Differential Pressure Transducers Series 5300

RANGES
3 Differential Ranges
0-3 psid to 0-18 psid

FEATURES
0.02% Accuracy
0.0001% Resolution
Frequency Outputs
Low Power Consumption
High Stability and Reliability
High Common Mode Pressure
Fully Calibrated and Characterized
ISO 9001:2000 Quality System – NIST Traceable

APPLICATION AREAS
Flow Measurement
Air Data Computers
Laboratory Standards
Pressure Calibration Systems
Custody Transfer Measurements

Paroscientific manufactures and sells a complete line of high precision pressure instrumentation. Resolution of better than 0.0001% and typical accuracy of 0.02% of full scale or better are achieved even under harsh environmental conditions. Superior resolution and accuracy comparable to the primary standards make the Digiquartz® Transducers essential for a variety of application areas where **high resolution**, **accuracy**, **reliability**, **ruggedness**, **long-term stability**, **low power consumption** and **low cost of ownership** are important requirements.

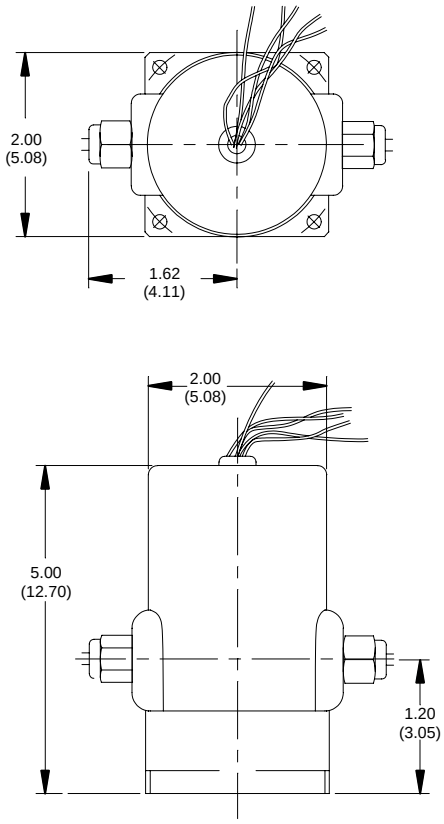
The remarkable performance of these transducers is achieved through the use of a precision quartz crystal resonator whose frequency of oscillation varies with pressure induced stress. A quartz crystal temperature signal is provided to thermally compensate the calculated pressure and achieve high accuracy over a broad range of temperatures. The transducers include integral shock protection to withstand acceleration, shock, and vibrational loads.

Paroscientific's Model 5300 Differential Pressure Transducer has an accuracy of better than 0.02% of full scale and a maximum common mode pressure of 1200 psi. The pressure medium can be in contact with stainless steel, nickel, inconel, epoxy, solder and gold. Model 5300 is indispensable for high accuracy flow measurements, air data computers, laboratory standards, pressure calibration systems and custody transfer standards.

A Quality Management System that is certified to the requirements of the ISO 9001:2000 International Quality Standard provides consistency in our products and processes from design and development through production, calibration, test, and servicing. Our quality system and commitment to excellence ensure customers of outstanding products and services. As a result, we offer a **market-leading** five year limited **warranty** on all Digiquartz® Transducers with the first two years covered at 100%.

Paroscientific,Inc.
Digiquartz® Pressure Instrumentation

Series 5300 Differential Pressure Transducers



Model 5300 Series

PERFORMANCE

Repeatability - Better than ±0.02% Full Scale
Hysteresis - Better than ±0.02% Full Scale
Maximum Common Model Pressure - 1200 psi

CHARACTERISTICS

Pressure signal is a frequency output with a 10% frequency change within the frequency band 30 KHz to 42 KHz.

Temperature signal is a frequency output with a 45 ppm/°C sensitivity within the band 168 KHz to 172 KHz.

Both pressure and temperature output signals are nominally square waves of 4 volts amplitude peak to peak.

Conformance and temperature compensation equations and calibration coefficients are provided with each transducer.

Weight …….... 20 ounces maximum (567 grams)
Power Requirements ……..…….. +6 VDC at 1 mA

ENVIRONMENTAL

Overpressure …….. 1.2 times Full Scale
Operating Temperature Range …. 0 °C to +40 °C

Dimensions are inches—parenthesized dimensions are in centimeters

Differential Pressure Ranges		Model No	Part Number
psid	MPa		
0-3	0-0.02	5303D-101	1178-001
0-6	0-0.04	5306D-101	1179-001
0-18	0-0.12	5318D-101	1180-001

Paroscientific, Inc.
4500 148th Ave. N.E.
Redmond, WA, USA 98052
Tel: (425) 883-8700
Fax: (425) 867-5407
http://www.paroscientific.com
E-Mail:support@paroscientific.com

Digiquartz® Technology

CERTIFIED QUALITY MANAGEMENT SYSTEM ISO 9001:2000 ANAB DNV