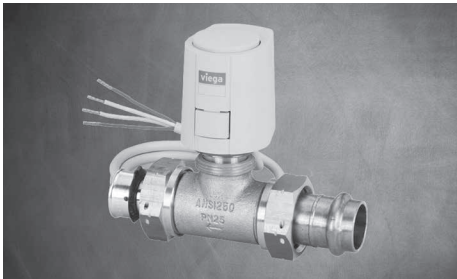


User Guide

Viega Zone Valve



This document is subject to updates. For the most current Viega technical literature please visit www.viega.us.



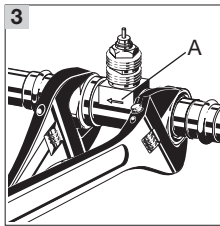
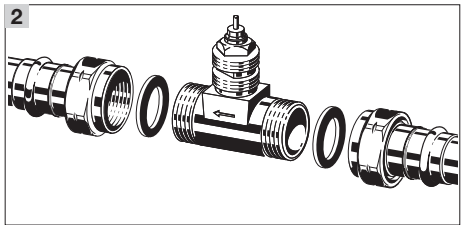
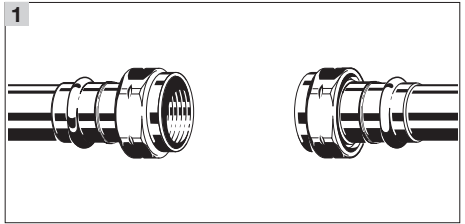
Viega products are designed to be installed by licensed and trained plumbing, mechanical, and electrical professionals who are familiar with Viega products and their installation.

Installation by non-professionals may void Viega LLC's warranty.

Description

Viega zone valves are used to control the flow of fluid within a hydronic heating or cooling system. They do so by opening when there is a thermostat demand, and closing when the demand has been met. Viega zone valves are available in $\frac{3}{4}$ " and 1", with three different connection types, ProPress x ProPress, ProPress x PEX Press and solder x PEX Press. See the following installation instructions for each type.

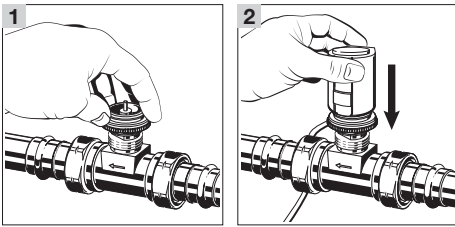
Installation Instructions



- 1** Connect the tailpieces to the tubing, for actual instruction on how to make a solder, press or ProPress connection see page 6.
- 2** Insert the gasket in between the tailpiece and the zone valve body.
- 3** Tighten both tailpiece nuts onto the zone valve body. When installing the zone valve align the arrow on the valve body with the direction of flow.



Make sure to properly pressure test the system once all connections are made. See page 6 for testing instructions.

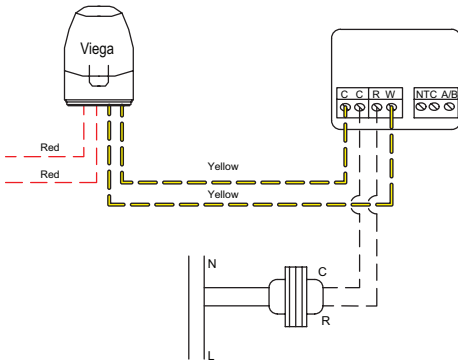


Mounting the Powerhead to the Zone Valve

- 1 Connect the adapter ring to the zone valve, hand tighten only.
- 2 Place the powerhead over the adapter ring and push down firmly.

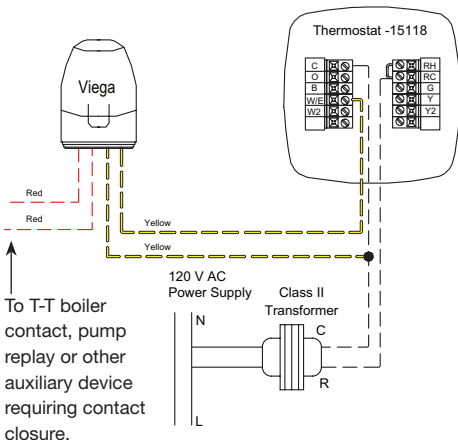


To remove the powerhead, push in on the square tab and pull up. With the powerhead separated from the zone valve, the zone valve will remain in the normally open position.



Wiring the Zone Valve Powerhead to a Viega Digital Thermostat 18050

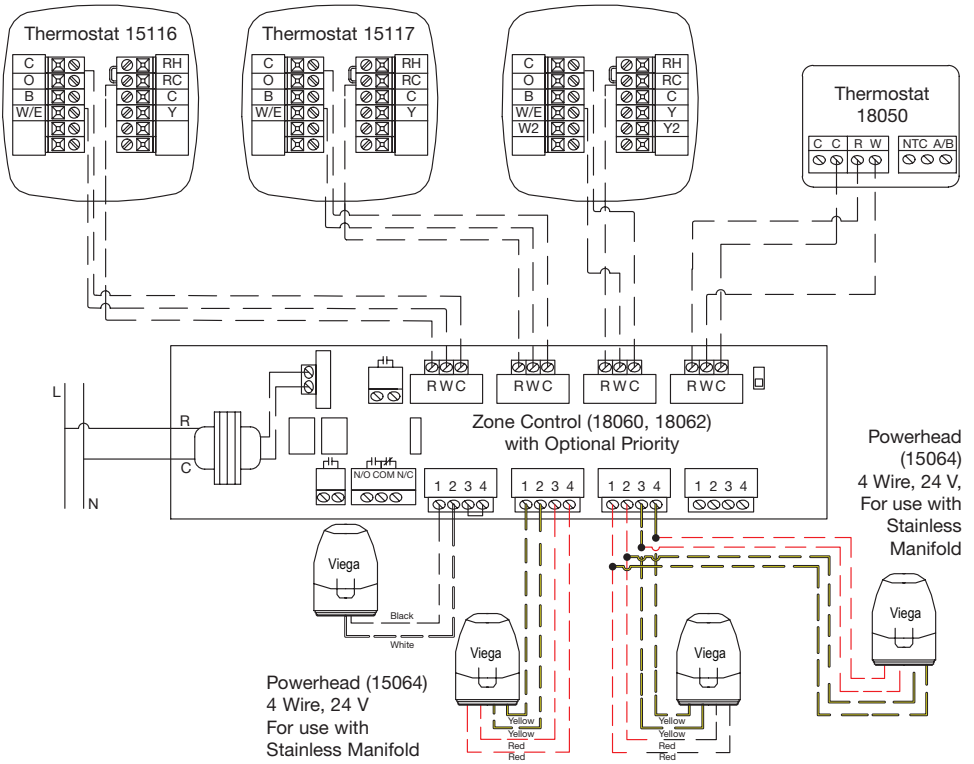
- 1 Connect a yellow wire from the zone valve powerhead to the C terminal on the digital thermostat.
- 2 Connect the other yellow wire from the zone valve powerhead to the W terminal on the thermostat.
- 3 The red wires can be connected to the boiler contact (TT), pump relay or other auxiliary device requiring contact closure.
- 4 Connect the C terminal from the transformer to the C terminal on the thermostat.
- 5 Connect the R terminal from the transformer to the R terminal on the thermostat.



Wiring the Zone Valve to a Viega Digital Thermostat 15116, 15117, 15118

- 1 Connect a yellow wire from the zone valve powerhead to the C terminal on the digital thermostat.
- 2 Connect the other yellow wire from the zone valve powerhead to the W terminal on the thermostat. This terminal is labeled W/E on thermostat part number 15118.
- 3 The red wires can be connected to the boiler contact (TT), pump relay or other auxiliary device requiring contact closure.
- 4 Connect the C terminal from the transformer to the C terminal on the thermostat.
- 5 Connect the R terminal from the transformer to the RC terminal on the thermostat.

Wiring the Zone Valve to the Zone Control



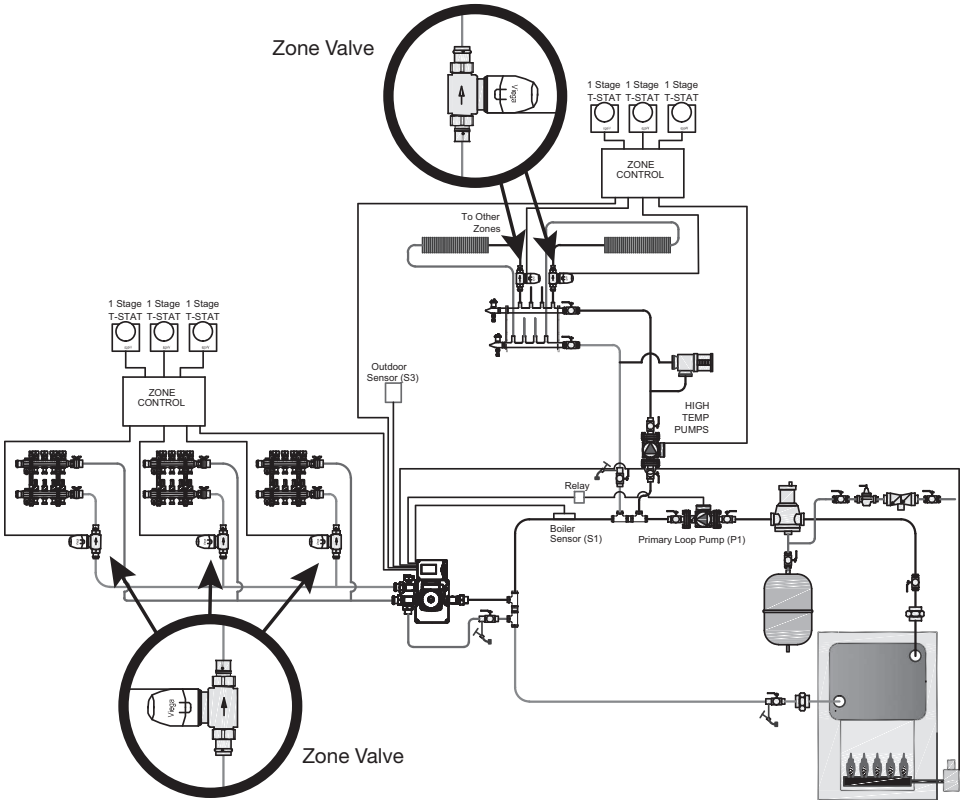
- 1 Connect a yellow wire from the zone valve powerhead to terminal 1 on the zone control.
- 2 Connect the other yellow wire from the zone valve powerhead to terminal 2 on the zone control.
- 3 Remove and discard the jumper installed between terminal 3 and 4.
- 4 Connect a red wire from the zone valve powerhead to terminal 3 on the zone control.
- 5 Connect the other red wire from the zone valve powerhead to terminal 4 on the zone control.

Legend: Thermostat

--- Low Voltage

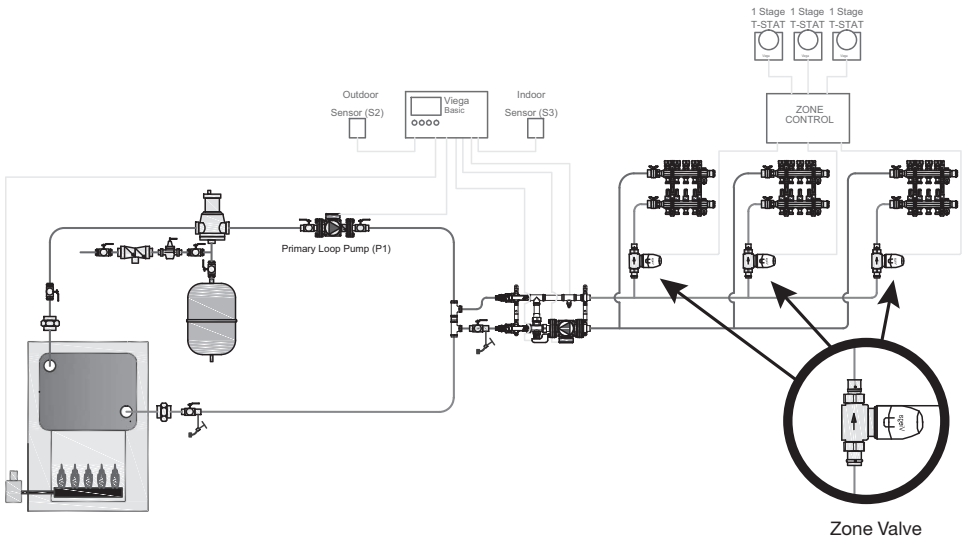
— Line Voltage

Piping the Zone Valve



Legend

	Hydronic Mixing Block		Pressure Differential Bypass Valve
	Spring check		Stainless Manifold with Flow Gauges
	Circulator		Baseboard Zone
	Draw Off (Purge Valve)		Diaphragm-Type Expansion Tank
	Make-up Water		Zone Valve
	Enhanced Mixing Station		



i The Enhanced Mixing Station is pictured above, other mixing stations should incorporate a pressure differential valve installed within the secondary piping to protect the pump from dead heading.

To make ProPress Press connections refer to the [ProPress 1/2 to 2 Product Instructions](#) on the [Viega.us](#) website.

To make PureFlow Press connections refer to the [PureFlow Press Fittings Product Instructions](#) on the [Viega.us](#) website.

Tailpiece Soldering

- 1 Cut the copper tubing cleanly with a tubing cutter.
- 2 Ream and deburr the cut tubing.
- 3 Clean the inside of the tailpiece solder cup and the outside of the copper tubing with a fitting brush and emery cloth.
- 4 Brush an even layer of flux over the copper tubing and within the tailpiece solder cup.
- 5 Insert the tubing into the solder cup until the copper tubing seats fully, wipe off excess flux.
- 6 Heat the joint with a torch, moving the flame back and forth on the tailpiece to heat evenly. Hold the solder against the joint on the opposite side of the flame until it melts. Run the solder 360° around the tubing, the joint should appear full all the way around. Avoid over-feeding the joint with solder. The amount of solder required is equivalent to the diameter of copper tubing being soldered.
- 7 Allow the soldered connections to cool before connecting to the zone valve body.

On/Off Indicator

The zone valve powerhead has a cylinder on the top that will raise and expose blue when the valve is open. You will be unable to see any blue when the valve is in its normal closed position.

Initially-Open Function

The zone valve is delivered in the open position. This allows for easier installations and also allows for the installer to pressure and flow test each circuit before connection the power. This function is disengaged automatically after the first 6 minutes of powered use.

Testing

Leak Testing with Smart Connect®

Unpressed connections are located by pressurizing the system with air or water. When testing with water the proper pressure range is 15 psi to 85 psi maximum. Leak testing with air can be dangerous at high pressures. When testing with compressed air the proper pressure range is ½ psi to 45 psi maximum. Following a successful leak test, the system may be pressure tested.

Pressure Testing the System

The heating or cooling system that the zone valve is installed into must be pressure tested before it is commissioned. Air or water may be used as the test medium. The following procedure is recommended by Viega. Check the local building codes for compliance or additional test requirements.

- Do not use water as a test medium in situations where it may freeze.
- Check that all connections are tight and properly sealed.
- Make sure all valves are in the open position to test the integrity of the entire system.
- Connect manifold pressurization kit (part #21210) to the manifold(s).
- Pressurize the system to not less than 100 psi or 1.5 times the working pressure.
- After initial pressurization, ensure pressure has not dropped after 20 minutes. Fluctuations may occur due to temperature fluctuations and tubing expansion. If a drop has occurred add pressure to the system.
- Carry out test for a minimum of one hour.
- For leak detection, original Palmolive dishwashing soap may be used. (Use ratio of two oz. soap to one gallon of water.)
- If this is a radiant or snow melt system, pressure must be maintained during the pour and floor covering installation.
- Once system is deemed leak-free the concrete pour and/or flooring finishes may be applied.

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UG-HC 566490 1219 Zone Valve (EN)