TEÔPCO

Installation Recommendations for Ceramic Infrared Elements



Installation:

- 1. Insert mounting head into slot in reflector.
- 2. Arrange mounting hardware as shown for either one-piece mounting (left side of figure) or two-piece mounting (right side of figure).
- 3. Depending on mounting method:

a. For one-piece mounting method: insert clip SPR-103-102 between the top of the reflector and the underside of the groove on the mounting head. Some force may be necessary.

b. For two-piece mounting method: set wave spring SPR-103-101 down, putting all leads through the hole in the middle of the spring. Then insert flat clip FAS-109-104 in between the top of the spring and the underside of the groove on the mounting head.

- 4. We recommend an obround slot size of 0.593" x 1.688" to be used when designing mounting reflectors for ceramic infrared heaters.
- 5. One-piece mounting method to be used with reflectors of thickness between $0.028^{\prime\prime}$ and $0.037^{\prime\prime}.$
- 6. Two-piece mounting method to be used with reflectors of thickness between 0.018" and 0.094".
- 7. Do not install heaters in areas where combustible gases, vapor, or dust is present.
- 8. Do not install heaters with mounting hardware in vertical orientation. Hardware may shift and fall out during operation.

Wiring

- 1. Use high temperature terminal blocks, wire terminals, and wire with proper gauge in wiring compartment.
- 2. All electrical wiring of heaters should be done by a qualified electrician.
- 3. Insulate all live electrical connections per applicable safety standards.

Caution: Exposed electrical wiring on ceramic infrared heater installation is a violation of electrical safety codes including O.S.H.A.

Operation:

- 1. Do not allow anything to come into contact with heater until all electrical power has been disconnected.
- 2. Do not operate above rated voltage. Excess voltage may result in heater failure.
- 3. Do not exceed 1,400 °F on surface of the heater or on the reading of the optional thermocouple.
- 4. To prevent overheating and heater failure, the use of an adequate temperature controller is recommended.
- 5. Do not immerse heater in liquid.
- 6. Do not expose heaters to severe vibration or shock.

Maintenance:

- 1. Disconnect heater from power before performing any type of service.
- 2. Replace mounting hardware when replacing heaters.
- 3. Heater terminal block connections must be kept tight. Loose connections can overheat and eventually destroy the connection, terminals, or may short out and result in heater failure.
- 4. If water comes in contact with the heater when it is hot, the heater will not fail. If water comes in contact with the heater when it is cold, a slow start to the next heating cycle is recommended. Trapped moisture inside the heater can boil rapidly and cause heater to break.
- 5. Clean only when heater is cool, and only with a damp, lint-free cloth. Anything more vigorous may damage the heater.