

ECONOMICAL RANGE OF ELECTROMAGNETIC FLOW METER

SMART JAL EC



Description :

Manas have now introduced a new type **SMART JAL Ec** Flowmeter. **SMART JAL Ec** meter's are commonly used in Treated Effluent, Sewage water, Waste water etc. This type of flow meters also work on the **FARADAY'S LAW OF ELECTROMAGNETIC INDUCTION**. The equation is,

$$E = B \cdot v \cdot d$$

Where,

E = Induced voltage [proportional to velocity]

B = Magnetic flux density

v = Mean velocity of the media

d = Diameter of flow-sensor (distance between the sensing electrodes.)

Technical Specifications:

- | | |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Meter Size | : DN32 to DN50 |
| 2. End Connections | : Threaded, BSP (M). |
| 3. Protection Class | : IP66 |
| 4. Cable Entries | : 2 no. for Integral transmitter.
1 no. for Remote transmitter. |
| 5. Media Conductivity | : $\sigma \geq 20 \mu\text{S} / \text{cm}$ |
| 6. Display | : For Integral : 16X2 rows LCD Display For Instantaneous Flow Rate, Totaliser, Engineering Units, Fault messages.
For Remote : 6 Digit, 0.3", 7 segment LED for Totalisation.
4 Digit, 0.5", 7 segment LED for Flow Rate Indication. |
| 7. Output | : Pulse o/p \propto flow rate
A] Pulse output open collector NPN OR
B] 4 - 20mA dc, in max. 600 Ω load, Isolated, Proportional to flow rate. |
| 8. Accuracy | : $\pm 1\%$ of Actual Flow Rate between 100% to 10% Flow Rate |
| 9. Media Pressure | : 10 Bar |
| 10. Empty tube detection | : Provided |
| 11. Power Supply | : 230V ac / 110V ac, $\pm 10\%$, 50 Hz, |

Features :

- No moving parts.
- Economically Priced.
- Do not require much upstream and downstream straight Lengths.
- Very fast Operation / small response time.
- Long life hence cost effective.
- Engineered in PP.
- Flowmeter does not obstruct flow, so it can be applied to clean, sanitary, dirty, corrosive liquids.
- Fully Vibration proof.

ORDERING INFORMATION :

FLOW METER SIZE

DN32	:	1 ¼"
DN40	:	1 ½"
DN50	:	2 "

ELECTRODE MATERIAL

SS316	:	Stainless Steel
HAST C	:	Hastelloy C

END CONNECTION

1 ¼" BSP	:	1 ¼" BSP Threaded (M)
1 ½" BSP	:	1 ½" BSP Threaded (M)
2" BSP	:	2" BSP Threaded (M)

TRANSMITTER TYPE

2D	:	Instantaneous Flow Rate & Total
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OUTPUT

P	:	Pulse Output
C	:	4-20 mA DC

COMMUNICATION PORT (Only RMT)

RS2	:	RS232
RS4	:	RS485
NA	:	Not Applicable

TRANSMITTER MOUNTING

INT	:	Integral
RMT	:	Remote

POWER SUPPLY

01	:	110 V AC
02	:	230 V AC

DN50 SS316 2" BSP 2D C NA INT 02

Sample Ordering Information

* Specifications are subject to change without prior notice.

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