## Model Hydrant Meter

Size 3"

#### **Mueller** systems

#### **Features**

**APPLICATIONS:** Recommended for measuring high-volume water usage from fire hydrants or other fire protection systems. Convenient hose connections and light-weight construction make this portable turbine meter useful for accurately measuring water used to fill street sweepers, water tankers or other equipment.

**CONFORMANCE TO STANDARDS:** Hersey Model HM Water Meters comply with ANSI/AWWA Standard C701 class II. Each meter is tested to ensure compliance.

**CONSTRUCTION:** Hersey Model HM Water Meters consist of three basic parts: D-I-M-E (Drop-In-Measuring-Element), bottom case and register. The D-I-M-E assembly contains all of the working parts inside of the meter and is easily removed from the bottom case when servicing is desired. The bottom case is constructed from cast aluminum to be lightweight and has built in carry handles for portability. The register is enclosed in a lockable bronze register box. The rotor assembly is thermoplastic which is dimensionally stable and will not corrode. The inlet connection has a 2-1/2" female national hose thread swivel adapter and the outlet connection is 2-1/2" male national hose threads.

**REGISTER:** The permanently sealed register incorporated a bayonet style locking mechanism with Hersey's unique integral tamper pin. The totalizing register has a straight-reading odometer type display, a 360° test circle with center sweep hand and a low flow (leak) indicator.

**OPERATION:** Water flows straight through the turbine section where it turns a rotor at a rate in direct proportion to the amount of water flowing through the meter. The straight-through design allows high volumes to flow with a minimum of head loss. Retro Thrust<sup>™</sup> rotor design extends the life of the meter by dividing wear between two points: during low flow the tungsten carbide thrustbearing floats against a sapphire bearing surface; during high flow the stainless steel shaft gently contacts a second sapphire bearing. During medium flow, the rotor floats between the thrust bearings without contact.

**MAINTENANCE:** The Hersey Model HMMeters are designed and manufactured to provide long service life with virtually no maintenance required. D-I-M-Es are available for field replacement and offer new meter accuracy and warranty benefits without field testing. Existing D-I-M-Es can be returned to the factory for refurbishment with new registers and measuring elements for installation later.

**CONNECTIONS:** Available with National Standard for fire hose coupling thread, female and male couplings.

**CARRYING HANDLE:** Facilitates ease of transportation.



3" Fire Hydrant Meter

#### Materials and Specifications

| MODEL DESIGNATION        | Hydrant Meter  |
|--------------------------|--|
| SIZE                     | 3"   |
| MAXIMUM WORKING PRESSURE | 175 PSIG   |
| TEMPERATURE RANGE        | 33°F to 130°F water temperature  |
| OPERATING RANGE          | 8 - 500 GPM  |
| METER TOP CASE           | Bronze   |
| METER BOTTOM CASE        | Epoxy-coated cast aluminum   |
| MEASURING CHAMBER        | Thermoplastic  |
| REGISTER BOX AND LID     | Bronze   |
|                          | Inlet: 2-1/2" - 7-1/2 NPSH<br>hose coupling thread) Female Coupling.<br>Dutlet: 2-1/2" - 7-1/2 NPSH, Male Nipple |
| SHAFTS AND BOLTS         | Stainless steel  |
|                          |  |

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#### **Meter Registration**

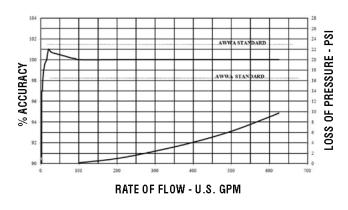
| Meter<br>Size | Initial Dial* | Capacity    | Initial Dial* | Capacity   |
|---------------|---------------|-------------|---------------|------------|
| 3"            | 100 Gal.      | 100 Million | 10 Cubic Ft.  | 10 Million |

#### **Flow Characteristics**

| Meter<br>Size | Typical Low<br>Flow<br>(95% Min.) | Typical<br>Operating Range<br>(100% ± 1.5%) | Maximum<br>Continuous<br>Operation | Maximum<br>Intermittent<br>Flow |
|---------------|-----------------------------------|---|------------------------------------|---------------------------------|
| 3"            | 5 GPM                             | 8 to 500 GPM                                | 500 GPM                            | 625 GPM                         |

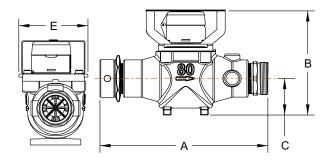
#### Performance

#### 3" Hydrant Meter



\*Performance curves are typical only and not a guarantee of performance.

#### **Dimensions and Weights**



| Dimension  |        |
|------------|--------|
| A          | 16"    |
| В          | 9-7/8" |
| C          | 3-3/8" |
| E          | 6-1/2" |
| Net weight | 14.6   |

NOTE: Meter may be ordered with less couplings, but a restriction orifice is needed. Weight is approximate and in pounds.

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<u>(</u>3)

| Meter | Mueller SYSTEMS |   |
|-------|-----------------|---|
|       |                 |   |
|       |                 |   |
|       |                 | 5 |
|       |                 |   |
| 5     | Hvdrant Meter   |   |
| (5A)  |                 |   |
|       | BA              |   |
|       | (8)             |   |
|       |                 |   |
|       | (9)             |   |
|       | (11)            |   |
|       |                 |   |
|       | (13)            |   |
| 8     | 14              |   |
|       |                 |   |
|       | (17B)           |   |
|       |                 |   |
|       |                 |   |

| Ref. No. | Description  | Part Number                                |
|----------|--|--|
| 1        | Register Box Lid (Plastic)<br>(Brass)  | n/a<br>50387                               |
| 2        | Locking Pin(Blue Color Plastic)<br>(Brass Color Plastic)                                 | n/a<br>A126581                             |
| 3        | Lid Pin (Plastic)<br>(Brass Color)   | n/a<br>AS41123                             |
| 4        | Register Housing Base (Plastic)<br>(Bronze)  | n/a<br>50386                               |
| 5        | Visual Register (Gallon)<br>(Cubic Feet)<br>Translator Register (Gallon)<br>(Cubic Feet) | D36211<br>D36212<br>D36211xxx<br>D36212xxx |
| 5a       | Spacer (not shown)   | 50382                                      |
| 6        | Register Housing Insert  | C5770                                      |
| 7        | Case Bolt  | 54002 (4)                                  |
| 8        | Handle   | 54023                                      |
| 8a       | Locking Bar (optional)   | 54024                                      |
| 9        | Top Case   | 54016                                      |
| 10       | Built-in Strainer  | N/A  |
| 11       | Complete Measuring Element   | C6598A                                     |
| 12       | Measuring Element Washer   | 98155 (3)                                  |
| 13       | Measuring Element Screw  | 98475 (3)                                  |
| 14       | Case Gasket / O-Ring   | 54602                                      |
| 15       | Test Plug  | N/A  |
| 16       | Bottom Case  | 54025                                      |
| 17A      | 2-1/2" MPT x 2-1/2" Female<br>hose swivel adapter  | 54014                                      |
| 17B      | 2-1/2" MPT x 2-1/2" Male hose swivel adapter   | 54015                                      |
| 31       | Drop In Measuring (CF)   | 5461H                                      |
|          | Element (GAL)  | 5462H                                      |

\*Call Mueller Systems for appropriate Translator Register and AMR/AMI device part number.

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