

"HMP" Turbine Flowmeter

Introduction

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.anderson-negele.com or contact your local authorized Anderson-Negele distributor.

Features

- 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



Specifications

ENVIRONMENT

Fluid Temperature Range: 0 - 149°C (32 - 300°F)
 Maximum Fluid Pressure: 10.3 Bar (150 psi) max
 Maximum Fluid Viscosity: 100 cps max
 Ambient Temperature Range: HTS1000: -40 - 79°C (-40 - 175°F)
 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)
 Product Contact Materials: 316L stainless steel, Rulon® 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:

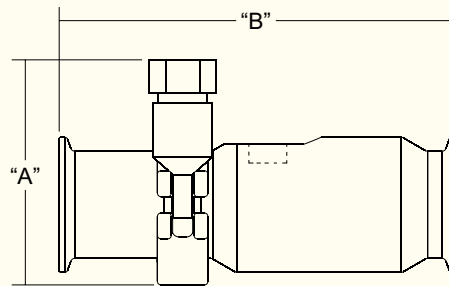
MODEL	DIM "A"	DIM "B"	FITTING
HMP075 HMP100	3.25" (82.6mm)	5.88" (149.4mm)	1" T.C.
HMP150	3.63" (92.2mm)	6.13" (155.7mm)	1 1/2" T.C.
HMP200	3.88" (98.6mm)	8.63" (219.2mm)	2" T.C.

ELECTRICAL SPECIFICATIONS

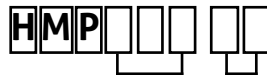
Power / Signal
 HTS1000
 Supply Voltage: 8-24 VDC, 0.8 Watts maximum
 Signal Output: 7.3-23.3 VDC, Unscaled, Pulsed Output
 Output Units: pulses per volume
 HT75000
 Supply Voltage: None
 Signal Output: 0.18-2.6 V.P.P, Unscaled, Frequency Output
 Output Units: pulses per volume

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



Order Information



SIZE
 075 3/4" Turbine flowmeter
 100 1" Turbine flowmeter
 150 1-1/2" Turbine flowmeter
 200 2" Turbine flowmeter

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

PROBE/DISPLAY OPTION



OUTPUT OPTIONS
 TS1 3-wire signal probe non magnetic sensing
 T75 2-wire signal probe
 RTI Integral battery operated totalizer
 RTR Remote battery operated totalizer (with 15' extension cable)
 RTX Integral explosion proof battery operated rate/totalizer
 RIX Integral explosion proof battery operated rate/totalizer with 4-20mA output
 FIX Integral explosion proof frequency to analog converter

CABLE
 000 No cable(for R and F options above)
 025 25' cable
 050 50' cable
 075 75' cable
 100 100' cable

REPLACEMENT PARTS

Part Number	Description	
HTS1000	3-wire pick-up probe	
HT75000	2-wire pick-up probe	
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	Description
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