Gauge Configurations for High Temperature Applications

140° F is the maximum recommended ambient media temperature for NOSHOK pressure gauges with brass wetted parts, and 212° F for gauges with stainless steel wetted parts. For applications in which media reaches temperatures above 212° F, NOSHOK offers several accessories designed to prevent damage to the gauge, and maintain maximum performance and accuracy.

Recommended gauge configurations are listed below. Please note that these guidelines are intended to be general recommendations. Many conditions may affect the amount of temperature reduction; including ambient temperature, media type, and process configuration.

- **Up to 140° F**: All NOSHOK pressure gauges will provide peak performance in this range
- **Up to 212° F**: A gauge with stainless steel wetted parts is required, such as the NOSHOK 400 and 740 Series. Do NOT use a gauge with brass wetted parts.
- **Up to 287° F**: Accessories must be used to maintain gauge integrity and accuracy. Options include:
  - **Pigtail Steam Syphon**: for use with a stainless steel wetted parts gauge. Should be used in steam applications and systems that contain superheated vapor. The pigtail buffers the instrument from the damaging effects of high temperature steam by holding system fluid in the coil to provide a steam trap for the fluid to condensate and dissipate the heat. Reduces temperature by 75° F/ft on average. Multiple configurations are available.
  - **Armored Capillary Tube**: for use with a stainless steel wetted parts gauge. Average temperature reduction is 75° F/ft. Two feet of capillary tube can increase the media temperature range to 362° F. Standard length is five feet, provided with thread connections; other lengths available on request. Gauge must be separated from the process with a mounting bracket or flange, and the extra capillary length can be rolled up if necessary. Recommended for use with clean media or gases.
  - **Long Pipe**: ½” in diameter or greater in either steel or stainless steel construction with a stainless steel wetted parts gauge. Average temperature reduction is 75° F/ft. Pipes can be cut and threaded for custom applications.
  - **Cooling Element**: for use with a stainless steel wetted parts gauge. Average temperature reduction is 75° F/4” element. Use with other accessories for additional temperature decrease (long pipe, syphon, diaphragm seal).
  - **Cooling Tower**: for use with a stainless steel wetted parts gauge. Approved usage up to temperatures of 312° F. Average temperature reduction is 100° F/8” cooling tower. Recommended for use with clean media or gases.
- **Up to 300° F**: A high temperature system fill is required, such as silicone D.C 550, and a diaphragm seal is recommended on a stainless steel wetted parts gauge.

For more information, contact NOSHOK at 440.243.0888