

## MODEL K9907C

# MEDIUM PRESSURE CALIBRATION WORKSTATION

- Assures accurate, traceable calibrations
- Turnkey system includes all necessary components
- Setup tests, acquire data, save results, and print reports quickly with precision and automation
- Define pass/fail criteria for each test and automatically recall them from the internal database
- Prints customizable ISO compliant certificates
- Automates calibration procedures

## TYPICAL APPLICATIONS

- Impact ballistics
- Body armor & crash survival research
- Turbine engine monitoring
- Dynamic combustion measurements
- Research laboratories

## STEP PRESSURE TO 1000 PSI

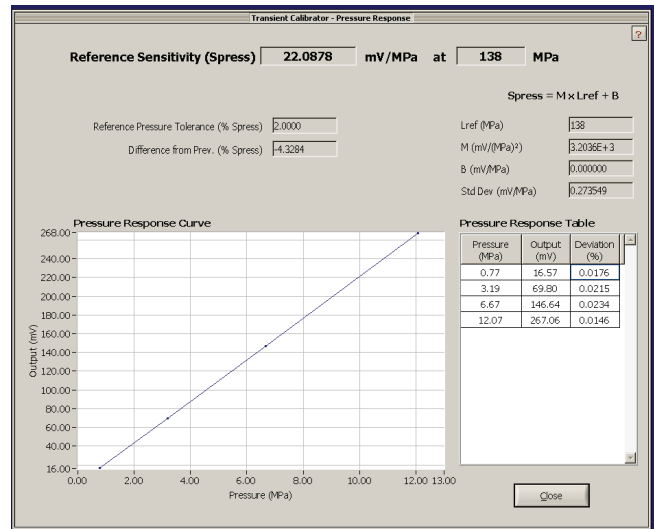
The Model K9907C Medium Pressure Calibration Workstation performs pressure calibrations on a wide range of dynamic pressure sensors. The Model K9907C is a turn-key system that includes the Aronson pressure step actuator, data acquisition hardware, Windows PC, and software to automate test setup, data acquisition, data archiving, and report generation. The K9907C provides step pressure pulses up to 1000 psi (6.9 MPa) to the sensor under test. The K9907C calculates sensitivity, linearity, and discharge time constant.

K9907C is based on two product lines with a rich heritage of calibration experience. The pressure actuator and measurement equipment have been in use for decades at PCB Piezotronics, while the data acquisition and automation software is based on the The Modal Shop's 9155 Series of Vibration Sensor Calibration Workstations. The K9907C merges these two product lines to form a standalone pressure calibration system with mature measurement capability. In addition, the K9907C01 is offered as a retrofit package to existing customer owned PCB 907 Series calibration systems. The 9155D-907 adds pressure calibration capability to existing 9155D Accelerometer Calibration Workstations.

# AUTOMATED PRESSURE CALIBRATION SOFTWARE

By combining PCB's factory calibration hardware with The Modal Shop's system software and expertise, pressure calibration systems meet the needs of the most discerning user. These turnkey systems reproduce the factory calibration techniques of pressure sensors for customers with the added advantage of a single point for product support and Total Customer Satisfaction. Test activity and results are shown in the easy-to-use software:

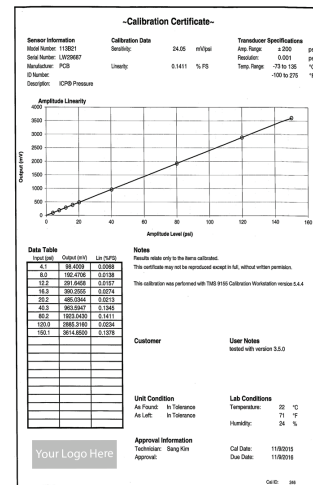
- Displayed pressure response data allows technician to view and check for anomalies
- Software automatically computes sensitivity values
- Pressure Response table provides a snapshot of results including % Deviation



## Transient Calibrator - Pressure Response

K9907C calibrates at predetermined levels and calculates linearity over the testing range

SPECIFICATIONS		
<b>Performance</b>		
Pressure Step Amplitude	0 to 1000 psi	6.9 MPa
Step Rise Time	35 $\mu$ s	
Maximum Reservoir Pressure	$\leq$ 2000 psi	13.8 MPa
Working Medium	Non-corrosive gas (i.e. helium)	
Maximum Sensor Diameter	1 in	25.4 mm
Locking Mechanism	Keeps poppet valve open or closed	
Trigger Signal Generator	Impacts sensor to trigger recording device	
Material	Stainless steel and aluminum	
Gas Pressure Controls	(3) each type 316L manual valves	
Gas Access Ports	12 Swagelok®-type AN connectors; 1 for gas pressure & vacuum sources; 1 for external static reference gages	
Size Diameter x Height (actuator only)	12 x 21 in	305 x 533 mm
Weight (actuator only)	75 lb	34 kg



## Calibration Certificate

K9907C automatically generates customizable calibration certificates for printing and archiving



10310 Aerohub Boulevard, Cincinnati, OH 45215 USA

Toll-Free in the USA: 800 860 4867

Phone: 1 513 351 9919 | Email: info@modalshop.com

The Modal Shop, Inc. offers structural vibration and acoustic sensing systems and services for various applications in design and test laboratories as well as manufacturing plants. An extensive sound and vibration rental program, precision calibration systems, and both modal and vibration shakers are designed to simplify test phases. Non Destructive Testing Systems help manufacturers provide 100% quality inspection of metal components. The Modal Shop, Inc. is a subsidiary of PCB Piezotronics, Inc., and PCB® is a wholly owned subsidiary of MTS Systems Corporation.

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