These Research Grade Isometric and Isotonic Transducers supply excitation voltage to a self-contained transducer and convert the pico-farad changes of capacitance into high level DC voltages using a patented electronic circuit (U.S. Patent #4,142,144). This circuit is extremely sensitive and stable, producing up to 5 VDC for direct connection to Standard Signal Conditioners, Data Acquisition Systems, Modular Universal Oscilloscopes, Student Oscilloscopes, Flatbed Strip Chart Servo Recorders, and X-Y Plotters. All transducers have a small external transducer element hard-wired to a small amplifier. This amplifier is hard-wired to a wall type transformer. The transformer reduces line voltage to 12 VDC and is both UL- and CSA-listed. For 230 VAC, 50 Hz operation, the transformer is VDE-listed. These Transducers are factory-calibrated to deliver 5 VDC for full rated load and are still linear for 100% overload (4 VDC). They have offset (tare) controls. The Transducer amplifier has a 3-digit backlit LCD display that shows the output voltage. A standard BNC output connector is located at the rear of the amplifier. These amplifiers can be stacked for multiple use.

This Transducer measures force by measuring the change in capacitance of a stiff beam between two plates. Beam deflection is measured in microns.

Two models are now available. The only difference between the models is the length and diameter of the mounting rod. Model 1 has a 12.7mm OD by 51mm long mounting rod. Model 2 has a 9.5 mm OD by 91.4mm long mounting rod.