

# NPT1 SERIES FLUID TEMPERATURE SENSOR

The NPT1 Series of high performance temperature sensors are designed to measure the temperatures of fluid in demanding motorsport and on-vehicle automotive applications.

The sensing element can be either PT1000 or NTC thermistor, calibration of each is well defined and can be installed into most common ECUs and data logging systems.

Construction is brass with standard motorsports cable and sleeve used to protect from the harsh environments around the vehicle.

For special applications we can modify the sensor design to exactly match custom specifications. The NPT1 Series are race proven in many formula around the world and offer a reliable and rugged solution for professional engineers.

## **TECHNICAL SPECIFICATIONS**

Ranges (FS)	-20°F to 300°F (-30°C to +150°C)	
Accuracy	±1.8°F (±1°C)	
Response Time	<10 Seconds	
Seal	Viton O-ring	
Sensor Type	See table on the right	
Construction	Stainless Steel or Brass	
<b>Electrical Connection</b>	12" 26AWG 55spec + DR25	
Mechanical	1/8" NPT	
<b>Protection Class</b>	IP67	
Vibration	Mil-Std-810C, curve L, 20G	
Weight (Excluding cable)	0.7oz for both stainless steel and brass	
Options	Cable length, connector fitted thread size and labelling	

	ΝΤC3ΚΩ	PT1000		
Temp °C	Output Ω	Output Ω		
-30	53100.000	882.200		
-20	29121.000	921.600		
-10	16599.000	960.900		
0	9795.000	1000.000		
10	5970.000	1039.000		
20	3747.000	1077.900		
25	3000.000	1097.300		
30	2417.100	1116.700		
40	1598.100	1155.400		
50	1080.900	1194.000		
60	746.400	1232.400		
70	525.600	1270.800		
80	376.500	1309.000		
90	274.590	1347.100		
100	203.460	1385.100		
110	153.090	1422.900		
120	116.790	1460.700		
130	90.279	1498.300		
140	70.581	1535.800		
150	55.791	1573.300		

Sense Measure Control

#### **Features**

- 1/8 NPT Thread
- Miniature Size
- -20°F to +300°F
- PT1000 or NTC
- Rugged Construction

## **Applications**

- Coolant
- Water
- Brake
- Fuel
- Oil

#### Contact us

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Represented by:

PMC/KA Sensors adopts a continuous development program which sometimes necessitates specification changes without notice

Sensors and solutions for Motorsport and On-Vehicle applications

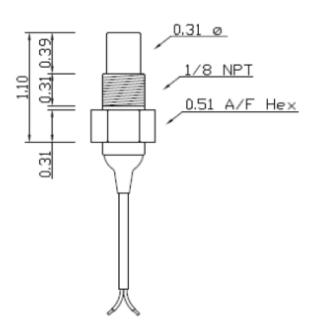
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<b>KA</b> figurator		NPT1 B	1uA	#N/A	000
Construction	Brass Stainless Steel Aluminum	B S A			,
Sensor Type	2K ohm @ 25°C 2K5 ohm @ 25°C 3K ohm @ 25°C 5K ohm @ 25°C 10K ohm @ 25°C 1μA/Degree Kelvin PT1000		2K 2K5 3K 5K 10K 1uA PT		
Cable Length	12 inches 16 inches 20 inches 40 inches			A12 A16 A20 A40	
Special Codes	None				000

The KA configuration tool is used to specify a standard KA Sensor, other options are available.

## **MECHANICAL DETAILS**

Dimensions in inches



# **ELECTRICAL DETAILS**

Output	Output
Red	White



## **Sensors for**

- Temperature
- Acceleration
- Pressure
- Position
- Torque
- Speed
- Angle
- Force

### **Services for**

- Data Logging
- Telemetry
- Controls
- Wiring
- Design

#### **KA Sensors are**

- Engineering led
- Confidential
- Experienced
- Responsive
- Dynamic
- Friendly

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