



Temp-Pro Inc is a leader in the industry, supplying temperature sensor requirements for the most demanding industrial applications.



We specialize in the following products:

- Temperature Sensors Electrical Enclosures
- Wiring Harness & Cable Assemblies

- Thermowells

- Electro-Mechanical Assembly
- Miscellaneous Instruments & Accessories

POWER • OIL & GAS • RENEWABLE ENERGY • AEROSPACE • FOOD & BEVERAGE • AUTOCLAVE • PETROCHEMICAL PHARMACEUTICAL • WATER & WASTE WATER • HVAC • INCINERATION • FURNACE • PLASTICS • CEMENT • DEFENSE



Temp-Pro Inc is a leader in the industry, supplying temperature sensor requirements for the most demanding industrial applications.

# **Temperature Sensors for the Wind Industry**

	Screw-in	RTD Sensors - Stainless steel or other					
	Туре	Flat, Continous, Stepped, Variety of designs available					
	Range	RTD: Pt, Ni, Cu					
11	Unique Features	Thermocouple: Type J, K, T, E Single or double RTD probe					
	onique i eatures	Available with transmitter					
	Accuracy	RTD: Class A, B according to IEC60751					
	Operating Temp.	Varies: -50°C to 200°C, Available up to 220°C					
•	Dimensions (in.)	Custom dimensions available					
	Typical Apps	Monitor Rotor, Gears, Transformer Station, Liquids & Gases					
TITI							
	Embedment Probe - Stainless steel or tin plated copper case						
	Туре	Miniature Design					
	Range	RTD: Pt, Ni					
	Unique Features	For use where space is limited					
		Simple Installation					
		Custom Designs					
		Feedthrough Options					
	Accuracy	RTD: ± 0.12%, ± 0.36% and ± 0.5% at 0°C					
	Operating Temp.	-50°C to 250°C (-58°F to 482°F)					
	Dimensions (in.)	Case specific dimensions					
	Typical Apps	Bearing monitoring					

#### Bolt-On Probe - Threaded bolt, tube style, flat style

Туре	Quick Repsonse Time
Range	RTD: Pt, Ni
Unique Features	For use where space is limited Retro Fitting
	Simple Installation
	Custom Designs
Accuracy	DIN Class B (IEC 75) and $\pm$ 0.5% at 0°C
Operating Temp.	-50°C to 250°C (-58°F to 482°F)
Dimensions (in.)	Case specific dimensions
Typical Apps	Rotor, Climate Control, Generator

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



Temp-Pro Inc is a leader in the industry, supplying temperature sensor requirements for the most demanding industrial applications.

# **Temperature Sensors for the Wind Industry**

Stator Sensors - G11 epoxy glass laminated, Class F or H							
<b>Д</b> Туре	Rigid flat, Slot sensor, Cable or leadwire options						
Range	RTD: Pt, Ni, Cu						
Unique Features	Extended sensitive length						
	Single or dual elements Calibration available						
Accuracy	RTD: Class A, B according to IEC60751						
Operating Temp.	Max. temperature: Class F, 155°C; Max. temperature: Class H, 180°C						
	Available up to 200°C						
Dimensions (in.)	Custom dimensions available						
Typical Apps	Monitor temperature between stator coils, electric motors, generators						
Transform	ner/Bearing Probe - Pt element embedded into Stainless tube						
Туре	Push-in probe						
Range	RTD: Pt100						
Unique Features	2-wire, 3-wire, 4-wire circuit						
	Various length of cable Cl.B according to IEC 751						
Accuracy	-						
Operating Temp.	-40°C to 350°C (-40°F to 662°F)						
Dimensions (in.)	ø.125, .188, .250 (Custom cable lengths available) Temperature monitoring in low voltage Transformer windings,						
Typical Apps	Bearing monitoring						
Bearing S	ensors - Copper alloy tip; Stainless steel, isolated stainless steel or epoxy glass case						
Туре	Rigid sheath, Tip sensitive, Cable/leadwire options						
Range	RTD: Pt, Ni, Cu						
Unique Features	Cut-to-length						
	Copper tip for fast time response Assemblies with fluid seal and spring loading						
	Single or dual elements						
Accuracy	RTD: Class A & B according to IEC60751						
Operating Temp.	-50°C to 250°C (-58°F to 482°F)						
Dimensions (in.)	Custom lengths, Standard sheath diameters: 125 & .188						
Typical Apps	Bearing monitoring						

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



# Temp-Pro Inc is a leader in the industry, supplying temperature sensor requirements for the most demanding industrial applications.

Temp-Pro's embedment sensors are designed for use in the Rotating Equipment and Turbomachinery industries. Our embedment sensors provide critical temperature indication of bearing conditions, thus allowing machine shutdown and maintenance before catastrophic failures.

Temp-Pro's Miniature Bearing Temperature Sensors provide a reliable, simple and cost-effective method to monitor bearing temperatures.

# **Embedment RTDs and Thermocouples**

Maximum Number of Conductors and Wire Gauge

Case Style A		Case Style B		Case Style C		Case Style D		Case Style E		
			Ē							
SENSOR TYPE		L: 0.250" Case L: Ø: 0.275" Case Ø: Flange Ø			Case L: 0.300" Case Ø: 0.125"		Case L: 0.300" Case Ø: 0.080"		Case L: 0.250" Case Ø: 0.250"	
	Single	Dual	Single	Dual	Single	Dual	Single	Dual	Single	Dual
Platinum, 100 $\Omega \pm 0.12\%$ at 0°C (Meets EN60751, Class B) <sup>1</sup>	3 Wire 24 AWG	6 Wire 24 AWG	3 Wire 24 AWG	6 Wire 24 AWG	3 Wire 26 AWG	NA	3 Wire 30 AWG	NA	3 Wire 24 AWG	6 Wire 24 AWG
Thermocouple (E, J, K, T)	2 Wire 24 AWG	4 Wire 24 AWG	2 Wire 24 AWG	4 Wire 24 AWG	2 Wire 26 AWG	NA	2 Wire 28 AWG	NA	2 Wire 24 AWG	4 Wire 24 AWG

 $^{1}\alpha$  = 0.00392 °C - Contact Factory

#### **Bearing (Embedded) Thermocouples & Pt100 Sensors**

Standard assemblies are easy to install in drilled holes for general temperature sensing applications, whereas the spring loaded 'top hat' style assemblies, are inserted into a milled hole with a retaining clip to compress the spring and retain the sensor against the surface being monitored.

#### **Specifications**

Temperature Range: -50 to 260°C (-58 to 500°F).

Case Materials: 316 SS; Copper; Nickel Plated Copper; Tin Plated Copper, Brass.

**Lead Wires:** Stranded silver plated copper conductors with PTFE insulation and optional stainless steel overbraid (one sleeve covers all leads).

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



# **Installation & Accesories**

Case Style	Installation Instructions	Dimensions
A & E	Install sensor Style A just below the babbitt layer, then puddle the babbitt metal over the sensor tip and smooth. Style E is bonded with epoxy near the babbitt face for best temperature measurement reading.	USE STATE TAX STATE OF TAX STAT
В	This sensor is designed with a spring and retaining ring allowing spring loading. Slide the spring and ring over the leads, insert the sensor tip into a milled hole, and push down on the retaining ring to compress the spring and secure the sensor.	BEARING SHOE LEADWIRE
C & D	Bond with epoxy inside the small bearing shoes. Locate near the babbit face for best temperature measurement reading.	Emech 0 + 303" (SUMP)

Part Number	Description	Illustration
67P-0096 67P-1084	Spring Length 0.50 Spring Length 1.25	QLQ
67P-0097	Retaining Washer	<i>Ż</i>
67P-1085	Retaining Ring	

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



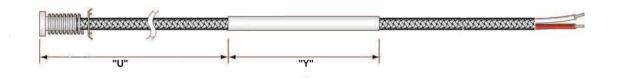
# **How to Order**

#### Order Chart -

	Sensor Type	Single or Dual	Case Style	Case Material	Junction	Options	Header Pass Through (Leave blank if not req'd)	Header Pass Through Location "U"	
MBTS									
1	Pt100 385	RTD 2W	А	316ss	Grounded	Stainless Steel Overbraid	Y	U	
2	Pt1000 385	RTD 2x2W	в	Copper	Ungrounded	Spring & Clib Style "B" Only	Y (X.XX)	U (X.XX)	
3	N120 672	RTD 3W	с	Ni Plated Cu	N/A - RTD	Beryllium Copper Retainer Style "B" Only			
4	Cu10 427	RTD 2x3W	D	Sn Plated Cu					
5	D100 392	RTD 4W	Е	Brass					
6	J	RTD 2x4W							
7	к	T/C Single							
8	E	T/C Dual							
9	т								

Example MBTS-1-3-2-1-3-2-40

#### Feedthroughs -



#### **Overview**

Feedthroughs provide an oil-tight-seal where a cable exits a machine housing. The stainless steel tube is epoxy filled and each wire is sealed to the individual conductor. This prevents wicking of oil inside the wires as well as leakage around the wire insulation.

Feedthroughs can be ordered as an accessory to any sensor in this guide. When ordering feedthroughs with case style B bearing sensors, the spring and retaining ring are automatically included.

#### **Specifications**

Materials: 316 Stainless Steel with epoxy potting

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



## We specialize in the following products:



#### **TEMPERATURE SENSORS**

Temp-Pro designs and manufactures temperature sensor products to include Thermocouples, resistance temperature devices (RTDs), thermistors, and associated components and hardware.

#### THERMOWELLS

Temp-Pro designs and manufactures thermowells for industry-specific or functional applications, but can also be designed and manufactured to meet customer-specific requirements.



#### **ELECTRICAL ENCLOSURES**

Temp-Pro combines functionality with quality in all of our industrial enclosure products, including simple junction, multi-function, multi-component control panels, or fully assembled electrical enclosures.

# ELECTRO-MECHANICAL ASSEMBLY

Temp-Pro offers a variety of electro-mechanical fabrication services—from simple sub-assemblies to complex systems including Local Instrument Enclosures (LIE), Local Instrument Racks (LIR) & Local Gauge Boards/Panels for specialized industrial applications.



#### WIRING HARNESS & CABLE ASSEMBLIES

Temp-Pro has a comprehensive offering of wiring harness and cable assemblies to include build-to-print wiring harnesses and electronic, as well as mechanical and structural assemblies.



#### **MISCELLANEOUS INSTRUMENTS**

Temp-Pro manufactures a wide-variety of temperature measurement instruments to include Bimetal Thermometers, Gas Actuated Thermometers, Pressure Gauges, and Transmitters.



#### ACCESSORIES

Temp-Pro's accessories include RTD and thermocouple heads, terminal blocks, plugs, jacks, wire and related elements—including fixtures, fittings, insulators, pipe bushings, nipples, and flanges, among many more.

Temp-Pro also offers extended services to support our product line:

Wake Frequency Calculations • Application Assistance • Expediting Options Special Packaging • Training • Calibration • Custom Design

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