### **CLARK**

# **MJP-SDC Plastic Totalizing Cold Water Meter**

5/8" x 3/4" Multi-Jet Type, Pulse/Reed Switch Output

#### **DESCRIPTION**

Model MJP-SDC meters are multi-jet, dry type, cold water totalizing water meters. They are an ideal choice for a range of water treatment and water monitoring applications.

A pulse/reed switch output of one pulse per 0.1, 1.0, 10 or 100 gallons is available.

MJP-SDC meters are accurate and reliable. They are produced in an ISO9001 certified production facility. The cold water meters are certified by NSF to meet ANSI/NSF 61 for materials safety and ANSI/NSF 372 for lead free compliance and conform with lead free plumbing as defined by California, Vermont, Maryland and Louisiana state laws and the U.S Safe Drinking Water Act.



#### **SPECIFICATIONS**

#### **GENERAL**

Measuring Principle: Multi-Jet

Meter Type: Dry, magnetic coupling between rotor

and register movement Meter Size: 5/8" x 3/4"

Max Operating Temperature: 86°F (30°C)

Max Operating Pressure: 150 PSI

Materials:

Main Casing: GV-5 FWA Black 9225

Couplings/Tailpieces: GV-5 FWA Black 9225 Registration Accuracy, with water <80°F (27°C):

Normal Test Flow Range (Table 1): The meter will

register 98.5% to 101.5% of the water that

passes through it.

At Minimum Test Flow (Table 1): The meter will register 97% to 103% of the water that passes

through it.

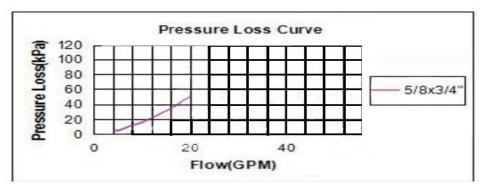
Pressure Drop: <15 PSI, see curve (fig. 1)
Installation: Horizontal orientation recommended
Inlet Strainer: Internal and can be cleaned without
breaking security seal

Casing Spud Connections: External straight threads according to ANSI/ASME B1.20.1.See Dimensions, Connections and Weights (Table 2) for details. Accessories: Meter coupling (tailpiece) sets that include 2 couplings and 2 gaskets, are supplied with each meter

| Table 1- Operating Characteristics |             |                             |  |                             |   |                            |                            |                                   |  |
|------------------------------------|-------------|-----------------------------|--|-----------------------------|---|----------------------------|----------------------------|-----------------------------------|--|
| Model                              | Size        | Safe<br>Max.<br>Flow<br>GPM | Recommended<br>Maximum<br>Continuous<br>Flow Rate<br>GPM | Min.<br>Test<br>Flow<br>GPM | Normal<br>Test<br>Flow<br>Limits<br>GPM | Min.<br>Reading<br>Gallons | Max.<br>Reading<br>Gallons | Gallons/Pulse<br>Output<br>Option |  |
| MJP-SDC                            | 5/8" x 3/4" | 20                          | 10   | 0.25                        | 1-20                                    | 0.005                      | 9999999.99                 | 0.1, 1, 10, 100                   |  |

#### PRESSURE LOSS CURVE

fig. 1



#### **OPTIONAL PULSE/REED SWITCH OUTPUT:**

The pulse emitter consists of a plastic housing with a reed switch that is closed when a magnet mounted on one of the meters register totalizers comes into its activation proximity. A 1.5 meter (59") length of 2-conductor wire 3.5 mm inch diameter is standard. One conductor has red insulation and one has black.

Optionally a dual reed switch output with 3-conductor cable is available. The two reed switches are symetrically placed and both are magnetically activated in one register/dial turn. So, two switch activations represents one pulse. As, in normal operation, it is not possible for both reed switches to be activated at the same time, a security feature of a microprocessor based system is to periodically sample both switches, and, if both are closed (high level signal), this would indicate external magnetic disturbance.

Max Voltage: 24V AC/DC Max Current: 0.01 A

Gallons per pulse: 0.1,1, 10 (standard), 100

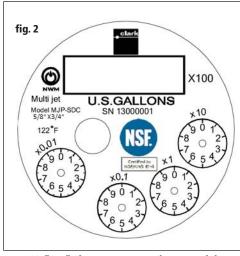
Capacitance: 0.2 pF

Output Bounce Time: 0.01 second

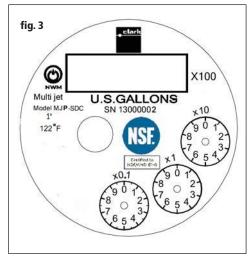


**MJ-SDC** with Reed Switch Output

#### **DIALS**

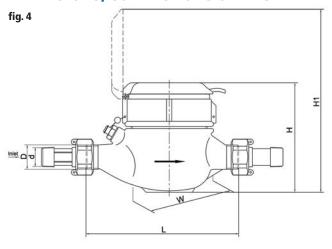


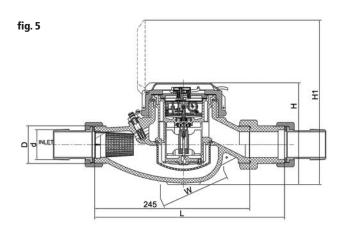
3/4"& 1" Size Meters: 5 Registers, 4 Dials



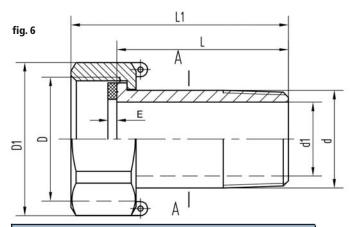
1-1/2" Size Meters: 6 Registers, 3 Dials

# **DIMENSIONS, CONNECTIONS & WEIGHT**





| Table 2 Meter Dimensions, Connections & Weight |      |             |                               |                              |                               |  |                                |          |                     |
|--|------|-------------|-------------------------------|------------------------------|-------------------------------|--|--------------------------------|----------|---------------------|
| Model  | fig. | Size        | L<br>Length<br>Inches<br>(mm) | W<br>Width<br>Inches<br>(mm) | H<br>Height<br>Inches<br>(mm) | H <sub>1</sub><br>Height<br>Inches<br>(mm) | D<br>Spud<br>Threads<br>(BSPP) | d<br>NPT | Weight<br>lbs (kgs) |
| MJP-SDC- 5/8x3/4                               | 4    | 5/8" x 3/4" | 7-1/2<br>(190)                | 3.98<br>(101)                | 4.72<br>(120)                 | 7.87<br>(200)                              | 1"                             | 3/4"     | 1.58<br>(0.717)     |





| Table 3 Coupling Set Dimensions |                 |                 |  |  |  |  |
|---------------------------------|-----------------|-----------------|--|--|--|--|
| Dimensions                      | Description     | 5/8 x3/4" Meter |  |  |  |  |
| d1                              | Hole Diameter   | 20 mm           |  |  |  |  |
| L                               | Coupling Length | 50 mm           |  |  |  |  |
| L1                              | Length          | 62 mm           |  |  |  |  |
| d                               | Coupling Thread | 3/4-14 NPT      |  |  |  |  |
| D                               | Nut Thread      | 1 " BSPP        |  |  |  |  |
| D1                              | Dimension       | 43 mm           |  |  |  |  |
| E                               | Gasket Thicknes | 3 mm            |  |  |  |  |

## **ORDERING INFORMATION**

# BUILD PART NUMBER FROM BELOW CHART: A-BC EXAMPLE: MJP-SDC-1X1

| A<br>*Model                              | B<br>Output   | C<br>**Pulse Frequency  |  |  |
|--|---|---|--|--|
| MJP-SDC-5/8x3/4                          | -= None<br>X= Single Pulse Output<br>D= Dual Pulse Output | 0.01= Pulse every .1 gal (3/4" & 1" only)<br>0.1= Pulse every 1 gal<br><b>1= Pulse every 10 gal (standard)</b><br>10= Pulse every 100 gal |  |  |
| * Models include a set of nine countings |   |   |  |  |

<sup>\*</sup> Models include a set of pipe couplings

\*\* Units are standardly available with a single pulse output a every 10 gallons. Consult factory for other pulse
output values, minimum order quantities may apply.