

# WATER METERS

Most Accurate  
in the Industry

## APPLICATIONS

- Use smaller sized meters as sub-meter for residential or commercial applications
- Communicate with irrigation controllers and measures water usage for effective water management

## SPECIFICATIONS

- Sizes: ¾" to 6"
- Maximum working pressure:  
¾", 1" and 1 ½": 140 psi  
2" to 6": 230 psi
- Maximum water liquid temperature:  
¾", 1" and 1 ½": 122° F  
2": 131° F  
3" to 6": 140° F
- Available bodies: metal (corrosion proof copper alloy) or composite (plastic)
- Available with Reed Switch, Photo Diode or Electronic Digital registers
- Installation of a continuous acting air vent before the water meter is highly recommended for accurate flow readings

## FEATURES & BENEFITS

### ONLY ONE MOVING PART - THE IMPELLER - IN CONTACT WITH THE WATER

For minimum wear and utmost reliability.

### MAGNETIC DRIVEN SEALED REGISTERS ARE STAINLESS STEEL/COMPOSITE ENCAPSULATED

Guaranteed against fogging due to moisture.

### ACCURATE OVER A WIDE RANGE OF FLOWS

For flexible and efficient water management.

### INDUSTRY'S LONGEST WARRANTY

Three years on the metering components (register and metering assembly) and five years on the meter body.



¾" AND 1"  
(PLASTIC BODY)



¾", 1" AND 1 ½"  
(METAL BODY)



2"

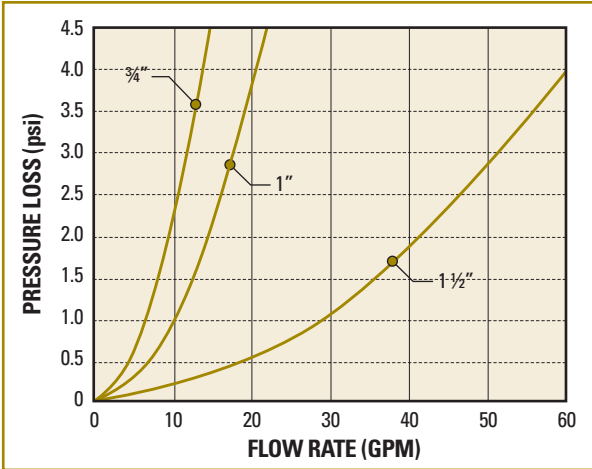


3", 4" AND 6"

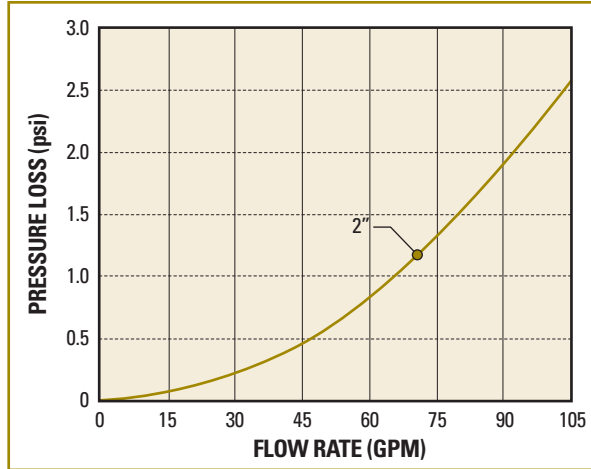
**PERFORMANCE DATA (GPM)**

SIZE	LOWEST FLOW WITHIN ± 5% ACCURACY	LOWEST FLOW WITHIN ± 2% ACCURACY	NOMINAL FLOW WITHIN ± 2% ACCURACY	MAXIMUM FLOW WITHIN ± 2% ACCURACY
¾"	0.2	0.9	11	14
1"	0.3	1.2	15.4	20
1½"	0.9	3.5	44	55
2"	2.0	8.8	88	110
3"	2.0	4	528	660
4"	4.0	6	1,013	1,266
6"	11	15	1,145	1,431

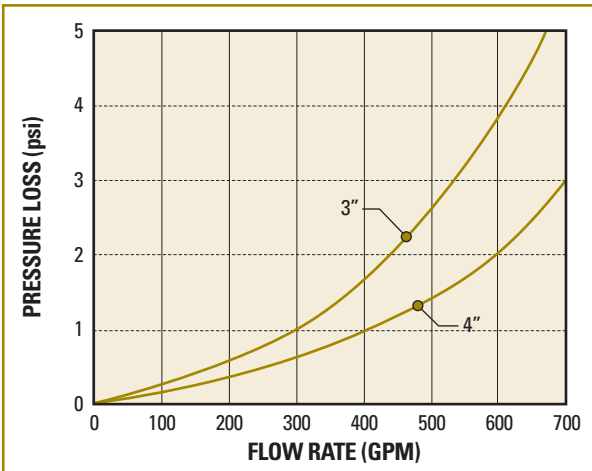
**FLOW RATE VS. PRESSURE LOSS**



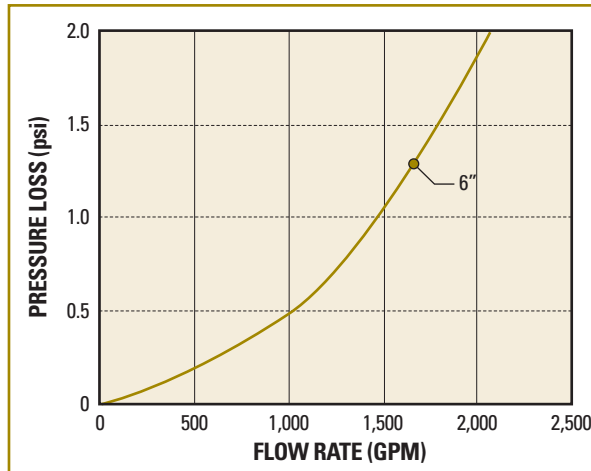
**FLOW RATE VS. PRESSURE LOSS**



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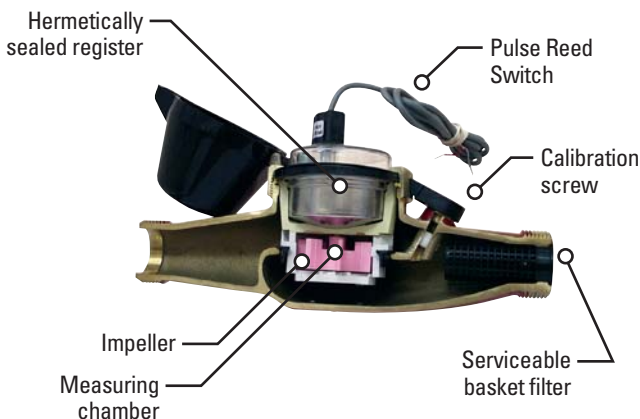
**FLOW RATE VS. PRESSURE LOSS**





**REED SWITCH REGISTER (RS)**

The reed switch register is a dry contact or simple switch closure for communicating with control and monitoring equipment. Flows are totaled in U.S. Gallons based on the multiplication factors indicated on the dial face.



**PHOTO DIODE REGISTER (PD)**

A photo coupler sensor that provides pulse output for communicating with control and monitoring equipment. Flows are totaled in U.S. Gallons based on the multiplication factors indicated on the dial face.



**DIGITAL (ER) REGISTER**

Combines standard digital register features with dry pulse output for communicating with control and monitoring equipment. Rate of flow and volume readings in U.S. Gallons are clearly displayed on the LCD display.

**ORDERING INFORMATION**

BODY MATERIAL	SIZE	REGISTER OUTPUT TYPE	GALLONS PER PULSE	MODEL NUMBER
PLASTIC	¾"	RS	0.1	WM-075-0.1-RS-P
PLASTIC	¾"	RS	1.0	WM-075-1.0-RS-P
PLASTIC	1"	RS	1.0	WM-100-1.0-RS-P
PLASTIC	¾"	PD	.0015	WM-075-.0015-PD-P
PLASTIC	1"	PD	.0021	WM-100-.0021-PD-P
PLASTIC	¾"	ER	0.1	WM-075-0.1-ER-P
PLASTIC	1"	ER	0.1	WM-100-0.1-ER-P
METAL	¾"	RS	0.1	WM-075-0.1-RS-M
METAL	¾"	RS	1.0	WM-075-1.0-RS-M
METAL	1"	RS	1.0	WM-100-1.0-RS-M
METAL	1 ½"	RS	1.0	WM-150-1.0-RS
METAL	2"	RS	10	WM-200-10-RS
METAL	3"	RS	10	WMW-300-10-RS
METAL	4"	RS	10	WMW-400-10-RS
METAL	6"	RS	100	WMW-600-100-RS
METAL	¾"	PD	.0015	WM-075-.0015-PD-M
METAL	1"	PD	.0021	WM-100-.0021-PD-M
METAL	1 ½"	PD	.0074	WM-150-.0074-PD
METAL	2"	PD	1.0	WM-200-1.0-PD
METAL	¾"	ER	0.1	WM-075-0.1-ER-M
METAL	1"	ER	0.1	WM-100-0.1-ER-M
METAL	1 ½"	ER	0.1	WM-150-0.1-ER
METAL	2"	ER	1.0	WM-200-1.0-ER
METAL	3"	ER	1.0	WMW-300-1.0-ER
METAL	4"	ER	1.0	WMW-400-1.0-ER
METAL	6"	ER	10	WMW-600-10-ER

# STRAIGHT PIPE INSTALLATION REQUIRED FOR WATER METERS 2" AND LARGER

When water flows through a pipe, any transition through a fitting, elbow, or change in pipe size causes turbulence in the water. In order to eliminate water turbulence, some water meters require straight pipe before and after the water meter. Straight pipe installation refers to the length of straight pipe needed before (upstream of the water meter) and after (downstream of the water meter).

The ¾", 1" and 1 ½" water meters do not require straight pipe installation, but a 5 x diameter before and 2 x diameter straight pipe installation after the meter is recommended. (**Diameter = Meter Size**)

The 2" water meter requires straight pipe installation of 10 x diameter before and 5 x diameter straight pipe installation after the meter.

The 3", 4" and 6" water meters require straight pipe installation of 5 x diameter before and 2 x diameter straight pipe installation after the meter.

Continuous acting air vents are used to remove air from the system for accurate metering. Proper air vent selection and placement within the system is critical.

## CONFIGURING STRAIGHT PIPE INSTALLATION EXAMPLE BELOW:

**Water Meter:** 2"  
**Upstream:** 10 x 2" diameter meter = 20" (10 x D)  
 20" of straight pipe upstream of the water meter  
**Downstream:** 5 x 2" diameter meter = 10" (5 x D)  
 10" of straight pipe downstream of the water meter  
**Meter Length:** 14"  
**Total:** 44" total installation recommended

## STRAIGHT PIPE INSTALLATION REQUIREMENTS (10 X D AND 5 X D - 2" SIZE) (5 X D AND 2 X D - 3", 4" AND 6" SIZE)

SIZE	UPSTREAM DISTANCE	DOWNSTREAM DISTANCE	METER LENGTH	TOTAL REQUIREMENT
2"	20"	10"	14"	44"
3"	15"	6"	9"	30"
4"	20"	8"	10"	38"
6"	30"	12"	12"	54"

