

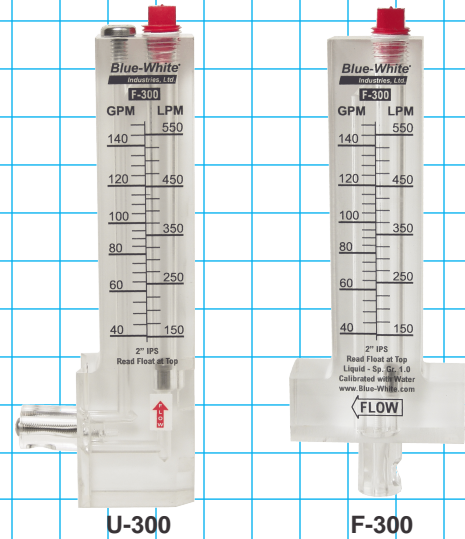
# F-300

# U-300

# D-300

Clamp-on Insertion Mount

Dual GPM / LPM scale



### Features:

- Dual GPM/LPM scale printed on both sides of the meter.
- 1" through 8" pipe sizes.
- Flow rates from 2 to 1900 GPM (8 to 7200 LPM).
- Corrosion resistant 316SS or PTFE internal float materials.
- One piece machined acrylic body.
- Mounts to existing pipe. No unions or adapters required.
- Models for mounting on horizontal or vertical pipe.
- Mounting clamps and gasket included.

### Specifications:

**Pipe Requirements:** ..... IPS inch pipe size (ASTM-D-1785)  
**Max. Psi (bar):** ..... 150 PSI (10.3 bar) @ 70° F (21° C)  
**Fluid temp. range:** ..... 32° to 110° F / 190° F (88° C) @ 0 PSI  
**Ambient temp. range:** ..... 32° to 110° F / -10° to 43° C  
*Note: Temperature & Pressure ratings of meter only. Actual pipe rating may vary.*

**Full scale accuracy:** ..... +/- 10%  
**Power requirement:** ..... No power required  
**Enclosure:** ..... NEMA 4X (IP56)  
**Approximate shipping wt:** ... 1"-4" units: 1 lb. (.45 kg)  
 6"-8" units: 2 lb. (.91 kg)

### Materials of Construction:

**Meter Body:** ..... Cast Acrylic  
**Float:** ..... Standard range models = 316SS  
 Low range models = PTFE

**Gasket:** ..... Neoprene  
**Pipe Clamp:** ..... 300 series Stainless Steel  
**Pitot screw:** ..... 1" thru 2" models only. 300 series stainless Steel

### Installation Requirements:

#### Minimum Straight Pipe Length Requirements

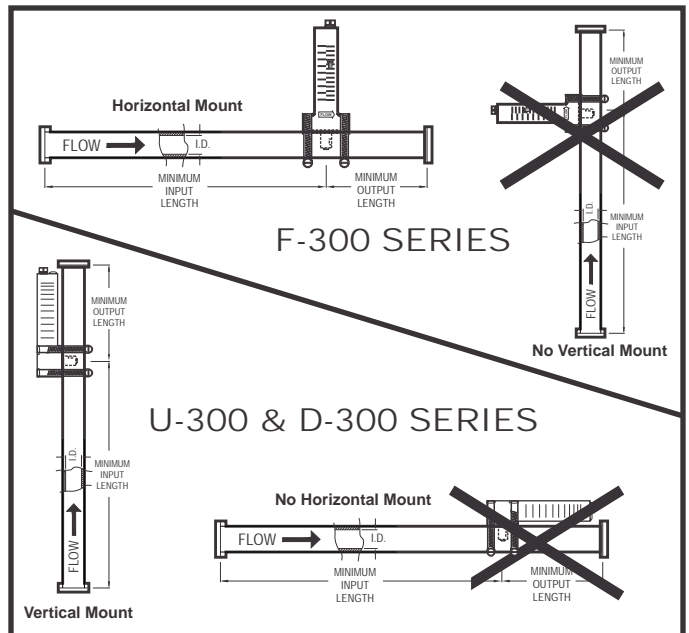
The meter's accuracy is affected by disturbances such as pumps, elbows, tees, valves, etc., in the flow stream. Install the meter in a straight run of pipe **as far as possible** from any disturbances. The distance required for accuracy is 10 times the nominal pipe diameter before the meter and 4 times the nominal pipe diameter after the meter.

#### Example of Minimum Straight Pipe Length Requirements

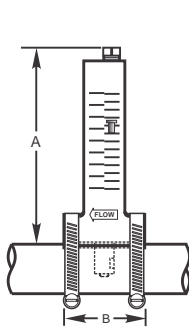
Nominal Pipe Diameter	Minimum Inlet Pipe Length	Minimum Outlet Pipe Length
3 inch	30 inch (10 X 3")	12 inch (4 X 3")
1-1/2 inch	15 inch (10 x 1.5")	6 inch (4 x 1.5")
6 inch	60 inch (10 x 6")	24 inch (4 x 6")

#### Mounting location

- The meter is designed to withstand outdoor conditions.
- F series meters must be mounted at the vertical (twelve o'clock) position on horizontal pipe only.
- U & D series meters must be mounted on vertical pipe only.
- The pipe must be completely full of water at all times.
- See the minimum straight length of pipe requirement chart above.
- The meter can accurately measure flow from one direction only.
- U-series meters measure upward flows only.
- D-series meters measure downward flows only.

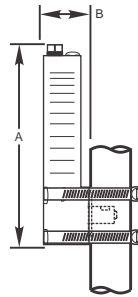


### Dimensions:



**F-300 Series**

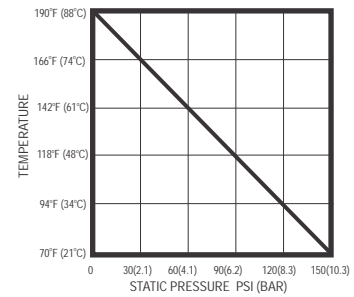
Pipe Size	A	B
1"	6"	2-7/16"
1-1/4"	6"	2-7/16"
1-1/2"	6"	2-7/16"
2"	6"	2-7/16"
2-1/2"	6"	2-7/16"
3"	6"	2-7/16"
4"	6"	2-7/16"
6"	7-1/2"	2-7/16"
8"	7-1/2"	2-7/16"



**U/D-300 Series**

Pipe Size	A	B
1-1/2"	6"	1-9/16"
2"	6"	1-9/16"

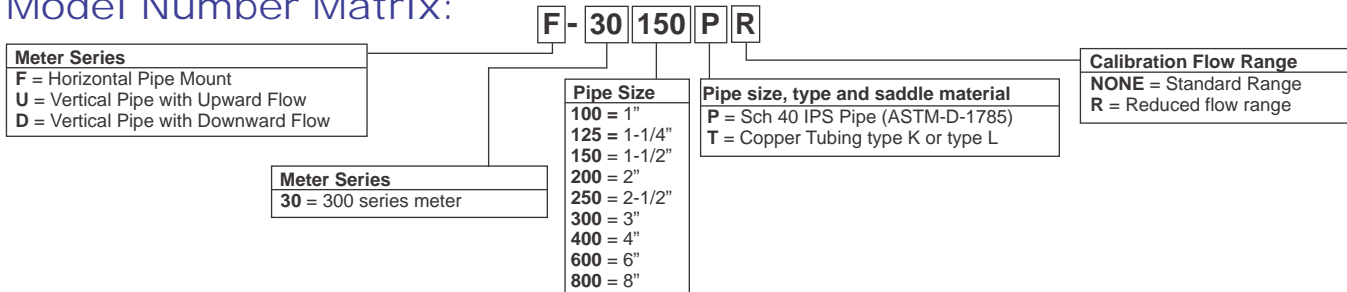
Maximum Temperature vs. Pressure



### Flow Stream Requirements:

Low viscosity fluids with a specific gravity of 1.0.

### Model Number Matrix:



### Pipe Size, Flow Range and Display Model Options:

#### Models for Mounting on Horizontal Pipe

Models for U.S. IPS Sch40 Pipe (ASTM 1785)

Display in U.S. Gallons and Liters per Minute

Pipe Size	GPM Flow Range	LPM Flow Range	Model Number
1"	5 to 35	20 to 140	F-30100P
1"	2 to 10	8 to 38	F-30100PR
1-1/4"	15 to 75	60 to 280	F-30125P
1-1/4"	5 to 35	30 to 130	F-30125PR
1-1/2"	20 to 100	75 to 375	F-30150P
1-1/2"	9 to 30	30 to 110	F-30150PR
2"	40 to 150	150 to 550	F-30200P
2"	15 to 70	60 to 260	F-30200PR
2-1/2"	60 to 240	225 to 900	F-30250P
3"	80 to 300	300 to 1125	F-30300P
3"	40 to 140	160 to 520	F-30300PR
4"	125 to 500	550 to 2000	F-30400P
6"	250 to 1050	900 to 3900	F-30600P
8"	500 to 1900	2000 to 7200	F-30800P

Models for Copper Tubing types K & L

Display in U.S. Gallons and Liters per Minute

Pipe Size	GPM Flow Range	LPM Flow Range	Model Number
1"	5 to 35	20 to 140	F-30100T
1"	2 to 10	8 to 38	F-30100TR
1-1/4"	15 to 75	60 to 280	F-30125T
1-1/4"	5 to 35	30 to 130	F-30125TR
1-1/2"	20 to 100	75 to 375	F-30150T
1-1/2"	9 to 30	30 to 110	F-30150TR
2"	40 to 150	150 to 550	F-30200T
2"	15 to 70	60 to 260	F-30200TR
2-1/2"	60 to 240	225 to 900	F-30250T
3"	80 to 300	300 to 1125	F-30300T
3"	40 to 140	160 to 520	F-30300TR
4"	125 to 500	550 to 2000	F-30400T
6"	250 to 1050	900 to 3900	F-30600T
8"	500 to 1900	2000 to 7200	F-30800T

#### Models for Mounting on Vertical Pipe

Models for U.S. IPS Sch40 Pipe (ASTM 1785)

Display in U.S. Gallons and Liters per Minute

Pipe Size	GPM Flow Range	LPM Flow Range	Flow Direction	Model Number
1-1/2"	20 to 100	75 to 375	UP	U-30150P
1-1/2"	20 to 100	75 to 375	DOWN	D-30150P
1-1/2"	9 to 30	30 to 120	UP	U-30150PR
1-1/2"	9 to 30	30 to 120	DOWN	D-30150PR
2"	40 to 150	150 to 550	UP	U-30200P
2"	40 to 150	150 to 550	DOWN	D-30200P
2"	18 to 70	70 to 280	UP	U-30200PR
2"	18 to 70	70 to 280	DOWN	D-30200PR

Models for Copper Tubing types K & L

Display in U.S. Gallons and Liters per Minute

Pipe Size	GPM Flow Range	LPM Flow Range	Flow Direction	Model Number
1-1/2"	20 to 100	75 to 375	UP	U-30150T
1-1/2"	20 to 100	75 to 375	DOWN	D-30150T
1-1/2"	9 to 30	30 to 120	UP	U-30150TR
1-1/2"	9 to 30	30 to 120	DOWN	D-30150TR
2"	40 to 150	150 to 550	UP	U-30200T
2"	40 to 150	150 to 550	DOWN	D-30200T
2"	18 to 70	70 to 280	UP	U-30200TR
2"	18 to 70	70 to 280	DOWN	D-30200TR