



## MODEL# 600-9SAN3A Sanitary Thermal Mass Flow Meters

### FEATURES FOR YOUR 3A SANITARY APPLICATIONS:

#### KEY FEATURES:

- ◇ Measurement of both Gases & Liquids
- ◇ Available as Flow Switch
- ◇ 316L Electro-Polished Stainless Steel Material
- ◇ 15 RA or Better Internal Finish
- ◇ Robust Welded Construction
- ◇ "CIP / SIP" Clean in place design
- ◇ 100:1 Turndown Available
- ◇ Unobstructed Flow Path
- ◇ No Moving Parts
- ◇ Negligible Pressure Drop
- ◇ Tri-Clamp and Tube End Connections
- ◇ Available in sizes from ¼" OD to 2" OD Tube
- ◇ Designed & Manufactured in the USA



#### Why Insist on 3A Approved Instrument:

- ◇ Independently inspected to meet Flow Meter Standard 28-05 from 3-A Organization
- ◇ Materials of Construction meet Good Manufacturing Practice (GMP)
- ◇ Designed for easy cleaning and inspection to protect from contamination
- ◇ Accepted by USDA & FDA
- ◇ 3-A symbol recognized around the world

**simplifying**

# MASS FLOW MEASUREMENT

## Thermal Instrument Mass Flow Meters

# 3-A Certified Sanitary Thermal Mass Flow Meter

## Performance:

Media: Liquid or Gas

Accuracy:  $\pm .50\%$  of Full Scale or 2% of Reading. Full Scale over calibrated range.

Repeatability:  $\pm 0.2\%$  of Rate

Response Time: 1 to 2 Seconds for Gases. < 500ms for Liquids.

Turndown: Up to 100:1

Fluid Temperature: Span  $\pm 50^\circ\text{F}$  from operating temperature

## Standard Installation:

10 pipe diameters before meter and 5 pipe diameters after meter without any piping changes (Note: We can calibrate to installation conditions if above cannot be met)

## Design:

Material: 316L Electro-Polished Stainless Steel

Internal Finish: 15 RA or Better

Sizing:  $\frac{3}{4}$ " to 2" OD

Flow Path: Unobstructed

Connections: Tri-Clamp, Tube Ends

Clean in Place (CIP/ SIP)

Non-Wetted Redundant Flow Sensors

## Electronic Transmitter Options:

Integral: Model # 9500P

Remote: Model #'s 9500P, 9200B, 926A

Outputs: Flow, Totalized Flow, and Temperature (Optional)

Output Signal: 4-20mADC, Pulse, Hart, RS485 Modbus

Display: 8 Digit Flow & Totalized Flow

Power: AC or DC

## Certification:

3A- SSI # 28-05

ANSI 3A/ 00-00-2014



Certified Design

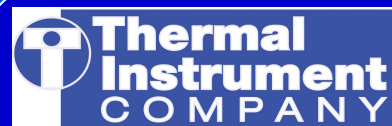
## Flow Range

\* Values below are based on GPM of Water and SCFM of Air

Size	Flow Range in GPM		Flow Range in SCFM	
	Min.	Max.	Min.	Max.
$\frac{3}{4}$ "	0.12	12	1.5	300
1"	0.25	25	2.5	400
1 $\frac{1}{2}$ "	0.6	60	5	700
2"	1.0	100	7	1000

Thermal Instrument Mass Flow Meters have been used across many industries in a variety of liquid and gas applications for more than 50 years. Back in the 1980's, we introduced our unobstructed in-line model for sanitary applications. With the 3-A Certification you can have the confidence that our flow meters and switches are accepted by the USDA, FDA, and other regulatory agencies for your food and beverage processes. 3-A has set the standards for fabrication and design of sanitary equipment to help protect the public health. Thermal Instrument provides a variety of sizing and process connections to aid in measuring and monitoring your critical food and beverage processes.

**Contact Thermal Instrument or one of our sales partners to find out more information.**



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