Blue-White

Variable Area Flow Meters

F-452N
2" Pipe Connection
Rod Guided Float
Shield option

Features:

- Polysulfone meter body resists high temperatures and pressures.
- 316SS or Hastelloy rod guided float.
- Direct reading permanent scale.
- Adapters and unions engineered for increased protection from misalignment and vibration.
- Custom calibrations, materials, and Private labeling available.
- · Very low pressure drop.
- Optional polycarbonate splash shield

Materials of Construction:

weter Body:	Polysulfone
Adapters:	Polysulfone
Guide Rod Holder:	Polysulfone
O-ring seals:	Viton® (optional EP)
Union Nuts:	Fiber reinforced nylon (non wetted)
Float:	
Standard Series	316SS or Teflon (varies per model)
K- Series	Hastelloy or Teflon (varies per model)
Guide Rod:	
Standard Series	316SS
K- Series	Hastelloy
Optional Shield:	Polvcarbonate

Specifications:

Max. working pressure:150 PSI (10.3 bar) @ 70° F (21° C)

Max. fluid temperature:200° F (93° C) @ 0 PSI

Full scale accuracy:+/- 2%

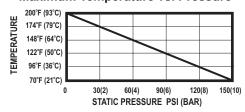
Calibration fluid:water, specific gravity 1.0

Scale length:8" (200mm)

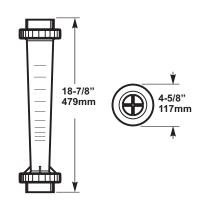
Environment:.....Not for direct sunlight exposure.

Maximum pressure drop:2 PSI Approximate shipping wt:5 lb. (2.27 kg)

Maximum Temperature vs. Pressure



Dimensions:





Industries, Ltd.

Installation Requirements:

1. Misalignment will damage the meter!

Flowmeter must be installed in an exact vertical plane to ensure accuracy. Be certain of proper plumbing alignments. Misalignment may cause the o-ring seals to leak. The meterbody material can be damaged by UV rays. Do not install in direct sunlight.

2. Pipe dope and glue will damage the meter!

Use only Teflon® tape on the threaded adapters. The meter body and plastic fittings cannot tolerate PVC Glue and/or pipe dope. Even fumes can cause severe damage. If you are installing your flowmeter to a glued pipe configuration, install the flowmeter after all glued fittings are dried and lines are purged of all fumes. Never hold the meter body with pliers or like tools. Union nuts should be hand tightened only. DO NOT OVER-TIGHTEN!

3. Vibration and heavy loads will damage the meter!

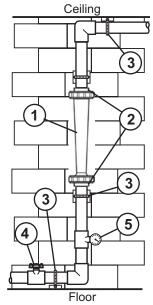
Wall, floor and ceiling mounts and supports must be carefully aligned with the meter body and sturdy enough to support the plumbing and prevent vibration. Never allow the flowmeter to support the weight of related piping.

4. Solenoid valves will damage the meter!

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. High pressures and temperatures will damage the meter!

The maximum acceptable temperature and pressure is interdependent. The maximum acceptable working pressure is dependant on the actual fluid temperature. The maximum acceptable fluid temperature is dependant on the actual working pressure. (see Temperature Vs. Pressure chart).



and Polycarbonate splash shield

Material

Teflon

316 SS

316 SS

316 SS

316 SS

316 SS

Float

Material

Guiderod

Material

316 SS

316 SS

316 SS

316 SS

Guiderod

Material

316 SS

316 SS

Flow Range and Model Options:

Standard Series - Equipped with 316 SS guide rod

Models for Liquid

MODEL NUMBER	Dual Scale Range GPM LPM		Float Material	Guiderod Material
F-452020LHN	2 to 20	8 to 78	Teflon	316 SS
F-452060LHN	6 to 60	30 to 230	316 SS	316 SS
F-452080LHN	8 to 80	40 to 300	316 SS	316 SS
F-452100LHN	6 to 100	20 to 380	316 SS	316 SS
F-452130LHN	20 to 130	80 to 500	316 SS	316 SS
F-452175LHN	25 to 175	100 to 675	316 SS	316 SS

Models for Air

MODEL NUMBER	Dual Sca SCFM	Dual Scale Range SCFM M³/HR		Guiderod Material
F-452040GHN	4 to 40	7 to 67	Teflon	316 SS
F-452250GHN	40 to 240	70 to 400	316 SS	316 SS

K-Series - Equipped with Hastelloy guide rod

K-Series models are specially equipped for highly corrosive applications.

Models for Liquid

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	MODEL NUMBER	Dual Sc GPM	ale Range LPM	Float Material	Guiderod Material
	F-452020LHKN	2 to 20	8 to 78	Teflon	Hastelloy
	F-452060LHKN	6 to 60	30 to 230	Hastelloy	Hastelloy
	F-452080LHKN	8 to 80	40 to 300	Hastelloy	Hastelloy
	F-452100LHKN	6 to 100	20 to 380	Hastelloy	Hastelloy
	F-452130LHKN	20 to 130	80 to 500	Hastelloy	Hastelloy
	F-452175LHKN	25 to 175	100 to 675	Hastelloy	Hastelloy

F-452040GHNC 4 to 40 7 to 67 Teflon 316 SS F-452250GHNC 40 to 240 70 to 400 316 SS 316 SS

Standard Series - Equipped with 316 SS guide rod

IPM

8 to 78

30 to 230

40 to 300

20 to 380

80 to 500

100 to 675

M³/HR

Dual Scale Range

Dual Scale Range

2 to 20

6 to 60

8 to 80

6 to 100

20 to 130

SCFM

K-Series - Equipped with Hastelloy guide rod and Polycarbonate splash shield

K-Series models are specially equipped for highly corrosive applications.

Models for Liquid

Models for Liquid

MODEL

NUMBER

F-452020LHNC

F-452060LHNC

F-452080LHNC

F-452100LHNC

F-452130LHNC

F-452175LHNC

MODEL

NUMBER

Models for Air

	-9			
MODEL NUMBER	Dual Sc GPM	ale Range LPM	Float Material	Guiderod Material
F-452020LHKNC	2 to 20	8 to 78	Teflon	Hastelloy
F-452060LHKNC	6 to 60	30 to 230	Hastelloy	Hastelloy
F-452080LHKNC	8 to 80	40 to 300	Hastelloy	Hastelloy
F-452100LHKNC	6 to 100	20 to 380	Hastelloy	Hastelloy
F-452130LHKNC	20 to 130	80 to 500	Hastelloy	Hastelloy
F-4521751 HKNC	25 to 175	100 to 675	Hastellov	Hastellov

Correction factor formulas for AIR models

PRESSURE CORRECTION 14.7 + Working PSIG 14.7

TEMPERATURE CORRECTION 460 + Working Temp °F

1) Liquid models calibrated with water, Sp.Gr. 1.0. Custom Sp.Gr. calibrations available. Contact the factory.
2) Air models calibrated at standard Conditions (70°F @ 14.7 PSIa). Temperature and pressure correction may be required. Contact the factory for custom calibrations.

