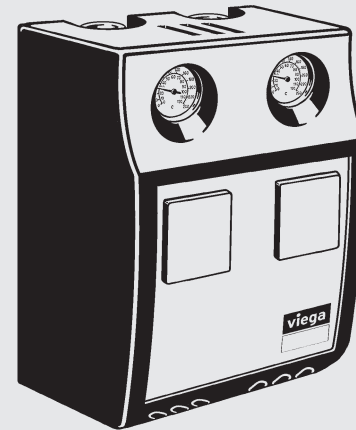


## Product Instructions

### ProBloc

#### Applications

The Viega ProBloc provides a mixed system supply fluid temperature that is modulated by a built-in mixing valve and actuator that are controlled by either the Basic Heating Control or Advanced Heating Control. The ProBloc can be connected to a variety of heat sources such as conventional or condensing boilers, water heaters or geothermal heat pumps. ProBlocs are available with two 3-speed circulator pump options, either high or low head. Boiler connections can be made with a variety of fittings: ProPress, PEX Press Adapters or F NPT adapters. Manifold connections can be simply made with the Stainless Manifold Connection Set, a pair of 1-1/4" stainless braided hoses. Red and blue thermometers are also shut-off valves and clearly indicate system supply and return connections. ProBlocs are ready to hang in a pre-insulated case.



#### Features

- Ready to Hang, Factory Tested
- Direct Connect with Stainless Manifolds or Remote Locations with PEX Press Adapters
- Compatible with Basic and Advanced Heating Controls
- Versatile Boiler Side Connections
- Compatible with Most Heat Sources

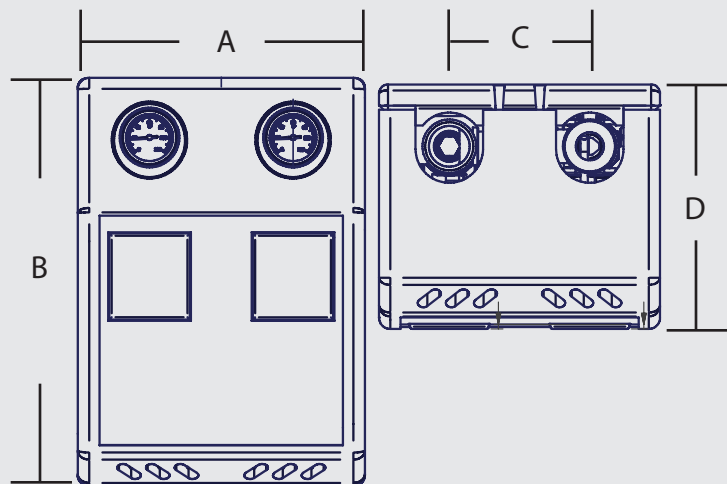
#### Specifications

Connections: 1-1/2" Union  
 Min Temp: 36°F  
 Max Temp: 180°F  
 Max Pressure: 100 psi  
 Maximum Glycol Mix: 50%

#### Materials

Fittings: Brass  
 Tubing: Steel Tube (Zinc Coated)  
 Circulator Body: Cast Iron  
 O-Rings: EPDM  
 Flat Seals: EPDM or AFM34  
 Ball Seats: Teflon

#### Dimensions



A	B	C	D
10"	14"	5"	7-3/4"

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## Product Instructions

### ProBloc

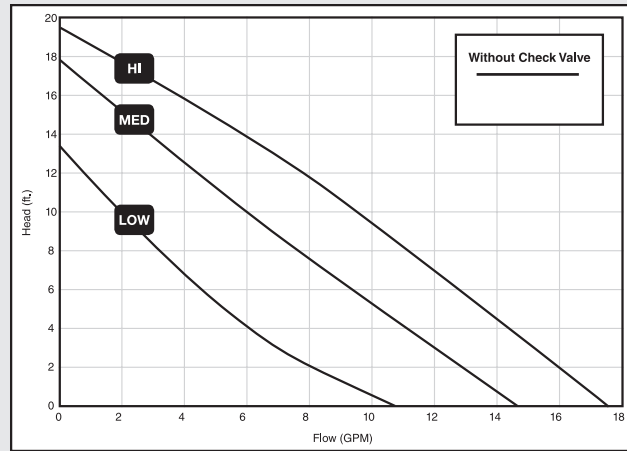
#### Technical Data

Viega's ProBloc is available in either a low head or high 3-speed circulator pump. Below are the two circulator pump curves, and specifications.

#### ProBloc Stock Code: 12600 Low Head 3-Speed Circulator Pump

- Maximum BTU output: 51,000
- Mixing Valve Cv Value: 7.3
- Flow Range: 0-17.5 U.S. GPM
- Head Range: 0-19 feet
- Motor: 2 Pole, Single Phase, 120V
- Maximum fluid temperature: 230°F (110°C)
- Minimum fluid temperature: 36°F (2°C)
- Maximum working pressure: 100 psi

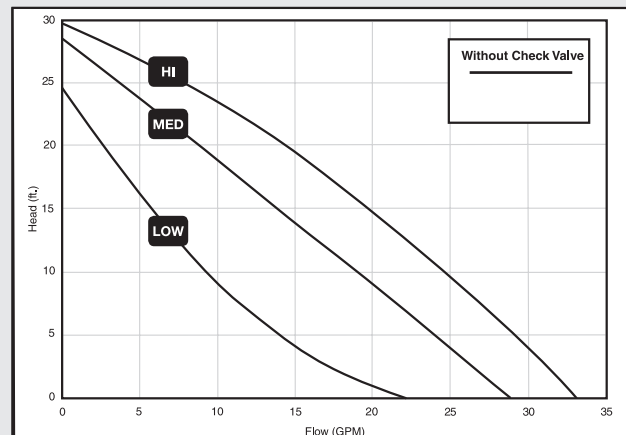
SPEED	AMPS	WATTS	HP
HI	0.75	87	1/25
MED	0.66	80	1/25
LOW	0.55	60	1/25



#### ProBloc Stock Code: 12605 High Head 3-Speed Circulator Pump

- Maximum BTU output: 120,000
- Mixing Valve Cv Value: 9.2
- Flow Range: 0-34 U.S. GPM
- Head Range: 0-30 feet
- Motor: 2 Pole, Single Phase, 120V
- Maximum fluid temperature: 230°F (110°C)
- Minimum fluid temperature: 36°F (2°C)
- Maximum working pressure: 100 psi

SPEED	AMPS	WATTS	HP
HI	1.8	197	1/6
MED	1.5	179	1/6
LOW	1.3	150	1/6



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## Product Instructions

### ProBloc

#### Mounting the ProBloc

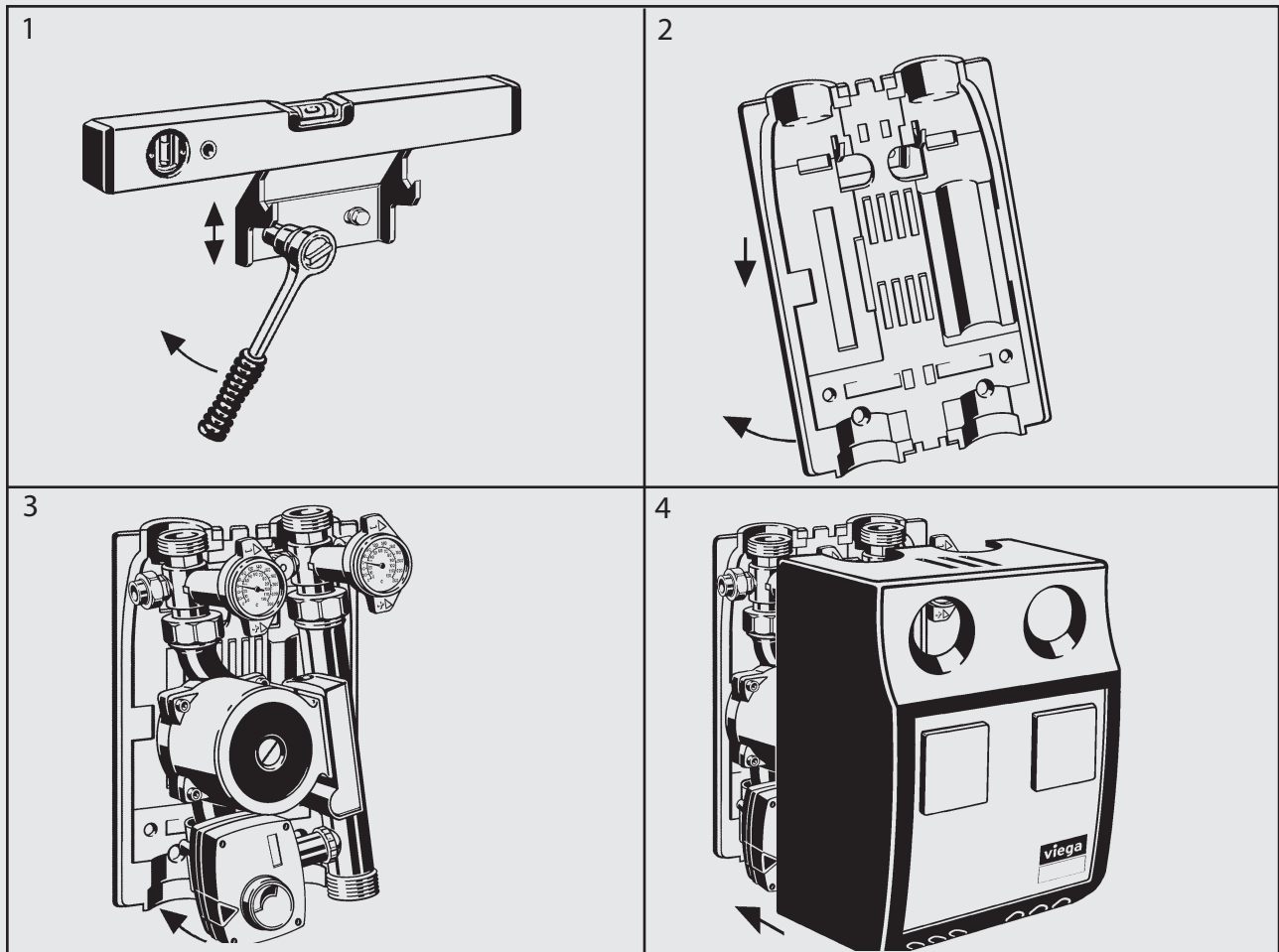
ProBloc can be mounted on most surfaces. The provided screws and anchors allow the options of securing ProBloc to most surfaces found in mechanical rooms, i.e. gypsum board, concrete foundation walls and plywood.

Step 1. Choose the mounting location of the ProBloc and Manifold. Align and level the provided template then pre-drill holes through template for ProBloc Mounting Bracket. Use provided bolts (2) to secure mounting bracket to wall (using anchors when required).

Step 2. Remove insulated cover and piping from the ProBloc back jacket. Place the back jacket over the mounting bracket. Starting with the top of the jacket, tip into the mounting bracket and pull downward.

Step 3. With piping in hand tip the top of the piping inward toward the wall. Place the horizontal bypass valve onto the hooks of the mounting bracket, then push the bottom of the ProBloc toward the wall.

Step 4. Install the ProBloc cover and begin connections to manifold(s) and/or primary loop.



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## Product Instructions

### ProBloc

#### Pressure Bypass Valve

The Viega ProBloc comes equipped with a pressure bypass valve located on the outlet side of the circulator pump directly between the supply and return ball valves. The bypass valve is ideal for preventing dead heading of the circulator pump in a continuous-flow primary/secondary application. Below is the recommended setting for the bypass valve based on tubing size, maximum length, maximum BTU output and 20° ΔT.

ViegaPEX™ Barrier	Bypass Valve Setting (bar)
5/16"	0.5
3/8"	0.5
1/2"	0.3
5/8"	0.2

It is important to set the bypass valve to achieve proper flow. Fluid naturally flows in the path of least resistance. If the bypass valve is not adjusted properly, the path of least resistance will be from the supply side of the ProBloc through the bypass into the return side, eliminating flow through the circuits.

#### Connecting to the ProBloc

The ProBloc has 1-1/2" union threads on the system supply and return and source supply and return. The connections are available in ProPress®, PEX Press, F NPT– any of these adapters can be used for connecting the source fluid to the ProBloc and/or connecting the ProBloc to manifolds. Also available: the Stainless Manifold Connection Set, which is a pair of stainless braided hoses for fast, direct connections between any of the three Stainless Manifolds and the ProBloc (see template).

Stock Code	Description	Dimensions
12800	ProBloc Adapter	1-1/2" BA* x 1" P**
82825	ProBloc Adapter	1-1/2" BA* x 1" PEX Press
82820	ProBloc Adapter	1-1/2" BA* x 1-1/4" PEX Press
12845	ProBloc Adapter	1-1/2" BA* x 1" F NPT
12840	ProBloc Adapter	1-1/2" BA* x 1-1/4" F NPT
12850	ProBloc Primary Loop Double Tee	1-1/4" P** x 1-1/4" P** x 1" P**
12852	ProBloc Primary Loop Double Tee	1" P x 1" P x 1" P
12860	Stainless Manifold Connection Set	1-1/2" BA* x 1-1/4" SMA***

\*BA-ProBloc Adapter, \*\*P-ProPress® Connection, \*\*\*SMA-Stainless Manifold Adapter

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## Product Instructions

### ProBloc

#### Pressure Testing

Prior to the finish floor being installed and during a concrete pour, the radiant system must be pressure tested. Once the ProBloc is connected to the source and system, begin to pressure test. Air or water may be used as the medium. The following procedure is recommended by Viega. Check with the local authority having jurisdiction for additional test requirements. Maintain pressure during the installation of the finish floor to simplify leak detection. Note what the pressure is and check occasionally. If pressure drops, some investigating may be necessary. If the tubing is damaged, repair necessary section with a coupling. Minor drop in pressure can be a result of change in ambient temperature. Follow the procedure below for pressure testing.

1. Close all valves
2. Ensure tightness of all connections
3. Connect manifold pressurization kit to the purge valve (draw-off) on the return manifold
4. Open isolation ball valves (thermometer handles red and blue) on the ProBloc
5. Open Pressure Bypass Valve
6. Open all circuits on manifold
7. Pressurize the system to 80 psi for at least 24 hours

**Air as the medium:** Use a bicycle pump or compressor. Viega's Pressurization Kit comes equipped with a schrader valve for pressurizing with air.

**Water as the medium:** Open the isolation valves to fill and pressurize. Or, backfill using a garden hose with a washing machine hose attached to it so there is a hose x hose connection. Attach one end of the hose to the purge valve (draw-off) on the manifold and the other end of the hose to a hose bib, wall hydrant or sillcock. This method is limited to city or well water pressure.

#### Purging

Assuming that the heat source is already filled and purged:

##### Stainless Balancing Manifolds

Supply manifold: Remove black caps to expose balancing valve. Use a 5mm allen wrench to open and/or close.  
Return manifold: Use each blue return cap to open and close each circuit.

##### Stainless Balancing and Flow Meter Manifolds

Supply manifold: Lift locking cap (red cap) and turn flow meters to open and/or close.  
Return manifold: Use each blue return cap to open and close each circuit.

Purging is easier when using greater than operating pressure to push air out using a fastfill component to boost pressure to 20-25 psi. Pressure must be kept below the Safety Pressure Relief Valve limit (commonly 30-50 psi). Start by closing all valves. Purging each circuit, individually discharge the air into a bucket while holding the hose under the water level. Use the air bubbles floating to the surface as a guide. Once there are no air bubbles present for two consecutive minutes, close that circuit and open the next circuit and continue in this manner until all circuits are air free. Watch the pressure in the system CAREFULLY to avoid a discharge from the Safety Relief Valve. Purging time and the amount of discharge may vary. Systems may need to be purged more than once. Air in the system may prevent flow and heat transfer. If system is purged in the future, it is important to close the Pressure Bypass Valve fully and to power down the circulator.

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