


Flow Measurement



Flow Measurement
Model 300.4 & 300.3


*Engineering
GREAT Solutions*

Flow Measurement

Model 300.4

Model 300.4 Test Kit is a portable unit for field monitoring and adjusting of AccuSetter (FlowSet) valves, Pitot Tubes and Venturis. The kit contains a $\pm 1.75\%$ F.S. accurate, 6" diameter face, 370° arc. beryllium diaphragm style gauge with three-valve manifold for over-range protection. Unit is housed in a vinyl case and comes equipped with ten foot hoses and can read either temperature/pressure ports or pressure only access valves. Use Flowcharts F234, or F193 in conjunction with label located on valve.



Key features

- > **Large Face**
Easy reading
- > **3-Valve Manifold**
Protects meter during connection
- > **1.75% FS Accuracy**

Technical description

Application:
Reading Venturis

Functions:
Pressure Reading

Case Dimensions:
14"L x 12 1/2"W x 6"D

Weight:
11 1/4 lbs.

Description:
6" Diameter Face
10' Hose length
P/T and Schrader Adapters
Dual Scales Feet and Inches W.C.
 $\pm 1 \frac{3}{4}\%$ Special Calibration
Beryllium Diaphragm

Pressure class:
500 psi working pressure

Maximum temperature:
200°

Accuracy:
 $\pm 1 \frac{3}{4}\%$ special calibration

Material:
Body: Brass

Options

Dial Range (Specify):

- 0 - 100" / 0 - 8.33' - Std. FlowSet
- 0 - 300" / 0 - 25' - Std. FlowSet
- 0 - 500" / 0 - 40' - Std. FlowSet

Model 300.3

Model 300.3 Test Kit is a differential pressure meter designed for permanent installation and consists of a 4 1/2" diaphragm type meter ($\pm 2\%$ F.S.). Available to read directly in GPM by special order only. Uses customer supplied piping, valves, etc. for field attachment to the flow element. The flow element must be specified at the time of order.



Key features

> **Direct GPM Reading**
Ease of use

> **4 1/2" Face**
Good resolution

Technical description

Application:

Dedicated Meter for Flow Reading

Functions:

Flow Measurement

Weight:

4 1/2 lbs.

Description:

4.5" or 6" Diameter Face
No Hoses (for direct mounting)
 $\pm 2\%$ Special Calibration
Buna-N Diaphragm

Pressure class:

500 psi working pressure

Maximum temperature:

210°

Accuracy:

$\pm 2\%$ special calibration

Material:

Body: Brass

Options

Model 300.4

Dial Range (Specify):

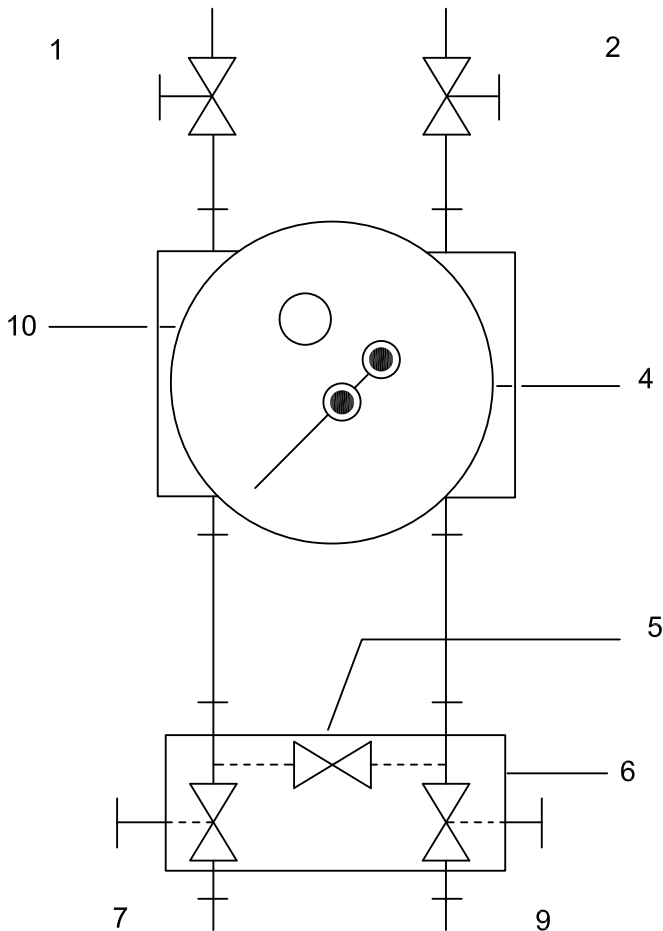
- 0 - 100" / 0 - 8.33' - Std. FlowSet
- 0 - 300" / 0 - 25' - Std. FlowSet
- 0 - 500" / 0 - 40' - Std. FlowSet

Model 300.3

Must Specify

(Device to be read and GPM)

Installation



1. Hang the meter by its support cable so that the dial face is level.
2. Close valves (1) & (2). Open valve (5). Close valves (6) & (7).
3. Close valves on Red & Yellow hoses. Connect high pressure fitting (9) to upstream orifice tap (Red hose) and connect low pressure fitting (8) to down stream orifice tap (Yellow hose) using rubber hoses provided. The hose valves should be located close to the venturi tap.
4. Open the hose valves and any valves on the venturi impulse lines.
5. Open valves (6) & (7) and alternately crack valves (1) & (2) until all air has been expelled from the instrument & hoses. Close valves (1) & (2).
6. Open valves (6) & (7) , slowly close by-pass valve (5) make sure the meter is not over-ranged. Read differential pressure.
7. When through with test, open valve (5), and close hose valves. Remove hose from venturi. **DO NOT REMOVE HOSES FROM METER IF ANOTHER VENTURI IS TO BE MEASURED.**
8. The filled and purged meter & hoses can be used for another test without purging.

Installation

Normal operation requires no maintenance. In cases where dirt or scale builds up, flush the meter with clean water or a compatible solvent.

CAUTION!

Do not leave liquid in the meter below freezing temperatures.
 Care must be taken not to overpressure the meter.
 Secure and support the hoses to prevent sagging and/or vibration.

