

Scope and Intended Use:

These user instructions are applicable to Series LTAP Low Temperature Actuation Probes.

The intended use of this product line is to sense fluid temperature at or below a setpoint threshold and activate the control head valve at that point. These products can be used with Inert Gas, Oxygen and potential Oxidizer gases > 21%, Hydrogen, and Carbon Dioxide. For use with other media, consult factory.

Operating Principle:

The LTAP Series uses pressure decay in a charged fixed volume to open a valve at a desired low temperature setpoint. When the fluid temperature on the probe reaches the desired setpoint, a passageway in the control head opens from the inlet port to the outlet port. Each device is factory set to the desired temperature setpoint. This setpoint cannot be adjusted in the field. This probe is typically installed in conjunction with an orifice fitting (e.g., 0.006" orifice) allowing the control head to vent pressure downstream of the orifice fitting. The fixed volume probe is factory charged to 550 PSI. Do not attempt to check the charge of the probe or recharge the probe yourself. Consult factory if you have reason to suspect that the charge has been compromised. If charge is compromised, unit control head fails open.

Technical Data:

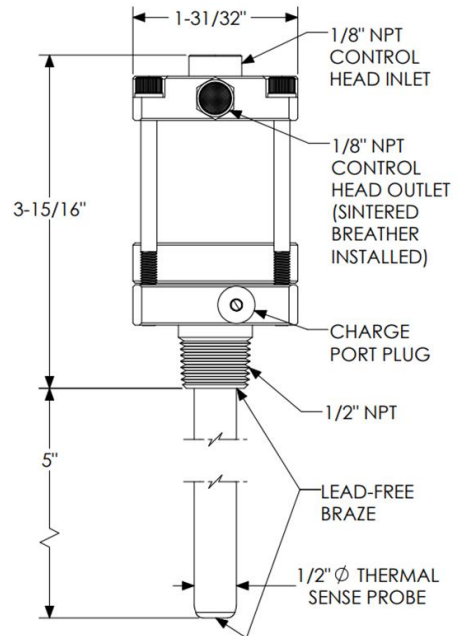
LTAP Series probes are 100% factory tested and supplied preset to a temperature setpoint. Probes must be ordered at a temperature setpoint and this setpoint is permanently engraved on the device.

Operating Parameters:

Temperature Setpoint Range: -40° to 0° Fahrenheit
Setpoint Tolerance: $\pm 3^\circ$ Fahrenheit
Full Open within -3° Fahrenheit of Initial Open
Control Head Full Open Cv: 0.02
Ambient Temperature Range: -60° to 150° Fahrenheit
Probe and Control Head MAWP: 600 PSIG (41.4 bar)

Maintenance:

These valves are factory preset and are **NOT TO BE TAMPERED WITH IN THE FIELD**. Recommended service interval is 5 years.



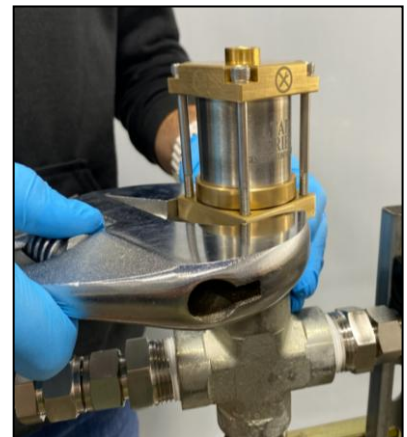
WARNING

Generant LTAP Series Low Temperature Actuation Probes are supplied with all wetted components and ports Cleaned for Oxygen Service and are shipped from the factory individually heat-sealed in poly bags. Once removed from the bag, integrity of this cleaning has been compromised. Proper handling should be used to ensure the integrity and cleanliness of the entire system.

Note: 1/4" Dual Ferrule Tube Fitting is supplied with the unit.

INSTALLATION INSTRUCTIONS

1. Upon receipt of the unit, confirm that the setpoint engraved on the unit is the desired temperature setpoint for the system.
2. A 2-inch wrench is required to install the unit in the system. Use the lower square nearest the 1/2 NPT probe connection to install the unit (see picture). **DO NOT USE THE CONTROL HEAD (UPPER SQUARE) FOR INSTALLATION.** Transmitting excessive torque through the tie rod screws could damage the unit.
3. Using a 2-inch wrench on the lower square, rotate the probe clockwise into the mating fitting until probe is tight and the NPT connection is leak-free.
4. The port on the top of the control head labelled INLET is the inlet port for the integral control head valve. In typical installations, this INLET port is piped to the downstream side of an orifice fitting. It is also in communication with the pilot port of the main regulator and inlet port of the back pressure regulator. Consult Factory for Typical Installation Schematic SA.TD.LTAP001. When installing a fitting in the control head INLET or OUTLET port, secure the upper square to ensure that excessive torque is not transmitted through the tie rod screws to the lower body.



Safe Component Selection

When selecting a component, the total system design must be considered to ensure safe, trouble-free performance. Component function, materials compatibility, adequate ratings, proper installation, operation, cleanliness and maintenance are the responsibility of the system designer and user.