Pressure Gauge Technical Brief

Temperature Limitations

Ambient Temperature

REOTEMP pressure gauges are built for service in a variety of applications. In order to ensure proper gauge functioning and long lifespan, REOTEMP pressure gauges should operate in ambient temperatures according to the following chart.

- Brass Internals, Dry Case: -40°F to +140°F
- 316SS Internals, Dry Case: -40°F to +150°F
- Glycerin Filled Case: 23°F to +150°F
- Glycerin (65%) / Water (35%) Case: -40°F to +150°F
- Silicone Filled Case: -40°F to +150°F

When exposed to temperatures exceeding those stated above the pressure gauge accuracy is compromised and discoloration of the dial and liquid fill could occur.

REOTEMP model PR and PT45S gauges can be used in constant ambient temperature up to 250°F with brief spikes up to 500°F if configured with a Tempered Safety Glass lens.

Process Temperature

Bourdon tube pressure gauges with 316 Stainless Steel tube and socket can withstand short periods up to 750°F (copper alloy internals have a maximum of 250°F), however the gauge may lose all calibration and lose proper function.

If process temperatures exceed the maximum recommended temperature for that pressure gauge (see pressure gauge data sheets for specific temperature), it is recommended that the instrument is either remote mounted using a capillary line or a diaphragm seal is installed.

For steam service, a water-filled pigtail siphon should be installed between the process pipe and pressure gauge.