**Features**

- Low Droop under flow conditions allows improved control of downstream pressure.
- Immunity to Supply Pressure Change permits use of normal plant air.
- Minimal Air Use in dead end service (.05 SCFM) reduces air consumption.
- High Forward and Exhaust Capacity permits increased process speed.
- Transducer can be configured to deliver an output which is directly or inversely proportional to the input.
- Split Range Operation permits two or more functions to be controlled from a common signal source (except 1-5 VDC unit).
- Built in Supply Pressure Regulator eliminates need for a separate regulator.
- Wall or Panel Mounting allows convenient installation.

**Operating Principles**

The Model T5700 is an electro-pneumatic device that converts a current signal to a linear pneumatic output. This device uses a force balance system in which a built-in supply regulator also functions as a pneumatic amplifier. Together the flapper and the nozzle work to control the pressure in the intermediate housing. This pressure acts on a diaphragm assembly which in turns controls the output pressure.
Technical Information

Mounting Kits

![Mounting Kits Diagram]

1-1/2" Pipe Mounting Configuration shown with Model T5700

Mounting Kits: 15396

Model T5700 Transducer Kits & Accessories

Mounting Bracket Kits ..........15396 (included with unit)

Installation

For installation instructions, refer to the Fairchild Model T5700 Electro-Pneumatic I/P, E/P Transducer Installation, Operation and Maintenance Instructions, IS-500T5700.

Catalog Information

Catalog Number T5700-

Input

<table>
<thead>
<tr>
<th>Input Range</th>
<th>OHMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-20 mA or 10-50 mA</td>
<td>62</td>
</tr>
<tr>
<td>1-5 VDC or 1-9 VDC</td>
<td>510</td>
</tr>
</tbody>
</table>

Output

<table>
<thead>
<tr>
<th>Output Range</th>
<th>[0.2-1.0 BAR]</th>
<th>[20-100 kPa]</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-15 psig</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>(20-100 kPa)</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Options

<table>
<thead>
<tr>
<th>BSPT Thread</th>
<th>[U]</th>
</tr>
</thead>
</table>

Specifications

Output Range
3-15 psig, \[0.2-1.0 BAR\], \(20-100\) kPa

Supply Pressure
18-150 psig, \[1.2-10.0 BAR\], \(120-1000\) kPa

Flow Capacity (SCFM)
- 17 (28.9 m³/HR) for \(20\) psig, \[1.4 BAR\], \(140\) kPa
- 47 (79.9 m³/HR) for \(120\) psig, \[8.0 BAR\], \(800\) kPa

Exhaust Capacity (SCFM)
over 9 (15.3 m³/HR) for downstream pressure 5 psig, \[.035 BAR\], \(.35\) kPa) above setpoint

Maximum Air Consumption
0.05 (.08 m³/HR) with 20-120 psig, \[1.5-8.0 BAR\], \(150-800\) kPa supply

Independent Linearity
+0.5% Full Scale

Supply Pressure Effect
+0.3% Full Scale for +50 psig, \[3.5 BAR\], \(350\) kPa) change

Terminal Base Linearity
+1.0% Full Scale

Hysteresis & Repeatability
Within 0.1% Full Scale

Input Impedence

\begin{align*}
4-20\ mA & : 62 \\
10-50\ mA & : 26 \\
1-5\ VDC  & : 510 \\
1-9\ VDC  & : 1020
\end{align*}

Temperature Range
-40°F to +150°F, \(-40°C to +65°C\)

Materials of Construction

<table>
<thead>
<tr>
<th>Housing</th>
<th>Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orifice</td>
<td>Sapphire</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>Buna N Dacron Fabric</td>
</tr>
</tbody>
</table>

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1 Units are factory calibrated for 4-20 mA or 1-9 VDC input, but can be field calibrated for other inputs.