

BATTERY OPERATED ELECTROMAGNETIC FLOW METER

Model : SS1021



Features :

- Battery Operated (Battery Life 5 Years)
- Sizes Available from DN10 to DN500.
- Highly Accurate and extremely Linear.
- Microvolt signal Proportional flow rate from primary flow sensor.
- Various types of Liner & Earth electrodes, both options are available.
- Empty tube detection is also provided.

Description :

Manas have now introduced a new type of Battery Operated Electromagnetic Flow meter series. This sensor works on Faraday's law of electromagnetic induction. The new type of flow transmitter is SS1021. It is available with integral or remote version of transmitter.

Battery Operated Electromagnetic Flow meter is specifically designed where Electric supply is not available & accurate flow measurement is essential.

Flow Rate Table :

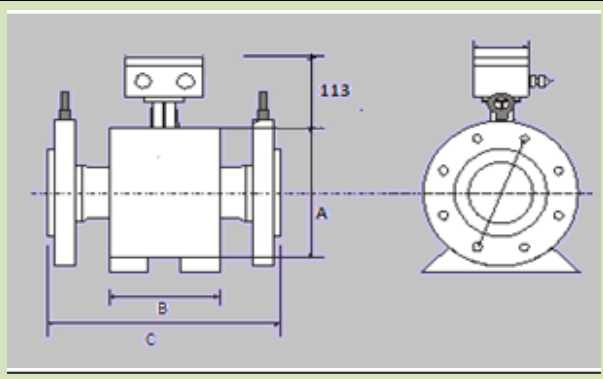
Flow rate at $v = 1 \text{ m/s}$

DN	M ³ /Hr	LPM	LPS
15	0.636	10.602	0.176
20	1.130	18.849	0.314
25	1.767	29.452	0.490
32	2.895	48.254	0.804
40	4.523	75.398	1.256
50	7.068	117.899	1.963
65	11.945	199.098	3.318
80	18.095	301.592	5.026
100	28.274	471.238	7.853
125	44.178	736.310	12.271
150	63.617	1060.287	17.671
200	113.097	1884.955	31.415
250	176.714	2945.243	49.087
300	254.469	4241.150	70.685
350	346.356	5772.608	96.210
400	452.389	7539.816	125.66
450	572.555	9542.580	159.04
500	706.858	1178.960	196.34
600	1017.87	16964.59	282.74
700	1385.44	23090.69	384.84
750	1590.43	26507.17	441.78
800	1809.55	30159.26	502.65
900	2290.21	38170.32	636.17
1000	2827.43	47123.85	785.39

*Technical Specifications

Meter Size	: DN 10 – DN 500
Pressure	: Up to DN80 - PN 40 From DN100 to DN200 - PN 16 From DN250 to DN500 - PN10
Media	: For Hard Rubber (HR) - 0 - 90°c
Temperature	: PTFE - 0 - 150°c PFA - 0 - 200°c
Ambient Temperature	: 0 - 50° c
Material	: Pipe : SS304 (non magnetic) Liner : Hard Rubber/ PTEF / PFA Electrodes : SS316/SS316L/Hastelloy C or other (as per requirement.) Coil Housing : MS / CS PU Painted / SS304 / SS316 Flanges : MS / CS / SS316 / SS304 / SS316 L Flange Standard : ANSI / DIN / BS Flanges (As per requirement)
Type of Transmitter	: SS1021
Min. Media conductivity	: 5 micro-Siemens per cm ($\geq 5 \mu\text{S/cm}$)
Output	: Pulsed DC output/4-20 mA (Optional)/Rs485 Communication (Optional)
GSM Facility	: Optionally Available with GSM modem.
Local Display	: 2 line LCD Display For instantaneous Flow rate, Totalizer, Engg. units, Fault Message, etc.
Accuracy	: $\pm 1\%$ of Actual Flow Rate between 100% to 10% of calibrated range
Flow Velocity	: 0.1m/s to 10m/s
Power Supply	: Battery Powered (5 years Battery Life)
Ingress Protection	: IP68 for Primary Flow Sensor, IP67 for flow Transmitter.

Meter Dimensions (mm)



Note :

- All dimensions are in mm.
- Dimensions are with ANSI B 16.5, class 150 flanges with terminal box.
- PRODUCTION STANDARD FLANGES :
ANSI B 16.5, class 150 up to DN125
BS10, Table E for DN 150 & DN 200
BS10, Table F for DN 250 to DN 350
IS1538 for Above DN 400

Table for Meter Dimensions :

DN (mm)	A	B	C
10,15	134	76	200
20	134	76	200
25	112	100	200
32	121	100	200
40	131	105	200
50	156	99	200
65	181	92	200
80	194	89	200
100	232	135	250
125	258	135	250
150	283	170	300
200	347	205	350
250	410	240	400
300	488	290	500
350	539	290	550
400	600	325	600
450	635	415	650
500	700	500	700

ORDERING INFORMATION :

FLOW METER SIZE			
DN 15	: ½"	DN 125	: 5"
DN 20	: ¾"	DN 150	: 6"
DN 25	: 1"	DN 200	: 8"
DN 32	: 1¼"	DN 250	: 10"
DN 40	: 1½"	DN 300	: 12"
DN 50	: 2"	DN 350	: 14"
DN 65	: 2½"	DN 400	: 16"
DN 80	: 3"	DN 450	: 18"
DN 100	: 4"	DN 500	: 20"

LINER MATERIAL

Hard Rubber	: HR
PTFE	: PTFE
PFA	: PFA
Any Other	: ZZ

ELECTRODE MATERIAL

SS316	: SS316
Hastelloy	: HAST C
Any Other	: ZZ

FLANGE / END CONNECTION STANDARD

ANSI 150	: ANSI 150
IS1538	: IS 1538
BS 10, Table E	: BS 10E
BS 10, Table F	: BS 10F
Any Other	: ZZ

FLANGE / END CONNECTION MATERIAL

Mild / Carbon Steel	: MS / CS
Stainless Steel SS304	: SS304
Stainless Steel SS316	: SS316
Any Other	: ZZ

BODY MATERIAL

Mild / Carbon Steel	: MS / CS
Stainless Steel SS304	: SS304
Stainless Steel SS316	: SS316
Any Other	: ZZ

TRANSMITTER MOUNTING

Integral	: INT
Remote	: RMT

POWER SUPPLY

Battery Operated	: 3.6 V
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DN25 PTFE SS316 ANSI 150 CS SS304 INT 3.6 V

Sample Order Code

manas microsystems pvt. ltd.

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