The Hoffer CT Series turbine flowmeters provide extremely accurate custody transfer grade flow measurement in a rim rotor design. These flowmeters are typically used in liquid petroleum products. This series is recommended for flow applications where high resolution (pulse count) is critical in order to achieve custody transfer grade accuracy.

Note: For bladed design custody transfer flowmeters we offer the API Series.

### OUTSTANDING FEATURES

- **Widest flow turndown ranges** available in a custody transfer grade turbine flowmeter.
- Designed to be compliant with API Standard Chapter 5.3.
- **Rim rotor design** offered in sizes 4”-12” provides for high pulse resolution.
- Bearing types include self-lubricating, ceramic ball bearings and tungsten carbide sleeve.
- Optionally available with **multiple pickup coils** for redundancy or bi-directional flow measurement.
- Rotor assembly is **hydraulically balanced** and “floats” on fluid cushion to provide extended bearing life.

### SIZE SELECTOR CHART FOR "PREMIUM RIMMED" CT SERIES (±.15% LINEARITY)

<table>
<thead>
<tr>
<th>Meter Size</th>
<th>MINIMUM LINEAR</th>
<th>MAXIMUM LINEAR</th>
<th>MAXIMUM EXTENDED FLOW RANGE (±5%)</th>
<th>PULSES/GALLON (±5%)</th>
<th>PULSES/BARREL (±5%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4”</td>
<td>120 GPM</td>
<td>172 BPH</td>
<td>4128 BPD</td>
<td>1200 GPM</td>
<td>2142 BPH</td>
</tr>
<tr>
<td></td>
<td>27 M3/HR</td>
<td>41,280 BPD</td>
<td>51,408 M3/HR</td>
<td>341 GPM</td>
<td>42.3</td>
</tr>
<tr>
<td>6”</td>
<td>280 GPM</td>
<td>400 BPH</td>
<td>9600 BPD</td>
<td>2800 GPM</td>
<td>5142 BPH</td>
</tr>
<tr>
<td></td>
<td>63.6 M3/HR</td>
<td>96,000 BPD</td>
<td>123,008 M3/HR</td>
<td>360 GPM</td>
<td>818</td>
</tr>
<tr>
<td>8”</td>
<td>520 GPM</td>
<td>743 BPH</td>
<td>18,832 BPD</td>
<td>5200 GPM</td>
<td>9142 BPH</td>
</tr>
<tr>
<td></td>
<td>118.2 M3/HR</td>
<td>178,320 BPD</td>
<td>219,008 M3/HR</td>
<td>6400 GPM</td>
<td>1454</td>
</tr>
<tr>
<td>10”</td>
<td>800 GPM</td>
<td>1143 BPH</td>
<td>27,432 BPD</td>
<td>8000 GPM</td>
<td>14,000</td>
</tr>
<tr>
<td></td>
<td>181.8 M3/HR</td>
<td>336,000 BPD</td>
<td>336,000 M3/HR</td>
<td>9800 GPM</td>
<td>2226</td>
</tr>
<tr>
<td>12”</td>
<td>1200 GPM</td>
<td>1714 BPH</td>
<td>41,136 BPD</td>
<td>12,000 GPM</td>
<td>21,428</td>
</tr>
<tr>
<td></td>
<td>272.4 M3/HR</td>
<td>411,360 BPD</td>
<td>514,272 M3/HR</td>
<td>15,000 GPM</td>
<td>3407</td>
</tr>
</tbody>
</table>

Flow ranges and performance specifications are based on a specific gravity of 1.0 and a viscosity of 1.0 centistoke.

For performance at other specific gravities and viscosities, consult factory.

### RIMMED ROTORS 4”-12”

**Materials of Construction:** 316 stainless steel (with exceptions noted below).

- **Rim Rotor:** Rim – 316 stainless steel.
  - **Rim Buttons:** 430 or 17.4 stainless steel.
- Flanges: 316 stainless steel standard. Optional carbon steel or 304 stainless steel flanges per ASME/ANSI B16.5 are available. Available in ANSI, DIN and ring joint type flanges.
- Bearings: Both tungsten carbide sleeve and ceramic ball bearings types are available.
- Optional NACE compliance per MR0175 available.

### GENERAL PERFORMANCE SPECIFICATIONS

- **Linearity:** ±0.15% linearity standard. Improved linearity over reduced flow turndown is optionally available, please consult factory.
- **Repeatability:** ±0.02% at any point throughout the extended flow range.
- **Temperature Range:** -450°F to +450°F, process fluid with standard magnetic pickup coil.
- **Pressure Drop:** 5 PSI at maximum linear flow rate.
- **Output:** 10mV RMS or greater into a 10K ohm load at a minimum flow rate.

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MODEL NUMBER DESIGNATION

Model CT  
(A) X (B) - (C) - (D) - (E) - (F / G / H) - (I) - (J) - (K)

A. End Fitting Size (Same as process line)
B. Flowmeter Size (Same as process line)
C. Minimum Operating Flow (In GPM)
D. Maximum Operating Flow (In GPM)
E. Bearing Type
   (CB) Ceramic Hybrid Ball Bearings, Self-Lubricating.
   (T) Tungsten Carbide Steel.
F. Pickup Coils
   (1M) One Magnetic Coil.  
   (2M) Two Magnetic Coils.  
   (1HTM) One High Temperature Mag Coil. (+850°F/454°C)  
   (1ISM) One Intrinsically Safe Mag Coil.  
   (2ISM) Two Intrinsically Safe Mag Coils.  
   (1ISM-ATEX) One ISM ATEX Coil.  
   (2ISM-ATEX) Two ISM ATEX Coils.  
   _(RPM) Redi-Pulse Magnetic Coil (See Redi-Pulse Technical Data Sheet RP-XXX).  
   _(DMX) Intrinsically Safe Redi-Pulse Magnetic Coil (See I.S. Redi-Pulse Technical Data Sheet IRP-XXX).
G. Coil Spacing, Mechanical Degrees Apart (Factory assigned)
H. Riser and Explosion-Proof Coil Enclosures
   (X) 1" MNPT Riser, welded to body, required for all type of enclosures.  
   (X-ATEX) 3/4" Male NPT Coil Riser-ATEX Exd Compliant.  
   (XE2) 1" MNPT Riser with E2 enclosure. (See chart)*  
   (X-ATEX)E2 3/4" Female NPT Riser with E2 enclosure. (See chart)*  
   (X8S) 8" Long S/S 1" MNPT riser. (For fluid temperatures below -40°F (-40°C) or above +140°F (+60°C).  
   (X8S-ATEX) 8" Long S/S 3/4" MNPT riser. (For fluid temperatures below -40°F (-40°C) or above +140°F (+60°C).  
I. End Fitting Types
   (F____) Raised Face Flanges per ANSI (See chart)**  
   (DN_/PN_-CS/SS) DN=Metric Size, PN=Flange Pressure Rating (in DIN Std.) and Select Material.
J. Locating Pins
   (LP) Flanged flow straightener locating pin mating holes. Included standard.
K. Special
   (CE) CE Mark required for Europe.
   (PED-CE) PED-CE Mark required for Europe.
   (SEP-CE) Sound Engineering Practice.
   (SP) Any special features that are not covered in the model number, use a written description of the -SP.
   (EXP) CSA Explosion-Proof Certification (See chart)***
   (X) No Special Features

Note: Specify schedule of pipe in which flowmeter will be installed when ordering.