



## **AIRPAX® | 5024 Series**

### **CUSTOM TEMPERATURE SENSOR PACKAGES**

#### **FEATURES**

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- Available sensing technologies include thermistor, RTD or IC
- Stainless steel, brass or plastic construction

#### **DESCRIPTION**

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The Airpax™ 5024 series are custom temperature sensors designed to meet your applications needs.

Immersion probes generally used to sense and monitor temperature changes in applications requiring the sensor to be immersed in a media (air, water, oil, fuel, transmission fluid, hydraulic fluid, and the like) while maintaining the integrity of the sensor with regards to the elements. These sensor assemblies have the ability to monitor temperature changes, feed information to a microprocessor, and allow the microprocessor to make decisions based on predetermined readings. The devices can also be used to drive a gauge or certain sensors with extreme changes in output with temperature can be used to pull in and drop out relays. Various package styles and termination are available.

Surface sensing assemblies are generally used in controlled environments where severe conditions will not come into play. The surface sensing device can signal a microprocessor and allow the microprocessor to turn on or turn off different peripheral hardware at different predetermined milestone points. Various package styles allow the surface sensing device to be used in power supplies, switching stations, generator sets, personal computers, and a wide variety of other applications. The device will sense the temperature of the surface it is mounted to and provides an active feedback to its host.

Transmissions, brakes, hydraulic lines, manifold and heat exchangers require fluid and air temperature to be monitored at all times. Sensata has worked in these environments for many years and can provide package styles that are very responsive to these environments. These devices in turn would constantly monitor and feedback information reflecting changes in temperature to a gage, microprocessor, relay, or other device, allowing the end user to operate the equipment under optimum conditions and be alerted when these conditions deteriorate.

Sensata has years of experience in working with applications requiring temperature sensing of air and fluids. Our expertise in packaging, screw machining, and overmolding, enable us to work with our customer to provide fast thermal response in the products we manufacture. We offer a multi-varied assortment of termination, as well as connectors, both secondary and integral. Thread sizes for immersion style, package styles for surface sensing, and that design that has to be unique to the application set Sensata apart with their flexibility to package the sensing element the way you want it.

**EXAMPLE : 5024-5555**

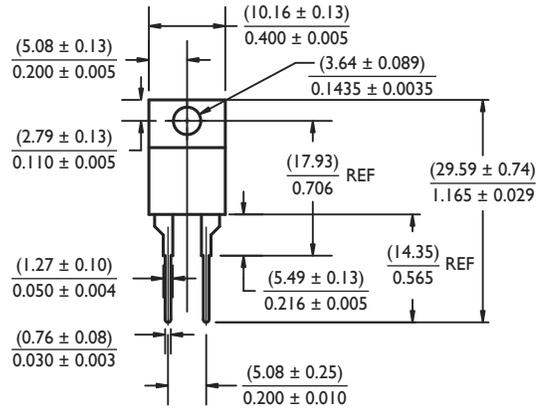
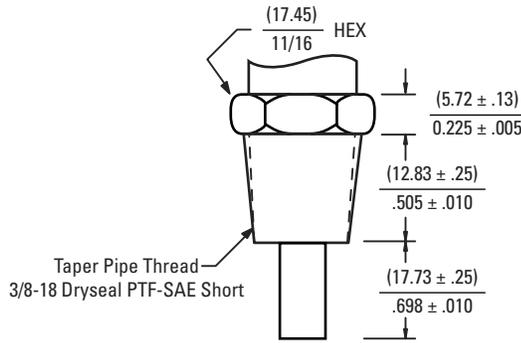
5024 series assigned a unique, 4-digit non-descript by Sensata Technologies to specify the body, terminals and sensing element.

5024 - 5 5 5 5

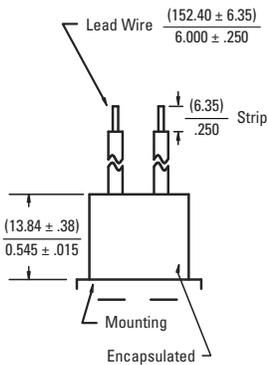
\* Basic Product Series

5. Non-Descript from Sensata

**TYPICAL PACKAGE CONFIGURATIONS**



**TYPICAL TERMINALS**



**Operation Characteristics**

The Airpax™ 5024 series temperature sensors are available in a variety of physical packages with several types of solid-state elements. These devices exhibit a predictable change in electrical output as a function of temperature.

**Custom Capabilities**

Sensata allows you to design the product to meet the requirements of each and every application. Something out of the ordinary is not out of the ordinary for us. We make the unique, daily.

**Quality**

ISO 9001 registered, Sensata Technologies is a certified supplier to many of the market leaders.

- The standard lead wire (materials) for different temperature ranges are as follows:
  - Up to 220°F (104.4°C) = # 18 AWG stranded. UL Style 1015/CSA approved. (PVC insulation, color black)
  - 221°F to 350°F (105°C to 176.6°C) = #18 AWG stranded. UL Style 1199/CSA approved. (Teflon® TFE insulation, color black)
  - 351°F (177.2°C) and above = #18 AWG stranded. UL style 5288/CSA approved. (Composite of Teflon®, ceramic + glass braid, color brown)



**SENSATA TECHNOLOGIES**

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