

# Installation Instructions

## F-460 and F-461 (ultra pure)

### Specifications

**Meter Body:** Polysulfone, natural

**Float Stops:** Polysulfone, natural

**Floats:** Teflon

**Adapters:** PVDF or PVC\*

**O-Rings:** Viton

**Half-Union:** Anodized aluminum, optional PVC

**Scale:** Permanent dual scale silkscreen

**Maximum Pressure:** 150 PSIG / 10.34 BAR at ambient temperature

**Maximum Temperature:**

See reverse side for Temperature Vs. Pressure graph

**Dimensions** (refer to drawing on right):

**F-460** (1/2" and 3/4" female NPT)

Dim A = 1.75" (4.45 cm)

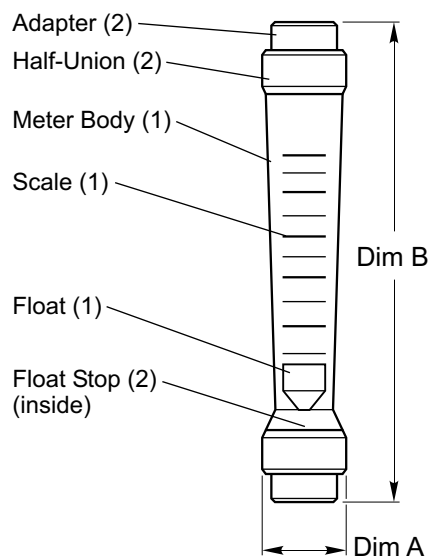
Dim B = 10" (25.4 cm)

**F-461** (1" female NPT)

Dim A = 2.75" (6.99 cm)

Dim B = 15" (38.1 cm)

\* PVC has a temperature *limit* of 130°F / 54.4°C



## Your Blue-White® Ultra Pure In-Line Flowmeter

Your Blue-White® flowmeter was designed to be easy to install.

Please read the following instructions before installing your flowmeter.

This flowmeter is an instrument, and special care should be taken when installing.

### Installation

Please use the following steps to guide you through the installation.

#### STEP 1. Unpack the flowmeter.

Check for damage while unpacking the flowmeter.

Make sure pressure, temperature, fluid and other requirements are compatible with the meter.

#### STEP 2. Choose a suitable location for the flowmeter.

Never allow the flowmeter to support the weight of related pipe or tubing.

Flowmeter must be installed in plumbing which is free of vibration.

Flowmeter must be installed in an exact vertical plane to ensure accuracy.

The meter body is constructed of polysulfone. Polysulfone has a high chemical resistance\*\*, but a low UV tolerance. Keep meter away from direct sunlight.

Be certain the meter is properly aligned with existing plumbing. Misalignment may result in damage to the flowmeter.

#### STEP 3. Connecting the flowmeter to the plumbing.

Use an appropriate amount of Teflon® (or similar) tape on external pipe threads before making connections.

See installation guideline on the back of this instruction sheet.

\*\* *Flowmeters are tested and calibrated for water or air only.*

Although meters may be suitable for other chemicals, Blue-White cannot guarantee their suitability.

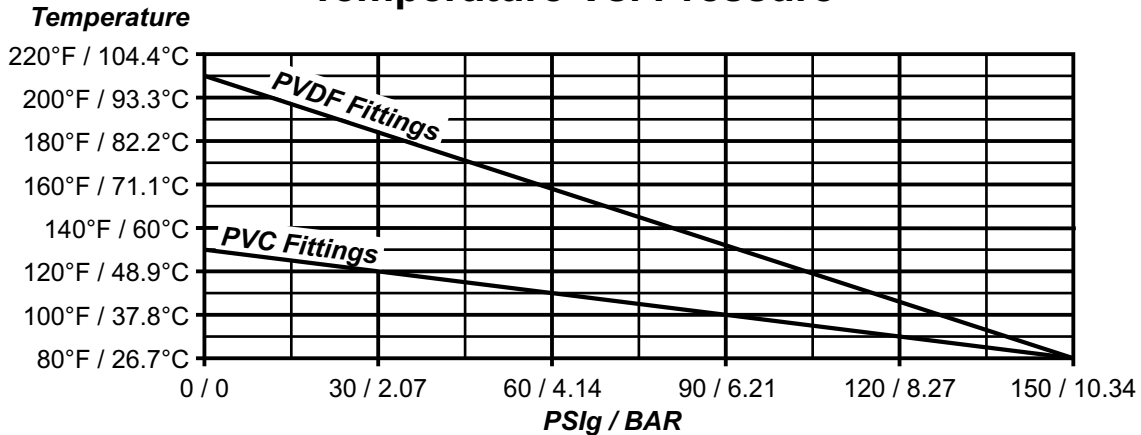
Visit our website to see other available flow ranges and pipe sizes. [www.Blue-White.com](http://www.Blue-White.com)

**Blue-White**<sup>®</sup>  
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## Temperature Vs. Pressure



**Note:** Pressure and temperature limits are inversely proportional.

### Pressure and Temperature

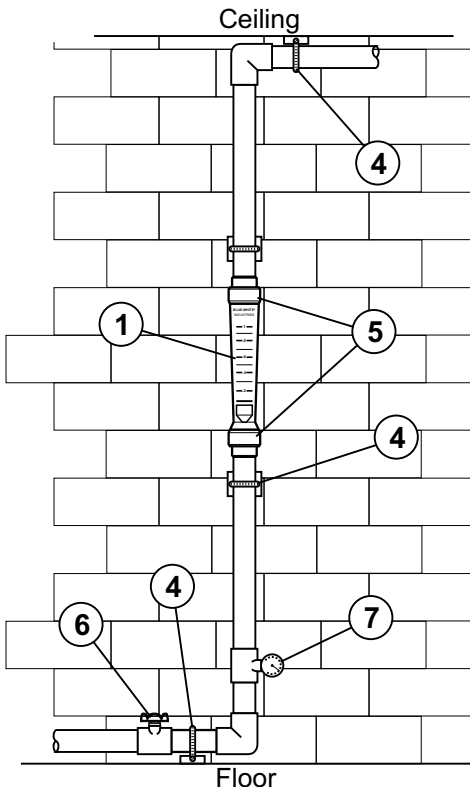
Pressure and temperature limits are inversely proportional. At the maximum suggested pressure the temperature should approach 80°F / 26.7°C; at the maximum suggested temperature the pressure should approach zero (0) psi. We cannot guarantee our flowmeters will not be damaged either at or below the suggested limits simply because of many factors which influence meter integrity; stress resulting from meter misalignment, damage due to excessive vibration and/or deterioration caused by contact with certain chemicals as well as direct sunlight. These situations and others tend to reduce the strength of the materials from which the meters are manufactured.

**Cleaning:** The flowmeter body and all other parts can be cleaned by washing in a mild soap and water solution. A soft bristle bottle brush will simplify cleaning inside the meter body.

### Installation Guideline

**Caution:** Follow These Tips to avoid Failure

**Danger:** Wear eye protection when installing or removing flowmeter.



1. Polysulfone and other exotic plastics cannot tolerate PVC Glue and/or pipe dope. Even fumes can cause crazing.
2. If you are installing your flowmeter to a glued pipe configuration, install flowmeter *after* all glued fittings are dried and lines are purged of all fumes.
3. Use Teflon<sup>®</sup> tape (or similar) for the flowmeters threaded adapters.
4. Wall, floor and ceiling mounts are to be carefully aligned and sturdy. Wall, floor and ceiling supports are recommended as needed.
5. Hand tighten union nuts. *No wrenches.*
6. *Valves* - Avoid a system that will impose a sudden burst of flow to the meter. Such a burst will cause the float to impact the float stop with destructive force. Magnet, solenoid, or other quick opening valves cannot be used unless meter is protected against sudden bursts of flow.
7. Maximum working pressure *not to exceed* 150 psi at ambient temperature.