



PRESSURE



Technology Solutions



# Piezoresistive Pressure Transducer

## Tek-Bar 3120S

### 1 FEATURES

- Measuring Range from -14.7psi to 8000psi.
- Measure Absolute, Gauge and Sealed Gauge Pressure.
- Accuracy:  $\pm 1.0\%$ FSO or  $\pm 0.5\%$ FSO.
- Calibrated and Temperature Compensated.
- Stainless Steel Construction.
- Piezoresistive Pressure Sensor Design.
- Wide Range of Pressure and Electrical Connection.
- Output: 4 to 20mA, 0 to 10V, 0 to 5V, and others.

### 3 APPLICATIONS

- Process Control Systems
- Refrigeration and HVAC Controls
- Hydraulic Systems and Valves
- Machine Building
- Pumps
- Compressor Testing Technologies
- Laboratory Technologies
- Combustion Engines
- Diesel Engines and Steam Turbines

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### 2 SPECIFICATION

Accuracy	$\pm 0.5$ or $1.0\%$ FSO
Thermal Effects	Temp Coeff-Zero: $\pm 0.75\%$ FSO Temp Coeff-Span: $\pm 0.75\%$ FSO
Long Term Stability	$\pm 0.2\%$ FSO/year
Pressure Range	Pressure Range: -14.7psi to 8000psi Over Pressure: $1.5 \times$ FS
Process Temperature	Operating Temperature: $-4^{\circ}\text{F}$ to $185^{\circ}\text{F}$ ( $-20^{\circ}\text{C}$ to $85^{\circ}\text{C}$ ) Compensated Temperature Range: $14^{\circ}\text{F}$ to $158^{\circ}\text{F}$ ( $-10^{\circ}\text{C}$ to $70^{\circ}\text{C}$ ) Storage Temperature: $-40^{\circ}\text{F}$ to $257^{\circ}\text{F}$ ( $-40^{\circ}\text{C}$ to $125^{\circ}\text{C}$ )
Vibration	10G (20 to 2000Hz)
Shock	100G (10ms)
Cycles	$10 \times 10^6$ Cycles
Output Signal	4 to 20mA 0 to 5VDC 1 to 5VDC 0 to 10VDC
Power Supply	10 to 36VDC 15 to 36VDC
Load Resistance	For Current Output: $< (V_s - 12) / 0.02\text{A}$ For Voltage Output: $> 10\text{k}\Omega$
Insulation Resistance	$100\text{M}\Omega @ 50\text{VDC}$
Media Compatibility	All media compatible with 316L SS
Housing	304 SS
Diaphragm	316L SS
Oil Filling	Silicon Oil
Protection	IP65 (Standard) IP66 (Only for cable)
Weight	Approx. 185g