



### SPACE QUALIFIED / RADIATION HARDENED PRESSURE TRANSDUCER

## 5411 / 5911 Series

With over 50 years of space production heritage, Taber is the industry leader when it comes to pressure measurements in space. Taber's Model 5411 / 5911 amplified pressure transducer series is qualified for space programs and is Taber's Space Transducer of choice when extreme, high reliability is required. NASA Level 1 electric, electronic and electro-mechanical (EEE) components with additional testing 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
- Includes bulkhead filtering for EMI/EMC immunity against MIL-STD-461
- Radiation hardened EEE parts with enhanced radiation shielding
- Optional isolated or non-isolated electronics
- Includes Class S EEE components with additional testing
- 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.



716.694.4000 TOLL FREE 800.333.5300 TaberTransducer.com



455 Bryant Street, North Tonawanda, NY 14120

# 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.



5411 SERIES REFERENCE DIMENSIONS One piece housing/mounting feet design

#### 5411 / 5911 SERIES **PERFORMANCE SPECIFICATIONS**

Output Signal	0-5 VDC	Improved Stat
Full Scale Output (FSO)	5 VDC	Error Band and
Static Error Band	± 0.25% FSO using Best Fit Straight Line (BFSL) and Root Sum Squared (RSS) Method	■ Increased Pro
Total Error Band	± 0.5% FSO over entire Compensated Temperature Range (CTR)	Pressures
Maximum Expected Operating Pressure (MEOP)	0-4 BAR through 0-345 BAR 0-60 PSI through 0-5,000 PSI	Uutputs up to 1
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.

#### 5411 / 5911 SERIES ENVIRONMENTAL SPECIFICATIONS OPTIONS

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)	■ 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)	

#### 5411 / 5911 SERIES ELECTRICAL SPECIFICATIONS

Strain Gage Type	Resistive Bonded Foil	■ Ranae of
Insulation Resistance / Isolation Resistance	> 100 Mohm at 50 VDC	resistance values <ul> <li>Wide selection</li> </ul>
Electrical Connection	D38999/27YA35PN per MIL-DTL-38999	of electrical
Mating Connector (not included)	D38999/26KA35SN or equivalent	MIL-DTL-26482 and MIL-STD-5015
Excitation Voltage	23-34 VDC (28 VDC nominal)	
Operating Current	< 25 mA	
EEE Selection	Class S, NASA Level 1 (Class S, JANS, etc.) with additional testing	

#### 5411 / 5911 SERIES MECHANICAL SPECIFICATIONS OPTIONS

	Series 5411	Series 5911	■ Multiple
Wetted Parts Materials	304L VAR, 15-5 PH c		construction
Weight	Typical < 400 g	Typical < 900 g	materials
Case Material	304L and 17-4 PH	304L and 17-4 PH	
Pressure Port	1/4" Diameter Tube Stu	1/4" Diameter Tube Stub with Ti transition weld	

#### **OPTIONAL FEATURES**

- Platinum RTD outputs: 100 Ohm, 1000 Ohm & 2000 Ohm.
- Conformal coating.
   Pigtail option available.
- Mounting feet.
- 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.** 

#### OPTIONS

**OPTIONS** 

VDC