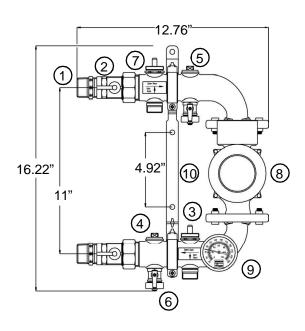
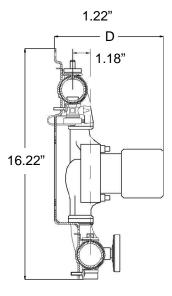


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### **Applications**

The Stadler-Viega Injection Station is a water temperature modulation station utilized frequently in conjunction with multi-temperature supply water systems. The base station can be directly connected to manifolds or can be used to supply remote manifolds.





#### **Technical Data**

- Pumps: Low Head Pump (UP 15-42)
   Medium Head Pump (UP 26-64)
   High Head Pump (UP 26-99)
- The system supply is connected to the bottom end of the Injection Station
- The system return is connected to the top of the Injection Station

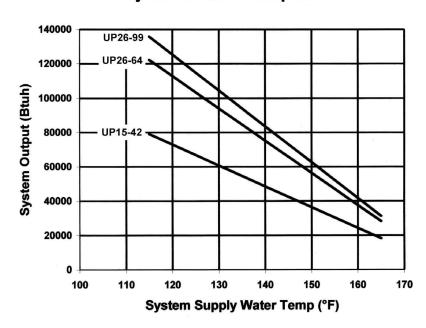
- 1. Connection Nipple 1"NPT x 1"G
- 2. Ball Valve 1"G x 1-1/4"G
- 3. Outlet Valve
- 4. Supply Sensor Well
- 5. Plug
- 6. Purge Valve
- 7. Inlet Valve
- 8. Pump
- 9. Temperature Gauge
- 10. 11" Spacing Mounting Brackets (An additional bracket is included for when the manifold is attached directly to the station)

| Side View Depth (D in inches) |      |  |
|-------------------------------|------|--|
| Low Head Pump                 | 6.13 |  |
| Medium Head Pump              | 7.13 |  |
| High Head Pump                | 7.13 |  |



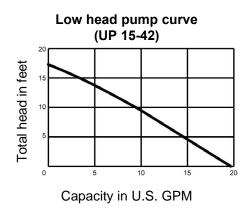
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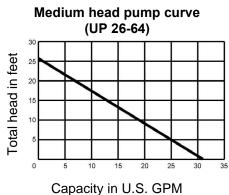
### **Injection Station Output**

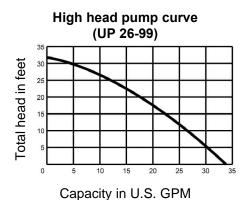




Outputs based upon 180°F primary loop water temperature.







| Electrical Data |      |       |      |                           |  |
|-----------------|------|-------|------|---------------------------|--|
| Volts           | Amps | Watts | HP   | Capacitor                 |  |
| 115             | .74  | 85    | 1/25 | <b>10</b> μ <b>F/180V</b> |  |

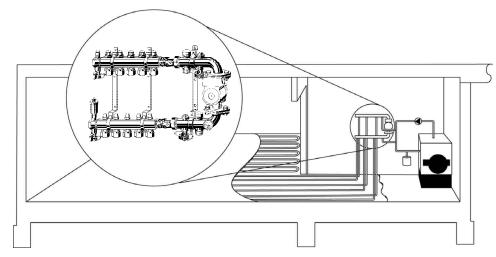
| ı | Electrical Data |      |       |      |                 |
|---|-----------------|------|-------|------|-----------------|
|   | Volts           | Amps | Watts | HP   | Capacitor       |
|   | 115             | 1.7  | 185   | 1/12 | <b>8μF/180V</b> |

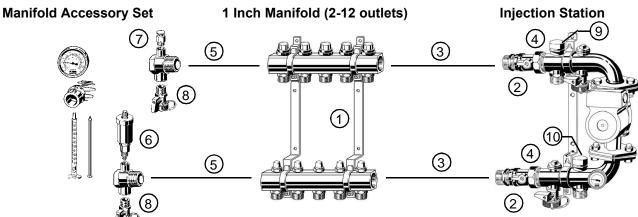
| Electrical Data |      |       |     |                           |  |
|-----------------|------|-------|-----|---------------------------|--|
| Volts           | Amps | Watts | HP  | Capacitor                 |  |
| 115             | 2.15 | 245   | 1/6 | <b>10</b> μ <b>F/180V</b> |  |



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Injection Station with Manifold attached





- 1. Use the proper bracket packaged with the Injection Station when connecting the Manifold directly to the Injection Station
- 2. Connect NPT to ball valve
- 3. Connect NPT to Manifold
- 4. Connect ball valve union to Injection Station
- 5. Connect end-piece to Manifold ( Note: Large thread should face bottom)
- 6. Assemble air vent to supply end-piece
- 7. Assemble bleeder to return end-piece
- 8. Assemble purge valves to both end-pieces
- 9. Remove grey cap from the inlet injection valve to attach actuator\*
- 10. Remove grey cap from the outlet injection valve to attach high limit\*
- \* Perform steps 9 and 10 after the system has been filled and purged.

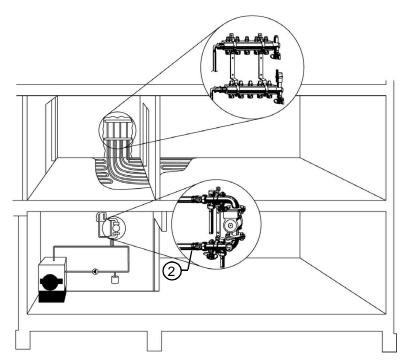
Note: It is important to use Teflon tape and thread sealant paste on all connections without gaskets.

Note:
Use new style Powerheads with the manifold on this station (stock code 18 028).
Note indicator window.



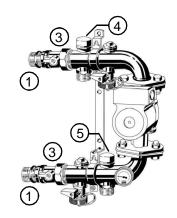
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## Injection Station with Remote Manifold(s)



#### Injection Station

- 1. Connect NPT to ball valve
- 2. Connect NPT to Press Female NPT Adapter\*\*
- 3. Connect ball valve union to Injection Station
- 4. Remove grey cap from the inlet injection valve to attach actuator\*
- 5. Remove grey cap from the outlet injection valve to attach high limit\*
- \* Perform steps 4 and 5 after the system has been filled and purged.
- \*\* Fosta Pex is suggested when piping an Injection Station. This method will produce a higher quality outcome, while reducing installation time.



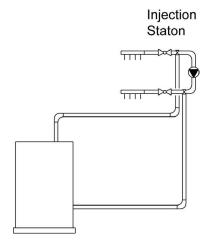
Note: It is important to use Teflon tape and thread sealant paste on all connections without gaskets.



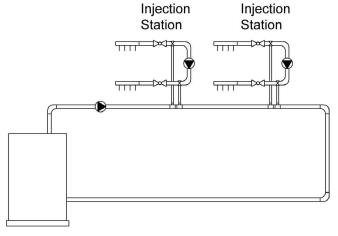
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### **Piping Schematics**

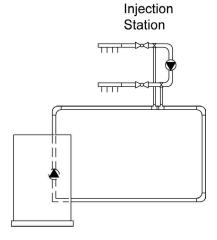
Injection Station piped directly to the boiler



Primary / Secondary-Multi-temperature radiant system



#### Installed circulator in boiler



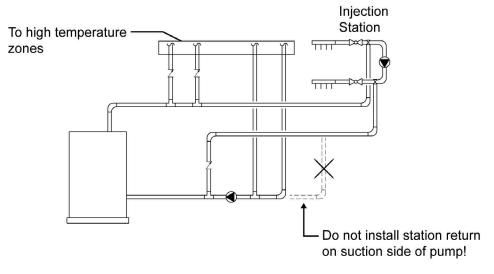
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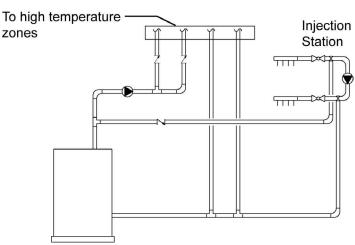
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### **Piping Schematics**

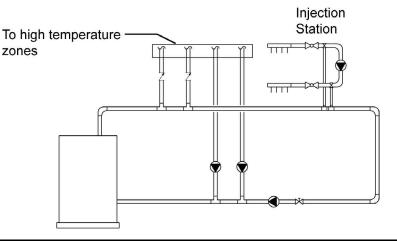
Multiple zone single high temperature circulator on system return



Multiple zone single high temperature circulator on system supply



Multiple zone high temperature circulators on system return



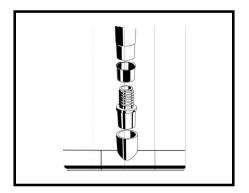
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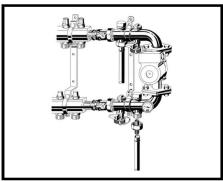
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### Connecting Injection Station to boiler or primary loop

When piping an Injection Station to a primary loop Fosta Pex is suggested. This method will produce a higher quality outcome, while reducing installation time.



1. Make the press connection for the supply and return lines to the Injection Station on the copper tee. Install tees as close as possible to keep pressure difference at a minimum (max. 6 times the outside diameter of the primary pipe)



2. Connect the supply and return lines with the SVC Press Adapter (sold separately).

### Pressure testing

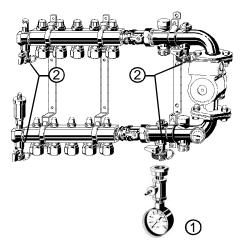
Before the finish floor is installed and during concrete pouring the radiant system must be pressure tested. Air or water may be used as the medium. The following procedure is recommended by Stadler-Viega. Check the local building codes for compliance or additional test requirements.

#### Note:

If the tubing was damaged, repair punctured section with a compression coupling.

#### Contractor -

 Maintain pressure during the installation of the finish floor to simplify leak detection if tubing is damged.



#### Procedure:

- 1. Double check all connections to manifold to ensure proper seal.
- 2. Connect manifold pressurization kit (1) to any purge valve (2).
- 3. Pressurize the system to 80 psi to detect potential nail or screw penetrations.
- 4. The system should hold the 80 psi for a minimum of 24 hours.

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### Filling and purging the system:

After completing the pressure test successfully, use the following procedure to fill and purge the system.

#### Procedure:

- 1. Connect the boiler inlet line to injection inlet (1a) or fill hose to purge valve (2).
- 2. Close the ball valve on the return side (3a).
- 3. When using the purge valve to fill the system close the inlet valve (1a).
- 4. Close the boiler outlet valve (1b).
- 5. Open the ball valve on the supply side (3b).
- Close all but one circuit (4) using included allen key on the supply manifold to isolate the circuit.
- 7. Open the purge valve (5) at the end of the return manifold and connect a hose to drain.
- 8. Fill and then close the first circuit, then repeat for the remaining circuts.
- After filling all the circuits close the ball valve on the supply side (3b) and open the ball valve on the return side (3a) to purge the return piping.

