



Flow Meter – Pitot Tube

Insertion type sensor - ideal for wet and dirty gases

Features

Insertion type sensor

Ideal for wet and dirty gases

Flow range of 5-300 Nm/s

Note: below minimum velocity flow meter reading will be zero

Accuracy: $\pm 1.5\%$ reading, $\pm 0.3\%$ full scale

Patented anti condensation technology

Low pressure drop minimises effects on gas flow

Stable accurate measurement

Measure: standard flow, consumption, pressure and temperature

Easy to insert and remove through 1/2" valve, even when under pressure

Integrated touch screen display with data logging

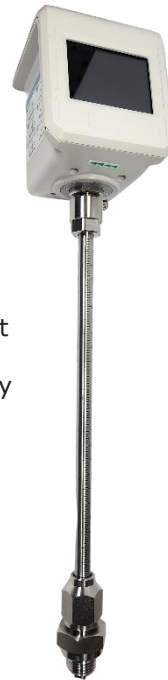
Two outputs as standard

- (i) Digital - Modbus RTU
- (ii) Analog – 4...20 mA + Pulse

Options:

- (i) Shaft lengths - 250 mm or 400 mm
- (ii) Multiple gas options
- (iii) With or without data cables
- (iv) Bi-directional or one-way flow

Pitot tube measurement with patented anti-condensation technology



Pitot tube sensor tip

Pitot tube flow meters are ideally suited to wet, dirty and high velocity compressed air and gas systems that contain some level of contamination. This makes pitot tube flow meters ideal for measuring flow, temperature and pressure near the outlet of compressors and other difficult environments.

The extremely sensitive differential pressure measurement allows this sensor to be used over a wide flow range. The patented anti condensation technology ensures the sensor can be used under 100% saturated conditions.

Benefits of flow monitoring:

- Improve system efficiency
- Reduce system maintenance
- Reduce operating and energy costs
- Increase system understanding and operation
- Identify changes in system performance
- Identify non-productive air demand and leakage
- Identify peak and average demand

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Specifications

Measurement Range

Flow Velocity	5 to 300 Nm/sec 17 to 984 ft/sec
Gas Temperature	-40 to +150°C -40 to +302°F
Gas Pressure	0 to 17 bar (247 psi)

Accuracy

Flow Accuracy	±(1.5% RD + 0.3% FS)
Contact us for higher accuracy of ±1% RD	
Reference Conditions: 20 °C, 1 bar(a), ISO 1217 (editable)	
Pressure Accuracy	±0.5% FS
Temperature Accuracy	±0.5°C

The accuracy and response time of the sensor can be affected by the on-site conditions, contaminants in the gas and incorrect installation.

Working Environment

Ambient Temperature	-20 to +60°C -4 to +140°F
Gas types	Dry /moist air and non-corrosive gases
Gas Quality	Clean and dry gas Wet and dirty gas

Display & Data Logger

Display	2.8" IPS ultra-wide viewing angle LCD touch screen
Data Logging	10,000,000 record points
Sampling Rate	> 20 samples per second

Output

Analogue Output	4-20 mA (isolated) / Pulse output (cumulative)
Digital Output	Modbus RTU (RS485)
Output Signals	Flow, Consumption Pressure, Temperature

Full digital signal processing

Power Supply

Power Requirement - Measurements	18 to 30V DC/6.5W @ 24V
Power Requirement - Start up phase	18 to 30V DC/24W @ 24V
Electrical Connection	2 × 5 pin M12, Female
Electromagnetic Compatibility	Meets IEC 61326-1

Other

Process Connection	ISO G1/2" thread
Pipe Size	<ul style="list-style-type: none"> 250 mm shaft DN25 to DN250 400 mm shaft DN25 to DN600
Shaft Lengths	250 mm or 400 mm 9.8" or 15.7"
IP Rating	IP65
Sensor Technology	Pitot Tube
Turndown Ratio	1:60
Bi-directional	Optional
Installation	Permanent or Temporary
Calibration	Every 2 years
Annual calibration is required if the sensor is exposed to relative humidity above 85%.	
Warranty	12 months



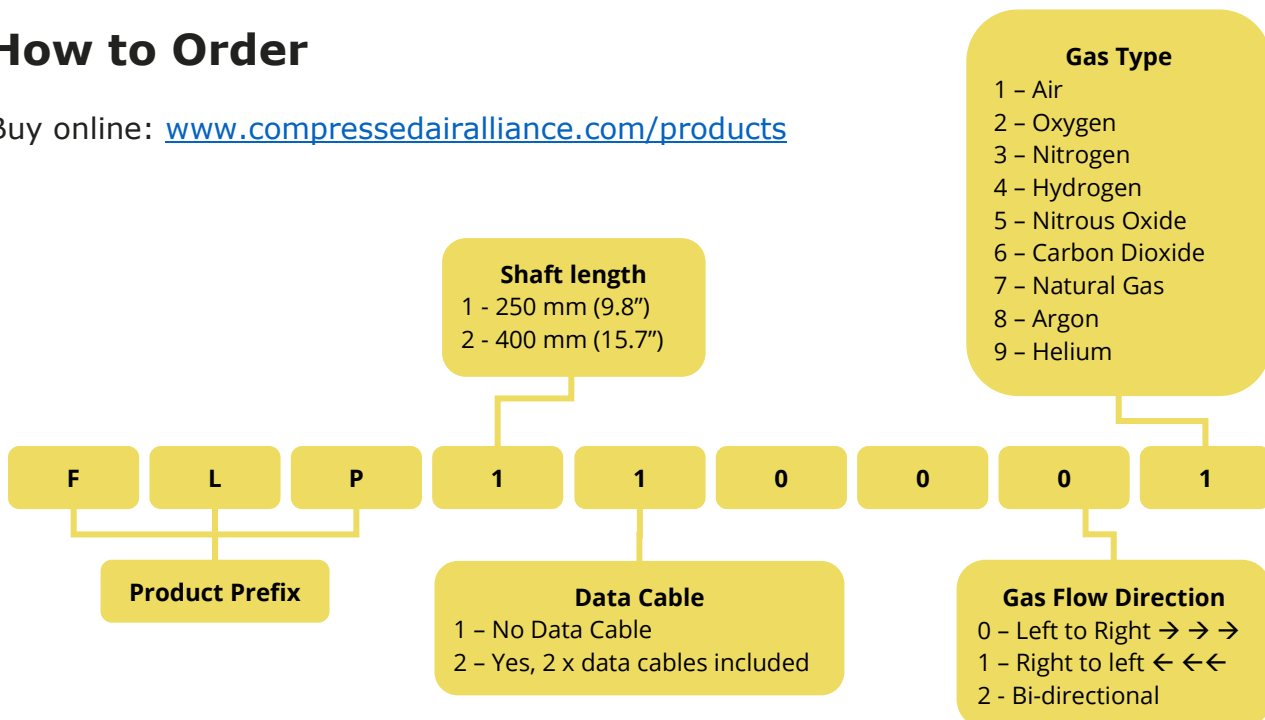


Pitot Tube Flow Range

Pipe Size			Pitot Tube Flow Meter Flow Range (Nm ³ /h)		Flow Range (cfm)	
Inches	DN	ID (mm)	Min Flow	Max Flow	Min Flow	Max Flow
1	25	25	8.8	530	5	312
1.25	32	32	14.5	868	9	511
1.5	40	40	22.6	1,357	13	798
2	50	50	35.3	2,120	21	1,247
2.25	65	65	59.7	3,583	35	2,108
3	80	80	90.5	5,428	53	3,193
4	100	100	141.4	8,482	83	4,990
5	125	125	220.9	13,253	130	7,797
6	150	150	318.1	19,085	187	11,228
8	200	200	565.5	33,929	333	19,962
10	250	250	883.6	53,014	520	31,190
12	300	300	1,272.3	76,340	749	44,913

How to Order

Buy online: www.compressedairalliance.com/products



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Flow Meter Product Range



Pitot Tube Flow Meter

Ideal for wet, dirty and high velocity gases.
Easy to install under pressure through a 1/2" ball valve

Flow Range

5 to 300 Nm/sec (17 to 984 ft/sec)
Min Flow Velocity: 5 Nm/s (17 ft/sec)

Pressure Range

0 to 16 bar (232psi)

Bi-directional

Optional

Gas Quality

Clean, dry, wet or dirty gas
Can be installed on the outlet of compressors.

Outputs

Modbus & 4-20mA

Pipe Size

DN25 to DN600



Thermal Mass - Insertion Style

Easy to install under pressure through a 1/2" ball valve

Flow Range

0.1 to 250 Nm/sec (0.3 to 820 ft/sec)

Pressure Range

0 to 50 bar (725psi)

Bi-directional

No

Gas Quality

Clean dry gas
Must be installed after a dryer

Outputs

Modbus & 4-20mA

Pipe Size

DN20 to DN600



Thermal Mass - Inline Style

Ideal for permanent installations or where shutting down the system to install the sensor is not an issue

Flow Range

0.1 to 250 Nm/sec (0.3 to 820 ft/sec)

Pressure Range

0 to 40 bar (580psi)

Bi-directional

No

Gas Quality

Clean dry gas
Must be installed after a dryer

Outputs

Modbus & 4-20mA

Pipe Size

DN15 to DN50



Vortex Flow Meter

For use in gas and steam systems

Flow Range

1.5 to 80 m/s (5 to 24 ft/sec)
Min Flow Velocity: 1.5 Nm/s (4.9 ft/sec)

Pressure Range

0 to 63 bar (913psi)

Bi-directional

No

Gas Quality

Clean, dry, wet or dirty gas / steam

Outputs

Modbus & 4-20mA

Pipe Size

DN15 to DN300