EX46 Explosion Proof Transducer

- Eliminate Drift – Fused Bond sensor technology for long term stability
- Sensor wetted material machined from solid 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: 0-50 PSI to 10,000 PSIS
- Standard accuracy of 0.25% BFSL
- Approved to CSA 30 (UL 1203) Class 1, Div. 1 Explosion proof – Groups A, B, C, D
- ANSI/ISA – 12.27.01.2003 Compliant “Single Seal” (No need for secondary seal)
- RoHS (lead free) compliant

Spectre’s Series EX46 Explosion Proof and Intrinsically Safe 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 EX46 is approved to CSA (UL 1203) Class 1, Div. 1 Explosion proof – Groups A, B, C, D

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

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: 10-28 Vdc
- Current Output: 4-20mA
- Current consumption: <25mA
- Voltage Output: 1-5 Vdc, 1-6 Vdc
- Current consumption: <10mA
- Zero offset: <±1% of FS
- Span tolerance: <±1% of FS
- Output load: 5K Ohm minimum (voltage)
  - 800 Ohm@24 Vdc (4-20mA)

Physical Data
- Sensor wetted material: 17-4 PH stainless (316SS or Inconel 718 optional)
- Pressure Connection: 1/4” & 1/8”MNPT, SAE-4
- Electrical connection: 24” leads, ½” MNPT conduit connection, DIN 43650
- Shock: 100G, 11msec; ½ sine
- Vibration: 10G peak, 20 to 2000 Hz
- ANSI/ISA 12.27.01-2003 Compliant

*Accuracy includes non-linearity, hysteresis and non-repeatability
EX46 Explosion Proof Transducer

Ordering guide – Example: EX46-A-(0-100PSI)-4-A-EC9-174

<table>
<thead>
<tr>
<th>EX46</th>
<th>A</th>
<th>0-100PSI</th>
<th>Units</th>
<th>Output</th>
<th>Connector</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Pressure port</td>
<td>Range</td>
<td>Units</td>
<td>A</td>
<td>B=1-5Vdc</td>
<td>C=1-6Vdc</td>
</tr>
</tbody>
</table>
| EX46   | A=1/4” MNPT  
|        | B=SAE-4     
|        | J=1/2” MNPT  
|        | P=1/2” FNPT  | Specify pressure range in: PSI (50-10,000) or equivalent in BAR or Kg/cm2 | 4=Sealed | A=4-20mA  
|        |              |              |       | B=1-5Vdc | C=1-6Vdc |              |              |              | 174=17-4 ss | 316=316L ss | INC=Inconel 718 |

Dimensions: Model EX46

<table>
<thead>
<tr>
<th>Wiring</th>
<th>4-20mA output, Cable</th>
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<tbody>
<tr>
<td>White</td>
<td>+ excitation</td>
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<tr>
<td>Black</td>
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Above dimensions may vary with options. Specifications subject to change without prior notice.

Applications
- Pipe line Instrumentation
- Power Generation
- Well Head Pressure
- Natural Gas Compressors
- Energy & Water management
- Industrial OEM & Hydrogen Equipment (316L wetted)
- Oil Platforms
- Pressure Instrumentation