

Right-Angle Ribbon Thermocouple with Dust Deflector C5 Series

This series of Right-Angle Ribbon Thermocouple features a Dust Deflector on the sensing tip. This deflector is in the shape of an arc and covers a 120 degree angle around the sensing tip. When foreign matter such as dust particles, dirt, and other small solid objects impact the Dust Deflector, that matter is then diverted off the sides of the probe. Thus, protecting the thin ribbon elements from damage. The thermal junction measures the temperature of the hot gases and/or liquids without being damaged by the dust particles. A peen mark is stamped onto the thermowell at the cold end to assist in aligning the probe so that the dust deflector is facing directly into the oncoming gas flow.

This Right-Angle Ribbon sensor features a thermal junction of thin ribbons welded together at the sensing tip. These ribbons are brought out from opposing sides of the probe between the interface of an insulating rod and cone assembly. The ribbons in the vicinity of the media being measured are parallel to the plane of the heat source. Thus, both the ribbons and the thermal junction are heated simultaneously and conduction errors are eliminated. The ribbon elements also allow for fast response times to temperature change. Since there is a large surface area to cross-section area ratio in the ribbon design as compared to round wires.

NOTES:

- Standard probe comes with a two-prong standard plug connector attached. Mating jack connector with cable clamp is furnished with each unit.
- Thermocouple junction has no conduction errors
- Pressure range to 4,000 psi
- Low millisecond response time to temperature changes
- Temperature range from -320 to 2,000 degrees Fahrenheit
- Available in thermocouple calibration types E, J, K & T
- When ordering specify part number C5 and thermocouple calibration type.
Example: C5-J

