

# INSTALLATION INSTRUCTIONS

## F-420

### SPECIFICATIONS



**Meter Body:** Acrylic, clear

**Floats:** #316 Stainless Steel (optional Hastelloy)

**Adapters:** PVC

**Guidewire:** #316 Stainless Steel (optional Hastelloy)

**O-Rings:** Viton

**Scale:** Permanent Silkscreen

**Max. Pressure:** See Temperature vs. Pressure chart\*

**Max. Temperature:** See Temperature vs. Pressure chart\*

F-420N Series

LETTER	DIMENSIONS
A	12" (305.0mm)
B	2" (51.0mm)

In. (mm)



## Your Blue-White® F-420 Series In-Line Flowmeter

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

Please read the Instruction Guideline on the next page before installing your flowmeter.

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

## Unpacking the Flowmeter

- Check for damage while unpacking the flowmeter.
- Remove the plastic tube that has been inserted during packaging for shipping reasons.
- Be sure the meter is suitable for your application.
- The maximum temperature and pressure is shown on the following page.
- Although the meter may be suitable for other chemicals, Blue-White® meters are tested with water and air only. If you are unsure of the meters compatibility with your chemical, consult the factory.
- **Blue-White® guarantees the meter is suitable with air and water only.**

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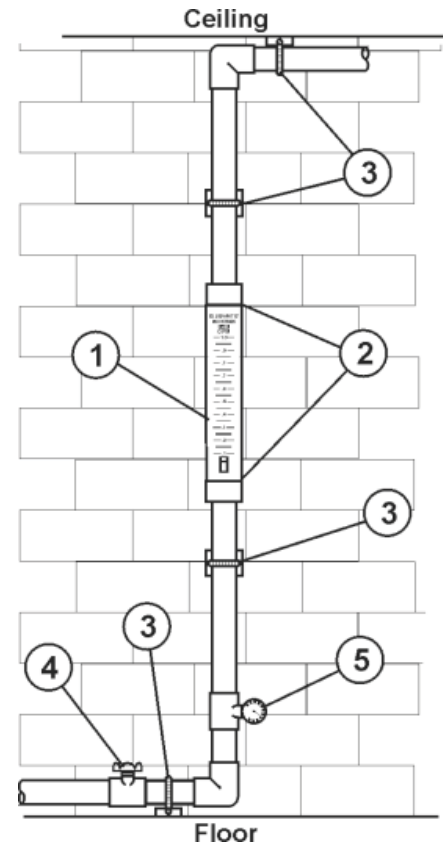
## Installation Guideline

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

**Caution:** Follow these tips to avoid failure

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

1. Flowmeter must be installed in an exact vertical plane to ensure accuracy.
2. Use PTFE tape (or similar) for the flowmeter threaded adapters. Acrylic and other exotic plastics cannot tolerate PVC Glue and/or pipe dope. Even fumes can cause crazing. 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. Never hold the meter with pliers or like tools. **DO NOT OVER-TIGHTEN!**



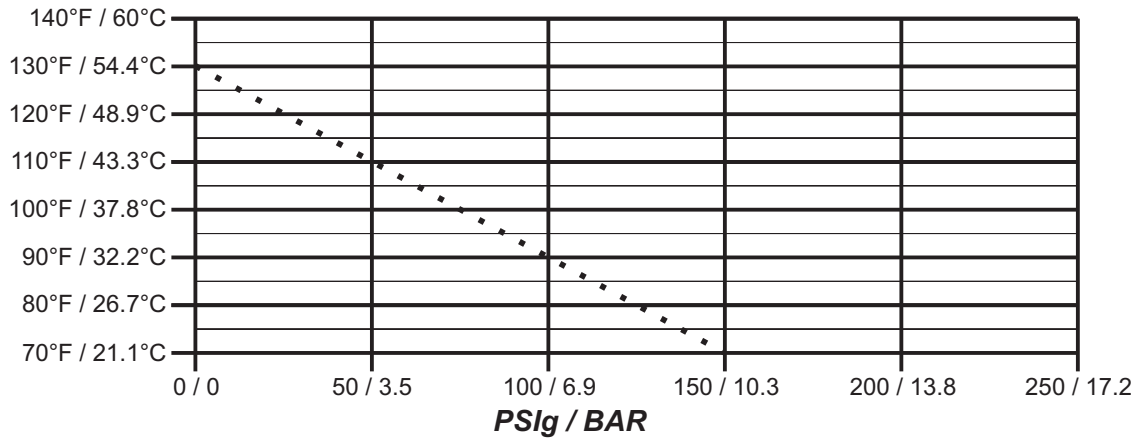
### F-420 Meter Installation

3. Wall, floor and ceiling mounts are to be carefully aligned and sturdy. Wall, floor and ceiling supports are recommended as needed.
4. 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. Solenoid valves, or other quick opening valves cannot be used unless meter is protected against sudden bursts of flow.
5. Maximum working pressure not to exceed recommended psi at fluid temperature (see Temperature Vs. Pressure chart).

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## Temperature vs. Pressure

### Temperature



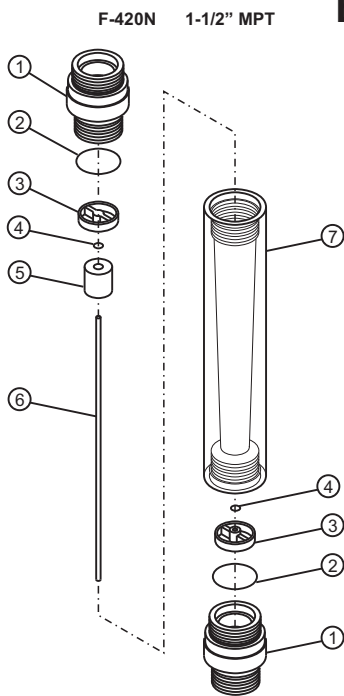
## Pressure and Temperature

Pressure and temperature limits are inversely proportional. At the maximum suggested pressure the temperature should approach 70°F / 21.1°C; at the maximum suggested temperature the pressure should approach zero 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.

## Application Note

Flowmeters are tested and calibrated for water or air only.

Although meters may be suitable for other chemicals, Blue-White cannot guarantee their suitability. It is the responsibility of the user to determine the suitability of the flowmeter in their application.



## Exploded View and Parts List

Standard Meters

F-420 Parts List. 1-1/2" MPT

Item	Catalog Number	Description	Amount Required
1	76001-026	1-1/2" MPT Adapter, F-420N, PVC	2
2	90003-123	O-ring, 127, Viton	2
3	91001-159	Wire holder, F-420, 1.5 PSF	2
4	2-006V	O-ring, 006 Viton	2
5	-	Float 5 - 25 GPM, SS	1
5	-	Float 8 - 40 GPM, SS	1
5	-	Float 10 - 50 GPM, SS	1
6	76001-038	Guide Wire, 420.125 x 7.31 SS	1
7	-	F-420 Large Body, Acrylic	1

Shading indicates item not sold separately

## Maintenance

The "Exploded View" drawing illustrates assembly of the F-420N series meter. If your flowmeter needs to be cleaned refer to this drawing when reassembling the unit. The tapered tube may be cleaned with a soft bottle brush. Use a MILD soap and water solution for cleaning purposes. Note the floats "up" position.

## BLUE-WHITE INDUSTRIES LIMITED WARRANTY

**FLOWMETERS** are warranted to be free of defects in material and workmanship for up to 12 months from the date of factory shipment. Warranty coverage is limited to repair or replacement of the defective flowmeter only. Blue-White Industries does not assume responsibility for any other damage that may occur.

This warranty does not cover damage to the flowmeter that results from misuse or alterations, nor damage that occurs as a result of: meter misalignment, improper installation, over tightening, use of non-recommended chemicals, use of non-recommended adhesives or pipe dopes, excessive heat or pressure, or allowing the meter to support the weight of related piping. Flowmeters are tested and calibrated with water and air only. Although meters may be suitable for other chemicals, Blue-White cannot guarantee their suitability.

Flowmeters are repaired at the factory only. Call or write the factory to receive a Return Authorization Number, carefully pack the flowmeter to be returned, including a brief description of the problem. Note the RA number on the outside of the carton.

Prepay all shipping costs. The factory does not accept COD Shipments. Damage that occurs during shipping is the responsibility of the sender.

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