Flow Meter - Outdoor

ATEX Rated, IP67 rating

FLO series

Integrated Display

Key Features

- ATEX Rating
  - II 2G Ex db IIC T6 Gb
  - II 2D Ex tb IIIC T80°C Db
- Thermal Mass, insertion type sensor
- IP67 rating
- Flow range: 0-250 Nm/s
- Accuracy: ±1.5% reading, ±0.3% full scale
- Touch screen display
- Power Supply: 18 to 30 vDC
- Two outputs as standard:
  - Digital - Modbus RTU
  - Analog – 4...20 mA + Pulse
- Measure: flow, consumption and temperature

About

The outdoor flow meter uses thermal mass technology which is independent of pressure and temperature change. With no moving parts, the flow meter has a stable signal, high reliability and long-term measurement accuracy.

The streamlined sensor tip ensures minimal impact on gas flow while maintaining accuracy over a wide flow range. Innovative intelligent diagnostic technology can sense contamination of the sensor in real time and protect the sensor from overheating and damage.

The flow meter has digital signal processing, replacing the traditional analog bridge design. This makes the flow meter more accurate and has a wider range (range ratio of 1:2500).

The highly durable IP67 rated, powder-coated Aluminium housing ensured the sensor can withstand the harshest environments.

Applications

- Manufacturing and industrial use
- Clean, dry air and inert gases
- Temporary or permanent installation
- Outdoor environments
- Gas pressure up to 50 bar (725 psi)
- Pipe Sizes: DN20 to DN300
- Install on pressurised pipes

More Info

CAA SENSORS

sales@caasensors.com

www.caasensors.com

Specifications

Measurement Range	
Flow Velocity	0.1 to 250 Nm/s (0.3 to 820 ft/sec)
Gas Temperature	-40 to +150°C -40 to +302°F
Gas Pressure	0 to 16 bar (232 psi) Up to 50 bar (725 psi) if using a retention cage
Accuracy	
Flow Accuracy	±(1.5% RD + 0.3% FS)
Reference Conditions: 20 °C, 1 bar(a) -ISO 1217	
The accuracy and response time of the sensor can be affected by the on-site conditions, contaminates in the gas and incorrect installation.	
Working Environment	
Ambient Temperature	-30 to +70°C -22 to +158°F
Gas types	Compressed air, nitrogen, oxygen, carbon dioxide and other non-condensable gases
Gas Quality	Clean and dry gas
Minimum flow velocity	0.1 Nm/s (0.3 ft/sec)
Power Supply	
Power Requirement	18 to 30V DC/ 5W @ 24V
Electrical Connection	Terminal Strip
Electromagnetic Compatibility	Meets IEC 61326-1
Output	
Analogue Output	4-20 mA (isolated) Pulse output
Digital Output	Modbus RTU (RS485)
Output Signals	Flow, Mass flow, Consumption, Temperature
Full digital signal processing	

Split Screen Model

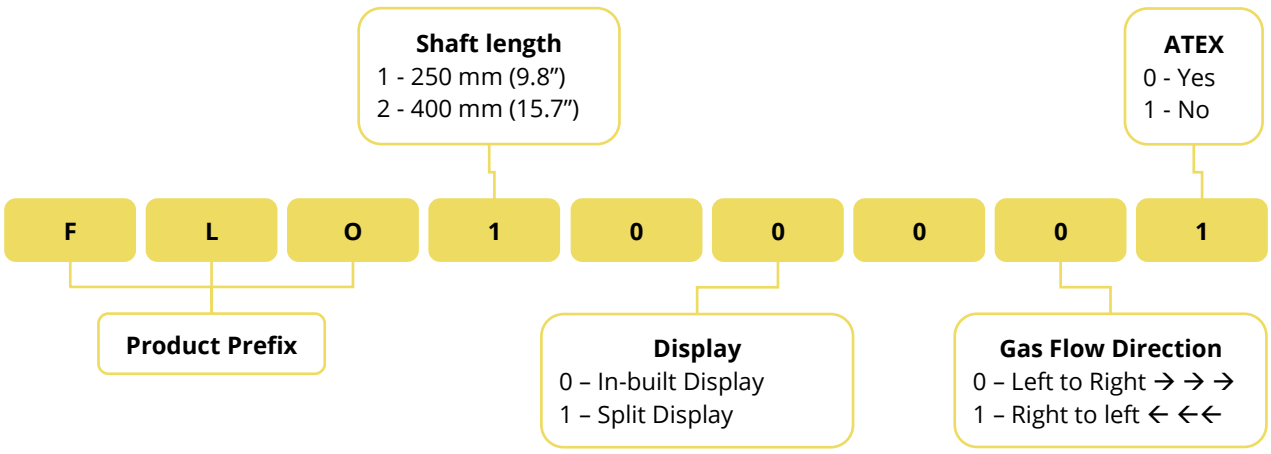
Display	
Display	2.0" IPS ultra-wide viewing angle LCD screen with capacitive touch
Display Options	Integrated Display or Split Display
Other	
Process Connection	ISO G1/2" thread
Pipe Size	DN20 to DN300 0.75” to 12.0”
Shaft Lengths	250 mm or 400 mm 9.8" or 15.7”
IP Rating	IP67
ATEX Rating	Ex II 2G Ex db IIC T6 Gb Ex II 2D Ex tb IIIC T80°C Db
Housing Material	Powder-coated Aluminium
Sensor Technology	Thermal Mass (not affected by temperature and pressure)
Turndown Ratio	Ultra-wide, 1:2500
Bi-directional	No
Data Logger	No
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
HS Code	9026.80.80

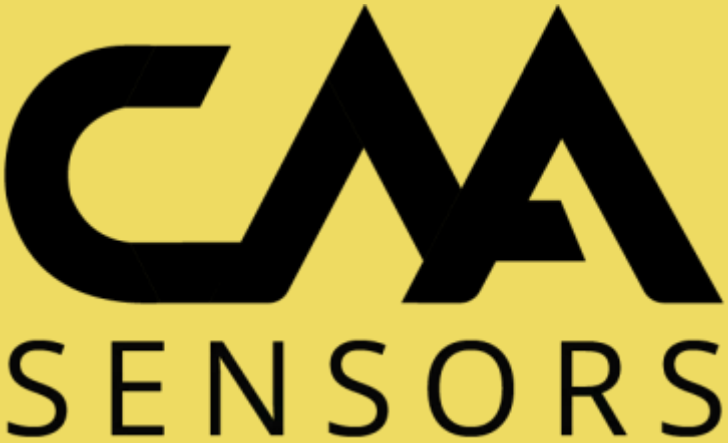
Flow Range

Pipe Size			Flow Range (Nm3/h)		Flow Range (cfm)	
DN	ID (mm)	Inches	Min Flow	Max Flow	Min Flow	Max Flow
20	20	3/4"	0.1	282	0.1	166
25	25	1"	0.2	441	0.1	259
32	32	1.25"	0.3	723	0.2	425
40	40	1.5"	0.5	1,131	0.3	665
50	50	2"	0.7	1,767	0.4	1,040
65	65	2.5"	1.2	2,986	0.7	1,757
80	80	3"	1.8	4,523	1.1	2,661
100	100	4"	2.8	7,068	1.6	4,158
125	125	5"	4.4	11,044	2.6	6,498
150	150	6"	6.4	15,904	3.8	9,357
200	200	8"	11.3	28,274	6.6	16,635
250	250	10"	17.7	44,178	10.4	25,991
300	300	12"	25.4	63,617	14.9	37,428

How to Order

Find a Distributor: www.caasensors/distributors





CAA Sensors Pty Ltd

Head Office: Sydney, Australia

Email: sales@caasensors.com

Website: www.caasensors.com

Find a Distributor: www.caasensors/distributors