

TPI Pipe Surface Thermocouple Sensor

The curved surface aluminium bodied sensors are specifically designed for mounting onto the surface of a pipe. The pipe temperature can be used to identify whether the product or medium is flowing.

Available as Type K, J or T Thermocouple types, Simplex with an insulated or grounded junction. The extension cable has flexible 7/0.2mm diameter PFA insulated conductors, which are twisted then Silicone Rubber sheathed. Suitable for use between temperatures of -30...+200°C.

The aluminium body ensures optimal heat transfer from the pipe surface to the measuring element. The thermal conductivity is approximately twice as good as brass and much better than stainless steel. The sensor is compact which results in minimal heat dissipation. The curved sensor suits a wide range of pipe diameters, from 12mm up to 30mm.

The sensors are easy to install: simply strap to the pipe using plastic cable ties, worm-drive hose clips or metal straps (application dependent). It is generally advised to insulate / lag over the sensor to reduce the effect of the ambient temperature on the sensor readings.

10mm OD

- · Aluminium tip for fast response
- · Thermocouple Types K, J, T
- · Suits pipe diameters 12...30mm
- · Easy to install











Thermocouple Type J







(section 5)

10mm OD

Tip Face



		Pipe Surface Thermoco	upie Serisor	IPI
2	conductor/thermocouple type (IEC 60584.1)		conductor temperature range	code
	Type K	Nickel Chromium vs. Nickel Aluminium	0°C to +1100°C	K
	Type J	Iron vs. Constantan	-50°C to +750°C	J
	Type T	Copper vs. Constantan	-200°C to +350°C	Т

3	sensing junction	code
	Insulated (isolated, ungrounded), Simplex	1
	Grounded (non-isolated), Simplex	G
4	extension cable length (mm) (L1)	code
	As required to suit your application	e.g. 2000
5	optional thermocouple connector (supplied attached to cable)	

Miniature Thermocouple Plug (K, J, T) **FMP** Standard Thermocouple Plug (K, J, T) **RSP**

See pages 53-58 for our full range of Thermocouple connectors.