The TDH41 Series
Low Cost OEM Vacuum and Compound Range Pressure Transducer

APPLICATIONS
- Hydraulic / Mobile Hydraulic
- Pneumatic Systems
- Food and Beverage Industry
- Pumps and Compressors
- Energy and water management
- Construction and Agricultural Equipment

DESCRIPTION
The TDH41 Series Pressure Transducer utilizes piezoresistance technology in an all stainless steel body. It is compact in size, has long term stability, ease of installation and is very economical as well as reliable.

The TDH41 sets a new price-performance standard for low cost, high volume commercial and industrial applications.

FEATURES
- Vacuum to 85 psi Ranges
- Various Outputs
- Compact Design
- 316 Stainless steel Housing
- Low Cost
- Industrial 0.4% Accuracy
- Custom Outputs and Ranges Available
- OEM Tested and Approved
- Low power consumption

ELECTRICAL CONNECTIONS

<table>
<thead>
<tr>
<th>Signal</th>
<th>Function</th>
<th>Color</th>
<th>Pin</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5V</td>
<td>Supply V +</td>
<td>Red</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Com</td>
<td>Black</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Output</td>
<td>White</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4-20mA Output</td>
<td>Red</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black</td>
<td>2</td>
</tr>
</tbody>
</table>

DIN 4 pin (9.4)

M12

0-5VDC Output
4-20mA Output

N/C

Load

Output

V+
**SPECIFICATIONS**

**Performance @ 25°C (77 °F)**

- **Accuracy**: 0.4% FS, BFSL (includes non-linearity, hysteresis and non-repeatability)
- **Stability**: 0.2% FS
- **Thermal Error**: 1% FS
- **Compensated Temperatures**: -10 to 75 °C (14 to 167 °F)
- **Operating Temperatures**: -20 to 80 °C (-4 to 176 °F)
- **Current Consumption**: Approx 4mA for 0-5 & 0.5-4.5 voltage output, 11mA for 0-10 voltage output, 23mA for current output (4-20mA)
- **Zero and Span Offset Tolerance**: 1.5%
- **Shock**: 50g, 11ms, 1/2 sign
- **Vibration**: 11g peak from 10 to 400 Hz
- **Reverse Polarity Protection**: Yes

**Mechanical Configuration**

- **Pressure Port**: 1/4 NPT (standard) *
- **Electrical Connection**: 9.4 mini DIN, 3 pin Packard *
- **Ingress Rating**: IP65 with T-Direct standard 9.4 DIN cable
- **Housing**: 316 stainless steel
- **Diaphragm Material**: 316 SS - Vac-0, Vac-15, Vac-45 Ceramic - Vac-85
- **Sealing Material**: Neoprene
- **Approvals**: CE

**Input**

- **Supply Voltage / (Output)**: 8-28 VDC (0-5V, 4-20mA)
- 5 VDC (0.5-4.5V)
- 12-36 VDC (0-10V)
- **Pressure Range**: Vacuum to 85 psig*
- **Proof Pressure**: 1.5 x full scale
- **Burst Pressure**: 3 x full scale
- **Fatigue Life**: More than 4 million cycles

**DIMENSIONS**

Dimensions are in mm [inches] and for reference only

**FOR INDUSTRIAL AND HOME AUTOMATION**

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**ORDERING**

**Series**

<table>
<thead>
<tr>
<th>Output</th>
<th>Pressure Type</th>
<th>Pressure Range</th>
<th>Pressure Port</th>
<th>Electrical Connection</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>T041</td>
<td>B</td>
<td>G = Gauge</td>
<td>V000</td>
<td>D00</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>4-20mA</td>
<td>= 0-5V (3 wire)</td>
<td>(psi)</td>
<td>1/4” NPT Male</td>
<td>0.4%</td>
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<tr>
<td>****</td>
<td>**</td>
<td>**</td>
<td>Vac-0 = V000</td>
<td>D00 = 4 pin 9.4 DIN</td>
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<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>Vac-15 = V015</td>
<td>Q = M12</td>
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<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td>Vac-45 = V045</td>
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<tr>
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<td>**</td>
<td>**</td>
<td>Vac-85 = V085</td>
<td>**</td>
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</tbody>
</table>

**Pressure ranges and outputs listed above are quick ship versions**

**REV. 8.19**

**Consult factory for further OEM options.**

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use. While we provide application assistance personally, through our literature and the Transducers Direct web site, it is up to the customer to determine the suitability of the product in the application.