5000 Series
Low Pressure Transducer

- Submersible and General Purpose Models
- Stainless Steel Case Construction
- High Proof Pressures

The 5000 Series features a sturdy ceramic diaphragm that detects minute pressure variations, while withstanding large pressure spikes. The tough ceramic sensor is housed in a stainless steel case to ensure performance in the most demanding applications.

Specifications

<table>
<thead>
<tr>
<th>Input</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Range</td>
<td>10 to 150” wc (0.36 to 5.4psi)</td>
</tr>
<tr>
<td>Proof Pressure</td>
<td>30psi (≤ 80”wc)</td>
</tr>
<tr>
<td></td>
<td>60psi (&gt; 80”wc)</td>
</tr>
<tr>
<td>Burst Pressure</td>
<td>45psi (≤ 28” wc)</td>
</tr>
<tr>
<td></td>
<td>60psi (&gt; 28” wc to 80”wc)</td>
</tr>
<tr>
<td></td>
<td>90psi (&gt; 80”wc)</td>
</tr>
<tr>
<td>Fatigue Life</td>
<td>10 million FS cycles</td>
</tr>
</tbody>
</table>

Performance

- Long Term Stability: 0.25% span/annum
- Accuracy: 0.2% span max
- Thermal Error: 2% span max
- Compensated Temperatures: -4F to 140F (-20°C to 60°C)
- Operating Temperatures: -40F to 212F (-40°C to 100°C)
- Zero Tolerance: 0.1% span
- Span Tolerance: 0.1% span max
- Mounting Effects: 0.25% span max
- Response Time: 5ms
- Supply Voltage Sensitivity: 0.01% span/volt

Mechanical Configuration

- Pressure Port: (See Ordering Guide)
- Wetted Parts: 316 SS, Ceramic, Viton (Nitrile Optional)
- Electrical Connection: (See Ordering Guide)
- Enclosure: Code M IP68 Submersible
- Code G IP65
- Vibration: 35g peak 5-2000 Hz, MIL STD 810, Method 514.2, Procedure I
- Acceleration: 100g, MIL STD 810C, Method 513.2, Procedure II
- Approvals: CE
- Weight: 330gms (excluding cable) (12oz)

Individual Specifications

Voltage Output units

- Output: (See Ordering Guide) (3-wire)
- Supply Voltage (Vs): 7.5 to 35vdc (8-35vdc, 1-6vdc Output)

Current Output Unit

- Output: 4-20 mA (2 wire)
- Supply Voltage (Vs): 9 to 35 Vdc
- Max. Loop Resistance: (Vs-9) * 50 ohms

www.gemssensors.com
HOW TO ORDER

Use the Bold characters from the chart below to construct a product code

SELECT

1. **5000 series**

2. **Output:**
   - **B** 4–20mA
   - **C** 1–6Vdc
   - **F** 0.1–5.1Vdc
   - **H** 1–5Vdc
   - **J** 0.5–5.5Vdc
   - **R** 0–5Vdc

3. **Pressure Datum:** **G** gauge

4. **Pressure range code***
   - **M70** 10 to 28”wc, 25 to 70mbar, 0.36 - 1psi
   - **N20** 29 to 80”wc, 71 to 200mbar, 1 - 3psi
   - **N35** 81 to 150”wc, 201 to 350mbar, 3 - 5psi

   * specify range required at time of order
   eg. 5000BGM700FM3001a@15”wc

5. **Pressure Connection**
   - **E** European Heads
     - **O0** G1/4 Internal
     - **AO** G 1/4 external
     - **MO** M14x1.5 external

6. **Electrical Connection**
   - **G** Fixed Plug to DIN 43650, Mating Connector Supplied
   - **M** Immersible Cable Assembly, IP68

7. **Approvals**
   - **3** CE Marked
   - **BZ** Ex n i e r
   - **G** Galvanic Intrinsically Safe

8. **Cable Length**
   - **000** = No Cable
   - **001** = 1 meter
   - **999** = 999 meters

9. **Static/Thermal Error Band**
   - **A** 0.25%/2%

10. **Specify Calibration**
    (i.e @70”wc)

Flange Face Diameter (1.57/40)

Diameter (1.5/38.1) (3.2/81) max

(2.9/74)max