

Model 206

Bonded Strain Gage Pressure Transducer

Specifications:

Measurand Fluids	All fluids compatible with 347 and Carpenter 20 Stainless steel. 347 stainless steel diaphragm is replaceable.	
Full Scale Output	3.00 ±0.015 mV open circuit per volt excitation. Calibrated at 10.00 Vdc excitation.	
Zero Balance	0.00 ±0.03 mV per volt at +70°F (+21°C).	
End Point Linearity	Within ±0.25% FSO.	
Hysteresis	Within 0.25% FSO.	
Repeatability	Within 0.10% FSO.	
Resolution	Infinite.	
Natural Frequency	Range (PSI)	Frequency (kHz)
	0-200	2.6
	0-300	3.2
	0-500	4.2
	0-750	5.5
	0-1000	6.7
	0-1500	8.8
	0-2000	11.0
	0-2500	13.0
	0-3000	15.0
	0-3500	16.0
	0-4000	18.0
	0-5000	21.0

Proof Pressure Rating
 0-200 thru 0-750 PSI ranges: 3.0 times range.
 0-1000 thru 0-2000 PSI ranges: 2.5 times range.
 0-2500 thru 0-3500 PSI ranges: 2.0 times range.
 0-4000 thru 0-5000 PSI ranges: 1.5 times range.
 Application of proof pressure will not cause any change in performance characteristics.

Compensated Temperature Range
 -30°F to +170°F (-34°C to +77°C).

Operating Temperature Range
 -100°F to +225°F (-73°C to +107°C).

Thermal Sensitivity Shift
 Less than ±0.005% FSO per °F over compensated temperature range (±0.009% FSO per °C).

Thermal Zero Shift
 Less than ±0.010% FSO per °F over compensated temperature range (±0.018% FSO per °C).

Triaxial Mechanical Shock
 30 G's applied for 11 milliseconds will not cause change in performance characteristics.

Acceleration Error
 Along most sensitive axis:

0-200 PSI range	±0.0145% FSO/G
0-300 PSI range	±0.0130% FSO/G
0-500 PSI range	±0.0100% FSO/G
0-750 PSI range	±0.0070% FSO/G
0-1000 PSI range	±0.0050% FSO/G
0-1500 PSI range	±0.0035% FSO/G
0-2000 PSI range	±0.0030% FSO/G
0-2500 PSI range	±0.0025% FSO/G
0-3000 PSI range	±0.0020% FSO/G
0-3500 PSI range	±0.0015% FSO/G
0-4000 PSI range	±0.0013% FSO/G
0-5000 PSI range	±0.0010% FSO/G

Excitation
 10 volts dc or ac rms recommended. 15 volts dc or ac maximum.

Input Resistance
 350 ±3.5 ohms at +70°F (+21°C). Input circuitry symmetrical.

Output Resistance
 350 ±5.0 ohms at +70°F (+21°C).

Insulation Resistance
 Greater than 10k megohms at 50 Vdc between all terminals in parallel and case at +70°F (+21°C).

Pressure Connection	7/16-20 internal thread per MS33649-4 is standard. Options available.
Pressure Cavity Volume	0.08 in ³ (1.31 ml) excluding MS33649-4 fitting.
Electrical Receptacle	Stainless steel receptacle to mate with MS3106-14-2S. Standard wiring: Excitation +A, -D; Signal +B, -C. Options available.
Enclosure	Entire housing and pressure cavity of stainless steel. All electrical components sealed against adverse environmental conditions.
Weight	Approximately 53 ounces (1.5 kg).

