

# VARIABLE AREA FLOWMETERS

## THE F-400 SERIES OF IN-LINE UNITS



F-400N

### F-400N

#### F-400N BENEFITS

- Tough machined acrylic meter body, highly polished to a clear finish.
- Direct reading permanent scale.
- White back reflector for easy reading.
- Sturdy adapters with high grade Viton® o-ring seals.
- Standard models #316 stainless steel float guide rods. (Optional K-series hastelloy C-276).
- Standard models #316 stainless steel, PVDF, Teflon float. (Optional K-series hastelloy C-276, PVDF, Teflon).
- Acceptable in direct sunlight applications.
- Available OEM options: Private labeling, custom calibrations, custom materials.

#### F-400N SPECIFICATIONS

Max. Working Pressure ..... 150 psig (10.3 bar) @ 70° F (21° C)  
 Max. Fluid Temperature..... Polypropylene adapters: 150° F (65° C) @ 0 PSI  
 Full scale accuracy..... +/- 5%  
 Meter body material ..... Machined acrylic  
 O-ring seals..... Viton® (optional EP)  
 Approximate shipping wt... 1/2 lb. (.23 kg)  
 NIST certificates optional

#### PIPE SIZES

1/4", 3/8" and 1/2" F/NPT

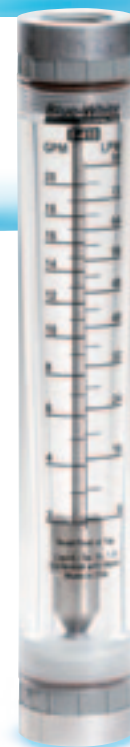
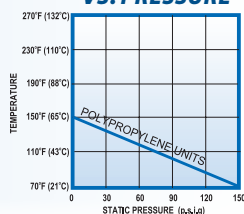
#### FLOW RATES

0.025 to 5 GPM  
 0.1 to 20 LPM  
 .2 to 20 SCFM  
 .4 to 34 M<sup>3</sup>HR

#### DIMENSIONS

Height: 8 3/16"  
 Width: 1 1/4"

#### F-400N TEMPERATURE VS. PRESSURE



F-410N

### F-410N

#### F-410N BENEFITS

- Tough machined acrylic meter body, highly polished to a clear finish.
- Direct reading permanent scale.
- White back reflector for easy reading.
- Sturdy adapters with high grade Viton® o-ring seals.
- Standard models #316 stainless steel float guide rods. (Optional K-series hastelloy C-276).
- Standard models #316 stainless steel or PVC float. (Optional K-series hastelloy C-276 or PVC).
- Acceptable in direct sunlight applications.
- Available OEM options: Private labeling, custom calibrations, custom materials.

#### F-410N SPECIFICATIONS

Max. Working Pressure ..... 150 psig (10.3 bar) @ 70° F (21° C)  
 Max. Fluid Temperature..... 316 SS and Hastelloy Floats: 150° F (65° C) @ 0 PSI  
 PVC floats: 120° F (49° C) @ 0 PSI  
 Full scale accuracy..... +/- 5%  
 Meter body material ..... Machined acrylic  
 O-ring seals..... Viton® (optional EP)  
 Approximate shipping wt... 2 lb. (.91 kg)  
 NIST certificates optional

#### PIPE SIZES

3/4" and 1" F/NPT

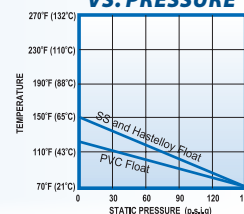
#### FLOW RATES

1 to 20 USGPM  
 4 to 80 LPM  
 4 to 80 SCFM  
 8 to 135 M<sup>3</sup>HR

#### DIMENSIONS

Height: 11"  
 Width: 1 3/4"

#### F-410N TEMPERATURE VS. PRESSURE



F-430N

### F-430N

#### F-430N BENEFITS

- Tough machined acrylic meter body, highly polished to a clear finish.
- Direct reading permanent scale.
- White back reflector for easy reading.
- Sturdy adapters with high grade Viton® o-ring seals.
- Standard models #316 stainless steel float guide rods. (Optional K-series hastelloy C-276).
- Acceptable in direct sunlight applications.
- Available OEM options: Private labeling, custom calibrations, custom materials.
- Optional Polypropylene and CPVC Adapters available.

#### F-430N SPECIFICATIONS

Max. Working Pressure ..... 130 psig (8.9 bar) @ 70° F (21° C)  
 Max. Fluid Temperature..... 130° F (54° C) @ 0 PSI  
 Full scale accuracy..... +/- 5%  
 Meter body material ..... Machined acrylic  
 O-ring seals..... Viton® (optional EP)  
 Approximate shipping wt... 6 lb. (2.7 kg)  
 NIST certificates optional

#### PIPE SIZES

1 1/2" M/NPT and 2" F/NPT

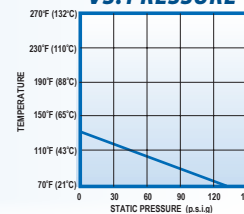
#### FLOW RATES

4 to 100 USGPM  
 15 to 375 LPM

#### DIMENSIONS

Height: 14"  
 Width: 3"

#### F-430N TEMPERATURE VS. PRESSURE



F-420N



### F-420N

#### F-420N BENEFITS

- Tough machined acrylic meter body, highly polished to a clear finish.
- Direct reading permanent scale.
- White back reflector for easy reading.
- Sturdy adapters with high grade Viton® o-ring seals.
- Standard models #316 stainless steel float guide rods. (Optional K-series hastelloy C-276).
- Acceptable in direct sunlight applications.
- Available OEM options: Private labeling, custom calibrations, custom materials.

#### F-420N SPECIFICATIONS

Max. Working Pressure ..... 130 psig (8.9 bar) @ 70° F (21° C)  
 Max. Fluid Temperature..... 130° F (54° C) @ 0 PSI  
 Full scale accuracy..... +/- 5%  
 Meter body material ..... Machined acrylic  
 O-ring seals..... Viton® (optional EP)  
 Approximate shipping wt... 2 lb. (.91 kg)  
 NIST certificates optional

#### PIPE SIZES

1" and 1 1/2" M/NPT

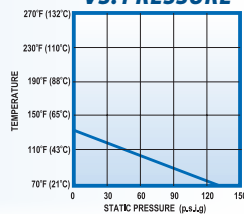
#### FLOW RATES

5 to 50 USGPM  
 20 to 200 LPM

#### DIMENSIONS

Height: 12"  
 Width: 2"

#### F-420N TEMPERATURE VS. PRESSURE



\* Viton® is a registered trademark of DuPont.

# F-550 SERIES MACHINED PANEL MOUNT METER



F-550A with Integral Flow Adjustment Valve

F-550N

## F-550 BENEFITS

- Durable, highly polished, one piece machined meter body.
- #316 Stainless Steel floats and float guides.
- Sturdy adapters with Viton® o-ring seals.
- Bulkhead nuts attach directly to inside panel.
- Separate mounting screws are not required.
- Optional Adjustable Flow Control Valve (F-550A only) easy to disassemble. No special tool required, ALL FIELD REPLACEABLE.
- Acceptable in direct sunlight applications.

## F-550 SPECIFICATIONS

Temperature.....200°F (93°C) @ 0 pressure  
 Pressure.....250 psig (17.2 Bar) @ 70°F (21°C)  
 Full Scale Accuracy.....± 5%  
 Meter Body Material.....Machined acrylic  
 Shield Material.....Lexan®  
 Adapter Material.....PVC, PVDF, CPVC  
 O-rings.....Viton®  
 Float Material.....#316 SS  
 Max. Pressure Drop.....2 psi full scale  
 Approximate Shipping Wt. .2 lbs. (.907 kg.)

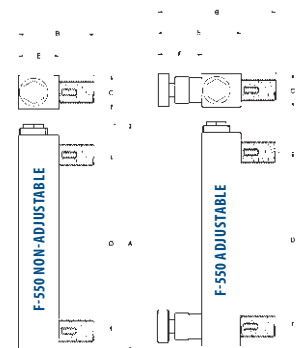
## F-550 ORDERING GUIDELINES

with NON-ADJUSTABLE & ADJUSTABLE Valves

MODEL NUMBER	GPM CALIBRATION	LPM CALIBRATION	ADAPTER SIZE	FLOAT MATERIAL
F-55250L(*)	0.025 to 0.250	0.1 to 1	1/4" M/NPT	#316 SS
F-55375L(*)	0.1 to 1	0.4 to 4	3/8" M/NPT	#316 SS
F-55376L(*)	0.2 to 2	0.75 to 7.5	3/8" M/NPT	#316 SS
F-55500L(*)	0.5 to 5	2 to 20	1/2" M/NPT	#316 SS
F-55750L(*)	1 to 10	4 to 40	3/4" M/NPT	#316 SS
F-55005L(*)	1 to 5	3 to 18	1" M/NPT	Teflon
F-55010L(*)	1 to 10	4 to 40	1" M/NPT	#316 SS
F-55015L(*)	1 to 15	5 to 60	1" M/NPT	#316 SS
F-55200L(*)	2 to 20	7.5 to 75	1" M/NPT	#316 SS

## MODEL OPTIONS

(\*) To order with Flow Adjustment Valve add the letter "A" after the "L" in the model number.  
 Model #F-55005L is not available with Adjustment Valve.  
 For optional hastelloy internals, add letter "K" to model number.



## F-550 NON-ADJUSTABLE DIMENSIONS

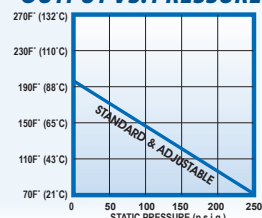
Model Number	A	B	C	D	E	Mount Hole
F-55250L (1/4")	7-1/4"	2-1/2"	11/16"	5-5/8"	1-1/4"	9/16"
F-55375L (3/8")	8-3/8"	2-3/4"	1-11/32"	6-1/2"	1-1/2"	1-1/16"
F-55376L (3/8")	8-3/8"	2-3/4"	1-11/32"	6-1/2"	1-1/2"	1-1/16"
F-55500L (1/2")	8-3/8"	2-3/4"	1-11/32"	6-1/2"	1-1/2"	7/8"
F-55750L (3/4")	9"	3-3/4"	1-1/2"	6-1/2"	1-3/4"	1-1/16"
F-55200L (1")	10-5/8"	4"	1-3/4"	8"	2"	12-1/64"

## F-550 ADJUSTABLE DIMENSIONS

Model Number	A	B	C	D	E	F
F-55250LA (1/4")	7-1/4"	3-7/16"	1"	5-5/8"	2-7/16"	1-11/32"
F-55375LA (3/8")	8-3/8"	4-1/2"	1-11/32"	6-1/2"	3-1/4"	1-3/4"
F-55376LA (3/8")	8-3/8"	4-1/2"	1-11/32"	6-1/2"	3-1/4"	1-3/4"
F-55500LA (1/2")	8-3/8"	4-1/2"	1-11/32"	6-1/2"	3-1/4"	1-3/4"
F-55750LA (3/4")	9"	5-1/2"	1-1/2"	6-1/2"	3-1/4"	1-5/16"
F-55200LA (1")	10-5/8"	5-1/4"	1-3/4"	8"	3-1/2"	1-7/16"

Note: Mount Hole Dimensions are the same as the Model Non-Adjustable

## F-550 OUTPUT VS. PRESSURE



**PIPE SIZES**  
 1/4", 3/8, 1/2", 3/4" and 1" M/NPT

**FLOW RATES**  
 0.025 to 20 GPM  
 0.1 to 75 LPM  
 0.1 to 45 SCFM

# F-500E SERIES PANEL MOUNT

## F-500E BENEFITS

- Impact resistant, one piece machined acrylic meter body.
- #316 Stainless Steel or glass floats (material depends on meter ordered).
- Permanent screen printed scales.
- A wide range of standard calibrations.
- Viton® o-ring seals.
- Excellent Accuracy.
- Acceptable in direct sunlight applications.

## F-500E SPECIFICATIONS

Temperature.....120°F (49°C) @ 0 pressure  
 Pressure.....150 psig (10.3 Bar) @ 70°F (21°C)  
 Full Scale Accuracy.....± 5%  
 Meter Body Material.....Machined acrylic  
 Adapter Material.....PVC  
 O-rings.....Viton®  
 Float Material.....#316 SS or Glass  
 Max. Pressure Drop.....2 psi  
 Approximate Shipping Wt. 1/2 lbs. (.227 kg.)



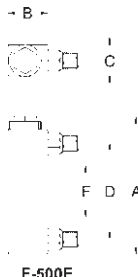
F-500E

**PIPE SIZES**  
 1/4" and 1/8" M/NPT

**FLOW RATES**  
 4.0 to 40 OZ/Hour  
 0.3 to 20 OZ/Min  
 2 to 50 SCFM  
 5 to 24 LPM/Air  
 1 to 72 GPH  
 2 to 300 CFH

## F-500E DIMENSIONS

Model #	A	B	C	D	F
F-501E	4-1/8"	1-1/4"	1"	3"	1-5/8"
F-502E	4-1/8"	1-1/4"	1"	3"	1-5/8"
F-503E	4-3/8"	1-1/4"	1"	3"	1-5/8"
F-504E	4-3/8"	1-1/4"	1"	3"	1-5/8"
F-505E	4-3/8"	1-1/4"	1"	3"	1-5/8"
F-506E	4-3/8"	1-1/4"	1"	3"	1-5/8"
F-507E	4-3/8"	1-1/4"	1"	3"	1-5/8"
F-508E	4-3/8"	1-1/4"	1"	3"	1-5/8"
F-509E	4-3/8"	1-1/4"	1"	3"	1-5/8"
F-510E	4-3/8"	1-1/4"	1"	3"	1-5/8"
F-511E	4-1/8"	1-1/4"	1"	3"	1-5/8"
F-514E	4-1/8"	1-1/4"	1"	3"	1-5/8"
F-512E	4-1/8"	1-1/4"	1"	3"	1-5/8"
F-513E	4-1/8"	1-1/4"	1"	3"	1-5/8"



# F-300 SERIES

## MACHINED ACRYLIC FLOWMETERS

## F-300 BENEFITS

- Well suited for closed pipe installation.
- Easy to read dual scale (GPM/LPM), screen printed on both sides of the meter body.
- Horizontal or Vertical pipe installation.
- One piece machined acrylic meter body.
- Corrosion resistant internal parts.
- Calibrated pitot tube.
- Ships with gasket seal and mounting clamps.
- Calibrated for use on PVC or Copper Pipe.
- Low Flow units offered.

## F-300 SPECIFICATIONS

Max. Working Pressure.....150 psig (10.3 bar) @ 70°F (21°C)  
 Max. Fluid Temperature.....190°F/88°C @ 0 pressure  
 Full Scale Accuracy.....± 10%  
 Meter Body Material.....Acrylic  
 Connection Type.....Saddle  
 Float Material.....#316 SS, Hastelloy or Teflon (low flow units)  
 Max. Pressure Drop.....0 psi  
 Approx. Shipping Weight... 1" to 4" Pipe: 1 lbs. (.454 kg.); 6" to 8" Pipe: 2 lbs. (.907 kg.)



U-300 F-300

**I.P.S. PIPE SIZES**  
 1", 1-1/4", 1-1/2", 2", 2-1/2", 3", 4", 6", 8"

**FLOW RATES**  
 5 to 1900 U.S. GPM  
 20 to 7200 LPM

\* Viton® is a registered trademark of DuPont.