

# F-451

## Variable Area Flow Meter

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### Features

- > Polysulfone body resists high temperatures and pressures
- > In-line or panel mount configurations available
- > Indoor use only
- > Full Scale Accuracy +/- 3%
- > 316ss float & guide-wire

### Highlights

**Flow range**

0.5 - 40 GPM  
2.0 - 155 LPM

**Pressures up to**

150 PSI  
(10.3 bar)

**Max. fluid temp.**

212 °F  
100 °C

**Body**

Polysulfone

**Adapters**

1.0", 1.5" F/NPT  
and 50mm slip

**Warranty**

1 Year



<b>Maximum Working Pressure</b>	150 PSI (10.3 bar) @ 70 °F (21 °C)
<b>Maximum Fluid Temperature</b>	Standard units - 1" pipe: 212 °F (100 °C) @ 0 PSI Standard units - 1-1/2" pipe: 120 °F (49 °C) @ 0 PSI
<b>Full Scale Accuracy</b>	+/- 3%
<b>Calibration Fluid</b>	Water, specific gravity 1.0
<b>Scale Length</b>	6" (150mm)
<b>Environment</b>	Not for direct sunlight exposure
<b>Maximum Pressure Drop</b>	1 PSI
<b>Approximate Shipping Weight</b>	3 lb. (1.36 kg)

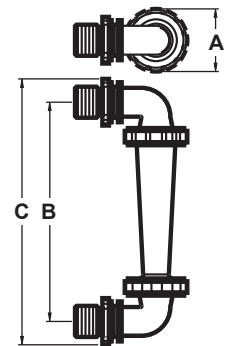
## Dimensions

Dim	Inch	cm
A	14-1/2"	36.83
B	3-5/16"	8.41



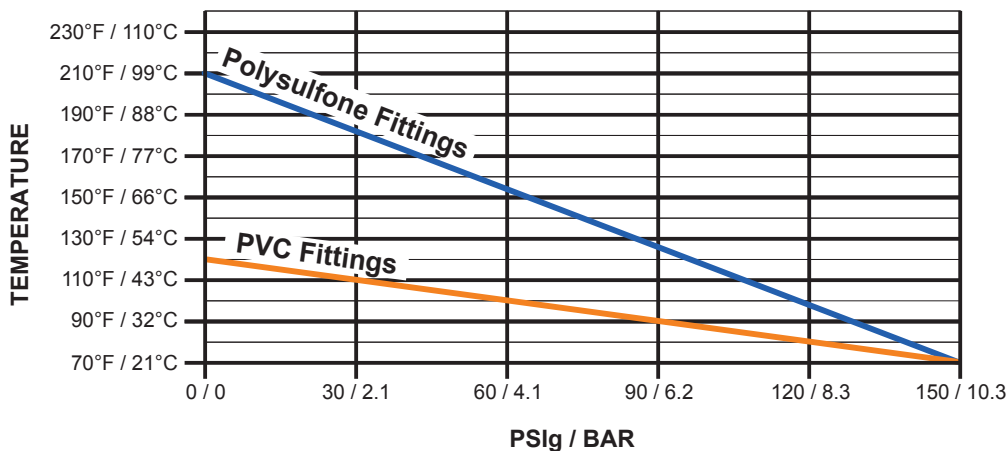
Vertical Inline Models

Dim	Inch	cm
A	3-5/16"	8.41
B	15"	38.1
C	17"	43.18



Panel Mount Elbow Models

## Maximum Temperature vs. Pressure



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**Non-wetted Components:**

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**Union Nuts** Fiber reinforced nylon

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**Wetted Components:**

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**Meter Body** Polysulfone

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**Adapters**  
 1" pipe: Polysulfone, F/NPT or elbow M/NPT  
 1.5" pipe: PVC, F/NPT

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**Guide Rod Holder** Polysulfone

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**O-ring Seals** Viton®

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**Float** 316ss or PTFE (varies per model)

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**Guide Rod** 316ss

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**Optional Shield** Polycarbonate

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## Output Specifications

Model	Feed Rate		Max Pressure	Max Temperature	Float Material
	GPM	LPM	PSI (bar)	°F (°C)	
F-451006L	0.5–6	2–22	150 (10.3)	70 (21)	Teflon
F-451001L	1.0–10	4–40	150 (10.3)	70 (21)	316ss
F-451002L	2.0–20	6–76	150 (10.3)	70 (21)	316ss
F-451003L	3.0–30	23–115	150 (10.3)	70 (21)	316ss
F-451004L	4.0–40	15–155	150 (10.3)	70 (21)	316ss

# Model Number Matrix

## F-451 Model Number

<b>F</b>	Flow Meter					
	<b>Series</b>					
	<b>451</b>	F-451 Polysulfone body				
		<b>Scale</b>				
		<b>006</b>	0.5 - 6 gpm (2 - 22 lpm) Teflon Float			
		<b>001</b>	1 - 10 gpm (4 - 40 lpm) 316ss Float			
		<b>002</b>	2 - 20 gpm (6 - 76 lpm) 316ss Float			
		<b>003</b>	3 - 30 gpm (12 - 115 lpm) 316ss Float			
		<b>004</b>	4 - 40 gpm (15 - 155 lpm) 316ss Float			
			<b>Guide-Wire Material</b>			
		<b>LHN</b>	3/16" Stainless steel rod			
			<b>Special</b>			
		<b>(Blank)</b>	Standard meter			
		<b>C</b>	Polycarbonate shield			
			<b>Adapter</b>			
		<b>(Blank)</b>	1.0" Female NPT, Polysulfone			
		<b>-24</b>	1.5" Female NPT, PVC			
		<b>-50m</b>	50mm Slip, PVC			
		<b>E</b>	90° Elbow 1.0" Male NPT , Polysulfone			
<b>F</b>	<b>-</b>	<b>451</b>	<b>006</b>	<b>LHN</b>		<b>Sample Model Number</b>

\*In-house NIST Calibration, OEM packaging and silicone oil free options are also available.