

SPACE QUALIFIED PRESSURE TRANSDUCER

4911 Series

Taber offers over 50 years of space production heritage and is the industry leader when it comes to pressure measurements in space. The Taber Model 4911 amplified pressure transducer series is qualified for space programs and boasts an ongoing production heritage. NASA Level 1 electrical, electronic and electro-mechanical (EEE) components are incorporated in a rugged, hermetically sealed, stainless steel construction. The bonded foil strain gage diaphragm design provides outstanding accuracy, stable signal fidelity over time and is compatible with a wide variety of gas and liquid media including typical propellants used in spaceflight.

- Voltage (VDC) output signal
- Does not require regulated power supply
- Wide pressure range
- Output short circuit protected
- Improved accuracy options
- Bulkhead filtering for EMI/EMC environments available
- Radiation hardened EEE parts
- Optional isolated or non-isolated electronics
- Includes Class S EEE components
- PSI, Bar or MPa in absolute or gauge pressure options

AT TABER, WE CONSISTENTLY OUTPERFORM THE INDUSTRY STANDARDS TO GIVE YOU WHAT YOU REALLY NEED—PRESSURE TRANSDUCERS SPECIFICALLY ENGINEERED FOR THE MOST EXTREME ENVIRONMENTS.



Last Revision 10/2021

The Taber Standard

Our bonded foil strain gage pressure transducers are manufactured to the highest standard of quality and engineered to meet your custom specifications.

4911 SERIES PERFORMANCE SPECIFICATIONS

Output Signal	0-5 VDC	OPTIONS <ul style="list-style-type: none"> Improved Static Error Band and Total Error Band* Increased Proof and Burst Pressures Outputs up to 10 VDC
Full Scale Output (FSO)	5 VDC	
Static Error Band	± 0.25% FSO using Best Fit Straight Line (BFSL) and Root Sum Squared (RSS) Method	
Total Error Band	± 0.75% FSO over Compensated Temperature Range (CTR)	
Maximum Expected Operating Pressure (MEOP)	0-69 BAR through 0-690 BAR 0-100 PSI through 0-10,000 PSI	
Proof Pressure	1.5 times MEOP, Minimum	
Minimum Burst Pressure	2.5 times MEOP	

*Dependent upon parameters such as pressure, temperature, and various hardware elements.

4911 SERIES ENVIRONMENTAL SPECIFICATIONS

Compensated Temperature Range (CTR) Temperature range in which the transducer will operate within the total error band.	-34° C to +77° C [-30° F to +170° F]	OPTIONS <ul style="list-style-type: none"> Alternate Temperature Ranges
Operating Temperature Temperature range in which the transducer will operate without degradation of performance once it returns to the CTR.	-40° C to +93° C [-40° F to +200° F]	

4911 SERIES ELECTRICAL SPECIFICATIONS

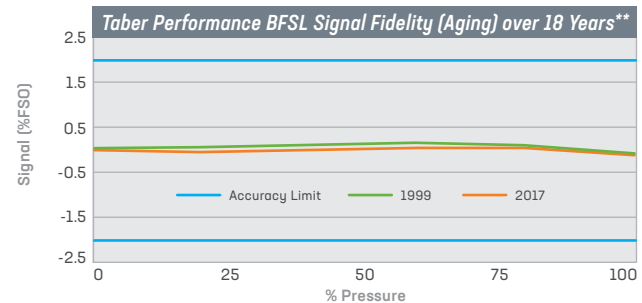
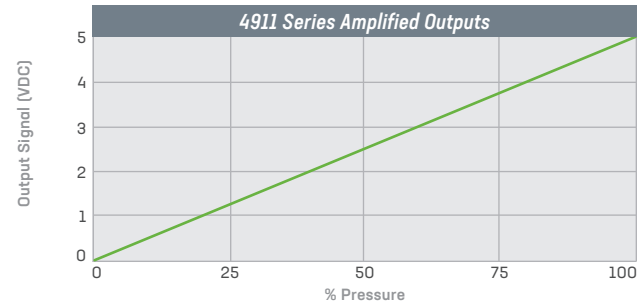
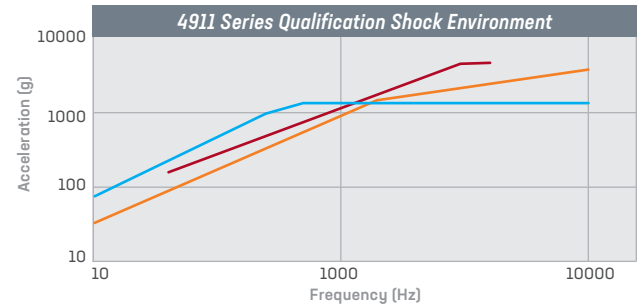
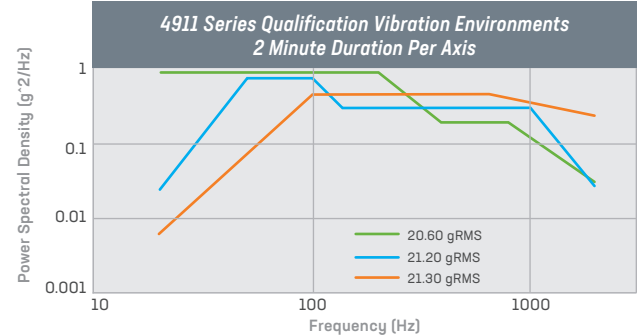
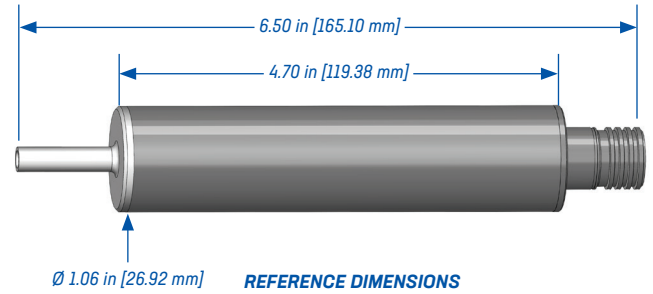
Strain Gage Type	Resistive Bonded Foil	OPTIONS <ul style="list-style-type: none"> Range of resistance values Wide selection of electrical receptacles including MIL-DTL-26482 and MIL-STD-5015
Insulation/Isolation Resistance	> 100 Mohm at 50 VDC	
Electrical Connection	D38999/27YB98PN per MIL-DTL-38999	
Mating Connector (not included)	D38999/26KB98SN or equivalent	
Excitation Voltage	21-40 VDC (28 VDC nominal)	
Operating Current	<20 mA	
EEE Selection	Class S, NASA Level 1 (Class S, JANS, etc.)	

4911 SERIES MECHANICAL SPECIFICATIONS

Wetted Parts Materials	304L VAR, 15-5 PH	OPTIONS <ul style="list-style-type: none"> Multiple construction materials Variety of pressure ports based on fluid compatibility
Weight	Typical < 255 g	
Case Material	304L and 17-4 PH	
Pressure Port	1/4" Tube Stub	

OPTIONAL FEATURES

- Platinum RTD outputs: 100 Ohm, 1000 Ohm & 2000 Ohm.
- EMI/EMC bulkhead filtering (will add length to the transducer).
- Mounting feet.
- Pigtail option available.
- Reference prints available for download upon request.



*Qualification profiles do not reflect all pressure ranges.
**Same unit tested 18 years apart.

If your pressure transducer requires a unique electrical connector, material, pressure range, temperature compensation, calibration, accuracy, cable length, or any other special requirement, **please contact a Taber Sales Engineer at 1-800-333-5300 or email sales@tabertransducer.com.**