H4000
Industrial bulk water meter

Sizes 1 1⁄2", 2", 3", 4", 6", 8", 10", 12"

Description

Operation

The H4000 is a horizontal Woltmann-type meter designed for installation where occasional low and moderate to high sustained flows are demanded. Accuracy is maintained in both forward and reverse flow directions and there are various register/pulser options to suit the application.

Compliance and standards

The H4000 complies with all performance requirements of ISO 4064 BS 5728 and EC Specifications Class B for forward flow.

Installation

The meter must be installed in a clean pipeline, free from any foreign materials. Install the meter with direction of flow as indicated by the arrow cast in the meter case. The meter may be installed in horizontal, inclined or vertical lines.

Application

The meter is for use only with POTABLE COLD WATER up to 120°F (50°C) and working pressure up to 230 psi (16 bar). The meter will perform with accuracy registration of 100% ±2% within normal flow. Both pressure loss and accuracy tests are made before shipment. No adjustments need to be made before installation.

Construction

The meter consists of a main case, measuring element, a case cover and a magnetically driven register/pulse assembly (pulse assembly sold as an option). The main case is epoxy coated cast iron with raised characters showing size and direction of flow.

The case has a throated inlet. The measuring element assembly consists of the rotor, straightening vanes, accuracy regulator, spindleless and gears. The measuring element is attached to the underside of the cover with three stainless steel screws and washers. The register/pulser assembly is secured to the cover with a lock wire and a lead seal.

Register type

Copper can enclosed direct read with inductive interface for use with PR7
The register includes easy to read roller bank, sweep hands for test volumes and a leak detector.

Connections
Connection  ANSI B16.1 class 125 raised face flange.
Bolt hole patterns are as follows:
- 1½” - 3” four bolt round raised face
- 4” - 8” eight bolt round raised face
- 10” - 12” twelve bolt round raised face

Dimensions and net weights

<table>
<thead>
<tr>
<th>Meter size (inches)</th>
<th>1½”</th>
<th>2”</th>
<th>3”</th>
<th>4”</th>
<th>6”</th>
<th>8”</th>
<th>10”</th>
<th>12”</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>3.06</td>
<td>3.06</td>
<td>3.69</td>
<td>4.19</td>
<td>5.31</td>
<td>6.47</td>
<td>7.79</td>
<td>8.85</td>
</tr>
<tr>
<td>E</td>
<td>5.9</td>
<td>6.88</td>
<td>7.81</td>
<td>9.06</td>
<td>12.12</td>
<td>12.99</td>
<td>13.7</td>
<td>13.7</td>
</tr>
<tr>
<td>Weight (lbs)</td>
<td>26.5</td>
<td>28.8</td>
<td>38.6</td>
<td>52</td>
<td>52</td>
<td>119</td>
<td>119</td>
<td>119</td>
</tr>
</tbody>
</table>

Materials

- Main case: Cast iron
- Top cover case: Cast iron
- Body & cover coating: Epoxy powder
- O-ring: Neoprene rubber
- Case nuts & bolts: Stainless steel
- Measuring element: Stainless steel
- Rotor: Polyphenylene oxide
- Rotor support assembly: Glass-loaded polypropylene
- Rotor thrust bearing: Glass-loaded noryl
- Spindles: Ceramic jewel
- Register: Tungsten carbide
- Register housing & lid: Glass lens sealed, copper can
- Polymer

Pulser
- PR7 module
- 10 year battery life
- IP68 rating
- 5-158°F operating temperature
- Output load 30 VDC @ 30 mA maximum
- 75Hz maximum
- CH1 pulse width min. 5ms, typical 8-12ms
- CH2 pulse width min 50ms
- CH1 is forward flow only
- CH2 is forward minus reverse
- For full explanations, see PR7 spec sheet

© 2014 by Elster. All rights reserved.
The company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained herein without notice. These products have been manufactured with current technology and in accordance with applicable AWWA Standards.

Lit Ref: 8514B4386–06–14