



Disc Thermocouples

Disc (or foil) thermocouples are widely used in fire testing of building components. Nextherm Sensing offers various standard models as well as custom design for your specific needs.



Sensor description

Disc thermocouples are proposed in standard version with the following specifications :

- Disc diameter: 12mm
- Thermocouple type K
- Single strand twin-conductors, diameter: 0.35mm
- Wire length: 2m50
- Glass silk insulation (option : high temperature silicone oversleeve)
- Termination via flat plug connector

Available in two versions:

- **Semi-rigid foil:** with a standard thickness of 0.2 mm, the copper foils are usable up to +650°C. They can be fixed with refractory adhesive or cement. The Type K thermocouple is brazed to the back of the disc with the conductors positioned diametrically opposite each other. This arrangement allows for the measurement of an average temperature. Upon request, the thermocouple junction can be brazed to the center of the foil ;
- **Flexible Kapton® (polyimide) foil:** with a thickness of 0.14 mm, the polyimide foil can withstand continuous temperatures up to +260°C (+300°C peak). The front of the disc is self-adhesive and removable with no residue. The sensor's flexibility allows it to be bonded to curved shapes (e.g., pipes). The thermocouple's hot junction is encapsulated at the center of the pad, between two layers of polyimide.

For custom requirements (foil thickness and diameter, conductor type, connector type, ...), please contact us.

COMPLIANT WITH STANDARD EN 1363-1 &2 « Fire resistance testing ».

Sales contact



NexTherm Sensing
6, Impasse Louis Bentajou (siège)
31410 Longages, France



contact@nextherm-sensing.com



+33 (0)6.45.13.04.71

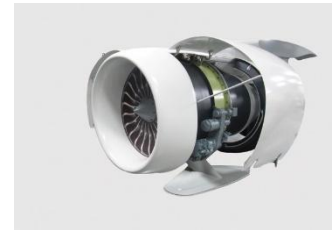
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