



TECHNICAL DATA SHEET

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 **hydrodynamically balanced** and "floats" on fluid cushion to provide extended bearing life.

Custody Transfer Series Rim Flowmeters

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.

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

| METER SIZE | NORMAL FLOW RANGE | | | | | | | | MAXIMUM EXTENDED FLOW RANGE | | | | PULSES/ GALLON (±5%) | PULSES/ BARREL (±5%) |
|------------|-------------------|------|--------|-------|----------------|--------|---------|-------|-----------------------------|--------|---------|-------|----------------------------|----------------------------|
| | MINIMUM LINEAR | | | | MAXIMUM LINEAR | | | | | | | | | |
| | GPM | BPH | BPD | M3/HR | GPM | BPH | BPD | M3/HR | GPM | BPH | BPD | M3/HR | | |
| 4" | 120 | 172 | 4128 | 27 | 1200 | 1720 | 41,280 | 270 | 1500 | 2142 | 51,408 | 341 | 42.3 | 1776 |
| 6" | 280 | 400 | 9600 | 63.6 | 2800 | 4000 | 96,000 | 636 | 3600 | 5142 | 123,008 | 818 | 26 | 1092 |
| 8" | 520 | 743 | 17,832 | 118.2 | 5200 | 7430 | 178,320 | 1182 | 6400 | 9142 | 219,008 | 1454 | 13.6 | 571 |
| 10" | 800 | 1143 | 27,432 | 181.8 | 8000 | 11,430 | 274,320 | 1818 | 9800 | 14,000 | 336,000 | 2226 | 8.68 | 364 |
| 12" | 1200 | 1714 | 41,136 | 272.4 | 12,000 | 17,140 | 411,360 | 2724 | 15,000 | 21,428 | 514,272 | 3407 | 5.66 | 237 |

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.

*A complete line of flowmeter signal conditioners (preamplifiers) and flow computers are available.
 Consult with the applications group at Hoffer for additional information.*

