# **Blue-White**

## **Variable Area Flow Meters**

Industries, Ltd. Engineering and Technical Data F-461 32mm Pipe Size **Socket Fusion, Butt Fusion** and Slip Glue connections **Rib Guided Float** No Metal in the fluid path

#### **Features:**

- Polysulfone meter body resists high temperatures and
- PTFE float and optional PVC, Polypropylene or PVDF adapters for corrosive applications.
- Rib guided float.
- No metal in the fluid path.
- Direct reading permanent scale.

# **Materials of Construction:**

**Dimensions:** 

Meter Body:	Polysulfone
Adapters:	PVC (optional Polypropylene & PVDF)
O-ring seals:	Viton® (optional EP)
Union Nuts:	Anodized Aluminum (optional PVC)
Float:	PTFE
Float Stop:	Polysulfone

# **Specifications:**

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

PVC adapters: .....54° C (130° F) @ 0 Bar Polypropylene adapters: ....65° C (150° F) @ 0 Bar PVDF adapters: ......98° C (210° F) @ 0 Bar

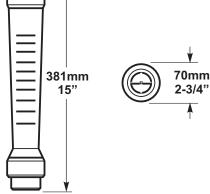
Full scale accuracy: .....+/- 2.5%

Calibration fluid: .....water, specific gravity 1.0

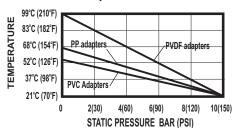
Scale length: ......127mm

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

Approximate shipping wt: ....1.4 kg (3 lb.)



### Maximum Temperature vs. Pressure





# 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 PTFE 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!

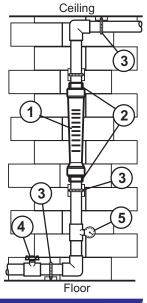
Wall, floor and ceiling mounts and supports must be carefully aligned with the meter body and sturdy enough to support the plumbing and prevent vibration. Never allow the flowmeter to support the weight of related piping.

#### 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).



# Flow Range and Model Options:

#### **Models with Socket connections**

#### - Models for Liquid with PVC glue slip socket adapters

MODEL	Dual Scale Range		Pipe	Float	Adapter
NUMBER	U.S.GPM	LPM	ĎΝ	Material	Material
F-461100LX-19P	1 to 10	4 to 40	32mm	PTFE	PVC
F-461200LX-19P	2 to 20	5 to 75	32mm	PTFE	PVC
F-461300LX-19P	3 to 35	12 to 130	32mm	PTFF	PVC.

#### - Models for Liquid - Polypropylene socket fusion adapters

MODEL NUMBER	Dual Sca U.S.GPM	le Range LPM	Pipe DN	Float Material	Adapter Material
F-461100LX-19G	1 to 10	4 to 40	32mm	PTFE	Polypropylene
F-461200LX-19G	2 to 20	5 to 75	32mm	PTFE	Polypropylene
F-461300LX-19G	3 to 35	12 to 130	32mm	PTFE	Polypropylene

#### - Models for Liquid - PVDF socket fusion adapters

MODEL NUMBER	Dual Sca U.S.GPM	le Range LPM	Pipe DN	Float Material	Adapter Material
F-461100LX-19K	1 to 10	4 to 40	32mm	PTFE	PVDF
F-461200LX-19K	2 to 20	5 to 75	32mm	PTFE	PVDF
F-461300LX-19K	3 to 35	12 to 130	32mm	PTFE	PVDF

Models listed above are LX variation = units with Anodized Aluminum unions. LP = units with PVC unions.

#### **Models with Butt Fusion connections**

#### - Models for Liquid - Polypropylene butt fusion adapters

MODEL NUMBER		le Range LPM	Pipe DN	Float Material	Adapter Material
F-461100LX-18G	1 to 10	4 to 40	32mm	PTFE	Polypropylene
F-461200LX-18G	2 to 20	5 to 75	32mm	PTFE	Polypropylene
F-461300LX-18G	3 to 35	12 to 130	32mm	PTFE	Polypropylene

#### - Models for Liquid - PVDF butt fusion adapters

	MODEL NUMBER	Dual Sca U.S.GPM	le Range LPM	Pipe DN	Float Material	Adapter Material	
Ī	F-461100LX-18K	1 to 10	4 to 40	32mm	PTFE	PVDF	Τ
j	F-461200LX-18K	2 to 20	5 to 75	32mm	PTFE	PVDF	
Ī	F-461300LX-18K	3 to 35	12 to 130	32mm	PTFE	PVDF	

Models listed above are LX variation = units with Anodized Aluminum unions. LP = units with PVC unions.

Notes:

1) Liquid models calibrated with water, Sp.Gr. 1.0. Custom Sp.Gr. calibrations available. Contact the factory.

3) Gallons shown are U.S. Gallons.

