



**SEN-320 SERIES  
PRESSURE TRANSDUCER  
CALIBRATING INSTRUCTIONS**

1.0    **CALIBRATION:**

Prior to subjecting the transducer to operating pressure and temperature, it is important to set the end points to 4.0 mA at Pressure and 20.0 mA at full-scale pressure. There are 2 methods that can be used to calibrate the transducer:

First method, without a pressure calibrator:

With temperature at room ambient (or close to 80 °F) and with zero pressure applied, adjust reading to 4.0 mA by turning “PZERO” zero trim pot located under the cover screw on the electronic case.

Short RCal (Calibrating Resistor) pins together and adjust reading to 16.8mA by turning “PSPAN” span trim pot located under the cover screw next to the zero trim pot.

Repeat steps 4.1.1 to 4.1.2 as necessary to fine tune adjustment.

Second method, with a Pressure Calibrator:

With temperature at room ambient (or close to 80 °F) and with zero pressure applied, adjust reading to 4.0 mA by turning “PZERO” zero trim pot located under cover screw on the electronic case.

Apply full scale pressure to transmitter and adjust reading to 20.0 mA by turning the “PSPAN” span trim pot located under cover screw next to the zero trim pot.

Repeat steps 4.2.1 to 4.2.2 as necessary to fine tune adjustment.

Adjust machine temperature to operating temperature and allow at least 30 minutes for transducer to reach thermal equilibrium.

After another 30 minutes soak time, re-adjust zero reading to 4.0 mA by turning “PZERO” zero trim pot. (Make sure there is no pressure applied to transducer at this time).

Transducer is now ready to use. (*NOTE: DO NOT adjust span at any temperature other than 80 ± 10 °F*). Adjustment of span at any temperature will require calibration with a Pressure Calibrator (see paragraph 4.2).

Make sure to reset zero occasionally to insure more accurate measurements. Reset span only at room ambient temperature using RCal method if calibrating without a Pressure Calibrator.

On SEN-322 models, the temperature sensor of the transmitter is factory set to 4.0mA at 80 °F and 20.0mA at 500 or 750°F unless special calibration is noted on the housing. These settings can be changed if desired, but a precision temperature reference should be used.

All models listed above that have thermocouple junctions for temperature measurement are not adjustable.

**WARNING:** Avoid Cold Starts! DO NOT Turn the extruder screw until sufficient soak time has been allowed. Jog screw several times before running while watching pressure, to avoid cold start damage.

**15402 Electronic Lane, Huntington Beach, CA 92649  
(714) 799-1616 Phone (714) 799-4116**