

DELIVERING EXCELLENCE

7881 Vibrating Cylinder Pressure Sensor

FEATURES

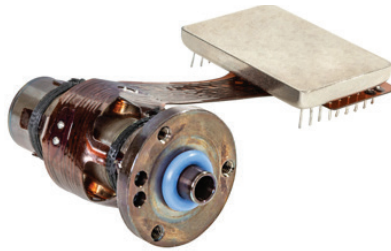
- High Accuracy:
< +/-140ppm FSP
- RVSM class (sensor) accuracy:
10.2 ft @29,000ft;
16.9ft @ 41,000ft
- Low drift: < +/- 100ppm FSP/ year
- Minimal package size
- Wide operating temperature range

BENEFITS

- Lightweight, board-mountable
- Compact footprint
- Single sensor type for both Ps and Pt
- Long re-calibration intervals

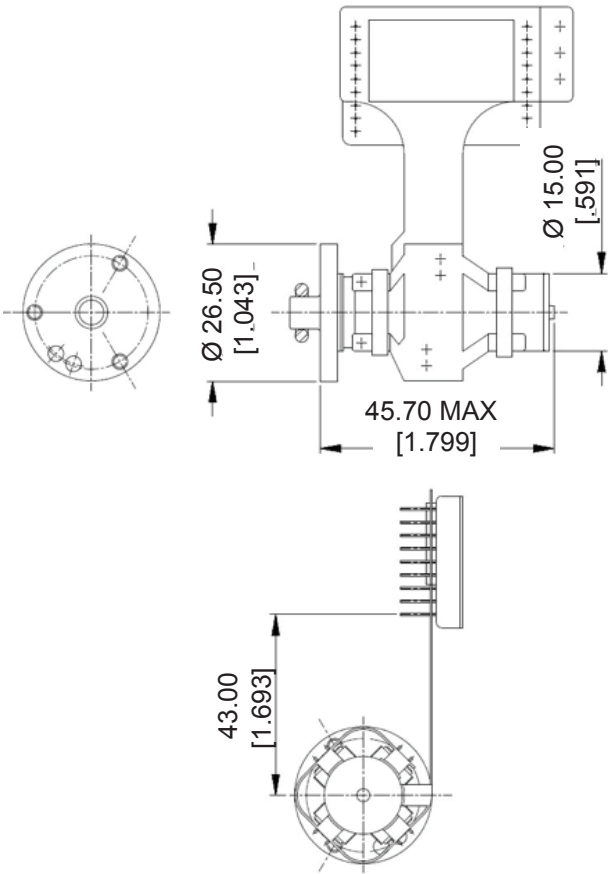
APPLICATIONS

- Air Data Computers
- Engine Control Computers



- With over 60 years of application and development, the vibrating cylinder is still recognized as the industry benchmark for accuracy and drift performance when it comes to pressure measurement.
- Using the flight-proven vibrating cylinder technique, developed by Auxitrol Weston at Farnborough since 1957, the 7881 series pressure sensors have been developed specifically for air-data and aero-engine applications operating over a wide temperature range.
- The high accuracy, repeatability and low drift make the vibrating cylinder one of the few technologies capable of meeting Reduced Vertical Separation Minima requirements.

Typical Performance Specification



UNITS: MILLIMETRES [INCHE]

| | |
|-------------------------------------|--|
| Pressure Calibration | |
| Range | 3.5kPa to 131kPa absolute (262kPa, 345kPa, 1MPa & 5MPa ranges also available) |
| Over-Pressure | |
| Limits | No calibration changes to 3 x FSP (393kPa) Burst pressure greater than 5 x FSP (655kPa) |
| Pressure Medium Air, non-condensing | |
| Operating Temperature | |
| Range | -55°C to +125°C |
| Combined | |
| Accuracy | Better than ± 140 ppm of FSP |
| Repeatability | Better than ± 10 ppm of FSP |
| Long-Term Drift | ± 100 ppm of FSP max per year, typically less than ± 50 ppm |
| Pressure Output | |
| Signal | Square-wave frequency output related to pressure |
| Temperature | |
| Output Signal | Available on request |
| Power Supply | +15Vdc +/-1V (26mA max) & -15Vdc +/-1V (16mA max) |
| Weight | 57g Nominal |
| Environmental | Tested to RTCA DO-160 |

Examples shown above are for information, dimensions can be modified to meet unique installations

SALES :

- Auxitrol SAS
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