

Blue-White®

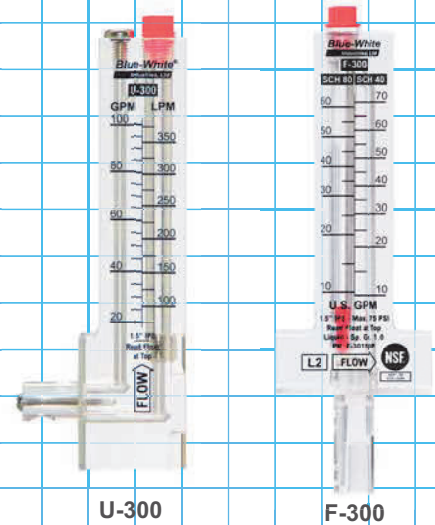
Industries, Ltd.

Pitot Tube Insertion Meters

Engineering and Technical Data

F-300 U-300 D-300

Clamp-on Insertion Mount



Features:

- 1" through 8" pipe sizes.
- Flow rates from 4 to 1900 GPM (15 to 7200 LPM).
- Corrosion resistant 316SS, PTFE, or PVDF 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.
- NSF Listed (1 1/4", 1 1/2", and 2" horizontal only)

Specifications:

Pipe Requirements: IPS inch pipe size (ASTM-D-1785)
Max. Psi (bar): 75 PSI (5.2 bar) @ 70° F (21° C)
Fluid temp. range: 0° to 190° F / -18° to 88° C @ 0 PSI
Ambient temp. range: 0° to 110° F / -18° to 43° C
Note: Temperature & Pressure ratings of meter only. Actual pipe rating may vary.

Full scale accuracy: 1", 1 1/2", 2", and 3" 5%, all other 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 or PVDF
 Low range models = PTFE

Gasket: Neoprene
Pipe Clamp: 316 series Stainless Steel
Pitot screw: 300 series stainless Steel (1", 1 1/2", 2", and 3" do not use screw)

Installation Requirements:

Minimum Straight Pipe Length Requirements

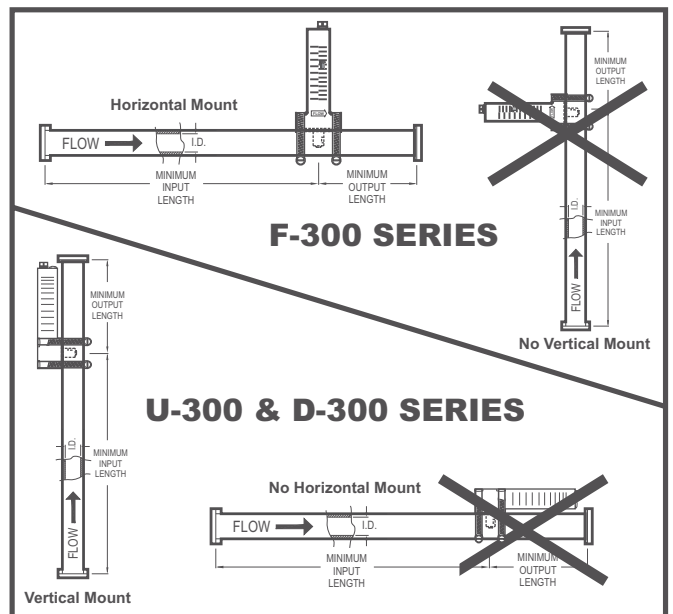
The meter's accuracy is affected by disturbances such as pumps, elbows, tees, valves, etc., in the flow stream. Install the meter in a straight run of pipe as far as possible from any disturbances.

Example of Minimum Straight Pipe Length Requirements

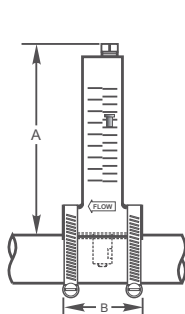
Nominal Pipe Diameter	Minimum Inlet Pipe Length	Minimum Outlet Pipe Length
4 inch	40 inch (10 X 4")	16 inch (4 X 4")
6 inch	60 inch (10 x 6")	24 inch (4 x 6")

Mounting location

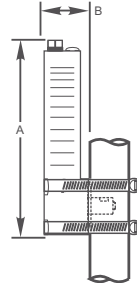
- The meter is designed to withstand outdoor conditions.
- F series meters must be mounted at the vertical (twelve o'clock) position on horizontal pipe only.
- U & D series meters must be mounted on vertical pipe only.
- The pipe must be completely full of water at all times.
- See the minimum straight 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.



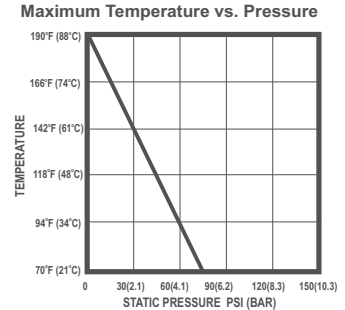
Dimensions:



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"



Flow Stream Requirements:

Low viscosity fluids with a specific gravity of 1.0.

Model Number Matrix:

Meter Series
F = Horizontal Pipe Mount
U = Vertical Pipe with Upward Flow
D = Vertical Pipe with Downward Flow

Meter Series
30 = 300 series meter

F - 30 600 P R

Pipe Size
100 = 1"
125 = 1-1/4"
150 = 1-1/2"
200 = 2"
250 = 2-1/2"
300 = 3"
400 = 4"
600 = 6"
800 = 8"

Pipe Size, type and saddle material
P = Sch 40 IPS Pipe (ASTM-D-1785)
T = Copper Tubing type K or type L

Calibration Flow Range
None = Standard Range
R = Reduced Flow Range*

*Select models only, see below

Note: see available models below.

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
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
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 U.S. IPS Sch40 & 80 Pipe (ASTM 1785) Display in U.S. Gallons per Minute

Pipe Size	Sch40	Sch80	Model Number
1"	5 to 35	4 to 26	F-30100P
1-1/4"	9 to 50	8 to 40	F-30125P
1-1/2"	10 to 70	10 to 60	F-30150P
2"	20 to 120	18 to 100	F-30200P
2-1/2"	29 to 150	25 to 130	F-30250P
3"	45 to 240	40 to 215	F-30300P

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"	4 to 26	15 to 100	F-30100T
1-1/2"	10 to 65	50 to 250	F-30150T
2"	20 to 105	75 to 400	F-30200T

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