Blue-White®

F-451

Variable Area Flow Meter

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

Engineering Specifications

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

Dimensions

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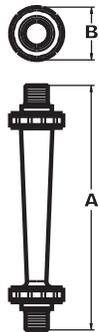
Vertical Inline Models

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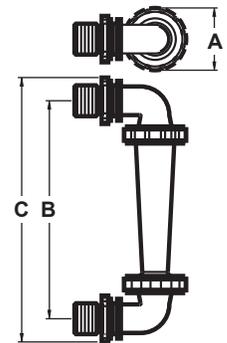
Panel Mount Elbow Models

Maximum Temperature vs. Pressure

Polysulfone Fittings

PVC Fittings

TEMPERATURE (230°F / 110°C, 210°F / 99°C, 190°F / 88°C, 170°F / 77°C, 150°F / 66°C, 130°F / 54°C, 110°F / 43°C, 90°F / 32°C, 70°F / 21°C)

PSIg / BAR (0 / 0, 30 / 2.1, 60 / 4.1, 90 / 6.2, 120 / 8.3, 150 / 10.3)

Materials of Construction
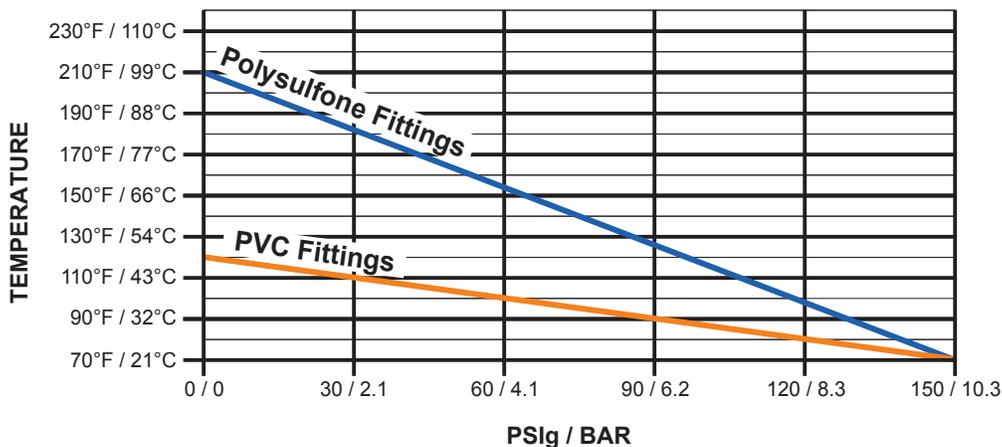
Non-wetted Components:

Union Nuts	Fiber reinforced nylon

Wetted Components:

Meter Body	Polysulfone
Adapters	1" pipe: Polysulfone, F/NPT or elbow M/NPT
	1.5" pipe: PVC, F/NPT
Guide Rod Holder	Polysulfone
O-ring Seals	FKM (optional EP)
Float	316SS or PTFE (varies per model)
Guide Rod	316SS
Optional Shield	Polycarbonate

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

F	Flow Meter

Series

451	F-451 Polysulfone body

Scale

006	0.5 - 6 gpm (2 - 22 lpm) Teflon Float
001	1 - 10 gpm (4 - 40 lpm) 316ss Float
002	2 - 20 gpm (6 - 76 lpm) 316ss Float
003	3 - 30 gpm (12 - 115 lpm) 316ss Float
004	4 - 40 gpm (15 - 155 lpm) 316ss Float

Guide-Wire Material

LHN	316 Stainless steel rod

Special

(Blank)	Standard meter

Adapter

(Blank)	1.0" Female NPT, Polysulfone
-24	1.5" Female NPT, PVC
E	90° Elbow 1.0" Male NPT , Polysulfone

O-Ring

(Blank)	FKM
-22R	EP

F	-	451	006	LHN				Sample Model Number

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

Optional Accessories and Components

Polycarbonate Shield Kit KIT-SHS
(Includes shield and two adapters. Some assembly required.)

ISO 9001:2015 CERTIFIED

Quality SINCE 1957

MADE IN THE USA