

# Product Instructions

viEGA

## Viega® 0-10VDC Actuator for Mixing Station and Diverting Valve

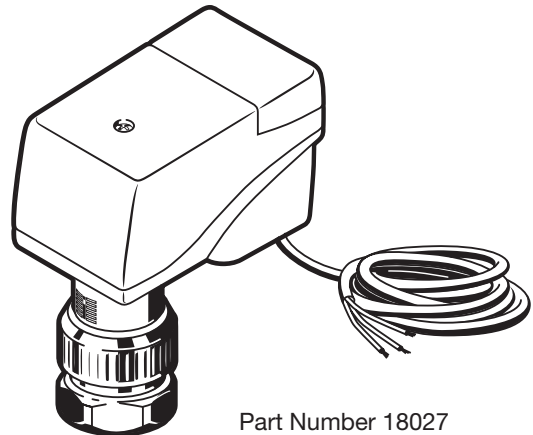
The Viega 0-10VDC actuator is an electronic actuator which is used to provide control over mixing stations and diverting valves. A 24 volt signal powers the unit open and closed while controlled by a 0-10VDC signal, usually from a central DDC building management system or thermostat. This actuator will not work with Viega controls such as the basic heating control, basic snow melt control, digital setpoint control, the advanced snow melt control or the hydronic mixing block.

### Features

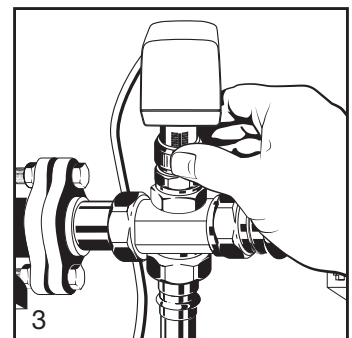
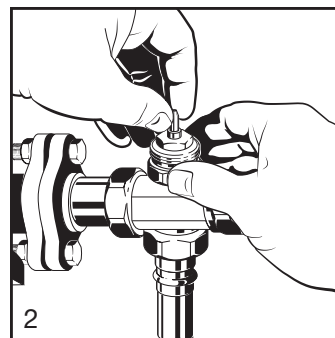
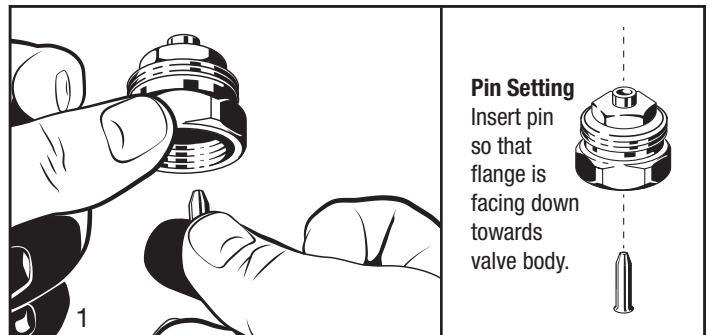
- Small size allows for installation where space is limited
- Maintenance free
- No tools required for mounting
- Adjustable between linear or equal percentage valve control
- Silent operation
- Low power consumption
- Exercise function, the actuator will be opened every 24 hours during periods of inactivity
- Actuator can be installed in any position, including upside down
- Compatible with heating and/or cooling systems

### Technical Data

Power Supply	24VAC
Power Consumption	2.5 VA
Drive	0-10VDC
Connecting Cable Length	56"
Stroke	4 mm
Actuating force	30 lbs
Running time	60 seconds fully closed to fully open
Ambient Temperature	32°F to 122°F
Fluid Temperature	32°F to 212°F

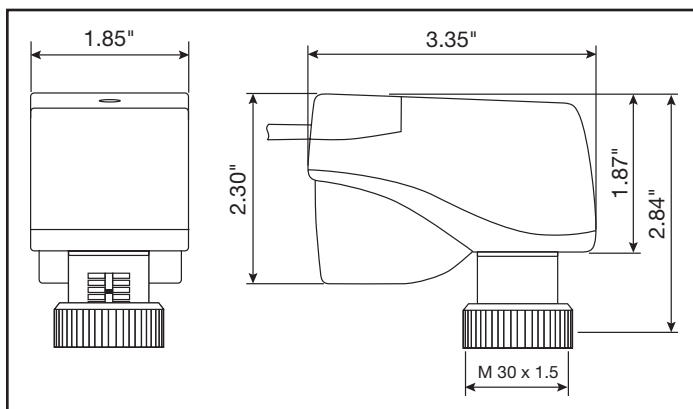


Part Number 18027

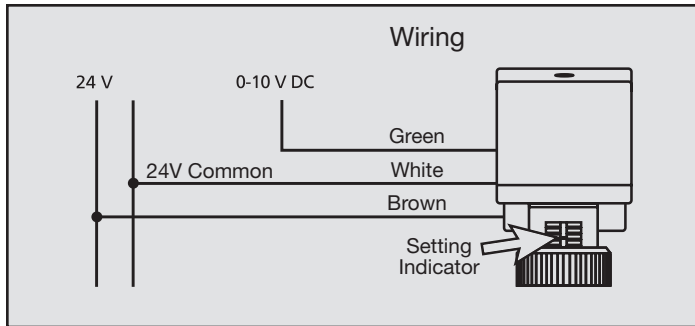


### Mounting the Actuator

1. Insert the brass pin into the bottom of the adapter fitting so that the flange is facing down.
2. While holding the brass pin with one hand, use your other hand to tighten the adapter fitting onto the diverting valve.
3. Place the actuator onto the pin/adapter fitting and thread the actuator nut onto the adapter fitting until hand tightened.



# Product Instructions



## Wiring

1. Connect the brown wire to 24 volts (usually labeled "R" on most hydronic equipment).
2. Connect the white wire to ground (24 volt common, typically labeled "C" on most hydronic equipment).
3. Connect the green wire to the 0-10VDC control signal (usually from thermostat or DDC building management system).

## Manual override function

The actuator can be operated manually by inserting a 4mm allen key into the hex port on top of the actuator. Turning the allen key clockwise will raise the pin, while turning the allen key counterclockwise will lower the actuator pin. The stroke of the actuator is visible through the setting indicator. (Make sure power is turned off to the actuator while using manually.)

## LED Display

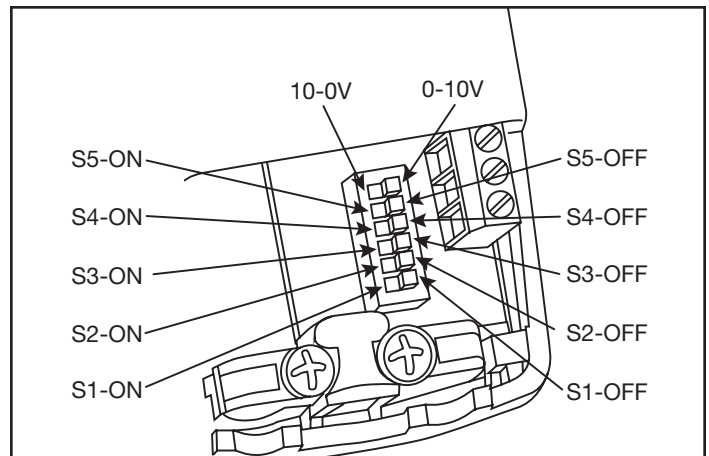
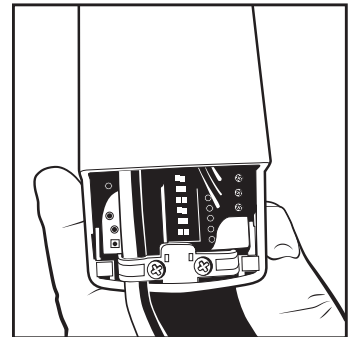
The green LED display is visible only with the rear cover removed.

- On . . . . . Power supply available, motor off
- Flashing . . . . . Actuator motor adjusting stroke
- Off . . . . . No power

## Programming

The 0-10V actuator is capable of being programmed for linear or equal percentage valve control. Setting the actuator for equal percentage is recommended for use with the Viega mixing stations/diverting valves.

1. Remove the cover on the back of the 0-10V actuator with allen wrench (2mm).
2. Once the back cover is removed, a set of dip switches will be exposed.
3. For linear valve control set the first 5 dip switches (1-5) to the OFF position.
4. For equal percentage valve control set the first 5 dip switches (1-5) to the ON position.
5. Set dip switch 6 to the off position for 0-10VDC control.
6. Setting dip switch 6 to the on position will provide 10-0VDC.



**Note:** The 0-10VDC actuator should be set for equal percentage valve control when used with Viega mixing stations/diverting valves.

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