



## | 5024 EGR SERIES

TEMPERATURE SENSOR

### Introduction

The 5024 EGR temperature sensor is a compact and economical, NTC based temperature sensor with a performance range up to 300°C. Originally designed for Automotive applications, it has been engineered and tested to meet the harshest environmental conditions. Fast response time, O-Ring sealed hex port and an integrated electrical connector make this sensor an outstanding turnkey solution for many industrial applications where accurate, robust temperature sensing is required.



### Features

- High temperature NTC Sensing
- Peak temperature to 300° C
- High accuracy over complete range
- Fast response time
- Stainless steel construction
- Integrated electrical connection

### Applications

- Exhaust gas recirculation systems, Automotive
- Diesel/Gas/Natural gas generators
- Wet exhaust gas, Marine
- Commercial lawnmowers
- Boiler exhaust gas monitoring

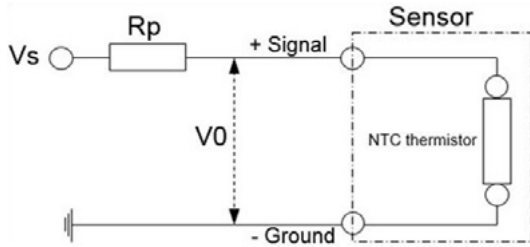


### SPECIFICATIONS

<b>Max Operating Temperature (Probe Tip)</b>	-55°C to 300°C (-67°F to 572°F)
<b>Temperature Tolerance</b>	25°C±0.8°C, 300°C±3.7°C
<b>Sensor Type</b>	10KΩ@25 °C, NTC
<b>Electrical Connector, Material</b>	USCAR 1.2mm Keyway, PPS-GF40
<b>Thread Design</b>	M12X1.5, M12X1.25 or M14X1.5
<b>Body and Probe Material</b>	304L Stainless Steel, 316L Stainless Steel
<b>Sealing Interface</b>	Stainless steel crush washer or FKM O-Ring

## Electrical Reference

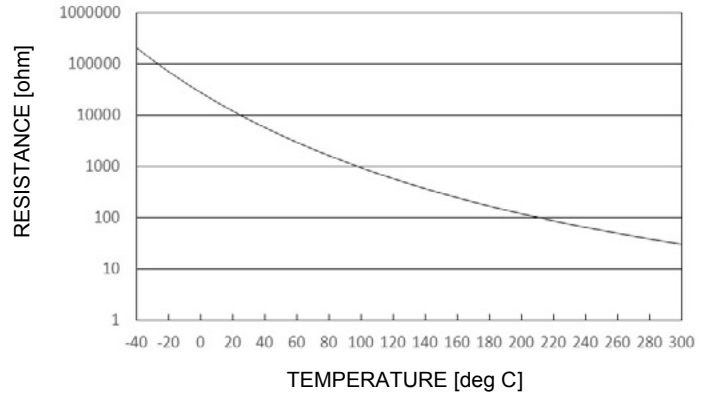
### 2. REFERENCE CIRCUIT



$V_s = 5V \pm 0.25V$   
 $R_p = 2.21k\Omega \pm 1\%$   
 $V_0 =$  Measurement results based on RT curve

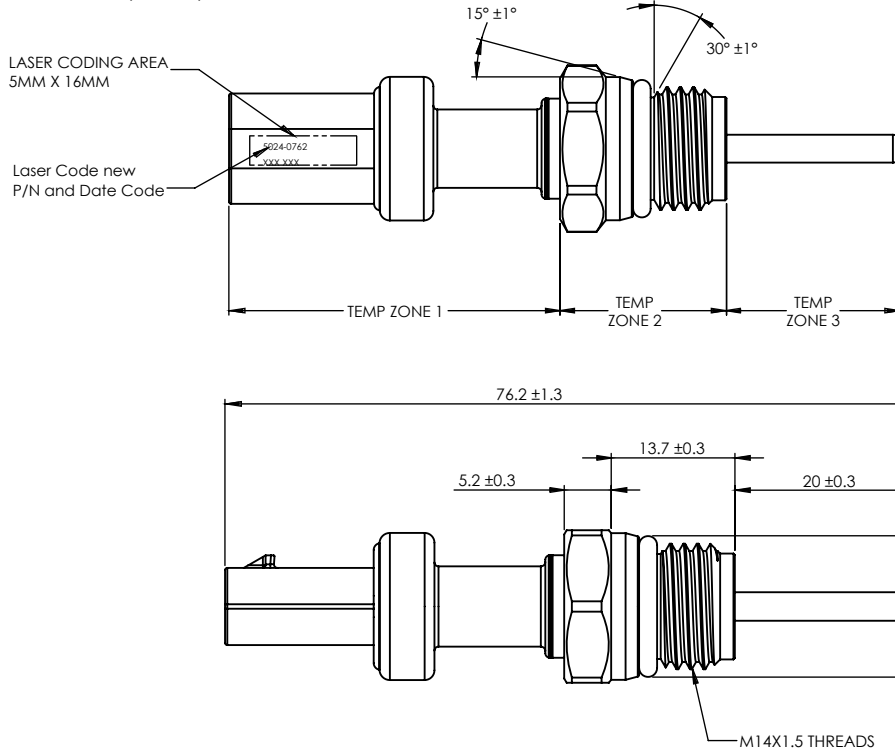
### RESISTANCE-TEMPERATURE CHARACTERISTICS

B VALUE: 3450K (0 / 100deg C), 10kohm at 25deg C  
RT CURVE(NOMINAL)



## DIMENSIONS

All dimensions are in millimeters (mm)  
 Dimensions for 5024-0762 are shown below.  
 Dimensions will vary with options selected

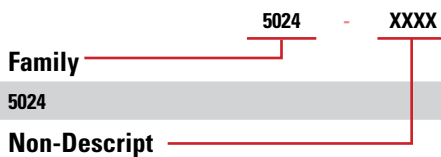


TEMP ONE	MAX APPLICATION TEMP ALLOWED
1	150°C
2	200°C
3	300°C



## ORDERING OPTIONS

Example : 5024-0762



Non-Descript assigned by Sensata and will account for all customer specific specifications, including Sensor Type, Thread and Hex, FKM O-Ring or Crush Washer, and Customer Specific Marking.



## STANDARD CONFIGURATION

Item Number	Overall Length	Thread Type	Sealing Interface	Connector Type
5024-0762	76.2 mm	M14 x 1.5 mm	FKM O-Ring (75 Durometer)	USCAR 1.2mm Keyway A



## GENERAL NOTE

Please contact Sensata Technologies for assistance in applying 5024 EGR temperature sensors to meet your probe temperature sensing needs.



## WARNINGS



### RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

**Failure to follow these instructions can result in serious injury, or equipment damage.**

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