

Product Instructions

viega

Mixing Valve Actuator

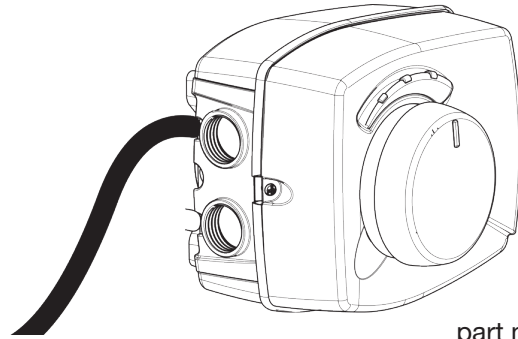
The Actuator is designed to provide electronic temperature control for the Mixing Valves in heating, cooling, and snow-ice melting applications. The actuator is designed to fit and modulate three- and four-way mixing valves. The Actuator is operated by a 24V signal from the Basic Heating Control or Advanced Snow Melt Control.

Features

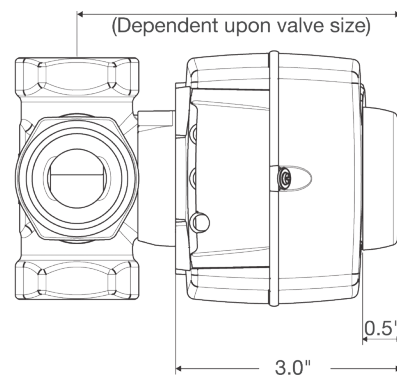
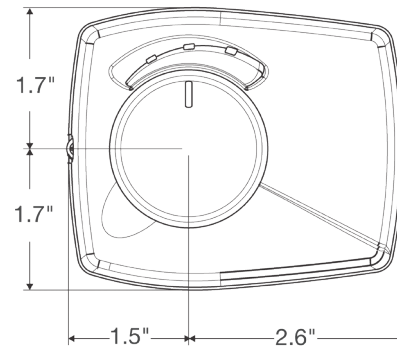
- Compact design
- Manual override of motor
- Ease of installation
- Compatibility with the Basic Heating Control and Advanced Snow Melting Control

Specifications

Power Supply:	24 VAC
Power Consumption:	1.5 VA
Torque:	45 in. lb.
Signal / Runtime for 90° rotation:	1.7 min. (102 sec.)
Weight:	1 lb.
Ambient Temp. Limits:	5 to 131°F



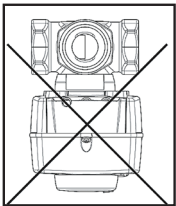
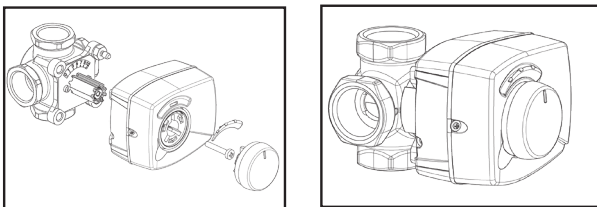
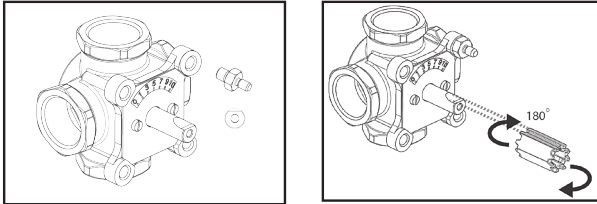
part number 20042



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Mounting



The Mixing Valve Actuator includes a four piece mounting kit for installation onto Viega's old and new three- and four-way Mixing Valves. The installation of the actuator depends on the piping configuration and orientation of the mixing valve.

The actuator position can be manually adjusted by pulling and turning the black cap.

The actuator can not be mounted with the housing facing the ground.

Mounting Actuator to Old Style* Three- and Four-Way Mixing Valve

To mount the actuator to the old style Mixing Valve, use the mounting stud, white plastic adapter and locking screw from the mounting kit.

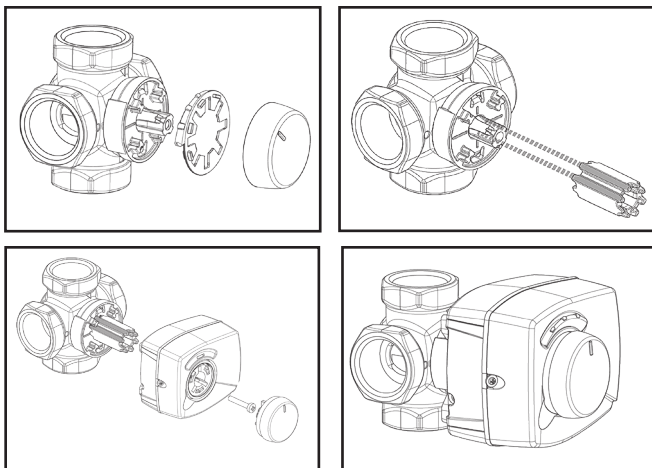
1. Determine actuator position by using the mounting stud in one of the holes in the valve body.
2. Push white adapter sleeve onto valve stem. Only one possible mounting option.
3. Set valve halfway open to ensure precise temperature control.
4. Remove black cap from actuator to insert locking screw and secure actuator onto valve body.
5. Replace black cap and temperature indicator (red) onto actuator corresponding with the direction of temperature mixing.

*Sold by Viega in 2009 catalog.

Mounting Actuator to New Style Three- and Four-Way Mixing Valve

To mount the actuator to the new style Mixing Valve, use the white plastic adapter and locking screw from the mounting kit.

1. Determine valve position based on individual piping configuration.
2. Remove black cap and indicator ring from valve.
3. Push white adapter sleeve onto valve stem. Only one possible mounting option.
4. Set valve halfway open to ensure precise temperature control.
5. Place actuator on white plastic adapter. The actuator must be secured with locking screw.
6. Place black cap back and temperature indicator (red) onto actuator corresponding with the direction of temperature mixing.



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Manual Operation

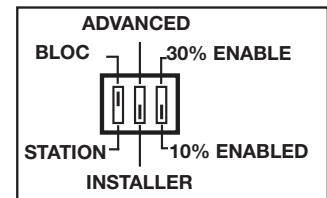
Prior to manual operation power should be turned off to the actuator. To manually operate the actuator pull the temperature dial knob and rotate clockwise or counter clockwise depending on temperature desired. To disengage manual operation turn the temperature dial to align with valve position and push it back into actuator housing.

Note: The motor actuator should not be engaged in manual operation for a prolonged period of time.

Wiring

Setting up the Basic Heating Control when used with three-way valve

Remove the cover plate of the Basic Heating Control. There are three DIP switches located in the upper right hand corner of the control. Set the toggle of the first DIP switch to “Bloc” for proper operation of the mixing valve actuator.

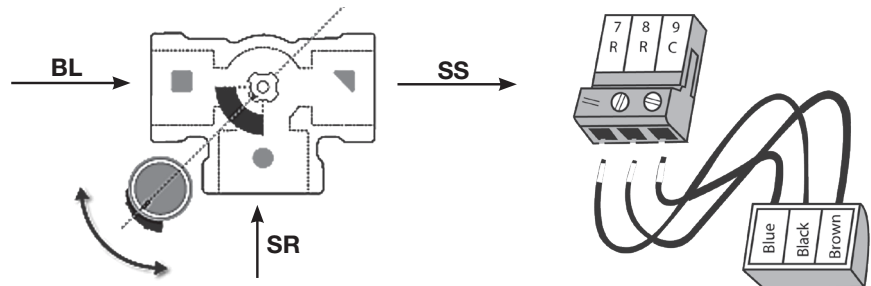


Wiring the actuator to the Viega Basic Heating Control

The exact wiring of the Actuator to the Basic Heating Control depends on the application and configuration of the Mixing Valve.

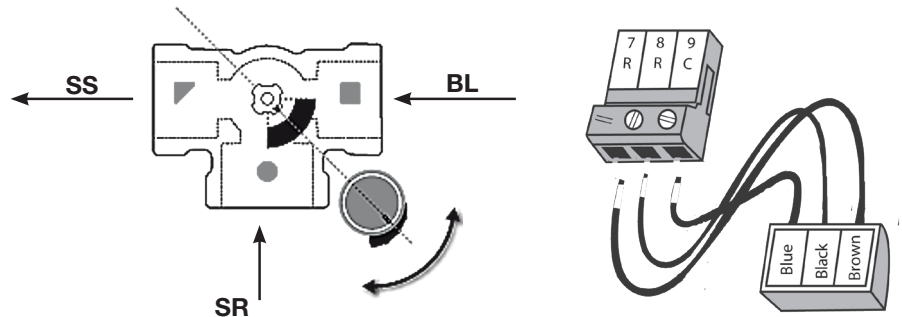
Scenario 1 Piping and Wiring: Boiler Loop on left, System Supply on right, System Return into branch

Blue in common 9
Open, ccw, black in open 7
Close, cw, brown in close 8



Scenario 2 Piping and Wiring: Boiler Loop on right, System Supply on left, System Return into branch

Blue in common 9
Open, cw, brown in open 7
Close, ccw, black in close 8



NOTE: For precise temperature control it is imperative that the initial position of the valve used is half open. This can be accomplished by positioning the groove of the white plastic adapter between Boiler Supply and Boiler Return. The actuator itself can be mounted onto the valve in any position.

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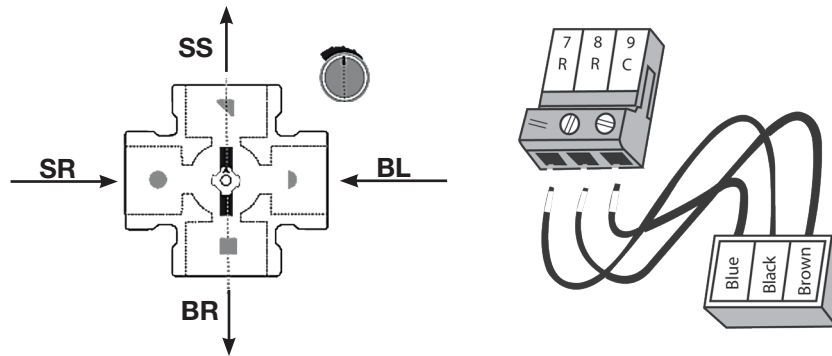
Setting up the Basic Heating Control when used with four-way valve

The exact wiring of the Actuator to the Basic Heating Control depends on the application and configuration of the Mixing Valve.

Scenario 1 Piping and Wiring:

Boiler Loop on right, Boiler Return on bottom, System Supply on top, System Return on left.

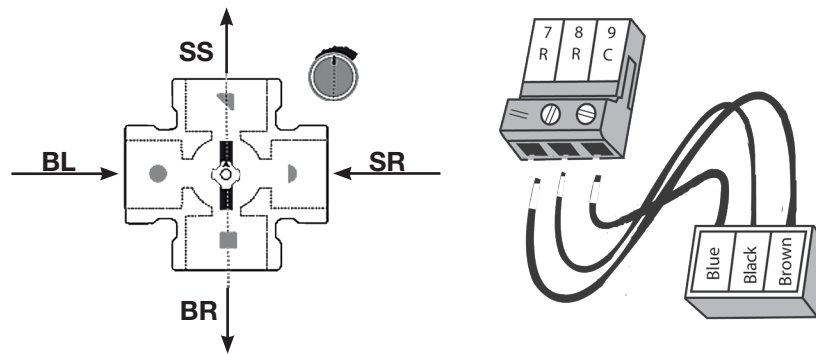
Blue in common 9
Open, ccw, black in open 7
Close, cw, brown in close 8



Scenario 2 Piping and Wiring:

Boiler Loop on left, Boiler Return on bottom, System Supply on top, System Return on right.

Blue in common 9
Open, cw, brown in open 7
Close, ccw, black in close 8



NOTE: For precise temperature control it is imperative that the initial position of the valve used is half open. This can be accomplished by positioning the groove of the white plastic adapter between Boiler Supply and Boiler Return. The actuator itself can be mounted onto the valve in any position.

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