Tungsten-Coated Molybdenum for Graphite-Lined Furnaces

At temperatures above 2010 °F (1100 °C), graphite dust from graphite liners/shields or heating elements can attack and carburize molybdenum sheaths. This causes the sheath to crystallize and become porous, losing its protective properties. The thermal elements in turn crystallize and open. Coating the heat-affected length of the molybdenum sheath with a thick layer of tungsten reduces this carburization action and extends probe life. The tungsten coating also provides increased abrasion resistance.

Termination Styles

**T5**

The T5 terminal head is a highly versatile, gasket-sealed head that meets NEMA 4 standards with termination styles T5AL (aluminum) and T5CI (cast iron). Termination style T5SS (stainless steel) meets NEMA 4X standards and provides a degree of corrosion resistance. T5 heads feature 6 terminal posts. Covers are tethered to the body with a ball-chain. Temperature rating with gasket is 300 °F (150 °C).

**T8**

The T8 terminal head is Conax Technologies’ standard weatherproof, gasket-sealed, screw cover head, constructed of cast iron with black epoxy coating (E-COAT) for corrosion resistance. It accepts up to 8 leads. Covers are tethered to the body with a ball-chain. Explosion-proof models are available. Temperature is rated at 700 °F (370 °C).

**T11**

The T11 termination provides a screw cover with chain leash and a 6-post terminal block. The T11 is available in cast aluminum with a high gloss silver-painted finish designed to resist weak acids, organic solvents, alkalis, sunlight and dust. Temperature is rated at 275 °F (135 °C).