We are certified with
ISO/IEC 17025:2017 | ISO 9001:2015
ISO 14001:2015 | OHSAS 45001:2018

manas®
Technology. Excellence. Trust.

SPRINKLER FLOW METER

Smart JAL Ec Series

A sprinkler is used to irrigate agricultural crops, lawns, landscapes, golf courses, and many such areas. They are also used for cooling and for controlling airborne dust.

Inefficient use and distribution of water would result in wastage, monetary losses and uneven spread of water to the land surface. The under and over watering due to sprinkler system damage or malfunction can result in big losses. Manas Microsystems manufactures Smart JAL Ec Series flow meters for sprinkler systems, to avoid such losses.

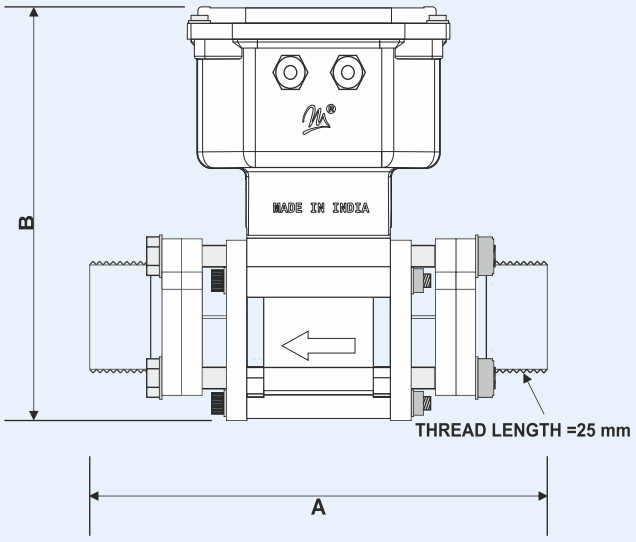
Due to scarcity and cost of clean water, flow metering has gained extreme importance in today's world. Manas flow meters measure instantaneous and totalized value of flow over a defined period, thus making it easy for accurate billing when water is chargeable. As there are no moving parts in these meters, these meters hardly need maintenance. The meters are vibration proof and can handle dirty or corrosive liquids as well.

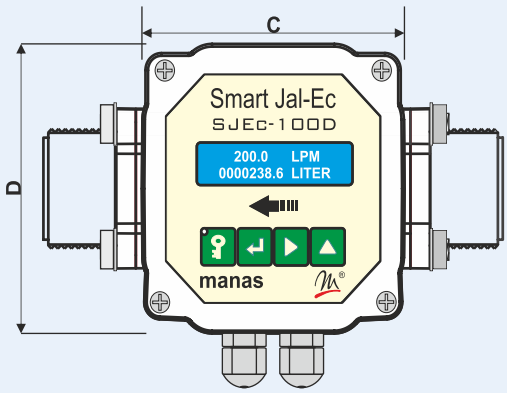
Features

- 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

Technical Specifications:

Meter Size	: DN10 to DN50
End Connections	: 3/8" BSP (M) to 2" BSP (M) as per size
Dimensions	: 189 mm (L) x 109 mm (W) x 157 mm (H) for DN10 –DN40 193 mm (L) x 102 mm (W) x 178 mm (H) for DN50
Material of Construction	
a) Sensor	: PP
b) Measuring Electrodes	: SS316
Protection Class	: IP66
Operating Ambient Temperature	: 0 – 50° C
Media Pressure	: 10 Bar From DN10 upto DN50
Mounting	: Integral
Enclosure	: ABS / PP
Cable Glands	: PG7 (1. Power & Pulse output 2. COMM PORT or 4-20mA)
Cable Entries	: 2
Media Conductivity	: $\sigma \geq 20 \mu S$ / cm
Empty Tube Detection	: Provided
Accuracy	: ±1 % of Actual Flow Rate between 100 % to 10 % Flow Rate
Display	: 16X2 rows LCD Display For Instantaneous Flow Rate, Totaliser, Engineering Units, Fault messages
Output	: Pulse output PNP/NPN Pulse output is proportional to flow rate
Note	: Pulse o/p stopped if flow tube is empty
Optional Outputs	: 4-20mA dc, isolated (with max. 600Ω load) Proportional to instantaneous flow rate Or Communication port (RS485 (Std) Or RS232 (Optional))
Output Pulse Selection	: 1 pulse / 0.1 liter or 1pulse / 1 liter or 1 pulse / 10 liter or 1pulse / 100 liter
PC Communication	: Protocol - MODBUS RTU Comport - RS232 (optional) / RS485 (Std)
Power Supply	: 12V dc / 24V dc, ± 10% for integral transmitter 230 Vac Adaptor





Meter Dimensions (mm)

DN (mm)	A	B	C	D
10	193	157	108	109
15	193	157	108	109
20	193	157	108	109
25	193	157	108	109
32	189	157	108	109
40	193	157	108	109
50	193	177	100	102

All dimensions are in mm
End Connection Thread is as per DN size BSP(M)

ORDERING INFORMATION

Sample code explained: DN 40 - SS316L - 2" BSP - 2D - P - RS4 - INT - 2

DN 40 — Flow Meter Size

DN 10	: 3/8"
DN 15	: ½"
DN 20	: ¾"
DN 25	: 1"
DN 32	: 1 ¼"
DN 40	: 1 ½"
DN 50	: 2"

2" BSP — End Connection

3/8" BSP Threaded (M)	: 3/8" BSP
½" BSP Threaded (M)	: ½" BSP
¾" BSP Threaded (M)	: ¾" BSP
1" BSP Threaded (M)	: 1" BSP
1 ¼" BSP Threaded (M)	: 1 ¼" BSP
1 ½" BSP Threaded (M)	: 1 ½" BSP
2" BSP Threaded (M)	: 2" BSP

RS4 — Communication Port OR 4-20mA

RS232	: RS2
RS485	: Rs4
OR	
4-20 mA	: C

SS316 — Elecrode Material

SS316	: SS316
Hastelloy C	: HAST C

2D — Transmitter Type

Instantaneous Flow Rate & Total	: 2D

INT — Transmitter Mounting

Integral	: INT

P — Output Type

P	: Pulse Output

2 — Power Supply

230 Vac Adaptor	: 2
24 V DC	: 3
12 V DC	: 4

Due to continuous development specifications are subject to change without prior notice.

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