

Piezoresistive Pressure Sensor Calibration

| | | | |
|----------------|---------------|------------------------|------------------------|
| Type | 4260M091 | Certificate ID # | 5291966-181210T1254 |
| Serial Number | 5291966 | Calibration Technician | Grover Walker |
| Manufacturer | Kistler | Date/Time | 12/10/2018 12:54:58 PM |
| Pressure Range | 0 to 1500 PSI | Span | mV/V 9.955 |
| Reference | Absolute | Offset | mV/V 0.914 |
| Test Condition | New | Supply Voltage | V 9.993 |

Non-Linearity, Hysteresis, and Repeatability (NLHR)

| P (PSI) | Output (mV/V) | BFSL Error (%) |
|---------|---------------|----------------|
| 0.0 | 0.9143 | 0.021 |
| 375.0 | 3.3997 | -0.014 |
| 750.0 | 5.8883 | -0.016 |
| 1125.0 | 8.3780 | -0.009 |
| 1500.0 | 10.8694 | 0.018 |
| 750.0* | 5.8888 | 0.005 |
| 0.0* | 0.9144 | 0.001 |

* Decreasing Pressure

Temperature Performance

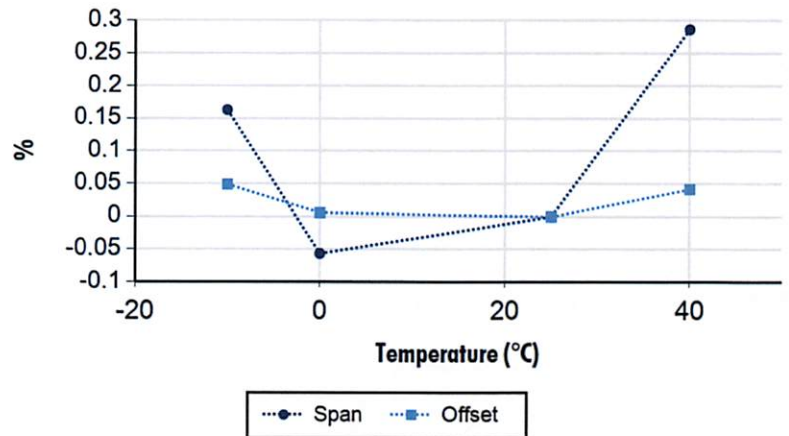
| Temperature (°C) | Span Error (%) | Offset Error (%) |
|------------------|----------------|------------------|
| -9.9 | 0.163 | 0.049 |
| 1.4 | -0.056 | 0.006 |
| 25.0 | 0.000 | 0.000 |
| 40.0 | 0.287 | 0.042 |

| Error Calculation | Unit |
|---|--------|
| NLHR limits are based on | % span |
| Temperature Performance limits are based on | % span |
| Span & Offset limits are based on | % span |

Summary:

Environmental Conditions

| | | |
|-------------------|----|---------|
| Temperature | °C | 22 ± 4 |
| Relative Humidity | % | 30 ± 30 |



Reference Equipment

| Type | S/N |
|------------------------|------------|
| Agilent 34970A | MY44021689 |
| Mensor Barometer | 680941 |
| Mensor CPC6000 | 611879 |
| Mensor Module 1500 psi | 831108 |

This sensor was calibrated per Kistler test procedure 300.002.750 using a comparison technique against a Kistler working standard. Kistler working standards are periodically calibrated against a primary standard system, which in turn is periodically recertified to the National Institute of Standards and Technology (NIST) or another recognized national standard. Measurements are derived from accepted values of natural physical constants according to the International System of Units (SI). This calibration meets or exceeds the requirements of ISO 9001:2015, ANSI/NCSL Z540-1-1994 (R2002) and is accredited to ISO/IEC 17025:2017 as verified by the ANSI-ASQ National Accreditation Board/ANAB. Refer to certificate and Scope of Accreditation AC-1117. Estimated uncertainty of this calibration is ±0.2% of pressure range for voltage output sensors or ±0.25% of pressure range for current output sensors with respect to the primary standard. Certificates are on file at Kistler and may be requested in writing. This certificate shall not be reproduced, except in full, without written approval of Kistler Instrument Corporation.