

# HYDROMETERS

Combination Master  
Valve and Water  
Meter/Flow Sensor

## APPLICATIONS

- For commercial, institutional and sports field irrigation applications
- Ideal for retrofits
- Designed for high pressure, remote operated applications
- Water meter can communicate with irrigation controllers and central control units
- Valve can function as a remote master valve for automated operation

## SPECIFICATIONS

- Sizes: 1 1/2", 2", 3", 4", 6" and 8"
- Maximum working pressure:  
Manual Electric - 235 psi
- Body: cast iron, polyester coated
- Valve diaphragm: reinforced natural rubber
- Pilot option: manual electric
- End connections:  
1 1/2" - male pipe thread  
2" - female pipe thread  
3", 4", 6" 8" - flanged
- Flanges: drilled according to ANSI specification
- Standards: EEC approval (class A)
- Installation of a continuous acting air vent before the Hydrometer is highly recommended for accurate flow readings

## FEATURES & BENEFITS

### GLOBE CONFIGURATION WITH BUILT-IN STRAIGHTENING VANE

Requires no straight pipe for installation - saving space.

### ± 2% ACCURACY ACROSS FLOW RANGES

No more false alarms.

### RUGGED, HEAVY DUTY CONSTRUCTION

Cast Iron with corrosion resistant coating.

### REGISTERS ARE STAINLESS STEEL/COMPOSITE ENCAPSULATED

Guaranteed against fogging due to moisture.

### DOUBLE-CHAMBERED VALVE

Provides quick acting and positive opening and closing.

### SUB-METERING

Meter dedicated to landscape irrigation water.



### REED SWITCH (RS) REGISTER

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 HIGH FREQUENCY (PDH) REGISTER

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 indicated on the LCD display.

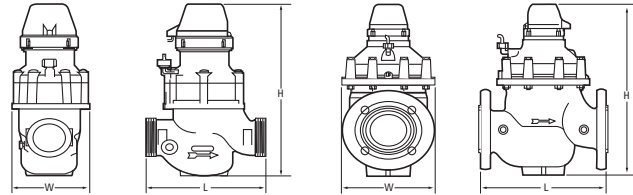
## FRICION LOSS vs. PRESSURE LOSS (psi)

|      |        | FLOW RATE (GPM) |      |      |      |      |      |      |      |      |     |      |      |      |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |     |
|------|--------|-----------------|------|------|------|------|------|------|------|------|-----|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|-----|
|      |        | 1.8             | 4.4  | 5.3  | 14   | 20   | 21   | 53   | 55   | 79   | 95  | 97   | 125  | 150  | 198 | 220 | 250 | 300 | 357 | 380 | 400 | 500 | 700 | 860 | 900 | 950 | 1000 | 1250 | 1500 |     |
| SIZE | 1 1/2" | 0.01            | 0.04 | 0.1  | 0.4  | 0.8  | 0.8  | 5.3  | 5.7  |      |     |      |      |      |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |     |
|      | 2"     |                 |      | 0.02 | 0.2  | 0.3  | 0.4  | 2.3  | 2.5  | 5.1  | 7.4 | 7.7  |      |      |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |     |
|      | 3"     |                 |      |      | 0.02 | 0.05 | 0.1  | 0.3  | 0.4  | 0.7  | 1.1 | 1.1  | 1.8  | 2.7  | 4.5 | 5.7 |     |     |     |     |     |     |     |     |     |     |      |      |      |     |
|      | 4"     |                 |      |      |      |      | 0.02 | 0.1  | 0.2  | 0.3  | 0.5 | 0.5  | 0.8  | 1.2  | 2.0 | 2.5 | 3.2 | 4.7 | 6.6 | 7.5 |     |     |     |     |     |     |      |      |      |     |
|      | 6"     |                 |      |      |      |      |      | 0.02 | 0.03 | 0.05 | 0.1 | 0.1  | 0.1  | 0.2  | 0.3 | 0.4 | 0.5 | 0.7 | 1.1 | 1.2 | 1.3 | 2.1 | 4.1 | 6.1 |     |     |      |      |      |     |
|      | 8"     |                 |      |      |      |      |      |      |      |      |     | 0.02 | 0.02 | 0.04 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.6 | 1.3 | 1.9 | 2.1 | 2.3  | 2.6  | 4.0  | 5.8 |

±2% Accuracy    ±5% Accuracy

## PERFORMANCE DATA (GPM)

| SIZE   | LOWEST FLOW<br>WITHIN ± 5%<br>ACCURACY | LOWEST FLOW<br>WITHIN ± 2%<br>ACCURACY | NOMINAL FLOW<br>WITHIN ± 2%<br>ACCURACY | MAXIMUM FLOW<br>WITHIN ± 2%<br>ACCURACY |
|--------|--|--|---|---|
| 1 1/2" | 1.8                                    | 4.4                                    | 44                                      | 55                                      |
| 2"     | 5.3                                    | 20                                     | 66                                      | 95                                      |
| 3"     | 14                                     | 53                                     | 176                                     | 220                                     |
| 4"     | 21                                     | 79                                     | 264                                     | 380                                     |
| 6"     | 53                                     | 198                                    | 660                                     | 860                                     |
| 8"     | 97                                     | 357                                    | 1,189                                   | 1,500                                   |



## HYDROMETER DIMENSIONS

|       |            | SIZE     | 1 1/2"   | 2"      | 3"       | 4"        | 6"        | 8" |
|-------|------------|----------|----------|---------|----------|-----------|-----------|----|
| GLOBE | LENGTH (L) | 6 5/16"  | 8 11/16" | 11 1/4" | 14 3/16" | 19 11/16" | 23 9/16"  |    |
|       | WIDTH (W)  | 4 15/16" | 4 15/16" | 8 1/16" | 9"       | 14 15/16" | 17 11/16" |    |
|       | HEIGHT (H) | 10 7/16" | 13"      | 17"     | 18 1/16" | 24 13/16" | 30 11/16" |    |
|       | WEIGHT     | 4 LBS.   | 7 LBS.   | 52 LBS. | 65 LBS.  | 245 LBS.  | 309 LBS.  |    |

## ORDERING INFORMATION

| METER SIZE | REGISTER OUTPUT TYPE | PULSE PER GALLON | GALLONS PER PULSE | MODEL NUMBER (MANUAL ELECTRIC) |
|------------|----------------------|------------------|-------------------|--------------------------------|
| 1 1/2"     | RS                   | 1                | 1                 | LHM15TG1-MEL                   |
|            | PDH                  | 187.900          | 0.0053            | LHM15TG0053-MEL                |
|            | ER                   | 10               | 0.1               | LHM15EM11AAFMEL                |
| 2"         | RS                   | 1                | 1                 | LHM2TG1-MEL                    |
|            | PDH                  | 117.000          | 0.0085            | LHM2TG0085-MEL                 |
|            | ER                   | 10               | 0.1               | LHM2EM11AAFMEL                 |
| 3"         | RS                   | 1                | 1                 | LHM3FG1-MEL                    |
|            | PDH                  | 48.710           | 0.0205            | LHM3FG0205-MEL                 |
|            | ER                   | 10               | 0.1               | LHM3EM11AAFMEL                 |
| 4"         | RS                   | 1                | 1                 | LHM4FG1-MEL                    |
|            | PDH                  | 17.933           | 0.0566            | LHM4FG0566-MEL                 |
|            | ER                   | 10               | 0.1               | LHM4EM11AAFMEL                 |
| 6"         | RS                   | 0.1              | 10                | LHM6FG10-MEL                   |
|            | PDH                  | 5.747            | 0.1741            | LHM6FG1739-MEL                 |
|            | ER                   | 1                | 1                 | LHM6EM11AAFMEL                 |
| 8"         | RS                   | 0.1              | 10                | LHM8FG10-MEL                   |
|            | PDH                  | 3.152            | 0.317             | LHM8FG317-MEL                  |
|            | ER                   | 1                | 1                 | LHM8EM11AAFMEL                 |

Installation Requirements: Globe configuration hydrometers have no straight pipe installation requirements.

Netafim Hydrometers are standard in a manually closed configuration. To order a Normally Open (NO) configuration, call Netafim Customer Service at 1 (888) 638-2346 for ordering information.



**NETAFIM USA**  
CS 888 638 2346  
www.netafimusa.com