# Clamp-on Ultrasonic Flow Meter

For industrial water, sea water, and other electrically conductive liquids

## **Key Features**

- Pipe Size: DN6 (1/8") to DN100 (4")
- Flow Range:
  - o 0.1m/s to 5m/s
  - o 0.328ft/s to 16ft/s
- Accuracy: ±2%
- Two outputs as standard:
  - Digital Modbus and
  - o Analog 4-20mA
- Power Supply: 24vDC
- Measure: Real-time flow, Accumulated flow, Flow velocity and Pipe Temperature
- IP54 rating



#### **About**

CAA Sensor's clamp-on ultrasonic flow meter is specially designed for small to medium sized pipe diameters. Fast and easy to install in less than 3 minutes without needing to penetrate the pipework.

The ultrasonic flow meter sends multiple signals per second which provides accurate flow rate measurements in full pipes. When the ultrasonic signal is transmitted and received through flowing liquid, there will be different upstream and downstream values, which can be used to calculate flow and velocity.

With no moving parts and no pressure loss the flow meter provides long lasting performance. These flow meters are incredibly durable and made for most industrial environments.

## **Applications**

- Manufacturing and industrial use
- Industrial and domestic water, sea water heating and cooling water, diesel oil, alcohol
- Permanent or temporary measurement
- Pipe materials: PVC, Stainless Steel, Carbon Steel, Copper
- Min flow velocity of 0.1m/s (0.328 ft/s)







# **Specifications**

#### Medium

- Industrial and domestic water
- Sea water

Liquid Medium

- Heating and cooling water
- Diesel oil
- Alcohol
- Other liquids available on request

Measurement Range							
Measurement Principal	Ultrasonic						
Flow Range	0.1m/s to 5m/s 0.328ft/s to 16ft/s						
Min flow velocity	0.1m/s (0.328 ft/s)						
Liquid Temperature	0°C to +50°C 32°F to +122°F						
Accuracy							
Measurement Accuracy	±2.0% (±0.3m/s ~ 5.0m/s)						
Repeatability	0.80%						
Response Time	50ms						
Power Supply							
Power Requirement	24VDC@3W						
Display and Data Logging							
Display	In-built 2.4" LCD (320 x 240 IPS)						



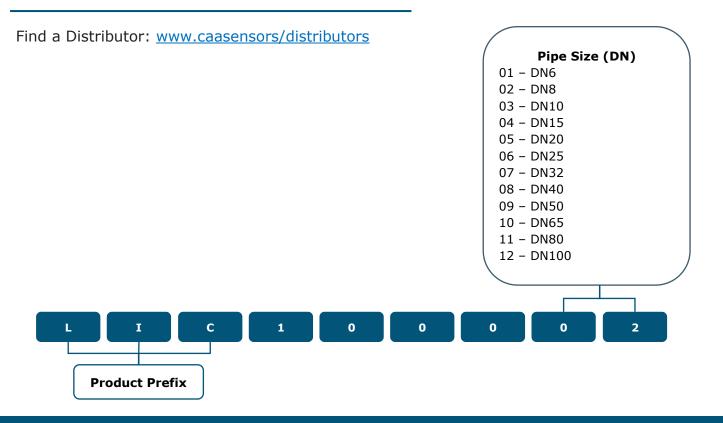
Output							
Outputs	4-20 mA tputs Modbus RTU (RS485)						
Alarm OCT up	OCT upper and lower limit alarm output, pulse output, relay						
Connection	M12						
Working Environment							
Ambient / working temperature	-10 to +55°C -22 to +158°F						
Viscosity	< 300CST (mm²/s)						
Ambient Temperature	-10°C to +50°C 14°F to +122°F						
Other							
Pipe Diameters	DN6 -DN100 1/8" to 4"						
Pipe Materials	Stainless steel, carbon steel, copper, plastic						
Mechanical Connection	Clamp-on						
IP Rating	IP54						
Casing	Aluminium alloy						
Cable Length	2m (6.6 ft) (contact us for longer cables)						
Warranty	12 months						



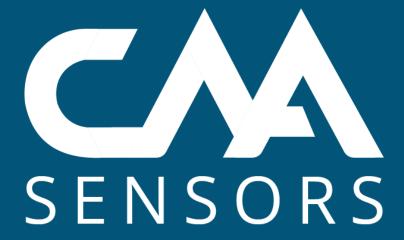
# Flow Range

Pipe Size		Flow Range (m³/hr)		Flow Range (L/min)		
DN	OD (mm)	Inches	Min	Max	Min	Max
6	9.53	1/8"	0.02	0.7	0.4	12
8	12.7	1⁄4"	0.05	1.7	0.9	28
10	15	3/8"	0.09	3.0	1.5	49
15	20	1/2"	0.06	3.2	1.1	53
20	25	3/4"	0.11	5.7	1.9	94
25	32	1"	0.18	8.8	2.9	147
32	40	1.25"	0.29	14	4.8	241
40	50	1.5"	0.45	23	7.5	377
50	63	2"	0.71	35	12	589
65	75	2.5"	1.2	60	20	995
80	90	3"	1.8	90	30	1,508
100	110	4"	2.8	141	47	2,356

### **How to Order**







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