UL300 Series Non-Incendive Pressure Transducer

- Eliminate Drift – Fused Bond sensor technology for long term stability
- Sensor wetted material machined from solid stainless steel bar stock – no welding
- No silicone oil fill, no internal o-rings, no welded diaphragms
- RFI/EMI protection on every transducer
- Outputs: 4-20mA, 1-5 Vdc and 1-6 Vdc
- Pressure ranges – 0-5 PSI to 10,000 PSI
- Standard accuracy of 0.25% BFSL
- Approved to UL1604 (CSA 213) for Class 1, Div 2, Groups A, B, C and D, Non-Incendive for use in Hazardous Areas.
- Optional external Zero & Span controls (specify Model UL310)

Spectre’s Series UL300 and UL310 Pressure Transducers are specifically engineered with proprietary Fused Bond sensor technology to eliminate the two most common problems with pressure transducers, noise and drift. The UL300 and UL310 (with zero & span) are approved to UL 1604 (CSA 123) for use in Class 1, Div 2, Group A, B, C & D hazardous areas.

Performance @ 25°C (77°F)
- Accuracy: <±0.25% BFSL
- Stability (1 year): <±0.25% FS, typical
- Over pressure protection: 2X Rated Pressure
- Burst Pressure: 5X or 20,000 PSI (whichever is less)
- Pressure Cycles: >100 Million
- Temperature range: -55 to +125°C (-65 to +250°F)
- Temperature Accuracy: ±1°C (±1°F)

Environmental Data
- Operating temp: -40 to + 85°C (-40 to +185°F)
- Storage temp: -50 to +125°C (-60 to +250°F)
- Compensated range: 0 to 55°C (-32 to +130°F)
- Temp comp Zero: <±1.5% FS
- Temp comp Span: <±1.5% FS

Electrical Data
- Excitation: 10-26 Vdc
- Output: 4-20mA, 1-5 Vdc, 1-6 Vdc
- Current consumption: <5 mA
- Zero offset: <±1% of FS
- Span tolerance: <±1% of FS
- Output load: >100K Ohm
- Isolation: 50 MOhm @ 250 VDC
- Output Impedance: <50 Ohm (voltage outputs)

Physical Data
- Sensor wetted material: 17-4 PH stainless (316SS optional)
- Pressure Connection: 1/4" & 1/8"MNPT, SAE-4
- Electrical connection: ⅝” MNPT conduit connection with 24" wiring leads
- Shock: 100G, 11msec, ½ sine
- Vibration: 20G peak, 20 to 2400 Hz
- ANSI/ISA 12.27.01.2003 compliant
UL300 Series Non-Incendive Pressure Transducer

Ordering guide – Example: UL300-A-(0-100PSI)-2-A-EC9-174

<table>
<thead>
<tr>
<th>UL300 Model</th>
<th>A Pressure port</th>
<th>0-100PSI Range</th>
<th>2 Units</th>
<th>A Output</th>
<th>EC9 Connector</th>
<th>174 Material</th>
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</thead>
<tbody>
<tr>
<td>UL300</td>
<td>A=1/4&quot; MNPT</td>
<td>Specify pressure range in PSI (5-10,000)</td>
<td>2=Gauge</td>
<td>A=4-20mA</td>
<td>EC9=1/2&quot;MNPT w/24&quot; leads</td>
<td>174=17-4 ss</td>
</tr>
<tr>
<td>UL310 (with zero span)</td>
<td>B=SAE-4</td>
<td>C=1/8&quot; MNPT</td>
<td>4=Sealed</td>
<td>B=1-5Vdc</td>
<td>ECX=Other</td>
<td>316=316 ss</td>
</tr>
</tbody>
</table>

Dimensions: Model UL300

- Wiring: 
  - 4-20mA output, Cable
  - White + excitation
  - Black - excitation/signal
  - Power 10-28 Vdc

Dimensions: Model UL310

- Wiring: 
  - Voltage output, Cable
  - Red + excitation
  - White - signal
  - Black - excitation/signal
  - Power 10-28 Vdc

All above dimensions may vary with options. Specifications subject to change without prior notice.