

QUALITY AND **Blue-White** PERFORMANCE

ACRYLIC VARIABLE AREA FLOWMETERS



Blue-White has manufactured high quality, top performance Variable Area Acrylic Flowmeters for more than 50 years.

Our knowledge of industry needs, close attention to detail, and strict quality standards ensure that you'll be shipped an attractive, functional and dependable flowmeter, every time. Top quality materials of construction are used in the manufacture of all Blue-White Flowmeters, and close attention is paid to every detail. Blue-White Variable Area Flowmeters are offered in a variety of styles, configurations and flow ranges. These include Panel Mount, In-line and closed pipe units. Flowmeters are highly polished to a clear, glass-like finish and scales are permanently screen printed to meter bodies. Flow ranges are offered in U.S. and Metric units, as well as air (SCFM) calibrations. In addition to the units shown in this brochure, and standard options shown on these pages, Blue-White offers a wide range of options including: Special materials of construction and alternate flow ranges, based on meter capability, as well as private labeling and packaging, to volume purchasers.

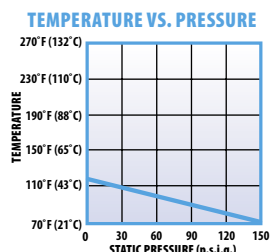
When you're specifying and purchasing Acrylic Variable Area Flowmeters, insist on the best, Blue-White Flowmeters.

For additional assistance please contact the factory, or your authorized representative or distributor.

THE F-500E SERIES COMPACT PANEL MOUNT FLOWMETER

The F-500E features meter styling similar to that of Blue-White's F-500 units, however the F-500E is smaller in size to accommodate a different range of applications. The compact meter body is machined of quality acrylic, polished to a clear glass-like finish. Meter adapters are constructed of PVC and have FKM o-ring seals. Overall meter width is 1-1/4" and adapter centers are 3". F-500E floats are constructed of either stainless steel or glass. Float material used depends on the flowmeter's calibration.

For performance, quality and style in a compact panel mount flowmeters, consider the F-500E.



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..... FKM
 Float Material..... #316 SS or Glass
 Approximate Shipping Wt. . 1/2 lbs. (.227 kg.)

F-500E ORDERING & CAPACITY GUIDELINES

Model Number	Calibration	Dimension-Connector Center to Center	Adapter Size	Float Material
F-501E	2 to 20 CFH	3"	1/4" M/NPT	GLASS
F-502E	4 to 30 CFH	3"	1/4" M/NPT	#316 SS
F-503E	5 to 50 CFH	3"	1/4" M/NPT	#316 SS
F-504E	2 to 24 LPM/Air	3"	1/4" M/NPT	#316 SS
F-505E	1 to 11 GPH	3"	1/4" M/NPT	#316 SS
F-506E	1 to 5 SCFM	3"	1/4" M/NPT	#316 SS
F-507E	0.2 to 1.2 GPM	3"	1/4" M/NPT	#316 SS
F-508E	12 to 72 GPH	3"	1/4" M/NPT	#316 SS
F-509E	.7 to 4.5 LPM	3"	1/4" M/NPT	#316 SS
F-510E	60 to 300 CFH	3"	1/4" M/NPT	#316 SS
F-511E	2 to 20 ML/MIN.	3"	1/8" F/NPT	GLASS
F-512E	10 to 100 ML/MIN.	3"	1/8" F/NPT	GLASS
F-513E	0.3 to 3.0 OZ/MIN.	3"	1/8" F/NPT	GLASS
F-514E	4.0 to 40 OZ/HOUR	3"	1/8" F/NPT	GLASS
F-515E	2.0 to 20 OZ/MIN	3"	1/8" F/NPT	#316 SS



F-500E

THE F-550N SERIES MACHINED PANEL MOUNT FLOWMETERS

Blue-White's F-550N Series Panel Mount Flowmeters feature a durable one piece meter body of solid, highly polished machined acrylic annealed for added strength and chemical resistance. The precision floats are machined. The F-550N Series have flush mount styling with removable bulkhead nuts. This design element eliminates the need for separate mounting screws. In addition, it makes installation and removal of the flowmeter a quick and uncomplicated process. A number of calibration ranges are offered for F-550N series units. The scale is printed in black ink to provide maximum contrast against the white back reflector, providing enhanced readability. **For proven performance insist on the F-550N Series from Blue-White.**



F-550NA with Integral Flow Adjustment Valve

F-550N

F-550N SERIES FEATURES & BENEFITS

- ▶ Durable and solid one piece annealed meter body.
- ▶ 316 Stainless Steel or PTFE Floats, depending on flow range .
- ▶ Stainless Steel Float Guide Rods.
- ▶ Sturdy adapters with FKM o-ring seals.
- ▶ Bulkhead nuts attach directly to the inside panel.
- ▶ Separate mounting screws are not required.
- ▶ Acceptable in direct sunlight applications.

F-550N SERIES OPTIONS INCLUDE

F-550N Series flowmeters may be ordered with an optional flow adjustment valve built into the meter body. The valve is easy to disassemble and no special tool is required. All field replaceable.

1/2" Barbed Fittings for F550N flowmeters are now offered. The barbed fittings provide a perfect solution when connecting flexible tubing or hose to our flowmeters.

If you don't see the flowmeter that suits your installation, please contact our helpful customer service department. Blue-White Sales, Engineering and Machine Departments work together to meet customer needs.

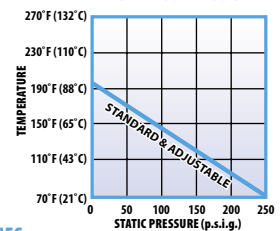
F-550N SERIES APPLICATIONS INCLUDE

- ▶ Reverse Osmosis Systems
- ▶ Water & Wastewater Treatment Systems
- ▶ Commercial aquariums
- ▶ Commercial car washes
- ▶ Pollution Monitoring and control equipment
- ▶ Chemical Processing Equipment – within the material capability
- ▶ Filtration Systems
- ▶ And many more!

F-550N & F-550NA 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.....Polypropylene
 O-rings.....FKM (optional EP)
 Float Material.....#316 SS (optional hastelloy)
 Max. Pressure Drop.....2 psi full scale
 Approximate Shipping Wt. 2 lbs. (.907 kg.)

TEMPERATURE VS. PRESSURE



F-550N & F-550NA ORDERING & FLOW RATE GUIDELINES

with NON-ADJUSTABLE & ADJUSTABLE Valves

Model Number	Calibration GPM	LPM	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-55375L(*)-BRB	0.1 to 1	0.4 to 4	1/2" BARB	#316 SS
F-55376L(*)	0.2 to 2	0.75 to 7.5	3/8" M/NPT	#316 SS
F-55376L(*)-BRB	0.2 to 2	0.75 to 7.5	1/2" BARB	#316 SS
F-55500L(*)	0.5 to 5	2 to 20	1/2" M/NPT	#316 SS
F-55500L(*)-BRB	0.5 to 5	2 to 20	1/2" BARB	#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	PTFE
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.

NEW!

1/2" BARB FITTINGS
for the F-550N Series



1/2" Barb Hose Bulkhead Nut (Attached directly to inside panel)

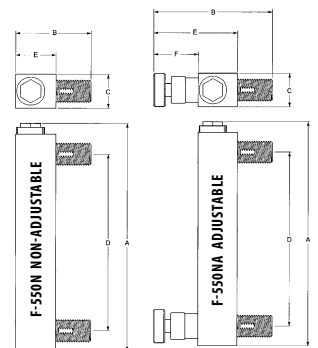
F-550N (NON-ADJUSTABLE) DIMENSIONS

Model Number	A	B	C	D	E	Mount Hole
F-55250L (1/4")	7-1/4"	2-1/2"	1-1/16"	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"	11/16"
F-55376L (3/8")	8-3/8"	2-3/4"	1-11/32"	6-1/2"	1-1/2"	11/16"
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"	1-21/64"

F-550NA (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"	15/16"
F-55200LA (1")	10-5/8"	5-1/4"	1-3/4"	8"	3-1/2"	17/16"

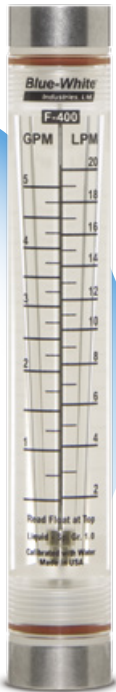
Note: Mount Hole Dimensions are the same as the Model Non-Adjustable



THE F-400 SERIES OF IN-LINE FLOWMETERS

Looking for a high quality, high performance in-line flowmeter? Consider Blue-White's F-400 Series Flowmeters. The F-400 come in a wide assortment of sizes, and a number of flow ranges are offered. The cylindrical F-400 is machined of high quality acrylic rod stock. The meter body is annealed for added strength and chemical resistance. It's highly polished to a clear, glass-like finish. Standard floats are machined of PVDF, PTFE or 316 Stainless Steel, depending on model and flow range ordered. The scale is printed in black ink to provide maximum contrast against the white back reflector, providing enhanced readability. Specially Equipped units are outfitted with Hastelloy, PTFE or PVDF Floats. The sturdy F-400 adapters have tough FKM o-ring seals. As an optional feature, HIGH/LOW LEVEL ALARM: Many of the lower flow calibration F-400N meters, up to 20 GPM or 80 LPM, may be ordered with an optional High/Low Level Alarm.

Because of its versatile styling, dependable performance and long service life, the F-400 Series is a very popular choice with OEMs. For special requirements please contact our helpful sales professionals.



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 FKM o-ring seals.
- ▶ Standard models #316 stainless steel float guide rods. (Optional K-series hastelloy C-276).
- ▶ Standard models #316 stainless steel, PVDF, PTFE float. (Optional K-series hastelloy C-276, PVDF, PTFE).
- ▶ 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 FKM (optional EP)
 Approximate shipping wt... 1/2 lb. (.23 kg)
 NIST certificates optional

PIPE SIZES

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

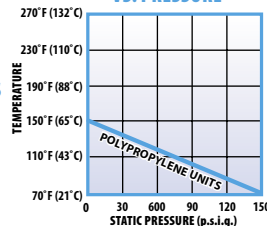
FLOW RATES

0.025 to 5 USGPM
 0.1 to 20 LPM
 .2 to 20 SCFM
 .4 to 34 M3HR

DIMENSIONS

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

F-400N 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 FKM 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 FKM (optional EP)
 Approximate shipping wt... 2 lb. (.91 kg)
 NIST certificates optional

PIPE SIZES

1" and 1 1/2" M/NPT

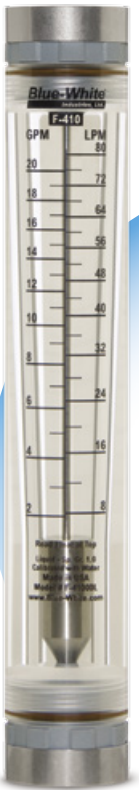
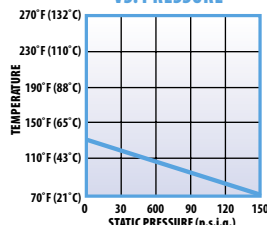
FLOW RATES

5 to 50 USGPM
 20 to 200 LPM

DIMENSIONS

Height: 12"
 Width: 2"

F-420N TEMPERATURE VS. PRESSURE



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 FKM 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 FKM (optional EP)
 Approximate shipping wt... 2 lb. (.91 kg)
 NIST certificates optional

PIPE SIZES

3/4" and 1" F/NPT

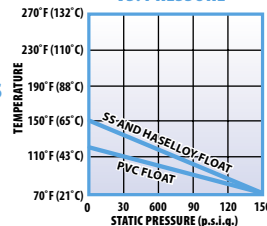
FLOW RATES

1 to 20 USGPM
 4 to 80 LPM
 4 to 80 SCFM
 8 to 135 M3HR

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 FKM 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 FKM (optional EP)
 Approximate shipping wt... 6 lb. (2.7 kg)
 NIST certificates optional

PIPE SIZES

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

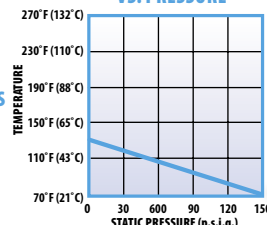
FLOW RATES

4 to 100 USGPM
 15 to 375 LPM

DIMENSIONS

Height: 14"
 Width: 3"

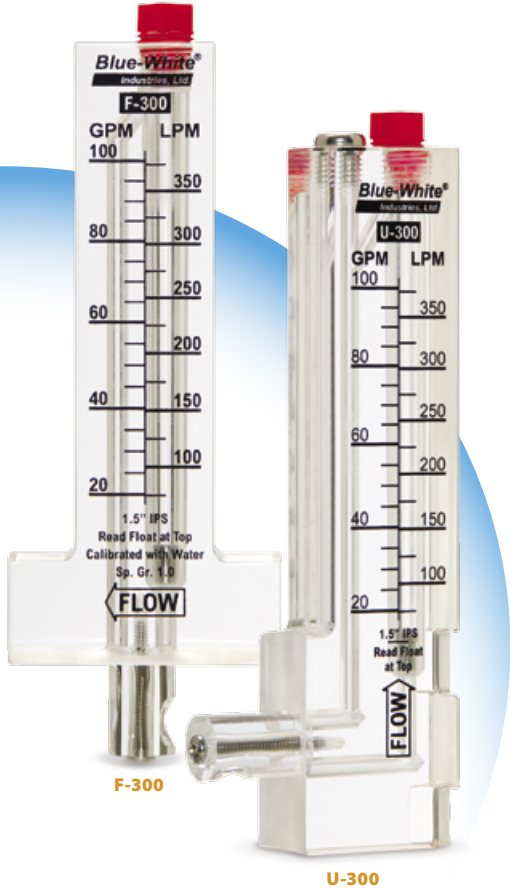
F-430N TEMPERATURE VS. PRESSURE



THE F-300 SERIES PIPE MOUNT FLOWMETERS

Blue-White's F-300 Series Flowmeters are an excellent choice for Commercial Pool and Spas, Irrigation Systems, and many other closed pipe installations. The F-300 is offered in both horizontal and vertical mount styles. If the installation is tight, a vertical mount unit may be your best option. The F-300 series are machined of tough acrylic sheet stock, polished to a clear finish, and assembled with corrosion resistant internal parts and calibrated pitot tubes. Permanent, easy to read dual GPM/LPM scales are screen printed on to both sides of the meter body. It is important to order F-300 units for the pipe size on which they will be used. Each F-300 is individually tested and calibrated for use with a specific pipe size, and pipe material.

For assistance choosing the correct flowmeter for your installation, contact our helpful customer service staff.



F-300 FEATURES INCLUDE

- ▶ Every Flowmeter is Individually Calibrated for Increased Accuracy and Dependability.
- ▶ Horizontal and Vertical Mount Styles.
- ▶ Each Meter is Machined for use on the IPS or Copper Pipe Size designated, One through Eight Inch Sizes.
- ▶ Well suited for Closed Pipe Installation.
- ▶ One piece machined acrylic meter body – polished to a clear finish.
- ▶ Easy to Read Dual GPM/LPM Scale, screen printed on both sides of the meter body.
- ▶ Corrosion Resistant Internal Parts.
- ▶ Calibrated Pitot Tube.
- ▶ Ships Complete with Gasket Seal and Mounting Clamps.

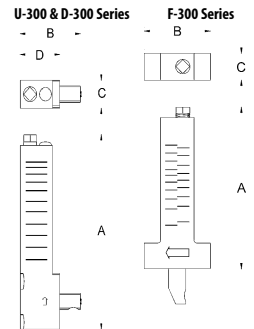
F-300 SPECIFICATIONS

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%
 Pipe Clamp Material 300 Stainless Steel
 Meter Body Material Acrylic
 Gasket Material Neoprene
 Connection Type Saddle
 Float Material #316 SS, Hastelloy or PTFE (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.)

DIMENSIONS

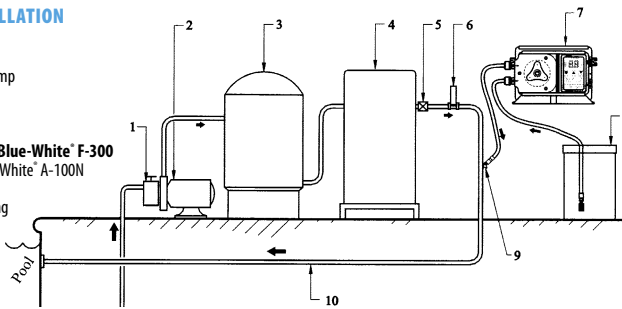
Model Number	A	B	C
F-30100	6"	2-7/16"	1"
F-30125	6"	2-7/16"	1"
F-30150	6"	2-7/16"	1"
F-30200	6"	2-7/16"	1"
F-30250	6"	2-7/16"	1"
F-30300	6"	2-7/16"	1"
F-30400	6"	2-7/16"	1"
F-30600	7-1/2"	2-7/16"	1-1/4"
F-30800	7-1/2"	2-7/16"	1-1/4"

Model Number	A	B	C
U-30150	6-7/8"	2-1/2"	1"
D-30150	6-7/8"	2-1/2"	1"
U-30200	6-7/8"	2-1/2"	1"
D-30200	6-7/8"	2-1/2"	1"



F-300 INSTALLATION EXAMPLE

1. Strainer
2. Circulation Pump
3. Filter
4. Heater
5. Check Valve
6. Flowmeter: Blue-White® F-300
7. Injector: Blue-White® A-100N
8. Solution Tank
9. Injection Fitting
10. Return Line



ORDERING GUIDELINES for HORIZONTAL PIPE INSTALLATION

Model Number	Gallons Per Minute (GPM)		Liters Per Minute (LPM)		PVC Pipe(*) or COPPER(*) Tube Size
	Std. Flow(*)	Low Flow(*)	Std. Flow(*)	Low Flow(*)	
F-30100*	5 to 35	2 to 10	20 to 140	8 to 38	1" Pipe
F-30125*	15 to 75	5 to 35	60 to 280	30 to 130	1-1/4" Pipe
F-30150*	20 to 100	9 to 30	75 to 375	30 to 110	1-1/2" Pipe
F-30200*	40 to 150	18 to 70	150 to 550	60 to 260	2" Pipe
F-30250*	60 to 240	—	225 to 900	—	2-1/2" Pipe
F-30300*	80 to 300	40 to 140	300 to 1125	160 to 520	3" Pipe
F-30400*	125 to 500	—	550 to 2000	—	4" Pipe
F-30600*	250 to 1050	—	900 to 3900	—	6" Pipe
F-30800*	500 to 1900	—	2000 to 7200	—	8" Pipe

(*) PVC PIPE: add letter "P" for Std. Flow and "PR" for Low Flow.
 (*) COPPER TUBE: add letter "T" for Std. Flow and "TR" for Low Flow.
 Note: if used on SCHEDULE 80 PVC pipe will read 12% higher than actual.

ORDERING GUIDELINES for VERTICAL PIPE INSTALLATION

Model Number	Gallons Per Minute (GPM)		Liters Per Minute (LPM)		PVC Pipe(*) or COPPER(*) Tube Size
	Std. Flow(*)	Low Flow(*)	Std. Flow(*)	Low Flow(*)	
D-30150*	20 to 100	9 to 30	75 to 375	30 to 120	1-1/2" Pipe
D-30200*	40 to 150	18 to 70	150 to 550	70 to 280	2" Pipe
U-30150*	20 to 100	9 to 30	75 to 375	30 to 120	1-1/2" Pipe
U-30200*	40 to 150	18 to 70	150 to 550	70 to 280	2" Pipe

(*) PVC PIPE: add letter "P" for Std. Flow and "PR" for Low Flow.
 (*) COPPER TUBE: add letter "T" for Std. Flow and "TR" for Low Flow.
 Note: if used on SCHEDULE 80 PVC pipe will read 12% higher than actual.

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