

METER CAPACITIES

Model	Size	Normal Flow	Maximum Flow
6251SJM-MOD	5/8" X 3/4"	12 GPM	1/4 - 22 GPM

SJM-MOD® Contact Settings Available

MODEL	1 PPG	10 PPG	20 PPG
6251SJM-MOD	X	X	X

PPG = Pulses per Gallon

Meter Specifications

Meter Housing: Reinforced nylon (Plastic)

Connections: Inc.reinforced nylon threaded connections

Outputs: Relay Contact and Modbus in RTU Mode

Operating Pressure: Maximum 232 psi

Temperature Range: 35°F - 160°F

PH Level Range: 6.5 - 8.0

Registration Options: U.S. Gallons or Liters

METER MAINTENANCE

The only suggested maintenance is to annually remove the meter from the water line and gently back flush the meter to remove particles that may have been trapped by the strainer. Back flushing is running the water into the meter from the outlet side instead of the normal flow direction. If some unusual evidence of meter performance is observed during maintenance,



10/25

CARLON METER, INC. • PRODUCT WARRANTY

Carlton Meter, Inc.(hereinafter Carlton or "the company") warrants products of its manufacture to be free of defects in material or workmanship. Liability under this warranty extends for twelve (12) months from the date of purchase. Liability is limited to repair or replacement of any failed product or assembly proven to be defective in material or workmanship upon manufacturer's examination. Removal and installation costs are not included under this warranty. Manufacturer's liability shall never exceed selling price of the meter or assembly in question. Carlton disclaims all liability for damage its products caused as the result of improper installation, maintenance, use or attempts to operate products beyond their intended functionality, intentionally or otherwise. Carlton is not responsible for damages, injuries or expenses incurred through the use of its products. The above warranty is in lieu of all other warranties, either expressed or implied. No agent of the company is authorized to alter or otherwise revise this warranty.

*For complete specifications, visit www.carltonmeter.com

Installation and Operating Instructions

Model SJM-MOD® Specialty Water Meter

5/8" X 3/4" Size



Leaders in water measurement and control

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SJM-MOD Meter Installation Instructions

1. Flush the line thoroughly after plumbing changes to eliminate the possibility of foreign contaminants reaching the meter.
2. Install meter horizontally with the top of meter facing up and the inlet port facing the supply water line.
3. It is recommended that if there is any possibility the water supply contains foreign contaminants, a strainer should be installed between the water supply and the meter.
4. It is not recommended that the meter be run for long periods of time at the maximum flow rating as excess wear will result and the life of the meter will be reduced.
5. To reduce potential harmful effects to equipment from water hammer caused by quick closing valves, it is suggested that you purchase and install a **Carlton** slow-closing ball valve.
6. Protect meter from freezing and from heat in excess of 160°F
7. Protect meter from any backflow of water opposite indicated direction of flow.
8. For outdoor installation, protect the meter from direct exposure to the elements.
9. For environments that require cleaning, it is not recommended to make direct contact with meter using pressure backed cleaning equipment.

■ The straight, unobstructed pipe section in front of the meter should be as follows:

Inlet Path - One Bend = 10 x Diameter of pipe

Valves (check, gate, etc.) = 12 X Diameter of pipe

Two Bends or One Tee and one bend(s) at random =
25 X Diameter of pipe

■ Straight, unobstructed pipe section downstream of meter =
5 X Diameter of Pipe

Meter Slave Address

The meter will ship by default with the slave address set to 1.
This address can only be used for configuration to change the slave address to a value in the range of 1 - 247.

Modbus Function Codes (in RTU Mode)

The meter can support the following Modbus function codes.

03 (0x03) Read Holding Registers

06 (0x06) Write Holding Registers

06 (0x06) Write Holding Registers

Up to 16 registers can be read or written to in a single transaction

Commands

Actions can be performed by writing the following values to the Command Register (0x0100) - Valid commands as noted below

0x0001 Write to non-volatile memory

0x0006 Reset totalizer (Requires Config Mode)

0x0007 Restart

0x0008 Enable Configuration Mode

Modbus Non-Volatile Memory

After writing to registers marked as Non-Volatile, the "Write to non-volatile memory" command will need to be issued to store the values.

M12 Wiring Chart

PIN	COLOR	FUNCTION
1	Brown	12v DC
2	White	Modbus B
3	Blue	Ground
4	Black	Modbus A
5	Grey	Pulse Out