Boiler Temperature Sensors

Overview

High efficiency, condensing water boilers have largely replaced conventional water heating systems in Europe, and are increasingly being used in the Americas and Asia. Driving this change is a substantial increase in energy efficiency, typically 98%, compared to 70%, for the older technology; this is further due to national legislation, which determines high efficiency water boilers are installed for new or upgraded systems.

The optimal performance is, in part, determined using high precision temperature sensors, based on negative temperature sensor (NTC) thermistors, which replace low precision thermal-mechanical switches. Additionally, safety is enhanced since ‘dry-burn’ is prevented with the use of thermal cut-off fuses (TCOs) that restrict electrical power to the boiler in the event of a malfunction.

- Full range of TCO temperature ratings according to EN60691
- Range of connector geometries are available
- Custom designs can be considered

- Non-intrusive temperature measurement - The sensor sits on the pipe
- A large range of pipe diameters are accommodated from Ø12-24mm (0.47-1.0”)
- Fast response time: < 2.0 seconds to register a thermal transient
- High precision: ±1.0°
- Full range of resistance values and resistance versus temperature responses are available