**OUTSTANDING FEATURES**

- Cost effective design eliminates flange on meter.
- Outstanding accuracy.
- Short Wafer Series meters are rated to meet the pressure rating of any flange as listed in ASME B 16.5.
- Provides wide flow ranges 10:1 turndown typical.
- Alignment rings provided.

**SPECIFICATIONS**

**Overrange:** 150% of maximum flow (intermittently).

**Linearity:** ±0.5% of reading (±0.25% typical) over tabulated linear flow range.

**Repeatability:** ±0.1% (±0.05% typical) over tabulated repeatable range.

**Available Turn Down Range:** 10:1 Typical.

**Available Temperature Range:** -450°F to +450°F Standard. High temperature option to +850°F. Refer to various flowmeter configurations for pressure ratings, outline dimensions and available sizes.

**Pressure Drop Characteristics:** 4 to 5 PSI at maximum linear flow rate at one CSTK.

**Materials:** 316/316L dual stainless steel standard. Consult with applications group for corrosive applications. Broad material list available.

### LIQUID SIZE SELECTOR CHART FOR HO WAFER SERIES TURBINE FLOWMETERS

<table>
<thead>
<tr>
<th>Flowmeter Size</th>
<th>End Fitting Size</th>
<th>Diameter (inches)</th>
<th>Linear Range (US GPM)</th>
<th>Linear Range (LPM)</th>
<th>Repeatable Range (US GPM)</th>
<th>Repeatable Range (LPM)</th>
<th>Linear Range (US GPM)</th>
<th>Linear Range (LPM)</th>
<th>Repeatable Range (US GPM)</th>
<th>Repeatable Range (LPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter (inches)</td>
<td>Diameter (inches)</td>
<td>Linear Range (US GPM)</td>
<td>Linear Range (LPM)</td>
<td>Repeatable Range (US GPM)</td>
<td>Repeatable Range (LPM)</td>
<td>Linear Range (US GPM)</td>
<td>Linear Range (LPM)</td>
<td>Repeatable Range (US GPM)</td>
<td>Repeatable Range (LPM)</td>
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<tr>
<td>5/8</td>
<td>2</td>
<td>1.75-16</td>
<td>6.6-60.6</td>
<td>.9-20</td>
<td>3.4-75.7</td>
<td>1.75-16</td>
<td>6.6-60.6</td>
<td>.2-20</td>
<td>.75-75.7</td>
<td></td>
</tr>
<tr>
<td>3/4</td>
<td>3/4</td>
<td>2.5-29</td>
<td>9.5-110</td>
<td>1.5-35</td>
<td>5.7-132.5</td>
<td>2.5-29</td>
<td>9.5-110</td>
<td>.35-35</td>
<td>.24-17</td>
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<tr>
<td>1</td>
<td>1</td>
<td>4-60</td>
<td>15-227</td>
<td>2-75</td>
<td>7.6-284</td>
<td>4-60</td>
<td>15-227</td>
<td>.75-75</td>
<td>.28-34</td>
<td></td>
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<tr>
<td>1-1/4</td>
<td>1-1/4</td>
<td>6-93</td>
<td>23-352</td>
<td>3-115</td>
<td>11.4-435</td>
<td>6-93</td>
<td>23-352</td>
<td>1.15-115</td>
<td>.45-45</td>
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<tr>
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<td>1-1/2</td>
<td>8-130</td>
<td>30.3-492</td>
<td>5-175</td>
<td>19-662</td>
<td>8-130</td>
<td>30.3-492</td>
<td>1.75-175</td>
<td>.75-75.7</td>
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<tr>
<td>2</td>
<td>2</td>
<td>15-225</td>
<td>56.8-852</td>
<td>11-275</td>
<td>42-1041</td>
<td>15-225</td>
<td>56.8-852</td>
<td>2.75-275</td>
<td>1.3-132.5</td>
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<tr>
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<td>2-1/2</td>
<td>25-400</td>
<td>95-1514</td>
<td>15-500</td>
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<td>25-400</td>
<td>95-1514</td>
<td>5-500</td>
<td>2.8-284</td>
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<tr>
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<td>40-650</td>
<td>151-2460</td>
<td>20-800</td>
<td>76-3028</td>
<td>40-650</td>
<td>151-2460</td>
<td>8-800</td>
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<tr>
<td>4</td>
<td>4</td>
<td>75-1250</td>
<td>284-4731</td>
<td>50-1500</td>
<td>189-5678</td>
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<td>530-7570</td>
<td>100-2500</td>
<td>379-9463</td>
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<td>200-2900</td>
<td>757-10977</td>
<td>125-3600</td>
<td>473-13626</td>
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<tr>
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<td>8</td>
<td>330-5200</td>
<td>1249-19682</td>
<td>270-6400</td>
<td>1022-24224</td>
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<td></td>
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</tr>
</tbody>
</table>

**NOTE:** Performance enhancement techniques are routinely applied to produce larger linear and usable flow ranges. Consult with the applications group at Hoffer with your requirements.

**Optional Mounting Hardware includes:**

- Stud Bolts per ASTM A 193 Grade B7
- Hex Nuts per ASTM A 194 Grade 2H with flat washers
# LIQUID WAFER TURBINE FLOWMETER
## MODEL NUMBERING SYSTEM

### Model HO

<table>
<thead>
<tr>
<th>A. End Fitting Size</th>
<th>B. Flowmeter Size</th>
<th>C. Minimum Operating Flow</th>
<th>D. Maximum Operating Flow</th>
<th>E. Bearing Type</th>
<th>F. Pickup Coils</th>
<th>G. Coil Spacing, Mechanical Degrees Apart</th>
<th>H. Riser and Explosion-Proof Coil Enclosures</th>
<th>I. Pressure Rating of Housing</th>
<th>J. Special Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
<td>X</td>
<td>(B)</td>
<td>(C)</td>
<td>(D)</td>
<td>(E)</td>
<td>(F / G / H)</td>
<td>(I)</td>
<td>(J)</td>
<td></td>
</tr>
</tbody>
</table>

#### A. End Fitting Size
- **(A)**

#### B. Flowmeter Size
- **(B)**

#### C. Minimum Operating Flow
- **(C)**

#### D. Maximum Operating Flow
- **(D)**

#### E. Bearing Type
- **(BP)** Self-Lubricating, Ceramic Hybrid Ball Bearings. Sizes 5/8" through 1"
- **(CB)** Self-Lubricating, Ceramic Hybrid Ball Bearing. Sizes 1¼" and up
- **(T)** Tungsten Carbide Sleeve Bearing
- **(C)** Hard Carbon Composite Sleeve Bearing

#### F. Pickup Coils
- **(1M)** One Magnetic Coil
- **(2M)** Two Magnetic Coils
- **(1MC3PA)** One RF Coil (Not recommended in 4" and larger)
- **(2MC3PA)** Two RF Coils
- **(1MC2PAHT)** One High Temp 6" Pigtail RF coil
- **(2MC2PAHT)** Two High Temp 6" Pigtail RF coils
- **(1HTM)** High Temperature Magnetic Coil
- **(2HTM)** Two High Temperature Magnetic Coils
- **(1ISM)** Intrinsically Safe Mag Coil
- **(2ISM)** Two Intrinsically Safe Mag Coils
- **(1ISM-ATEX)** One ISM ATEX coil
- **(2ISM-ATEX)** Two ISM ATEX coils
- **(RP_** Redi-Pulse Coil (See Redi-Pulse Technical Data Sheet RP-XXX)
- **(_____** Intrinsically Safe Redi-Pulse Coil (See I.S. Redi-Pulse Technical Data Sheet IRP-XXX)
- **(P)** Pigtail or Flying Leads, Add-P and the Length of leads after any coil except the high temperature coils
- **(-ATEX)** Add after coil part no. when using ATEX enclosure mounted on meter

#### G. Coil Spacing, Mechanical Degrees Apart
- **( )** Factory Assigned. Spacing required when meter has two pickup coils.

#### H. Riser and Explosion-Proof Coil Enclosures
- **(X)** 1" MNPT riser, welded to body. Required for all types of enclosures.
- **(X-ATEX)** 3/4" MNPT riser, welded to the body.
- **(XE2)** 1" MNPT riser with E2 enclosure. (See Chart)*
- **(X-ATEX)E2** 3/4" MNPT riser with E2 enclosure. (See Chart)*
- **(X8S-ATEX)** 8" Long S/S 3/4" MNPT riser. (For fluid temperatures below -40°F (-40°C) or above +140°F +60°C)
- **(X8S)** 8" Long S/S 1" MNPT riser. (For fluid temperatures below -40°F (-40°C) or above +140°F +60°C)

#### I. Pressure Rating of Housing
- **(_____)** Enter Class of Customer’s Existing Mating Flange. (Example: 150)

#### J. Special Features
- **(SW)** Short Wafer
- **(CE)** CE Mark - Required for Europe
- **(PED-CE)** PED Mark- Required for Europe
- **(SEP-CE)** Sound Engineering Practice
- **(SP)** Any special features that are not covered in the model number, use –SP and a written description
- **(EXP)** CSA Explosion-Proof Certification (See Chart)**
- **(X)** No Special Features

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**E2 EXPLOSION-PROOF/FLAME-PROOF ENCLOSURE WITH 3/4" FNPT MOUNT AND 3/4" CABLE ENTRY RATINGS:**

- **FM:** CLASS I, DIV. 1, GR. ABCD, CLASS II, DIV. 1 & 2, GR. ABCD, CLASS III, TYPE 4X
- **CSA:** CLASS I, DIV. 1, GR. ABCD, CLASS II, DIV. 1, GR. ABCD, CLASS III, TYPE 4X
- **ATEX:** EX D IIC, IP66/68
- **IEC:** EX D IIC IP68

**CLASS I, DIV. 1, GR. ABCD; CLASS I, DIV. 2, GR. ABCD; CLASS II, DIV. 1, GROUPS EFG**
- **CANADA:** CLASS I, ZONE 1 & 2, Ex d II C
- **USA:** CLASS I, ZONE 1 & 2, AEx d II C

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**The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.**