



Precision Instrumentation  
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## ***KPSI™ Level & Pressure Transducers***

### **Wet Well Level Transmitter**

The liquid level or pressure shall be sensed by a pressure transducer certified by FM, UL, and CSA for installation in a Class I, Division 1, Groups A, B, C, and D, Class II, Division 1, Groups E, F, and G, Class III, Division 1 hazardous location when connected to associated apparatus manufactured by R.G. Stahl and others. The transducer shall be installed in accordance with manufacturer's instructions.

The transducer shall sense the liquid level or pressure variations and convert these variations into a linear 0-5 VDC or 4-20 mA signal. The transducer shall be solid state with no mechanical linkages or moving parts. Static accuracy of  $\pm 1\%$  includes the combined errors due to nonlinearity, hysteresis and nonrepeatability on a Best Fit Straight Line basis at 25°C, per ISA S51.1.

The pressure sensing element shall incorporate a four active arm Wheatstone Bridge strain gage diffused directly into a silicon diaphragm. The sensed media shall exert its pressure against a 316 SS barrier diaphragm. The sensing element shall exhibit non-measurable hysteresis, withstand overpressures to 200% of rated range without damage and have a life expectancy in the tens of millions of cycles.

Transducer shall operate from a 9-30 VDC regulated or unregulated power source. On-board signal conditioning shall also include overvoltage and reverse polarity protection.

The transducer housing shall be assembled with 360° circumferential welds. Wetted materials may include 316 SS and Viton only. Transducer housing diameter may not exceed 1.0 inch.

Factory-attached 0.30" OD polyurethane or Tefzel jacketed cable shall have pull strength of 200 pounds. Cable construction to include non-stretch Kevlar stiffeners, cable shield and vent tube for atmospheric reference with moisture barrier. Water tight cable seal shall be via compression type fitting.

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