

PRESSURE
TEMPERATURE
LEVEL
INSTRUMENTATION
FLOW
ANALYTICAL

## "HMP" Turbine Flowmeter

- Durable stainless steel shaft and Rulon® sleeve bearing eliminates failure due to blow downs
- Two piece design allows for easy access to internals for inspection
- Designed to ASME BPE-2004 standards
- All 316L stainless steel construction

The "HMP" series turbine flowmeter is suited for applications that require an economical and accurate measurement solution. The "HMP" is designed using the proven method of monitoring the rotation of a turbine rotor in a flowing product stream. This is not a modification of an industrial design but a flowmeter designed specifically for sanitary applications. Understanding the requirements of these applications has produced a flowmeter with superior durability. The all 316L SS

construction (including rotor), along with a unique 2-piece housing design eliminates the need for internal locking rings to retain internal components. This makes for a truly cleanable design that also provides exceptional performance. When used with the HTS1000 probe, the non-magnetic sensing of the rotor eliminates drag - present in other magnetically sensed turbines. This lack of drag provides better accuracy and extended operational life. These features, coupled with a durable Rulon® bearing

and stainless steel shaft, give the "HMP" the ability to handle difficult process requirements such as steam blowdowns and the need to autoclave without difficulty.

Complete specifications and ordering information are available on the reverse side. For more information please visit our website at www.andinst.com or contact your local authorized Anderson distributor.



# **HMP Specifications**

#### **Environment**

0 - 149°C (32 - 300°F) Fluid Temperature Range: 10.3 Bar (150 psi) max Maximum Fluid Pressure:

Maximum Fluid Viscosity: 100 cps max

HTS1000: -40 - 79°C (-40 - 175°F) Ambient Temperature Range:

HT75000: -54 - 107°C (-65 - 225°F)

Accuracy: ± .5% of rate over specified range

Repeatability: ± .1% of rate

Flow Ranges: HMP-075: 18.5-65 LPM(5-17 GPM)

HMP-100: 26.5-265 LPM(7-70 GPM) HMP-150: 49-492 LPM(13-130 GPM) HMP-200: 94-946 LPM(25-250 GPM)

Cleaning Methods: CIP/SIP/Autoclave @ 149°C (300°F)

#### **Mechanical Specifications**

Sanitary Connections: 1", 1 1/2" and 2" Tri-Clamp® Gasket Material: PTFE Polytetrafluoroethylene Bearing Material: Rulon® 123 (reinforced Polytetrafluoroethylene)

316L stainless steel, Rulon® **Product Contact Materials:** 123, Teflon®, and GSP1325-2

(Epoxy Resin)

Surface finish: 20 Ra max, stainless steel surfaces electropolished Hardware: Heavy duty Tri-Clamp® with live loaded clamp nut

**DIMENSIONS:** 

MODEL	DIM "A"	DIM "B"	FITTING	
HMP075 HMP100	3.25" (82.6mm)	5.88" (149.4mm)	1" T.C.	
HMP150	3.63" (92.2mm)	6.13" (155.7mm)	1 1/2" T.C.	
HMP200	3.88" (98.6mm)	8.63" (219.2mm)	2" T.C.	

#### **Electrical Specifications**

#### **Power / Signal**

HTS1000 Supply Voltage: 8-24 VDC, 0.8 Watts maximum

Signal Output: 7.3-23.3 VDC, Unscaled, Pulsed Output

**Output Units:** pulses per volume

HT75000

Supply Voltage: None

Signal Output: 0.18-2.6 V.P.P, Unscaled, Frequency

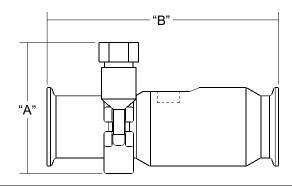
**Output Units:** pulses per volume

#### **Approvals**

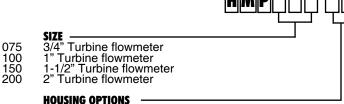
**USP Class VI** 

Designed to meet ASME BPE-2004 standards

3-A compliant, Third party verified in accordance with standard 28-03 Material, Conformance and Calibration: Certificates provided with product, also available on-line using serial number

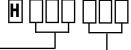


#### **HOW TO ORDER**



Standard housing 3/4" NPT threaded adapter. 00 PT for explosion proof applications

### PROBE/DISPLAY OPTION



**OUTPUT OPTIONS** 3-wire signal probe non magnetic sensing

2-wire signal probe

Integral battery operated totalizer Remote battery operated totalizer (with 15' extension cable)

Integral explosion proof battery operated rate/totalizer Integral explosion proof battery operated rate/totalizer RTX RIX with 4-20mA output

FIX Integral explosion proof frequency to analog converter

000 No cable(for R and F options above)

025 25' cable 050 075 100 50' cable 75' cable 100' cable

#### REPLACEMENT PARTS

<u>Part Number</u>	<u>Description</u>	
HTS1000	3-wire pick-up pr	obe
HT75000	2-wire pick-up pr	obe
HMP600-075	3/4" Rebuild kit	316SS rotor
HMP600-100	1" Rebuild kit	316SS rotor
HMP600-150	1.5" Rebuild kit	316SS rotor
HMP600-200	2" Rebuild kit	316SS rotor

#### **SPARE CABLES**

Part Number	<u>Description</u>
Cable 3W-25	25' cable with connector
Cable 3W-50	50' cable with connector
Cable 3W-75	75' cable with connector
Cable 3W-100	100' cable with connector