

Pressure Transducer 3000



Bonded Foil Sensing Technology

Designed Using Advanced Computer Modeling Tools

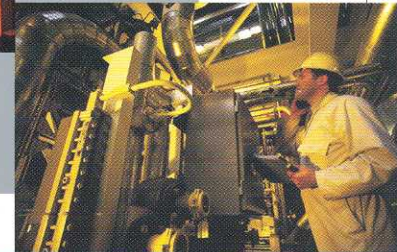
The sensing element was designed using Finite Element Analysis and other computer modeling tools to ensure optimum performance. Key features of the sensing element are isolation from induced stresses (generated from installation torque, temperature excursions, vibration and shock), and its hardening to withstand pressure spiking, water hammering, and media shock waves.

Manufactured for Extended Life

Every transducer is built using advanced manufacturing techniques. Critical procedures such as heat-treat and bonding are controlled through vacuum furnaces. Welding and calibration are accomplished with fully automated work cells. State of the art characterizing electronics are engineered and mounted to withstand even the most severe vibration and shock environments. These steps along with extreme environmental burn-in ensure the transducer's reliability and accuracy will be maintained over time.

1-2 Weeks Delivery

Quick delivery available for standard and modified configurations.



Standard Features

- +/- 0.25% FSO Static Accuracy
- +/- 0.25% FSO Long Term Stability
- 20 to +50° C Compensation
- Sealed gage or absolute

Pressure Transducer 3000



For General and Moderately Aggressive Environments
0-300 thru 0-20k psi

Mechanical

Pressure Ranges	Any range from 0-300 thru 0-20k psi		
Proof Pressure	3000A	500 to 20k psi	1.5X std range
	3000B & F	300 to 5000 psi	3X std range
		7.5k to 10k psi	2X std range
		15k to 20k psi	1.5X std range
Burst Pressure	3000A	500 to 5k psi	3X std range
	3000B & F	7.5k to 20k	2X std range
		300 to 5000 psi	6X std range
		7.5k to 10k psi	3X std range
		15k to 20k psi	2X std range
Pressure Port	1/4"-NPT Female *		
Elect. Connection	Cable Exit per outline drawing *		
Materials	15-5 SST and 316L SST (Plus materials of electrical connector and cable)		
Dimensions	Per outline drawing below		
Weight	Approximately 150 g		

Electrical

Input Voltage	
Model 3000A	Calibrated at 10 Vdc (15 Vdc max)
Model 3000B	20-36 Vdc Unregulated
Model 3000F	8-36 Vdc Unregulated Vdc
Power Supply Rejection	± 0.002% per Volt input change
Model 3000A	N/A ; ratio-metric output
Output	
Model 3000A	3 mV/V
Model 3000B	0-5 Vdc 4 wire *
Model 3000F	4-20 mAdc
Zero Balance	± 2% FSO *
FSO Setting	± 2% FSO *
Resolution	Infinite (± 0.001% FSO usable)
Response Time	Less than 4 ms (10-90% FSO)
Insulation Resistance	Greater than 100 M Ohms @ 50 Vdc
Reverse polarity protected	Yes
Output short circuit protected	Yes
EMI/RFI protected	3000B and 3000F

Environmental

Compensated Temp Range	-20 to 50° C (0 to 122° F) *
Operating Temp Range	-54 to +121° C (-65 to 250° F)
Storage Temp Range	-54 to +121° C (-65 to 250° F)

* Options available

Performance

Static Accuracy	± 0.25% FSO * (BFSL, RSS) (Combined effects of non-linearity, hysteresis and repeatability)
Repeatability	± 0.075% FSO
Temperature Error Band	± 2% FSO * over comp range (Combined effects of Zero and FSO with reference at 28° C)
Long Term Stability	± 0.25% FSO per annum



STD Wiring Info

<i>mV/V and 0-5 V</i>	<i>+In</i>	<i>-In</i>	<i>+Out</i>	<i>-Out</i>
Cable exit	Red	Grn	Blk	Wht
DIN	1	2	3	4
PT06E-10-6P	A	B	C	D
<i>4-20 mA</i>	<i>+In</i>	<i>-In</i>	<i>+Out</i>	<i>-Out</i>
Cable exit	Blk	Wht	Open	Open
DIN	1	2	Open	Open
PT06E-10-6P	A	B	Open	Open

455 Bryant Street
North Tonawanda, New York 14120 USA
Phone 1.800.333.5300 (U.S.) or 716.694.4000 (outside U.S.)
Fax 716.694.1450
Email sales@taberindustries.com
Visit us at www.taberindustries.com