



## 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:  $\leq \pm 0.25\%$  BFSL\*  
Stability (1 year):  $\leq \pm 0.25\%$  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:  $\leq \pm 1.5\%$  FS  
Temp comp Span:  $\leq \pm 1.5\%$  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:  $\leq \pm 1\%$  of FS  
Span tolerance:  $\leq \pm 1\%$  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, 1/2" MNPT conduit connection, DIN 43650  
Shock: 100G, 11msec; 1/2 sine  
Vibration: 10G peak, 20 to 2000 Hz  
ANSI/ISA 12.27.01-2003 Compliant

\*Accuracy includes non-linearity, hysteresis and non-repeatability



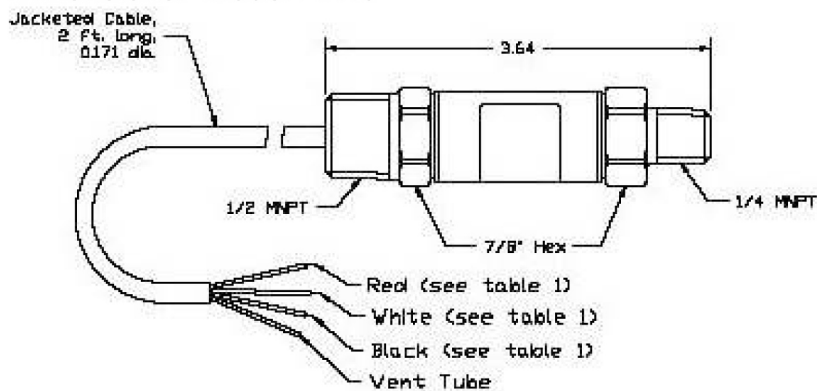


## EX46 Explosion Proof Transducer

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

EX46	A	0-100PSI	2	A	EC9	174
Model	Pressure port	Range	Units	Output	Connector	Material
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/cm <sup>2</sup>	4=Sealed	A=4-20mA B=1-5Vdc C=1-6Vdc	EC9=1/2" MNPT w/24" leads EC9B=1/2" MNPT w/48" leads ECX=Other	174=17-4 ss 316=316L ss INC=Inconel 718

### Dimensions: Model EX46



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

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

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

