## Model Number

<table>
<thead>
<tr>
<th>Flowmeter Size (Inches)</th>
<th>Linear Flow Range (US GPM)</th>
<th>Magnetic Pickup Coils and Enclosure Option</th>
<th>MNPT End Fitting</th>
<th>IND Series</th>
<th>Approvals (Use “X” for no special features)</th>
<th>Nominal Pulses/Gallon</th>
<th>Nominal Max. Frequency (Hz)</th>
<th>Length (inches)</th>
<th>Working Pressure PSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model HO 1/2 X 1/4</td>
<td>-0.35 to -3.5</td>
<td>-C aligned -BP</td>
<td>-1M</td>
<td>-NPT</td>
<td>PED-CE CE EXP</td>
<td>15000</td>
<td>1000</td>
<td>2.45</td>
<td>6000</td>
</tr>
<tr>
<td>Model HO 1/2 X 3/8</td>
<td>-0.75 to -7.5</td>
<td>-C aligned -BP</td>
<td>-1M</td>
<td>-NPT</td>
<td>PED-CE CE EXP</td>
<td>9500</td>
<td>1200</td>
<td>2.45</td>
<td>6000</td>
</tr>
<tr>
<td>Model HO 1/2 X 1/2A</td>
<td>-1.25 to -9.5</td>
<td>-C aligned -BP</td>
<td>-1M</td>
<td>-NPT</td>
<td>PED-CE CE EXP</td>
<td>6600</td>
<td>1040</td>
<td>2.45</td>
<td>6000</td>
</tr>
<tr>
<td>Model HO 3/4 X 5/8A</td>
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<td>-C aligned -BP</td>
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<td>-NPT</td>
<td>PED-CE CE EXP</td>
<td>5200</td>
<td>1500</td>
<td>2.75</td>
<td>6000</td>
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<tr>
<td>Model HO 3/4 X 3/4</td>
<td>-2.25 to -29</td>
<td>-C aligned -BP</td>
<td>-1M</td>
<td>-NPT</td>
<td>PED-CE CE EXP</td>
<td>2200</td>
<td>1000</td>
<td>3.25</td>
<td>4400</td>
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<tr>
<td>Model HO 1 X 1</td>
<td>-4 to -60</td>
<td>-C aligned -BP</td>
<td>-1M</td>
<td>-NPT</td>
<td>PED-CE CE EXP</td>
<td>816</td>
<td>816</td>
<td>3.50</td>
<td>3850</td>
</tr>
<tr>
<td>Model HO 1¼ X 1¼</td>
<td>-6 to -93</td>
<td>-C aligned -CB</td>
<td>-1M</td>
<td>-NPT</td>
<td>PED-CE CE EXP</td>
<td>450</td>
<td>670</td>
<td>3.88</td>
<td>3850</td>
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<tr>
<td>Model HO 1½ X 1½</td>
<td>-8 to -130</td>
<td>-C aligned -CB</td>
<td>-1M</td>
<td>-NPT</td>
<td>PED-CE CE EXP</td>
<td>215</td>
<td>500</td>
<td>4.38</td>
<td>3500</td>
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<td>Model HO 2 X 2</td>
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<td>-C aligned -CB</td>
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<td>-NPT</td>
<td>PED-CE CE EXP</td>
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<tr>
<td>Model HO 2½ X 2½</td>
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<td>1100</td>
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<td>Model HO 3 X 3</td>
<td>-40 to -650</td>
<td>-C aligned -CB</td>
<td>-1M</td>
<td>-NPT</td>
<td>PED-CE CE EXP</td>
<td>45</td>
<td>500</td>
<td>7.50</td>
<td>1500</td>
</tr>
</tbody>
</table>

### FLOW RANGE (Note 1)
Ranges shown are standard ranges; other ranges are available. The linear flow ranges on 1/4” through 5/8” may be derated depending on bearing selection. Contact factory for additional information.

### BEARING TYPE (Note 2)
- **C** = Hard Carbon Composite sleeve bearing (standard)
- **BP** = Shielded, self-lubricating hybrid ceramic ball bearing (optional 1" & below)
- **CB** = Shielded, self-lubricating hybrid ceramic ball bearing (optional 11/4" to 3")

### APPROVALS
- **PED-CE** = PED-CE mark required for Europe requires the operating temperature and pressure be given and will be marked on the housing.
- **SEP-CE** = Standard engineering practice
- **CE** = CE mark required for Europe
- **EXP** = CSA Explosion-proof Certification! See chart
- **X** = No special features

### PICKUP COILS AND ENCLOSURE OPTION (Note 3)
- **1M** = Standard magnetic pickup coil
- **1MX** = Magnetic pickup coil with 1” riser on meter body for mounting of enclosures and electronics

### *E2 EXPLOSION-PROOF/FLAME-PROOF ENCLOSURE - 3/4" NPT MOUNT AND 3/4" CABLE ENTRY RATING:
| HM | CLASS I, DIV. 1, GR. A, B, C, D, E, F, G, H, I, Z | CANADA: CLASS I, ZONE 1 & 2, EX d IIC |
| BM | CLASS I, DIV. 1, GR. A, B, C, D, E, F, G, H, I, Z | USA: CLASS I, ZONE 1 & 2, EX d IIC |

**E2** = 1” MNPT riser with E2 enclosure (See chart)**

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[Image]
**PERFORMANCE SPECIFICATIONS**

**Linearity:** ± 1.0% of reading or better.

**Repeatability:** ± 0.1% of reading or better.

**Temperature Range:** -20°F to +450°F (Standard).

**Signal Output:** 10 MV RMS or greater into a 10K ohm load at minimum flow rate.

*Based on K-Factor Calibration at 70°F.

**Materials of Construction:**

- Type 316/316L dual rated Stainless Steel (with exceptions noted below).
- Rotor: 17.4 PH Stainless Steel.
- Shielded, Self-lubricating Hybrid Ceramic Ball Bearings (Optional).

**End Fittings:** Male NPT

**COMPANY PROFILE**

HOFFER FLOW CONTROLS, INC. has been designing and manufacturing high quality turbine flowmeters since 1969. Our ★ STAR Series should be considered when cost is a primary concern. The ★ STAR Series is offered in eleven popular sizes that are readily available.

**Simplicity**

- The Hoffer Turbine Flowmeter construction is simple, allowing for rugged and dependable service at low cost.

**Timely Deliveries**

- Delivery for ★ STAR Series Industrial Turbine Flowmeters are typically around 15 days. Companion electronics are also available for use with this series.

**Accuracy**

- Outstanding accuracy at low cost, without compromise in design. Accuracy ± 1.0% of reading or better. Repeatability ± 0.1%.

**Reliability**

- Hoffer Flow Controls has been supplying turbine flowmeters to industry for over 45 years. Our customers are repeat customers. Today our reputation is synonymous with high-quality, reliable flow systems.

In addition to the Industrial ★ STAR Series, HOFFER offers a full line of precision turbines for liquid and gas, mini-flowmeters for low-flow liquid and gas applications, profile insertion flowmeters for liquids and gases, as well as a complete line of electronic support equipment, including flow computers and linearizers. Contact the Applications Group at HOFFER for assistance.

**NOTE:** Spare parts are available for the ★ STAR Series to facilitate field repairs. The factory does not provide repair service on this series since it is generally more economical to replace the flowmeter.

Some industrial process applications for the ★ STAR Series are listed below but are not limited to:

- Water Flood Secondary Recovery
- Fuel Metering Systems
- Chemicals
- Petroleum Products
- Crude Oil
- Gasoline
- Well Water
- Glycerin
- Ethylene Glycol
- Alcohol
- Benzene

The quality system covering the design, manufacture and testing of our products is certified to International Standard ISO 9001.