Accurate, Temperature Readings Through Radio or Conduction Environments

Watlow’s TR thermocouple probe is designed for use in plasma generation applications to ensure accurate temperature readings through radio or conduction environments where traditional sensors are ineffective. Radio frequency energy can cause serious temperature measurement errors when exposed to these types of environments.

The TR probe is constructed using a unique combination of high performance materials. The sensor tip is made from high thermal conductivity materials to provide a quick response time. High dielectric insulation electrically insulates the sensor from capacitive coupling. Lead wires are twisted to improve common mode rejection and reduce induced EMI (electromagnetic interference).

Features and Benefits

3000VDC dielectric rating
  • Allows thermocouple to be used in platens with dc bias

High thermal conductivity design
  • Ensures accurate, repeatable measurements

High CMRR lead wire design
  • Reduces induced error from EMI

Options

• Type K calibration
• 0.875 in. (22.23 mm) to 1.5 in. (38.1 mm) immersion depths
• 5/16 - 18 or M8 threaded fitting
• 260 or 500°C rated constructions