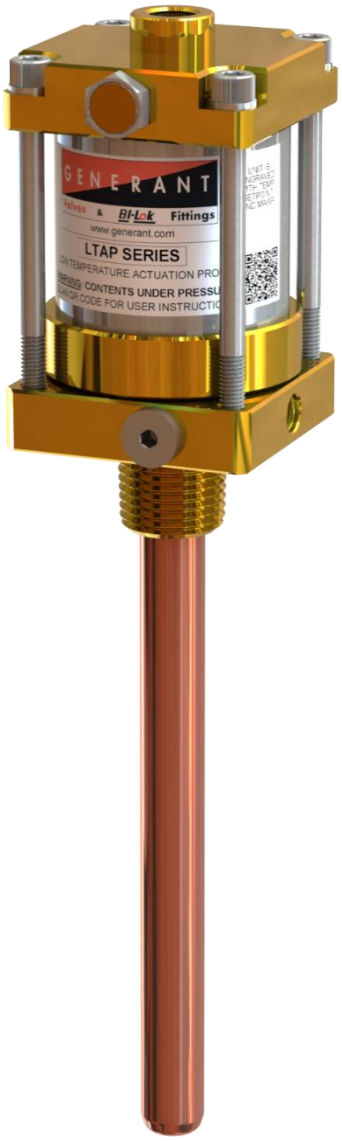
GENERANT

LOW TEMPERATURE ACTUATION PROBE
1/2" NPT PROBE CONNECTION
MAWP 600 PSI (41.4 bar)

LTAP SERIES

DESCRIPTION:

The LTAP Series Low Temperature Actuation Probe is a temperature controlled pneumatic two-way valve. The device utilizes a pressurized copper probe which reacts to fluid temperature and opens a passageway in the top control head as the fluid temperature approaches the device temperature setpoint. The LTAP Series can be installed on cryogenic systems to protect end users when draw rates are higher than system capacity or ambient conditions are much colder than normal.



FEATURES:

- **HIGHLY ACCURATE**: Setpoint Tolerance of ±3°F.
- **QUICK OPEN**: Control head opens quickly at desired setpoint: less than 3°F from first bubble to full open.
- **REPEATABLE AND RELIABLE:** Designed to activate at temperature setpoint repeatably and reliably in a wide range of ambient conditions.
- **CLEANED FOR O2 SERVICE**: Assembled Cleaned for Oxygen Service as Standard.
- **ROBUST DESIGN**: Solid brass design with Working Pressures up to 600 PSIG.

TECHNICAL DATA:

Maximum Probe Pressure: 600 PSIG (41.4 bar)
Maximum Control Head Pressure: 600 PSIG (41.4 bar)

Temperature Setpoint Range: -40°F to 0°F
Setpoint Tolerance: Nominal ±3°F
Full Open: Within -3°F of Initial Open

Exposed Fluid Temperature Range: -320°F to +150°F
Ambient Temperature: -60°F to +150°F

Control Head Full Open Cv: 0.02

This Product is **NOT** a Safety Device or Safety Accessory.

MATERIALS OF CONSTRUCTION:

Component	Material
Probe	Copper Tube, ASTM B280
Soldering Material	Lead-Free Silver Solder
Valve Body, Control Head, Control Head Internal Components	Brass, ASTM B16
Springs	302SS, ASTM A313
Control Head Seals, Charge Valve Screw Seal	As Specified: EPDM or FS
Housing Sleeve	316SS, ASTM A269
Control Head Clip Ring	15-7 SS
Set Screws, Piston Pin, Tie Rod Bolts	18-8 SS

NOTE: LTAPs are assembled with Dupont Krytox® lubricant.

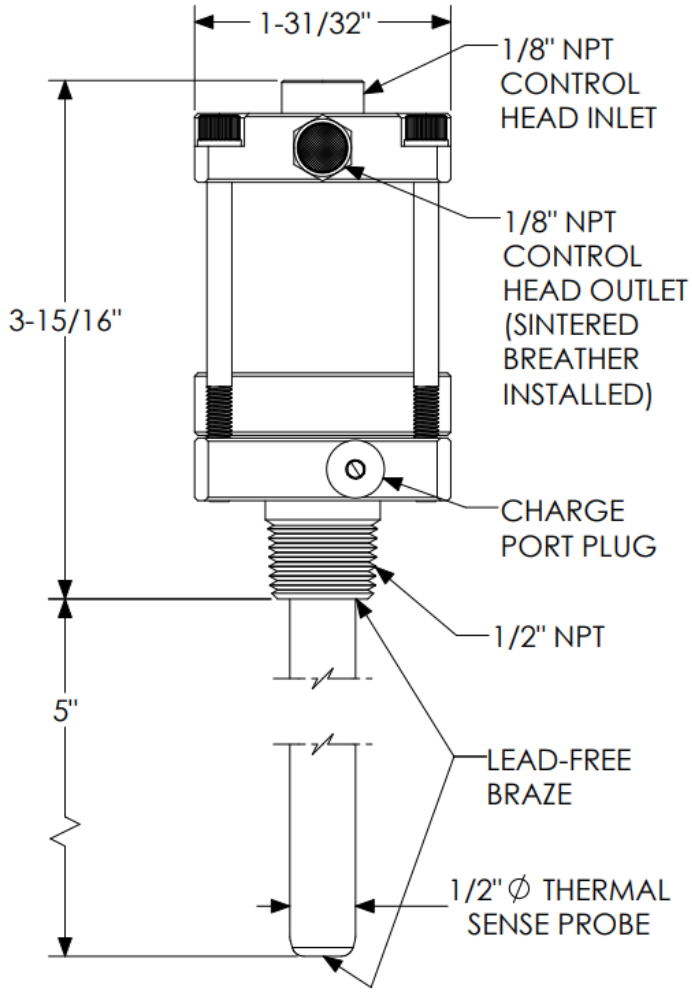
Installation Note

LTAP actuation probes are typically installed in a system with an orifice fitting and back pressure regulator controlling the dome-load pressure of a pilot operated reducing regulator.

Consult factory for a detailed schematic of typical installations.

LOW TEMPERATURE ACTUATION PROBE

DIMENSIONAL DATA



All LTAP probes are supplied with a sintered breather installed in the control head outlet port. A fitting for the control head inlet (1/4 tube x 1/8 NPT) is supplied loose for easy retro-fit into existing installations.

LTAP Probes are factory pre-set at the desired set temperature and cannot be adjusted in the field. Probes utilize a pressurized fixed volume for temperature sensing. Do not attempt to disassemble.

HOW TO ORDER

LTAP - 500B - EP - 20

SERIES
LTAP - Low Temperature Actuation Probe

PROBE CONNECTION AND MATERIAL
500B - 1/2" NPT, Brass

SET TEMPERATURE (°F)
Specify actuation temperature between -40° and 0° in degrees Fahrenheit (e.g. "20" = -20°F)

SEAL MATERIAL
EP - EPDM
FS - Fluorosilicone

PROPER COMPONENT SELECTION – When specifying a component, the total system design must be considered to ensure safe and trouble-free performance. Intended component function, materials compatibility, pressure ratings, installation, environment and maintenance are the responsibility of the system designer.

GENERANT

www.generant.com

1865 Route 23 South PO Box 768 Butler, New Jersey 07405 973.838.6500 Fax 973.838.4888