Manual Balancing Valves
2 1/2”-14” Flanged steel venturi

Engineering GREAT Solutions
This AccuSetter is designed to connect directly to a threaded ATC valve. A dielectric union provides cathodic protection between the brass ATC and steel venturi. It has a built-in five-pipe diameter extended inlet section. The AccuSetter uses a low-loss venturi to obtain a measurement accuracy of 3% F.S. The butterfly has a 2” extended neck above the flange for insulation. The valve handle has an infinite-position memory stop. The entire assembly has a five-year warranty. The total pressure drop added to the pump head seldom exceeds one foot. The exact drop can be calculated using the formula on the reverse side. Flow measurement can be obtained with a differential pressure meter reading across the venturi taps. Use the flow chart on the reverse side. The design flow can be obtained by adjusting the valve handle until the desired GPM is reached. The set handle position is maintained by using the memory stop. Use flow table on page 3.

Key features

> **Low Loss Venturi**
  Measure with 3% accuracy

> **Infinite Position**
  Fine adjustment

> **Built-in Straight Run**

> **Memory Stop**

> **Dielectric Union**
  Connect steel pipe to copper based control valve

Technical description

**Application:**
Hydronic Balancing

**Functions:**
Balancing, measurement, shut-off

**Dimensions:**
2 1/2”- 3”, 4”

**Pressure class:**
240 psi at 250° F

**Venturi Material:**
Body: Steel ASTM - A120
Instrument Valves: Ext. Pressure/ Temperature Ports
Design: Low loss, piezo-ring throat

**Butterfly Valve Material:**
Body: Cast iron, lug-type body
ANSI Class 125/150
Seat & Gasket: EPDM
Stem: 410 Stainless Steel
Bearings: Nylon
Disc: Bronze
Model Information

Model ET
Model ET AccuSetter includes an extended inlet with reduced dielectric union, 150# outlet flange with a lug butterfly valve attached to the downstream side. Extended Pressure/Temperature Ports are standard.

Field installation requires one 150# mating flange. Cap screws are included to mate both the butterfly and the customer-supplied flange.

Permanent Pressure Loss Example for ET

Calculate permanent pressure loss for an ET300 at 120 GPM.

\[
\text{Permanent Loss (psi)} = 0.10 \left( \Delta P \right) + \left( \frac{\text{GPM}}{C_v} \right)^2
\]

Diff. Pressure ($\Delta P$) = 209” W.C. or 7.55 psi (from table)

\[
\text{Permanent Loss (psi)} = 0.10 \times 7.55 + \left( \frac{120}{262} \right)^2 = 0.75 + 0.21 = 0.96 \text{ psi or 2.22 feet}
\]
**Articles**

**Dimensions**

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
<th>Connections</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Weight</th>
<th>Cv</th>
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<tbody>
<tr>
<td>ET0250-100</td>
<td>2 1/2&quot;</td>
<td>1&quot; Inlet &amp; 2 1/2&quot; Outlet</td>
<td>25.3</td>
<td>7.0</td>
<td>7.2</td>
<td>9.0</td>
<td>29.1</td>
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<td>1 1/4&quot; Inlet &amp; 2 1/2&quot; Outlet</td>
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<td>1 1/4&quot; Inlet &amp; 3&quot; Outlet</td>
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<td>7.5</td>
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**Notes**

All weights and dimensions given are in pounds and inches and are subject to change. Venturi products made from fabricated materials may vary ±1/16 inch per component.

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**Model Order Designation**

Model Size

4" ET with 2" inlet Shown

Model Size

4" ET with 2" inlet Shown

Option

Metal ID Tag

Shown

**Options Available**

**AV** Manual Air Vent

**C4** 1/4" Accessory Port

**PI** Plastic ID Tag

**C2** 1/2" Accessory Port

**HN** Hose End Drain Valve

**SE** Stem Extender

**C3** 3/4" Accessory Port

**MI** Metal ID Tag

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