CLARK
MJP-SDC Plastic Totalizing Cold Water Meter

5/8" x 3/4", 1" & 1-1/2" 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

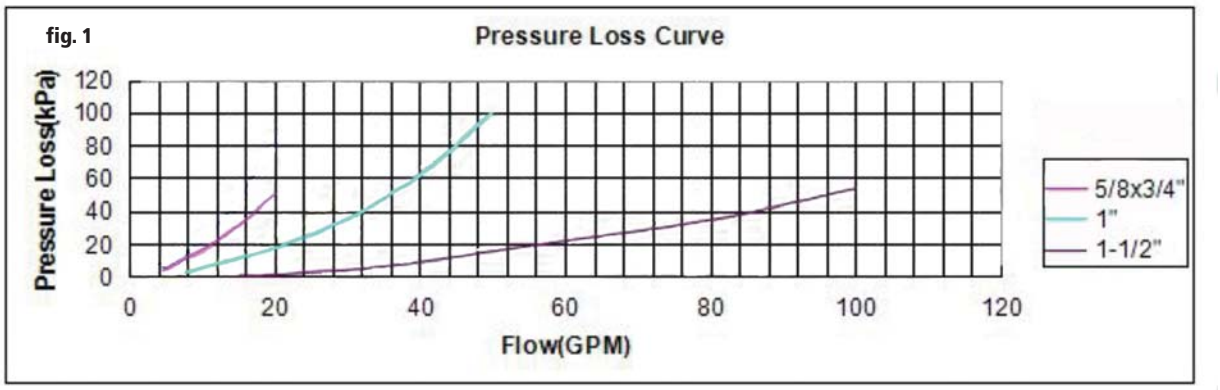
Measuring Principle: Multi-Jet
Meter Type: Dry, magnetic coupling between rotor and register movement
Meter Sizes: 5/8" x 3/4", 1", 1-1/2"
Max Operating Temperature: 86°F (30°C)
Max Operating Pressure: 150 PSI
Materials:
Main Casing: GV-5 FWA Black 9225
Couplings/Tailpieces: GV-5 FWA Black 9225
Registration 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 Max. Flow GPM	Recommended Maximum Continuous Flow Rate GPM	Min. Test Flow GPM	Normal Test Flow Limits GPM	Min. Reading Gallons	Max. Reading Gallons	Gallons/Pulse Output Option
MJP-SDC	5/8" x 3/4"	20	10	0.25	1-20	0.005	9999999.99	0.1, 1, 10, 100
MJP-SDC	1"	50	25	0.75	3-50	0.005	9999999.99	0.1, 1, 10, 100
MJP-SDC	1-1/2"	100	50	1.5	5-100	0.05	99999999.9	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.

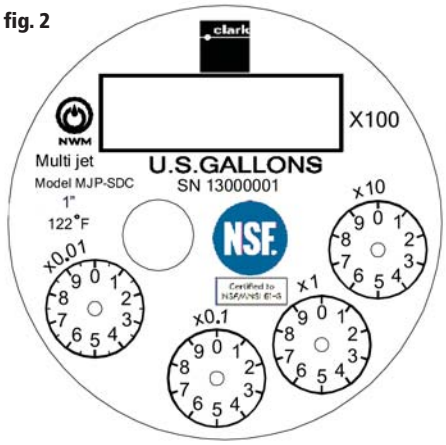
Optionally a dual reed switch output with 3-conductor cable is available. The two reed switches are symetrically placed and both are magnetically activated in one register/dial turn. So, two switch activations represents one pulse. As, in normal operation, it is not possible for both reed switches to 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

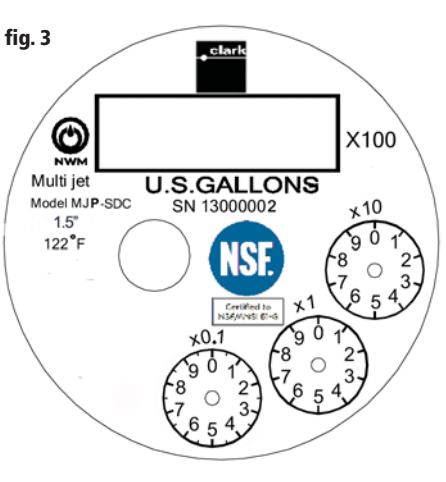
DIALS

fig. 2



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

fig. 3



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

DIMENSIONS, CONNECTIONS & WEIGHT

fig. 4

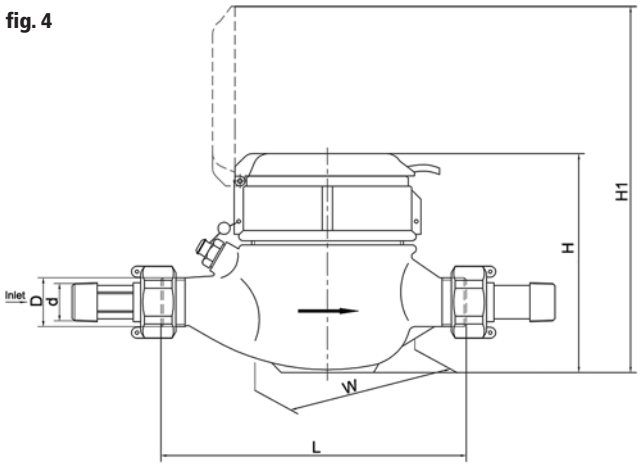


fig. 5

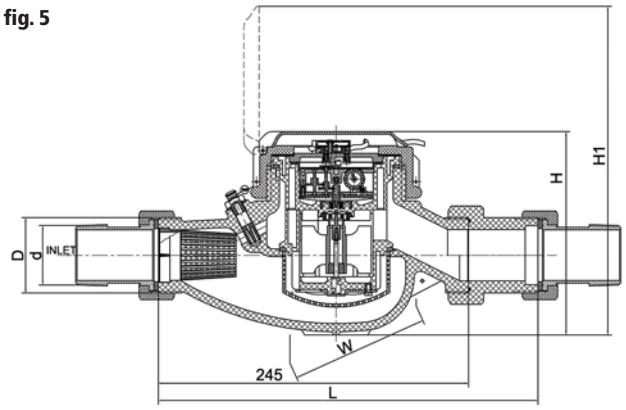
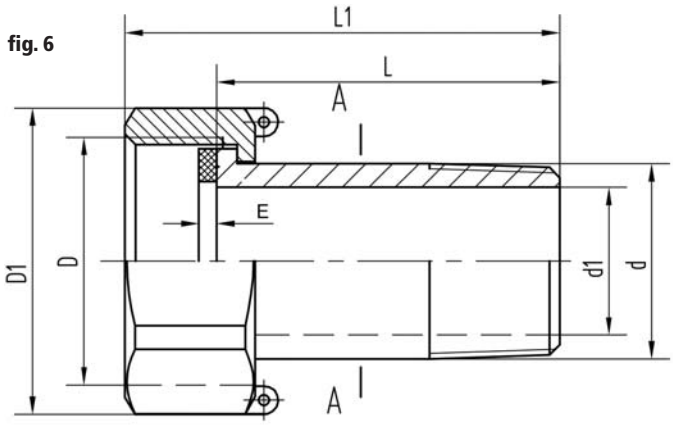


Table 2 Meter Dimensions, Connections & Weight

Model	fig.	Size	L Length Inches (mm)	W Width Inches (mm)	H Height Inches (mm)	H_1 Height Inches (mm)	D Spud Threads (BSPP)	d NPT	Weight lbs (kgs)
MJP-SDC- 5/8x3/4	4	5/8" x 3/4"	7-1/2 (190)	3.98 (101)	4.72 (120)	7.87 (200)	1"	3/4"	1.58 (0.717)
MJP-SDC-1	4	1"	10-1/4 (260)	4.09 (104)	5.12 (130)	8.27 (210)	1-1/4"	1"	1.85 (0.84)
MJP-SDC-1.5	5	1.5"	11-7/8 (300)	5.31 (135)	6.38 (162	10.30 (261)	2"	1-1/2"	3.17 (1.44)

fig. 6



Meter Coupling/Tailpiece Set (2 x Coupling, Nut & Gasket)

Table 3 Coupling Set Dimensions

Dimensions	Description	5/8 x3/4" Meter	1" Meter	1 1/2" Meter
d1	Hole Diameter	20 mm	25 mm	40 mm
L	Coupling Length	50 mm	58 mm	62 mm
L1	Length	62 mm	73 mm	77 mm
d	Coupling Thread	3/4-14 NPT	1-11.5 NPT	1 1/2-11.5 NPT
D	Nut Thread	1 " BSPP	1 1/4 " BSPP	2" BSPP
D1	Dimension	43 mm	51	70
E	Gasket Thickness	3 mm		3.5

ORDERING INFORMATION

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

A *Model	B Output	C **Pulse Frequency
MJP-SDC-5/8x3/4 MJP-SDC-1 MJP-SDC-1.5	-= None X= Single Pulse Output D= Dual Pulse Output	0.01= Pulse every .1 gal (3/4" & 1" only) 0.1= Pulse every 1 gal **1= Pulse every 10 gal (standard)** 10= Pulse every 100 gal
* 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.		