

TTB Miniature Embedment/Bearing Thermocouple Sensor

Embedment thermocouple sensors are most commonly used to monitor the bearing temperatures of rotating equipment. The recognition of a rising temperature can provide an early warning of the break-down of the lubrication. This early warning allows the process to be shut-down for maintenance before a major breakdown or costly failure occurs.

The miniature bearing sensors provide a cost-effective solution to bearing temperature monitoring. Suitable for use between -25°C and +250°C.

Easy to install, the sensors are inserted directly into the bearing shoes, in or beneath the Babbitt layer. The small diameter tips are commonly epoxy sealed into drilled holes in the shoes, whilst the spring loaded style tip is inserted into a milled hole, the self-locking retaining clip is then pushed into the hole to compress the spring.

The D (Top-Hat) Style Tip is supplied with a retaining clip and spring.

- Cost-effective solution to bearing temperature monitoring
- Easy to install
- Cap and Top-Hat tip styles
- Stainless steel and phosphor bronze tip materials
- Custom extension cable lengths

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1	Sensor Type						Code	
	Miniature Embedment/Bearing Thermocouple Sensor						TTB	
2	Conductor/Thermocouple Type (IEC 60584.2)				Conductor Temperature Range		Code	
	K	Nickel Chromium vs. Nickel Aluminium			0°C to +1100°C		K	
	J	Iron vs. Constantan			-50°C to +750°C		J	
	T	Copper vs. Constantan			-200°C to +350°C		T	
	N	Nicrosil vs. Nisil			0°C to +1200°C		N	
E	Nickel Chromium vs. Constantan			-200°C to +900°C		E		
3	Tip							
	Style	A (Cap)		B (Cap)		C (Cap)		D (Top-Hat)
	Diameter	3.2mm Ø x 8.0mm L		4.0mm Ø x 9.0mm L		6.0mm Ø x 6.0mm L		6.0mm Ø x 6.0mm L Case 5.0mm Ø
	Material	Stainless Steel	Phosphor Bronze	Stainless Steel	Phosphor Bronze	Stainless Steel	Phosphor Bronze	Stainless Steel
	Code	AS	AP	BS	BP	CS	CP	DS
	4	Sensing Junction		Number of Channels				Code
Insulated (isolated, ungrounded)				Simplex		I		
				Duplex		2I		
Grounded (non-isolated)				Simplex		G		
				Duplex		2G		
5	Extension Cable Length (mm)	Description			Conductor Size	Simplex / Duplex	Max. OD	Code
	As required to suit your application (e.g. 1000mm)	Single pair of stranded conductors. Each conductor is PFA insulated. The cores are twisted to form a pair then stainless steel wire braided overall (95% coverage).			7 x 0.15mm	Simplex	2.1mm	CT02/SSB
		Single pair of stranded conductors. Each conductor is PTFE taped and sintered. The cores are twisted to form a pair, PTFE taped and sintered then stainless steel wire braided overall (95% coverage).			7 x 0.15mm	Simplex	2.2mm	CT04/SSB
		Single pair of stranded conductors. Each conductor is PFA insulated. The cores are twisted to form a pair then PFA sheathed overall.			7 x 0.20mm	Simplex	2.6mm	CT25
		Two pairs of stranded conductors. Each conductor is PFA insulated. The four cores are twisted, PFA sheathed then stainless steel wire braided overall (95% coverage).			7 x 0.20mm	Duplex	3.5mm	CTM02/SSB
Order Code (example)		1 2 3 4 5 TTB - K - AP - I - 1000mm CT02/SSB						

Accessories for Top-Hat (D style) Tips

RC846 Retaining Clip

Replacement retaining clip for Top-Hat (D style) tips
8mm OD x 4.0mm ID, 6 prongs



RS126 Spring

Replacement spring for Top-Hat (D style) tips
H 12mm long x 6.0mm Ø

