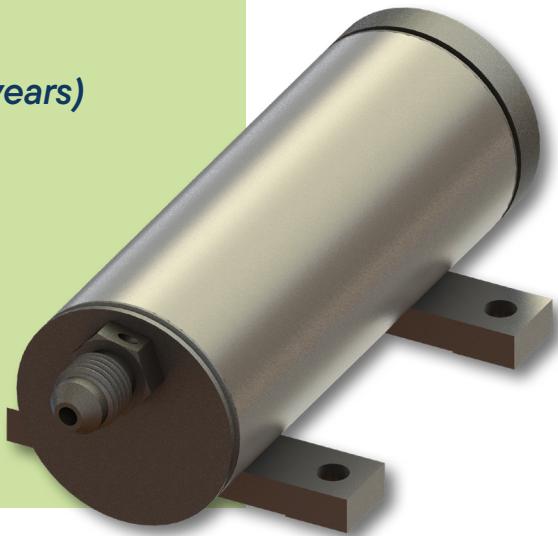


LOW PRESSURE ABSOLUTE

TAVIS low pressure absolute transducers have been designed to measure low pressures while keeping mass to a minimum. Configurable for MEOPs from 0.1 to 20 PSIA, these transducers deliver precision low pressure measurements across large temperature ranges and environments. An all-welded construction, high-reliability electronics, and excellent long-term stability are all contributing factors for this design's established success and decorated heritage. Non-contact sensors eliminate diaphragm restrictions and limitations, improving hysteresis in extreme low pressure conditions and ability to withstand extreme overpressure events.

- **Highly Configurable Pressure Ranges**
- **Excellent Extended Mission Stability (20+ years)**
- **Designed for Extreme Temperature Ranges**
- **Tested to High Vibration Environments**
- **Input-Output Isolation**
- **High Accuracy**
- **Stable Calibration**
- **All Welded Construction**
- **Minimal Hysteresis**
- **Extreme Overpressure Options**



TAVIS has provided tailored solutions to our customers since day one. The sample product shown on this data sheet is meant to showcase our engineering and manufacturing capabilities. TAVIS can engineer and manufacture a product that will meet your unique application requirements. From radiation to low pressure, TAVIS transducers will remain stable, even in high vibration and high shock conditions. Contact us today to see how we can best handle your pressure.

[SEE SPECS ON NEXT PAGE](#)

LOW PRESSURE ABSOLUTE

TAVis 

| GENERAL SPECIFICATIONS | |
|------------------------|---|
| Pressure Range | Configurable, from 0-0.1 PSIA through 0-20 PSIA |
| Proof Pressure | 200% of MEOP or 20 PSIA, whichever is greater |
| Weight | Less than 18 OZ (510 Grams) |
| Sensor Type | Variable Reluctance |
| EEE Reliability Level | NASA-EEE-INST-002 Level 2 |

OPTIONS

- Higher proof pressure configurations available. Consult TAVis Engineering for more info.
- Level 1 EEE option available

PERFORMANCE DETAIL

Static Accuracy

Static Error Band¹ $\pm 0.5\%$ F.S. max.
Hysteresis $\pm 0.1\%$ F.S. nom.
Repeatability $\pm 0.1\%$ F.S. nom.

Thermal Error²

$\pm 2.0\%$ F.S. max.

Frequency Response³

Flat $\pm 5\%$ to 250 Hz

Regulation Error

0.05% F.S./Volt max.

Resolution

Effectively Infinite

¹ Static Error Band is defined as the maximum deviation from a best fit straight line which minimizes errors due to the combined effects of non-linearity, hysteresis, resolution, and non-repeatability

² Thermal Error is defined as the maximum allowed deviation from a best fit straight line which minimizes errors due to temperature over the range of -65°F to +165°F

³ Frequency Response given is for electronics only. Actual Frequency Response will depend on specified pressure range and operating media.

OPTIONS

- Different connector styles such as MIL-DTL-38999 can be accommodated

ELECTRICAL SPECIFICATIONS

| | |
|-----------------------|---------------------------------|
| Input Voltage | 24 to 36 VDC |
| Input Current | 7 mA maximum |
| Output Signal | 0-5 VDC |
| Electrical Interface | MSFC Spec 40M39569 (NB3H10-6PN) |
| Output Impedance | 1000 Ω Maximum |
| Output Noise | 10 mV P-P Maximum |
| Insulation Resistance | 100 Meg Ohm @ 50 VDC |
| Isolation Resistance | 100 Meg Ohm @ 50 VDC |

OPTIONS

- Configurable for corrosive media applications. Consult TAVis Engineering for specific use cases
- Different fitting options available (tube stubs, lockwire holes, etc.)
- Larger temperature ranges are obtainable (e.g. -135°F to + 235°F)

MECHANICAL SPECIFICATIONS

| | |
|-------------------------------|---|
| Operating Media | Liquids or gases compatible with 410 SST, 17-4 SST and Inconel™ |
| Pressure Interface | 1/4" AN Flared Tube Fittings per MS33656-4 |
| Compensated Temperature Range | -65°F to +120°F |
| Random Vibration | 42.3 grms |

OPTIONAL DESIGN FEATURES

- Different mounting feet options available
- Platinum RTD outputs: 1000 Ω and 2000 Ω
- EMI/EMC filtering
- Pigtail option available
- High shock features can be incorporated into the design at customer request
- Outline specification drawings available upon request

PRODUCT DIMENSIONS

