MODEL MW600

DESCRIPTION

Model MW600 Weld-On Saddle Meter is machined to the same radius as the tube on which it is to be installed to provide accurate alignment. The Model MW600 is manufactured to comply with applicable provisions of American Water Works Association Standard No. C704-02 for propeller-type flowmeters. As with all McCrometer propeller flowmeters, standard features include a magnetically coupled drive, instantaneous flowrate indicator and straight reading, six-digit totalizer.

Impellers are manufactured of high-impact plastic, capable of retaining their shape and accuracy over the life of the meter. Each impeller is individually calibrated at the factory to accommodate the use of any standard McCrometer register, and since no change gears are used, the MW600 can be field-serviced without the need for factory recalibration. Factory lubricated, stainless steel bearings are used to support the impeller shaft. The shielded bearing design limits the entry of materials and fluids into the bearing chamber providing maximum bearing protection.

The instantaneous flowrate indicator is standard and available in gallons per minute, cubic feet per second, liters per second and other units. The register is driven by a flexible steel cable encased within a protective vinyl liner. The register housing protects both the register and cable drive system from moisture while allowing clear reading of the flowrate indicator and totalizer.

INSTALLATION

Standard installation is horizontal mount. If the meter is to be mounted in the vertical position, please advise the factory. A straight run of full pipe the length of ten pipe diameters upstream and two diameters downstream of the meter is recommended for meters without straightening vanes. Meters with optional straightening vanes require at least five pipe diameters upstream and two diameters downstream of the meter.

APPLICATIONS

The McCrometer propeller meter is the most widely used flowmeter for municipal and wastewater treatment applications as well as agricultural and turf irrigation measurement. Typical applications include:

- Water and wastewater management
- Center pivot systems
- Sprinkler irrigation systems
- Drip irrigation systems
- Golf course and park water management
- Gravity turnouts for underground pipelines
- Commercial nurseries

The McCrometer Propeller flowmeter comes with a standard instantaneous flowrate indicator and straight-reading totalizer. An optional FlowCom register is also available. Typical face plates.
WELD-ON SADDLE FLOWMETER MODEL MW600

SPECIFICATIONS

PERFORMANCE

**ACCURACY/REPEATABILITY:** ±2% of reading guaranteed throughout full range. ±1% over reduced range.
Repeatability 0.25% or better

**RANGE:** see dimensions chart below

**HEAD LOSS:** see dimensions chart below

**MAXIMUM TEMPERATURE:** (Standard Construction)
160°F constant

**PRESSURE RATING:** 150 psi. Consult factory for higher rated version.

**MATERIALS**

**SADDLE:** Carbon steel

**TOP PLATE:** Fusion-bonded epoxy

**BEARING ASSEMBLY:** Impeller shaft is 316 stainless steel.
Ball bearings are 440C stainless steel.

**MAGNETS:** Permanent type. Cast or sintered Alnico.

**BEARING HOUSING:** Brass; 316 stainless steel
Optional

**REGISTER:** An instantaneous flowrate indicator and six-digit straight-reading totalizer are standard. The register is hermetically sealed within a die cast aluminum case. This protective housing includes a domed acrylic lens and hinged lens cover with locking hasp.

**IMPELLER:** Impellers are manufactured of high-impact plastic, retaining their shape and accuracy over the life of the meter. High temperature impeller is optional.

**OPTIONS**

- Weld-on saddle can be profiled to fit any outside diameter pipe dimensions
- Forward/reverse flow measurement
- Register extensions
- All stainless steel construction
- High temperature construction
- “Over Run” bearing assembly for higher than normal flowrates
- Electronic propeller meter available in all sizes of this model
- A complete line of flow recording/control instrumentation
- Certified calibration test results
- Stainless steel bearing housing

**MW600 DIMENSIONS**

<table>
<thead>
<tr>
<th>Meter Size (inches)</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
<th>20</th>
<th>24</th>
<th>30</th>
<th>36</th>
<th>42</th>
<th>48</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Flow U.S. GPM</td>
<td>600</td>
<td>1200</td>
<td>1500</td>
<td>1800</td>
<td>2500</td>
<td>3000</td>
<td>4000</td>
<td>5000</td>
<td>6000</td>
<td>8500</td>
<td>12500</td>
<td>17000</td>
<td>25000</td>
<td>30000</td>
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<tr>
<td>Minimum Flow U.S. GPM</td>
<td>50</td>
<td>90</td>
<td>100</td>
<td>125</td>
<td>150</td>
<td>250</td>
<td>275</td>
<td>475</td>
<td>700</td>
<td>1200</td>
<td>1500</td>
<td>2000</td>
<td>2500</td>
<td>3000</td>
</tr>
<tr>
<td>Standard Dial Face (GPM/Gal)</td>
<td>8000/100</td>
<td>1300/100</td>
<td>2500/100</td>
<td>3000/1000</td>
<td>4000/1000</td>
<td>6000/1000</td>
<td>8000/1000</td>
<td>10000/1000</td>
<td>15000/1000</td>
<td>20000/1000</td>
<td>25000/1000</td>
<td>30000/1000</td>
<td>35000/1000</td>
<td>**</td>
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<tr>
<td>Approx. Head Loss in Inches at Max. Flow</td>
<td>23.0</td>
<td>17.0</td>
<td>6.75</td>
<td>3.75</td>
<td>3.75</td>
<td>2.75</td>
<td>2.00</td>
<td>1.75</td>
<td>1.50</td>
<td>1.25</td>
<td>1.00</td>
<td>.75</td>
<td>.50</td>
<td>.45</td>
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<tr>
<td>Approx. Shipping Weight-lbs.</td>
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<td>45</td>
<td>70</td>
<td>90</td>
<td>120</td>
<td>125</td>
<td>130</td>
<td>150</td>
<td>175</td>
<td>190</td>
<td>205</td>
<td>210</td>
<td>220</td>
<td>230</td>
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<tr>
<td>A (inches)</td>
<td>11.37</td>
<td>12.87</td>
<td>12.87</td>
<td>12.12</td>
<td>12.12</td>
<td>12.12</td>
<td>12.12</td>
<td>12.12</td>
<td>15.00</td>
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<td>15.00</td>
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<tr>
<td>B (inches)</td>
<td>10.75</td>
<td>10.75</td>
<td>11.75</td>
<td>13.75</td>
<td>14.75</td>
<td>14.75</td>
<td>16.75</td>
<td>16.75</td>
<td>18.75</td>
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<td>22.38</td>
<td>26.38</td>
<td>29.38</td>
<td>32.38</td>
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<tr>
<td>C* (inches)</td>
<td>5 ½</td>
<td>7 ½</td>
<td>7 ¼</td>
<td>10 ¾</td>
<td>10 ¾</td>
<td>10 ¾</td>
<td>10 ¾</td>
<td>10 ¾</td>
<td>12 ½</td>
<td>12 ½</td>
<td>12 ½</td>
<td>12 ½</td>
<td>18 ½</td>
<td>20 ½</td>
</tr>
<tr>
<td>No. of Topplate Bolts</td>
<td>6</td>
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<td>8</td>
<td>8</td>
<td>12</td>
<td>12</td>
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<td>12</td>
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</tbody>
</table>

* Dimension C is O.D. of saddle.
** Per customer requirements

Larger flowmeters on special order.

To order:
Specify pipe I.D. and O.D.
The pipe O.D. determines the meter size.
The model number is established by taking the pipe O.D. to the next larger size.
For example, a 14” cast iron pipe with a 15.3” O.D. would be a 16” meter, or a model ‘MW616.’

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