



EUREKA

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 17025:2017 Certified

Ultrasonic Flowmeters



**EUREKA
INDUSTRIAL
EQUIPMENTS
PVT. LTD.**

REGD. & SALES OFFICE: 17-20, 1st Floor, Royal Chambers, Paud Road, Pune - 411 038, Maharashtra, India.

■ Tel: 0091-20-25443079 ■ sales@eurekaflow.com

FACTORY

: 501, 'J' Block, M.I.D.C., Pimpri, Pune - 411018.

■ Email: works@eurekaflow.com

MUMBAI OFFICE

: Office No.116, Growmore Tower, 1stFloor, Plot No.5, Sector No.2, Kharghar, Navi Mumbai - 410 210

www.eurekaflow.com

The working principle

The transit time flow meter utilizes two sensors that function as both as ultrasonic transmitter & receivers. The sensors are clamped on outside of a closed pipe or inserted in the pipeline by using an isolated ball valve assembly at a specific distance from each other. Transit time flow meters measure the time it takes for an ultrasonic signal transmitted from one sensor to cross a pipe & be received by second sensor. Upstream & downstream time measurements are compared. With no flow, the transit time will be equal in both directions. With flow sound will travel faster in direction of flow & slower against the flow. The liquid velocity (V) inside the pipe can be related to the difference in time of flight through the following equation

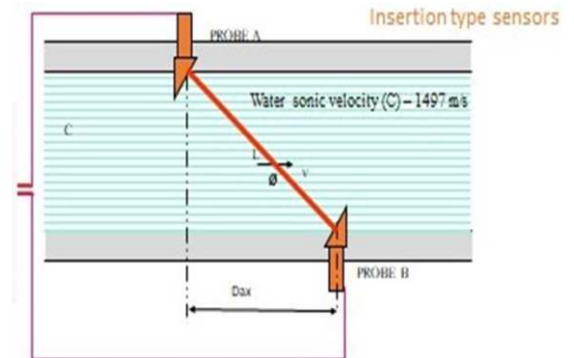
$$V = K \times D \times \Delta t$$

V = Liquid velocity

K = Constant

D = distance between two sensors

ΔT = difference in time of flight



Technical Specifications of UFM

Parameters	EUSONIC 100	EUSONIC 200	EUSONIC 300	EUSONIC 500
Transmitter				
Power Supply	24 VDC, 230 VAC	Built in Battery	24 VDC OR 230 VAC	24 VDC, 230 VAC
Velocity	0 - ± 12 m/s	0 - ± 12 m/s	+/- 12 m/s	0 - ± 12 m/s
Display	2 × 16 Character LCD With Backlight	2 × 16 Character LCD with Backlight	2 × 16 Character LC	2 × 16 Character LCD With Backlight
Output	4-20 mA RS-485 (Optional)	--	4-20 mA	4-20 mA RS-485 (Optional)
Accuracy	± 1% of reading @ >0.5 M/sec	± 1% of reading @ >0.5 m/sec Optional 0.5% of reading	± 1% of reading @ >0.5m/sec	± 1% of reading @ >0.5m/sec Optional 0.5% of reading
Repeatability	0.2% of Span	0.2% of Span	0.2% of Span	0.2% of Span
Protection Class	IP 65	NA	IP 65	IP 65
Mounting	Wall Mounted	Portable	Wall Mounted	Pipe Mounted
Sensor				
Type	Clamp On	Clamp On	Insertion, Single Path	Inline
Suitable Temp	Converter -20 to 60°C	--	Converter -40 to 120°C	Converter -20 to 60°C
	Transducer -30 to 90°C	Transducer -30 to 90°C	-	Transducer -30 to 90°C
Pipe Size	S DN25 - DN100 M DN50 - DN700 L DN300 - DN6000	S DN25 - DN100 M DN50 - DN700 L DN300 - DN6000	DN50 - DN600	DN350 - DN600
Protection Class	IP 68	IP 68	IP 68	IP 65
Cable Length	5 Mtr std.	5 Mtr std.	6 Mtr Std	—

EUSONIC MODEL CODE

		EUSONIC			
		100	200	300	500
Code Power Supply					
A	24 VDC	✓	✗	✓	✓
B	230 VAC	✓	✗	✓	✓
C	3AANiMh built in battery with charger	✗	✓	✗	✗
Code Sensor					
X	None	✗	✗	✗	✗
S	Small 25-100 mm	✓	✓	✗	✗
M	Medium 50-700 mm	✓	✓	✗	✗
L	Large 300-6000 mm	✓	✓	✗	✗
R	Regular	✗	✗	✓	✗
E	Extended Sensor	✗	✗	✓	✗
Code Output					
0	None	✓	✓	✓	✓
1	4-20 mA	✓	✓	✓	✓
Code Communication Interface					
A	None	✓	✓	✓	✓
B	RS 485	✓	✓	✓	✓
Code Protection Class - Convertor					
X	None	✓	✓	✓	✓
1	IP - 65	✓	✗	✓	✓
2	IP-68	✗	✗	✗	✗
Code Protection Class - Sensor					
1	IP - 65	✓	✓	✓	✓
2	IP-68	✓	✓	✓	✓
Code Pipe Size (mm NB)					
40	40	✗	✗	✗	✓
50	50	✗	✗	✗	✓
80	80	✗	✗	✗	✓
100	100	✗	✗	✗	✓
150	150	✗	✗	✗	✓
200	200	✗	✗	✗	✓
250	250	✗	✗	✗	✓
300	300	✗	✗	✗	✓
350	350	✗	✗	✗	✓
400	400	✗	✗	✗	✓
500	500	✗	✗	✗	✓
600	600	✗	✗	✗	✓
L1	25 to 100	✓	✓	✓	✗
L2	50 to 700	✓	✓	✓	✗
L3	300 to 6000	✓	✓	✓	✗

EUSONIC	
100	
200	
300	
500	

Model Code	A	S	1	B	1	1	L1
------------	---	---	---	---	---	---	----

Where ✗ Not Applicable

EUREKA

- Operating since 1970
- Best Price to Performance
- 76% Repeat Buyers
- HART Member
- Competitors Buy From Us
- ISO 17025 Calibration Lab
- Exports more than 10% and growing
- Telemetry system with Eumag
- Approved By Major Consultants & Govt. Organizations

Sales & Service Network

- ◆ Corporate Office & Plant
- ★ Regional Offices
- Dealers & Sales Representative

