

Technical Data Sheet

F-452N Series - Rod guided Polysulfone Variable Area Meter



F-452060LHN

F-452N Features:

- Polysulfone meter body resists high temperatures and pressures.
- 316 SS or Hastelloy rod guided float.
- Direct reading permanent scale.
- Adapters and unions re-engineered for increased protection from misalignment and vibration.
- Not recommended for direct sunlight.
- Available OEM options:
Private labeling, custom calibrations and custom materials.

F-452N Specifications:

- Max. Working Pressure: ... 150 psig (10.3 bar) @ 70° F (21° C)
- Max. Fluid Temperature: ... 200° F (93° C) @ 0 PSI
- Full scale accuracy: +/- 2%
- Meter body material: Polysulfone
- Union Nuts: Glass fiber reinforced Nylon
- Guide Rod Material: 316 Stainless Steel
Options: Hastelloy C-276
- O-ring Material: Viton
Options: EPDM
- Max. pressure drop: 2 psi
- Approximate shipping wt.. 5 lb. (2.27 kg)

Standard models for Liquid						
MODEL NUMBER	Dual Scale Range		Adapter Size/Type	Adapter Material	Float Material	Guideroed Material
	GPM	LPM				
F-452020LHN	2 to 20	8 to 78	2" F/NPT	Polysulfone	Teflon	316 SS
F-452060LHN	6 to 60	30 to 230	2" F/NPT	Polysulfone	316 SS	316 SS
F-452080LHN	8 to 80	40 to 300	2" F/NPT	Polysulfone	316 SS	316 SS
F-452100LHN	6 to 100	20 to 380	2" F/NPT	Polysulfone	316 SS	316 SS
F-452130LHN	20 to 130	80 to 500	2" F/NPT	Polysulfone	316 SS	316 SS
F-462175LHN	25 to 175	100 to 675	2" F/NPT	Polysulfone	316 SS	316 SS

Models listed above are LHN variation = Standard units without shield.
LHNC = Shielded units.

Standard models for Air						
MODEL NUMBER	Dual Scale Range		Adapter Size/Type	Adapter Material	Float Material	Guideroed Material
	SCFM	M ³ /HR				
F-452040GHN	4 to 40	7 to 67	2" F/NPT	Polysulfone	Teflon	316 SS
F-452250GHN	40 to 240	70 to 400	2" F/NPT	Polysulfone	316 SS	316 SS

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

MODEL NUMBER	Dual Scale Range		Adapter Size/Type	Adapter Material	Float Material	Guideroed Material
	GPM	LPM				
F-452020LHKN	2 to 20	8 to 78	2" F/NPT	Polysulfone	Teflon	Hastelloy
F-452060LHKN	6 to 60	30 to 230	2" F/NPT	Polysulfone	Hastelloy	Hastelloy
F-452080LHKN	8 to 80	40 to 300	2" F/NPT	Polysulfone	Hastelloy	Hastelloy
F-452100LHKN	6 to 100	20 to 380	2" F/NPT	Polysulfone	Hastelloy	Hastelloy
F-452130LHKN	20 to 130	80 to 500	2" F/NPT	Polysulfone	Hastelloy	Hastelloy
F-462175LHKN	25 to 175	100 to 675	2" F/NPT	Polysulfone	Hastelloy	Hastelloy

Models listed above are LHKN variation = K-Series units without shield.
LHKNC = Shielded units.



F-452060LHNC
Shield Model

Installation Guideline

Caution: Follow these instructions to avoid failure.

Danger: Wear eye protection when installing or removing flowmeter.

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. Polysulfone meter body and 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 OVERTIGHTEN!**

3. Vibration and heavy loads will damage the meter!

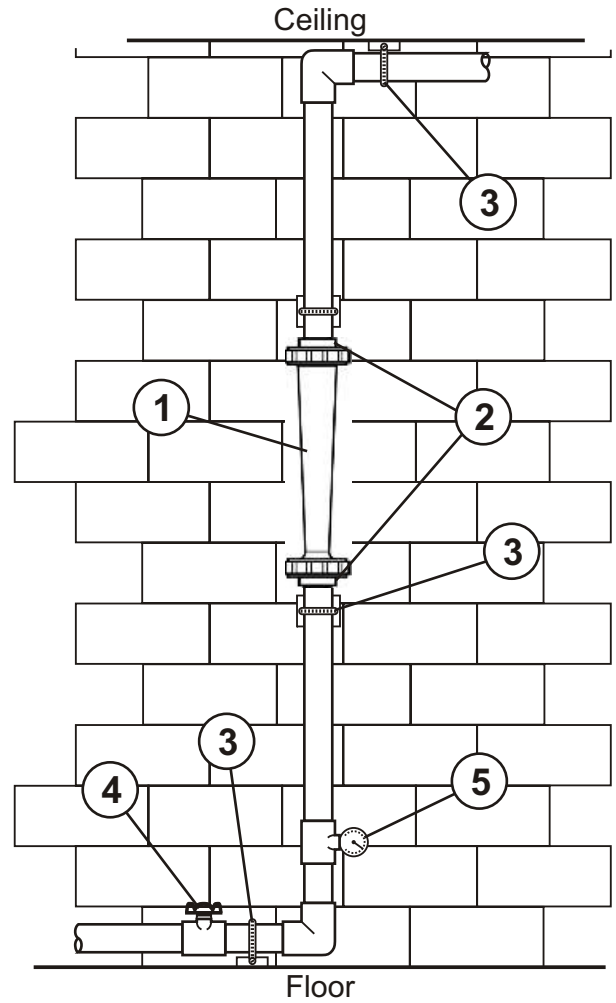
Wall, floor and ceiling mounts and supports must be carefully aligned with the meter body and sturdy enough to support the plumbing and prevent vibration. Never allow the flowmeter to support the weight of related piping.

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.

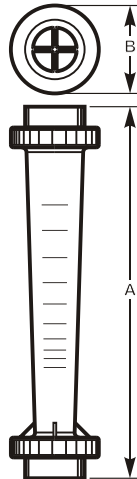
5. High pressures and temperatures will damage the meter!

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).



F-452N Series Parts

Part Number	Description
F-452330N	Adapter 2" F/NPT Polysulfone
76001-294	Adapter 2" Socket Fusion polypropylene
76001-295	Adapter 2" Socket Fusion PVDF
F-452287N	Guide Rod 316 Stainless Steel
76001-310	Guide Rod C-276 Hastelloy
F-452043N	O-ring Viton
F-452004N	Union Nut
F-452002	Guide Rod Holder
F-452332	Float Stop



Dimensions	
A	B
18-7/8"	4-5/8"

Temperature vs. Pressure

