



SENSONETIX

Sensing today...with tomorrow's technology



State-of-the-art Silicon-on-Sapphire pressure transducers have a proven track record in the aerospace, flight test, plastics and down-hole markets. Piezoresistive strain gages are epitaxially grown onto a single-crystal radiation-hardened structure with virtually undetectable hysteresis and non-repeatability. Sapphire is a perfect electrical insulator that does not require diode isolation junctions found on diffused semiconductor pressure transducers. Sapphire is chemically inert allowing compatibility with virtually all media.

Sensonetix' model 300 pressure transducers offer a significant improvement in performance over bonded foil strain gage and diffused semiconductor technologies at competitive prices. These transducers are perfect for high volume OEM applications on hydraulic test stands, injection molding machines, paper machines, sterilizers, liquid level, gas pipelines and other applications where rugged high accuracy pressure measurements are required.

Available with a variety of pressure ports and electrical connectors, the 300 series transducers have custom packaging for high volume OEM applications. Fully compensated temperature ranges, above those available from foil strain gage technologies, up to 500°F can be ordered today.

If accuracy, stability and price are important to you, consider Sensonetix 300 Series Silicon-on-Sapphire Pressure Transducers for your pressure measurement needs.

- Silicon-on-Sapphire Technology
- Competitive Pricing
- Outstanding long term stability
- High Temperature Capability
- Electron beam welded construction
- Hermetically Sealed
- Outputs of mV, 0-5 VDC, 0-10 VDC and 4-20 mA

300 SERIES SPECIFICATIONS

PRESSURE RANGES 0-15, 0-25, 0-30, 0-50, 0-100, 0-200, 0-500, 0-1000, 0-2000, 0-3000, 0-5000, 0-10,000 psi.
PROOF PRESSURE 150% FSO (higher overload available)
BURST PRESSURE 300% FSO

ERROR BAND
LINEARITY ± 0.25% FSO
REPEATABILITY ± 0.1% FSO

TEMPERATURE RANGE/EFFECTS
COMPENSATED RANGE 0 to 180°F (higher range available)
OPERATING RANGE -65 to 250° F
STORAGE RANGE -65 to 250°F
EFFECT ON ZERO ± 1.0% FSO/ 100° F
EFFECTS ON SPAN ± 1.0% FSO/ 100°F

ELECTRICAL PARAMETERS
FULL SCALE OUTPUT 3-5 mV/V (302,303)
 0-5 VDC (SEN311,312,313)
 0-10VDC (SEN331,332,333)
 4-20mA (SEN321,322,323)
EXCITATION/POWER 6-12 VDC for mV output units
 12-36VDC for amplified units
ZERO BALANCE ± 5.0% FSO (factory set)
INSULATION RESISTANCE 100 megohms @ 50 VDC

MECHANICAL PARAMETERS
CASE MATERIAL 300 series welded SS, hermetically sealed
WETTED MATERIAL 300 series SS and sapphire
CONNECTOR Bendix PTIH-10-6P, others available
CASE SIZE 1.30" diameter (maximum)
 4.0" length (maximum) excluding pressure port and connector
PRESSURE FITTINGS 1/4" NPTM, 1/4" NPTF, MS33656-E4, 9/16" UNF Snowtrik

* Specifications subject to change without notice

ORDERING GUIDE

Model/output	Pressure Range	Configuration	Pressure port	Connector
SEN302 (3-5mV/V)	15-200 psi	A - Absolute	1/4" NPTM	C1 - 6 pin
SEN303 (3-5mV/V)	250-10,000 psi	G - Gage	1/4" NPTF	(Bendix)
SEN311 (0-5VDC)	15-25 psi	S - Sealed Gage	9/16" UNF Snotrik	PTIH-10-6P)
SEN312 (0-5VDC)	30-200 psi	W -Wet/Wet Gage	MS33656-E4	
SEN313 (0-5VDC)	250-10,000 psi	V - Vacuum		
SEN322 (4-20mA)	15-200 psi			
SEN323 (4-20mA)	250-10,000 psi			
SEN332 (0-10VDC)	15-200 psi			
SEN333 (0-10VDC)	250-10,000 psi			

EXAMPLE: SEN302-100G-250-1-C1