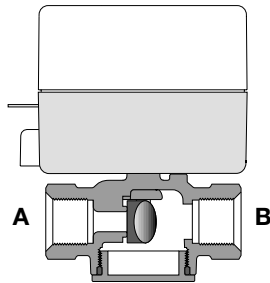


- A 3-way valve cannot be transformed into a 2-way valve and visa versa.
- The flow is from A to B (see diagram below) and must be installed so the paddle closes against the direction of flow as indicated in the following diagrams.
- The 2-way valves can be installed on the supply or on the return; for correct installation it is necessary to respect the direction of flow indicated from the arrow on the body valve.
- The NC versions have a override handle.
- 3-way zone valves can be fitted with NC actuator only (rotate 180° the valve body for NO application).

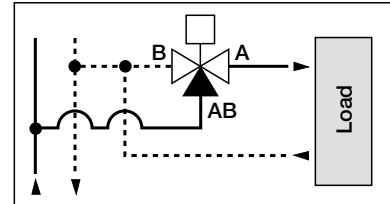


3-way valve normally closed actuator

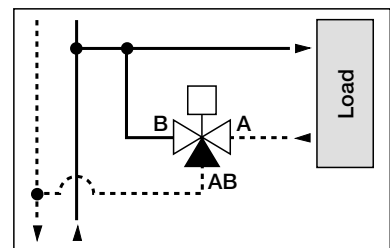
(Note: 3-way uses only normally closed actuator)



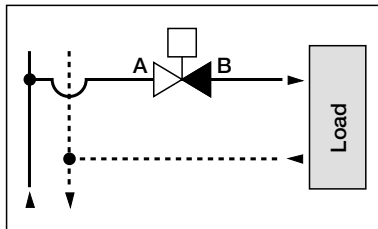
2-way valve normally closed actuator



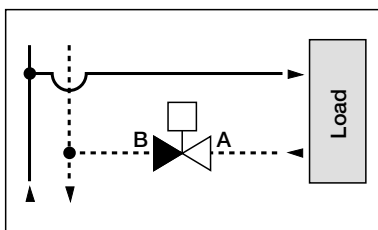
3-way installed on the supply in diverting configuration



3-way installed on the return



2-way installed on the supply

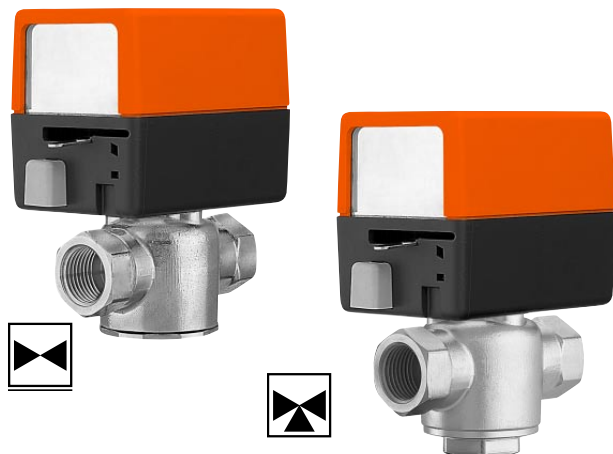


2-way installed on the return

| | 2-way | 3-way |
|----------------------|-----------------|--|
| N.C. without power | Port "A" closed | Port "A" closed Port "B" open Port "AB" open |
| N.C. open with power | Port "A" open | Port "A" open Port "B" closed Port "AB" open |
| N.C. manually open | Port "A" open | Port "A" open Port "B" open Port "AB" open |

Electronic Zone Valves

ZONE... Series
Technical Data/Submittal



Valve Specifications

| | |
|---------------------|----------------------------------|
| Service | chilled or hot water, 50% glycol |
| Flow characteristic | |
| Two-way | on/off |
| Three-way | on/off, diverting |
| Sizes | 1/2", 3/4" and 1" |
| Type of end fitting | female, NPT or Sweat |
| Materials: | |
| Body | forged brass |
| Stem | stainless steel |
| Seals | EPDM |
| Pressure rating | 300 psi |
| Media temp. range | 32°F to 212°F [0°C to 100°C] |
| Close off pressure | 20 – 75 psi |
| Leakage | Class III 0.1% |
| Cv rating | 1.0 – 8.0 |

U.S. & Foreign Patent Pending

Application

This valve is typically used on fan coil units, baseboards or other hydronic applications where fail safe operation or 2-wire control is required. This valve is suitable for use in a hydronic system with variable or constant flow.

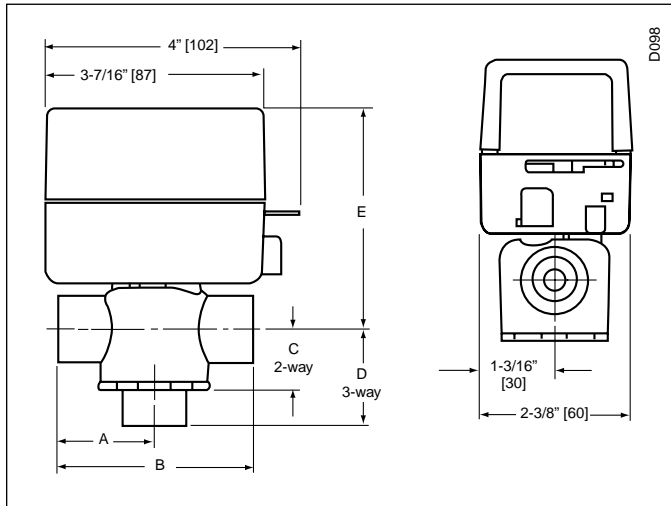
This valve is designed to fit in compact areas where on/off or control is required using 24 VAC or 120 VAC.

Actuator Specifications

| | |
|--------------------------------------|---|
| Control | On/off |
| Nominal voltage | 24 VAC 50/60 Hz ± 10% or 120 VAC 50/60 Hz ± 10% |
| Power Consumption | 6.5 W |
| Transformer Sizing | 7VA (Class 2 power source) |
| Electrical Connection | Wire lead length, 120V 6" 24V 18" |
| Position Indication | Integrated into lever (NC only) |
| Running Time | Motor: 20-40 seconds Spring: 5 seconds |
| Humidity | 5 to 95% non-condensing |
| Ambient Temperature | 32°F to 104°F (0°C to + 40°C) |
| Storage Temperature | -40°F to 176°F (-40°C to +80°C) |
| Housing Rating | UL94-5V(B) |
| Agency Listing | CE, cULus |
| Noise Level | max. 35 db (A) |
| Quality Standard | ISO 9001 |
| Built-in Auxiliary Switch (optional) | 1 x SPST, 5A resistive (5A inductive) @ 24 VAC 1 x SPST, 5A resistive (5A inductive) @ 120 VAC |

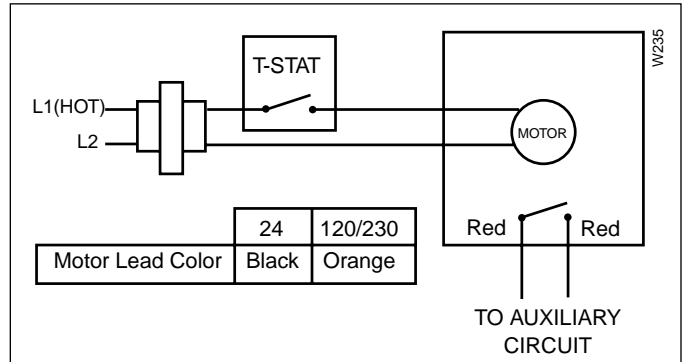


Dimensions



| Connection Size and type | A in. (mm) | B in. (mm) | C in. (mm) | D in. (mm) | E in. (mm) |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|
| 1/2" sweat | 1-5/16" [34] | 2-5/8" [38] | 15/16" [24] | 1-5/16" [34] | 3-1/2" [89] |
| 3/4" sweat | 1-3/8" [35] | 2-3/4" [70] | 15/16" [24] | 1-1/2" [38] | 3-1/2" [89] |
| 1" sweat | 1-11/16" [43] | 3-3/8" [86] | 15/16" [24] | 1-9/16" [39] | 3-11/16" [93] |
| | | | | | |
| 1/2" NPT | 1-7/16" [36] | 2-7/8" [72] | 15/16" [24] | 1-1/4" [32] | 3-1/2" [89] |
| 3/4" NPT | 1-9/16" [39] | 3-1/16" [92] | 15/16" [24] | 1-1/4" [43] | 3-11/16" [93] |
| 1" NPT | 1-13/16" [46] | 3-5/8" [92] | 15/16" [24] | 1-11/16" [43] | 3-11/16" [93] |

Wiring Diagram



Built-in auxiliary switch (optional) (-S models)