

## Advanced Sensor Solutions for Turbomachinery in Power Generation

### AIR INLET SENSORS

Specifically designed to measure the temperature of the air entering an engine or system, providing critical data for optimal performance and efficiency.

### WHEELSPACE SENSORS

Addressing issues such as creep, stress, rupture, corrosion and EMF drift, our durable range of single and dual-element designs are tailored for wheelspace applications.

### EXHAUST GAS SENSORS

Exhaust gas temperature systems prevent mechanical probe damage at installation and tip vibration during normal operation.

### DISC CAVITY

### COMPRESSOR DISCHARGE

### BLADEPATH SENSORS

Thermocouple is situated downstream from a respective combustor, positioned within the flow path of the turbine exhaust near the last row of turbine blades. Sensor assemblies utilize vibration resistant tip construction.

### FLASHBACK SENSORS

Thermocouples are used to monitor flashback temperatures in the gas turbine combustor system. Sensor assemblies utilize swagged tip construction.

### BEARING SENSOR

Meeting the operational and performance requirements per the OEM specifications as replacements on heavy duty gas turbines.

**REQUEST A FREE QUOTE FROM TEMP-PRO TODAY**

Phone: 413-584-3165 | Toll Free: 800-991-9093 | Fax: 413-586-3625 | Email: [sales@temp-pro.com](mailto:sales@temp-pro.com)  
Temp-Pro.com | 200 Industrial Drive | Northampton, MA 01060

**COST-EFFECTIVE**

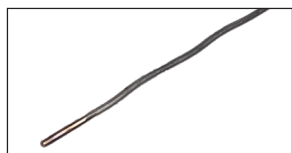
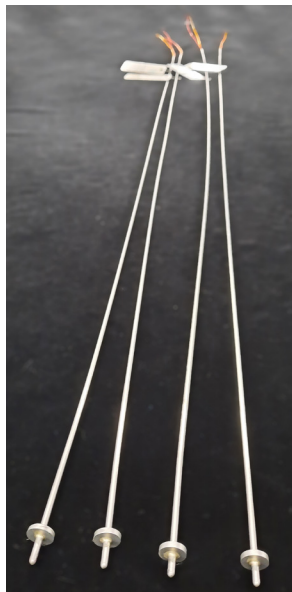


**RAPID RESPONSE TIME**



**RETROFIT CAPABILITY**

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### **AIR INLET SENSORS**

Air inlet thermocouples meeting specific qualifications are crafted from ASTM E585 thermocouple material and employ exceptionally pure insulation material, resulting in superior insulation resistance and consistent sensor performance.

### **BEARING SENSORS AND SEALS**

Designed for embedded usage in applications demanding precise temperature monitoring to ensure optimal machine performance and dependability. These sensors offer versatility with options in RTD or thermocouple variants—specifically types J, K, T, and E. They feature an exclusive bearing sensor wire seal, mitigating the risk of oil migration along the sensor leads.

### **WHEELSPACE SENSORS AND DISC CAVITY THERMOCOUPLES**

Temp-Pro Inc.'s thermocouples tailored for this specific application conform precisely to the operational and performance criteria stipulated by OEM specifications for use as replacements on heavy-duty gas turbines. These thermocouples, known for their cost-effectiveness, are meticulously designed with hermetic sealing to ensure heightened reliability. Meets the requirements of ASTM E585 and ASTM E608. Additionally, the positive stop at the thermocouple's tip effectively eliminates potential fretting issues.

### **EXHAUST GAS SENSORS AND BLADE PATH SENSORS**

Exhaust gas and blade path sensors utilize Type K ungrounded thermocouples designed with Special (+/-0.4%) limits and have a time response of 1.7 to 4.0 seconds, contingent upon the tip configuration.

These specified thermocouples for exhaust gas and blade path applications are crafted from ASTM E585 thermocouple materials utilizing the highest purity insulation material yielding superior insulation resistance at elevated temperatures. Equipped with a positive stop in the thermowell and an anti-vibration collar.

Flashback Sensor assemblies use Type K sensor elements. These type K ungrounded thermocouples are manufactured using conductor materials meeting special limits of error in accordance with ASTM E230. Meets the requirements of ASTM E585 and ASTM E608.

All specified thermocouples adhere to industry ASTM E608 standards, produced from ASTM E585 thermocouple material, deploying insulation materials of the highest purity to ensure exceptional insulation resistance at elevated temperatures. Thorough manufacturing and testing procedures are implemented at various stages of the production cycle, ensuring the attainment of the highest feasible quality levels.

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