



Precise Sensors

"Defining Higher Expectations"

Lab Standard Pressure Transducer

Model 5550

Description

Model 5550 bonded strain gage transducer is our rugged, economical general purpose pressure transducer. It has the same field proven characteristics and reliability as all Precise Sensors bonded strain gage designs and will operate in all environments compatible with 15-5 PH. The construction of our rigid sensing element makes this design insensitive to shock and vibration in all planes, and is ideal for static or dynamic pressure measurements. The Model 5550 is well suited for hydraulic and pneumatic systems, explosive detonation testing, and in quantity is extremely attractive for OEM applications.



Performance Specifications @ 72°F (22°C)

Non-Linearity & Hysteresis	0-500 thru 0-1,000 PSI Less than ±0.50% F.S.O. (±0.35% typical)	Input & Output Resistance	350 Ohms nominal, Bridge A 5000 Ohms nominal, Bridge C
	0-1500 thru 0-60,000 PSI Less than ±0.35% F.S.O. (±0.25% typical)	Supply Voltage	1 to 10 VDC regulated, 350 ohm 1 to 24 VDC regulated, 5000 ohm (Note: calibration at 10 VDC)
Repeatability	Within ±0.08% F.S.O.	Full Scale Output (Sensitivity).....	3.0 mV/V nominal 3.0 mV/V ± 1%, Option F
Resolution	Infinite	Zero Balance.....	± 2% F.S.O.
Operating Temperature Range	-65°F(-54°C) to 300°F(149°C)	Shunt Calibration	80% ±5% F.S.O. (specific value noted on calibration sheet)
Compensated Temperature Range	0°F(-18°C) to +250°F(121°C)	Resistance to Ground	1000 Megohms minimum @ 50 VDC
Thermal Zero Shift	Less than ±0.0075% F.S.O./°F (Less than ±0.0135% F.S.O./°C)	CE Marked	Conforms with EN 55011:1991 Class A, & with applicable RF immunity requirements of EN 50082-2:1995 when used with CE approved equipment
Thermal Sensitivity Shift.....	Less than ±0.0075% F.S.O./°F (Less than ±0.0135% F.S.O./°C)		
Resonant frequency.....	See Pressure Table		
Acceleration Effect	Less than ±0.01% F.S.O. per "G" all planes		

Electrical Specifications

Bridge..... Four active arm bonded strain gage

Mechanical Specifications

Pressure range See Pressure Table

Negative Pressure..... Usable to full vacuum

Pressure Limit

Burst Pressure

Wetted Material.....

Weight

