## **Blue-White** F-451 Flowmeter Industries, Ltd. Instruction Manual

Building Reliable Products that Enhance the Quality of Life

### Your Blue-White® F-451 Series **In-Line Flowmeter**

This flowmeter was designed to be easily installed. Please read this Instruction guideline before installing your flowmeter.

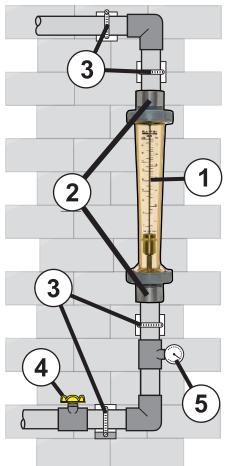
Do not install the meter in direct sunlight. The meter can be damaged by UV light.



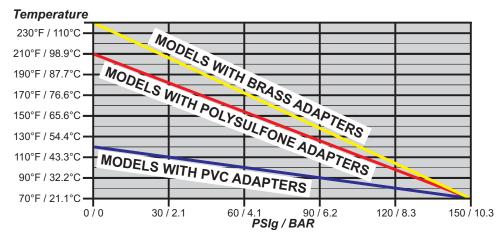
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#### **INSTALLATION GUIDE**

- 1 The flowmeter must be installed in a vertical plane to ensure accuracy. Misalignment may damage the flowmeter and also may cause the o-ring seals to leak.
- 2 Use only PTFE tape on the threaded adapters. Pipe dope and glue will damage the polysulfone meter body and fittings. Or install the flowmeter after all glued fittings have dried and fumes have been purged from the system.
- 3 Mounts and supports must be sturdy enough to support the plumbing and prevent vibration. Vibration and heavy loads will damage the meter.
- 4 Avoid imposing a sudden burst of flow to the meter. Solenoid valves will damage the meter. Such a burst will cause the float to impact the top float stop with destructive force.
- 5 The Maximum fluid temperature is dependant on the working pressure. High pressure and temperature with damage the meter. (see temperature VS pressure chart)



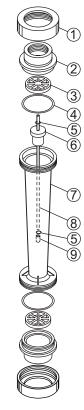
#### TEMPERATURE vs PRESSURE



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#### **EXPLODED VIEW, PARTS LIST AND SPECS**

#### **EXPLODED VIEW**



#### **PARTS LIST**

Item	Catalog	Description	Qty
1	F-45038N	Union Nut	2
2	F-45030N F-45036	Adapter, vertical, 1" F/NPT (PSF) Adapter, vertical, 1-1/2" M/NPT (PVC)	2 2
3	F-45025 F-45025-2	Wireholder 1-10, 2-20 (PSF) LG Wireholder 3-30, 4-40 (PSF)	2
4	2-136V	O-Ring 2-136 (Viton)**	1
5	2-006A 2-008V	Float Stop .5-6, 1-10, 2-20 (Aflas) Large Float Stop, 3-30, 4-40 (Aflas)	1
6	-	Float (SS)*	1
7	-	Meterbody (PSF)	1
8	F-45028 F-450028-2	Guide Wire, .5-6, 1-10, 2-20, (SS)* Guide Wire, 3-30, 4-40 (SS)*	1
9	F-45046 F-45054	Wireholder, .5-6, 1-10, 2-20 (PSF) Wireholder, 3-30, 4-40 (PSF)	1

Shading indicates item not sold separately

\*Hastelloy C-276 Option Available \*\*EP Option Available

PSF= polysulfone SS = # 316 Stainless Steel PP = polypropolyne PVC = Polyvinyl chloride

#### **METER SPECS**

Scale	Permanent dual scale silkscreen
Max Pressure	See Temperature vs. Pressure chart*
Max Temperature	See Temperature vs. Pressure chart*
Height	14.5" (368mm)
Width	3.1875" (81mm)
Accuracy	± 2% of full scale reading

#### APPLICATION NOTES

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. Flowmeters are tested and calibrated for water only.

#### **MAINTENANCE**

The "Exploded View" drawing illustrates assembly of the F-451N 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 float's "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 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.

# We are not satisfied until you are!