

ASIONIC® - 400

ULTRASONIC FLOW METER

Features

- Ultrasonic Measurement using Transit Time Technology
- Full Bore Type
- Local Indication through LCD Display
- Simple and Cost Effective Construction
- Empty Pipe Indication
- Automatic Meter Reading option over GSM, GPRS & RF
- Electronic Protection Class : Field Mount Weather Proof IP-67, DIN Standard (IP 54), Flameproof (CMRI IIA IIB Certified)
- Leak, Burst and Tamper Detection
- No Pressure Drop



Description

Electronet series ASIONIC®-400 Ultrasonic flow meters give the flexibility to install a reliable flow meter, virtually anywhere, without distorting accuracy and performance. The flow meter is extremely easy to use, simple to install and requires no regular maintenance. The product is engineered for various industrial as well as domestic applications such as Municipal and Industrial Water applications, Cooling tower, Water treatment, etc. The LCD display provides indication for flow rate and totalized flow with key selection. The display auto shuts off after 10 minutes, which increases the battery life in case of battery powered flow meter. The display can be turned ON by pressing the 'enter' key.

Technical Specifications

Media	Liquids
Line Size	15 NB to 600 NB
Number Of Paths	Single
Electronics	1) Integral (Local) 2) Remote
Output	4 to 20mA DC, Pulse (Open Collector), Pulse (Active TTL), Frequency (0 to 1 KHz)
Communication Output	RS485 (MODBUS RTU), GSM & GPRS
Viscosity	200 cp maximum
Display	LCD Display – 7 digit for Flow Rate & 8 digit for Totalised Flow
Calibration Range	As per requirement (Factory Calibrated)
Accuracy	< ± 0.5% of M.V. ± 5mm /sec for Velocity Range 0.3 m/s to 6 or 12 m/s
Linearity	± 0.5% of M.V.
Repeatability	± 0.2% of M.V.
Temperature Coefficient	± 0.05% per °C
Process Temperature	-20°C to 85°C maximum
Process Pressure	16 kg/cm ² maximum
Material of Construction	Flow tube – SS304, SS316, PVC & MS
Power Supply	24V DC (+/-10%), Solar Powered
Low Battery indication	Provided
Battery Life	5 to 10 Years depending on sampling time and communication interval
Response Time	Less than 10 Sec.
Electronic Protection Class	Field Mount Weather Proof IP-67, DIN Standard (IP 54), Flameproof (CMRI IIA IIB Certified)
Certification	CE

Process Connections	ASA 150 Flanged (As per table B 16.5)
Ambient Conditions	Temperature -20 to 70°C / Humidity 5 to 95% Non Condensing
Data Logging	For 5 Years (Per day 1 Sample)

Assembly Overview

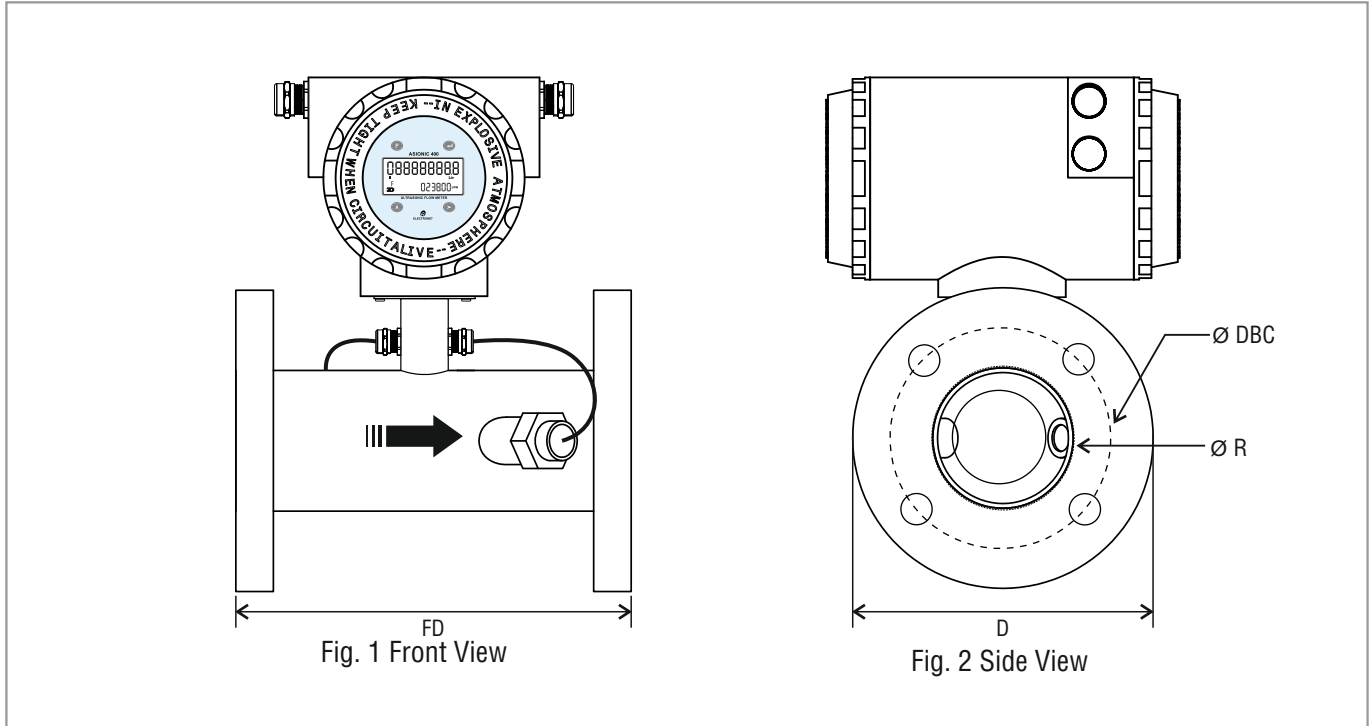


TABLE : Dimensional Details (Flow Meter with ANSI 150 Flange)

Refer Drg. Fig.1 & 2

Line Size Inch	NB	Flange Diameter D (mm)	Diameter of Raised Face R (mm)	Diameter of Bolt Hole Circle DBC (mm)	Diameter of Bolt Hole (mm)	No. of Holes	Thickness of Flange	Flange Distance 'FD'		Flow Range (m ³ /hr) for Velocity 0.3m/s to 6m/s	
								Fixed Inline	Hot Retractable Insertion	Min.	Max.
1/2"	15	88.9	34.9	60.3	15.9	4	11.1	200	-	0.19	3.817
1"	25	107.9	50.8	79.4	15.9	4	14.3	200	-	0.53	10.602
1 1/2"	40	127.0	73	98.4	15.9	4	17.5	250	-	1.35	27.143
2"	50	152.4	92.1	120.6	19.0	4	19.0	300	490	2.12	42.4115
2 1/2"	65	177.8	104.8	139.7	19.0	4	22.2	350	510	3.58	71.675
3"	80	190.5	127.0	152.4	19.0	4	23.8	350	530	5.42	108.573
4"	100	228.5	157.2	190.5	19.0	8	23.8	360	560	8.48	169.646
5"	125	254.0	185.7	215.9	22.2	8	23.8	400	580	13.25	265.071
6"	150	279.4	215.9	241.3	22.2	8	25.4	420	610	19.085	381.703
8"	200	342.9	269.9	298.4	22.2	8	28.6	470	670	33.929	678.584
10"	250	406.4	323.8	361.9	25.4	12	30.2	550	730	53.014	1060.28
12"	300	482.6	381.0	431.8	25.4	12	31.8	620	780	76.340	1526.81
14"	350	533.4	412.7	476.2	28.6	12	34.9	680	820	103.908	2078.16
16"	400	596.9	469.9	539.7	28.6	16	36.5	750	880	135.716	2714.33
18"	450	635.0	533.4	577.8	31.7	16	39.7	800	930	171.766	3435.33
20"	500	698.5	584.2	635.0	31.7	20	42.9	870	990	212.057	4241.15
24"	600	812.8	692.1	749.3	34.9	20	47.6	1000	1100	305.362	6107.25

Note : Flange to flange distance (FD) Tolerance : 1) 1/2"(15NB) to 6"(150NB) : +/-3mm 2) 8"(200NB) to 24"(600NB) : +/-5mm

- All dimensions are in 'mm'
- For dimensions of line size above 600NB, please consult factory.
- Typical mounting dimensions are for reference only.

- Wet Calibrated at IEC/ISO/EN17025 Accredited Calibration Laboratory.
- Flow meter should be selected with the help of Nomograph (recommended full scale velocity).
- Flow indication of 6 digit max. up to 999999.

Product Ordering Information :

Order Code for Flow Transmitter			
Sample Order Code : TX 3 B1 C1 D2 E1 F1 H2 I2 J2			
Parameter	Code	Description	
TX	Electronics Transmitter	TX 1	Field Mount Weather Proof IP67
		TX 3	DIN Standard (IP 54)
		TX 4	Flameproof (CMRI IIA IIB Certified)
B	Power Supply	B1	90 to 250 VAC
		B2	24 VAC
		B3	Battery Operated
		B5	Solar Powered 24V DC
		B6	Solar Powered 3.6V DC
C	MOC Electronics Enclosure	C1	Aluminium Die Cast
		C2	SS316
D	Electrical Connection	D1	M20 *1.5 F
		D2	½ Inch NPT F
		D3	M12 Connector
		DY	Other
Parameter	Code	Description	
E	Output 1**	E1	4 to 20 mA
		EX	NA
F	Output 2	F1	Pulse (Open Collector Type)
		FX	NA
H	**Communication Output 1 (Any one)	H1	RS485 (MODBUS RTU)
		HX	NA
I	Communication Output 2 (Any one)	I1	GSM
		I2	GPRS
		IX	NA
J	Process Pressure Calibration Range	J1	10 Kg
		J2	20 Kg
		JX	NA
Note : • In case of flameproof version only electronics enclosure is flameproof certified. ** Features Available with external power supply not with battery operated.			

Order Code for Flow Tube

Sample Order Code : FT 15 K2 L1 M1 N3 O2 P1 Q1 R1 S1 T1 U1 W1

Parameter	Code	Description	Code	Description	
FT	Flow Tube	FT 15	15 NB	FT 150	150 NB
		FT 20	20 NB	FT 200	200 NB
		FT 25	25 NB	FT 250	250 NB
		FT 32	32 NB	FT 300	300 NB
		FT 40	40 NB	FT 350	350 NB
		FT 50	50 NB	FT 400	400 NB
		FT 65	65 NB	FT 450	450 NB
		FT 80	80 NB	FT 500	500 NB
		FT 100	100 NB	FT 600	600 NB
		FT 125	125 NB		
		K	Spool Piece	K1	With Spool Piece
K2	Without Spool Piece				
L	Electronics Location	L1	Integral (Local)		
		L2	Remote		
M	Remote Cable Length	M1	5 Meter		
		M2	10 Meter		
		M3	15 Meter		
		MX	NA		
N	Flow Tube Protection Class	N1	IP-67		
		N2	IP-68		
O	Process Connection	O1	Threaded (15 to 50 NB)		
		O2	Flanged (15 To 600 NB)		
		O3	Triclover (15 to 100 NB)		
		O4	SMS Union (25 to 100 NB)		
P	Material of construction – Flange	P1	MS		
		P2	CS		
		P3	SS304		
		P4	SS316		
		P5	PVC		
		PY	Other		
		PX	NA		
Q	Flange Standard and Rating	Q1	ANSI 150 B16.5		
		Q2	ANSI 300 B16.5		
		Q3	ANSI 600 B 16.5		
		Q4	DIN PN 10 EN 1092-1		
		Q5	DIN PN 16 EN 1092-1		
		Q6	DIN PN 25 EN 1092-1		
		Q7	DIN PN 40 EN 1092-1		
		Q8	IS 1538		
		QY	Other		
QX	NA				
R	Material of construction – Flow Tube	R1	SS304		
		R2	SS316		
		R3	PVC		
		R4	MS		
		RY	Other		
		RX	NA		
S	Material of construction – Sensor	S1	SS316		
		S2	PVC		
		SY	Other		
T	Insertion Flow Sensor Installation	T1	Fixed Inline		
		T2	Hot Retractable		
U	Inline Flow Sensor	U1	Single Pair		
		U4	Hot Retractable Sensor – Single Pair		
W	Inline Pressure Sensor	W1	10 Kg		
		W2	20 Kg		
		WX	NA		

Note : - Due to our continuous product revisions, design specification and model numbers are subject to change without notice.
 - To be used for industrial applications.
 - Accuracy defined at Lab Conditions.
 - For other requirement please consult factory.

ELECTRONET EQUIPMENTS PVT. LTD.

Factory Address:

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