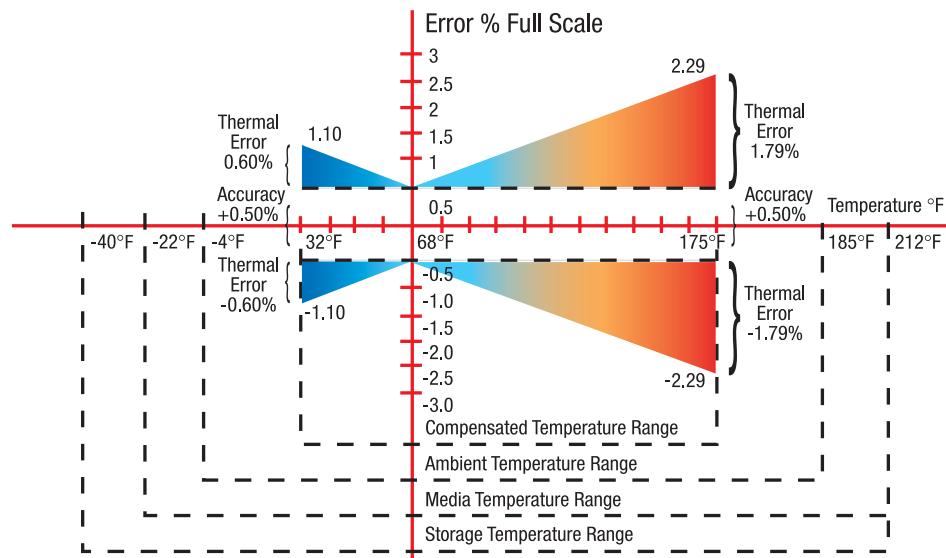


Thermal Performance of NOSHOK Pressure Transducers



The above diagram illustrates transducer performance related to the temperature of the environment and media being measured.

The graph shows the worst case performance of the series 100 pressure transmitter as an example (other series follow the same pattern). The thermal specification as indicated in the 100 series specifications is given in a worst case coefficient for the combined effects on zero and span. The definitions are as follows.

The **Compensated Temperature Range** is the thermal band over which the effect specification is guaranteed. For the 100 series, the coefficient is $\pm 0.0167\%$ full scale per $^{\circ}\text{F}$. This means that over the compensated temperature range the thermal boundaries are straight lines as shown. This is sometimes called a "bow-tie effect" or "butterfly effect".

The **Ambient Temperature Range** is the maximum and minimum ratings over which the transducer will output a correct signal.

The **Media Temperature Range** is the maximum and minimum ratings of the media at the process connection.

The **Storage Temperature Range** is the maximum and minimum ratings for no damage on the shelf.