Economical Pitot Tube

Flow Sensors

FPT-3000 Series

- ✓ Includes Shut-Off Valves on Both Pressure Connections
- ✓ Low Pressure Drop
- ✓ Low Maintenance
- Rugged Construction Yields, Non-Clogging, Stable Design

Applications

- Remediation
- Natural, Flare, Flue, Stack Gas
- ✓ Boiler Feed-Water
- Cooling Water
- Superheated, Saturated, or Geothermal Steam
- Combustion or Compressed Air
- ✓ Oil Flow Monitoring

The FPT-3000 averaging flow sensors are designed to be inserted in the pipeline through a compression fitting and are available for pipe sizes from 2.5 to 25.4 cm (1 to 10"). All models include convenient and quick-acting quarter-turn ball valves to isolate the sensor for zeroing with ½ female NPT valve assembly process connections.

The FPT-3000 Series in-line flow sensors are two averaging pitot tubes for compatible gases and liquids. They provide accurate and convenient flow rate sensing for a schedule 40 pipe, when purchased with a suitable differential pressure gage with appropriate range. Extremely reliable, proven technology, pitot tubes, have been used in flow measurement for years. Multiple sensing point measurement and built-in averaging capability eliminates the need for "traversing" the flowing stream with single point velocity pressure measurement which saves time.

Specifications

Accuracy: ±2%

Materials of Construction:

Valves: Brass with TFE seats and

BUNA-N O-Rings

Head and Sensor Tube:

304 SS

Compression Fitting: 1/4 NPT

Brass

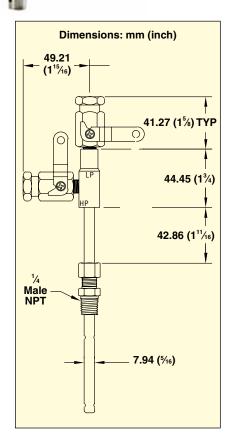
Valve Connections: 1/8 female NPT

Maximum Pressure: 13.7 bar

(200 psig)

Maximum Temperature: 93.3°C

(200°F)







		Full Range Flows by Pipe Size (Approximate)									
Gage Range (in w.c.)	Media @ 70°F	1"	11/4"	11½"	2"	21/2"	3"	4"	6"	8"	10"
2	Water (gpm)	4.8	8.3	11.5	20.5	30	49	86	205	350	560
2	Air @ 14.7 psia (scfm)	19	33	42	65	113	183	330	760	1340	2130
2	Air @ 100 psig (scfm)	50	90.5	120	210	325	510	920	2050	3600	6000
5	Water (gpm)	7.7	14	18	34	47	78	138	320	560	890
5	Air @ 14.7 psia (scfm)	30	51	66	118	178	289	510	1200	2150	3400
5	Air @ 100 psig (scfm)	83	142	190	340	610	820	1600	3300	5700	10,000
10	Water (gpm)	11	19	25.5	45.5	67	110	195	450	800	1260
10	Air @ 14.7 psia (scfm)	41	72	93	163	250	410	725	1690	3040	4860
10	Air @ 100 psig (scfm)	120	205	275	470	740	1100	2000	4600	8100	15,000
25	Water (gpm)	18	32	40.5	72	108	173	310	720	1250	2000
25	Air @ 14.7 psia (scfm)	63	112	155	255	390	640	1130	2630	4860	7700
25	Air @ 100 psig (scfm)	185	325	430	760	1200	1800	3300	7200	13,000	22,000
50	Water (gpm)	25	44	57.5	100	152	247	435	1000	1800	_
50	Air @ 14.7 psia (scfm)	90	161	205	360	560	900	1600	3700	6400	_
50	Air @ 100 psig (scfm)	260	460	620	1050	1700	2600	4600	10,000	18,500	_
100	Water (gpm)	36.5	62	82	142	220	350	620	1500		_
100	Air @ 14.7 psia (scfm)	135	230	300	505	800	1290	2290	5000		_
100	Air @ 100 psig (scfm)	370	660	870	1500	2300	3600	6500	15,000		_

How to Order:

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Determine the pipe size into which the flow sensor will be mounted and select the corresponding size from the ordering table below. For non-critical water and air flow monitoring applications, the chart above can be utilized for selecting a differential pressure gage for use with the sensor. Simply locate the maximum flow rate for the media being measured under the appropriate pipe size and read the differential pressure range in inches of water column to the left. The FPT-3000 sensor is supplied with installation and operating instructions. It also includes complete flow conversion information for the three media conditions; water, air at STP, and air at 100 psig (shown in the chart above). This information enables the user to create a complete differential pressure to flow rate conversion table for the sensor and differential pressure gage employed.

To Order							
Model No.	Pipe Size	Description	Weight kg (lb)				
FPT-3010	1"	Averaging pitot tube flow sensor	0.34 (0.75)				
FPT-3012	11/4"	Averaging pitot tube flow sensor	0.34 (0.75)				
FPT-3015	11/2"	Averaging pitot tube flow sensor	0.34 (0.75)				
FPT-3020	2"	Averaging pitot tube flow sensor	0.34 (0.75)				
FPT-3025	2½"	Averaging pitot tube flow sensor	0.34 (0.75)				
FPT-3030	3"	Averaging pitot tube flow sensor	0.34 (0.75)				
FPT-3040	4"	Averaging pitot tube flow sensor	0.36 (0.80)				
FPT-3060	6"	Averaging pitot tube flow sensor	0.36 (0.80)				
FPT-3080	8"	Averaging pitot tube flow sensor	0.38 (0.85)				
FPT-3100	10"	Averaging pitot tube flow sensor	0.32 (0.70)				

Comes complete with shut-off valves on both pressure ports, compression fitting to mount, and operator's manual.