



| 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

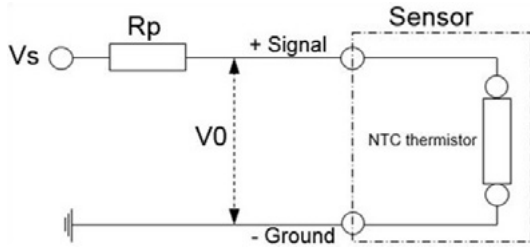


SPECIFICATIONS

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

Electrical Reference

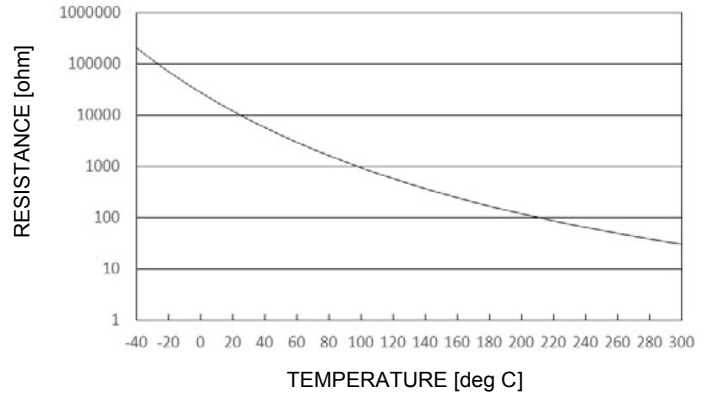
2. REFERENCE CIRCUIT



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

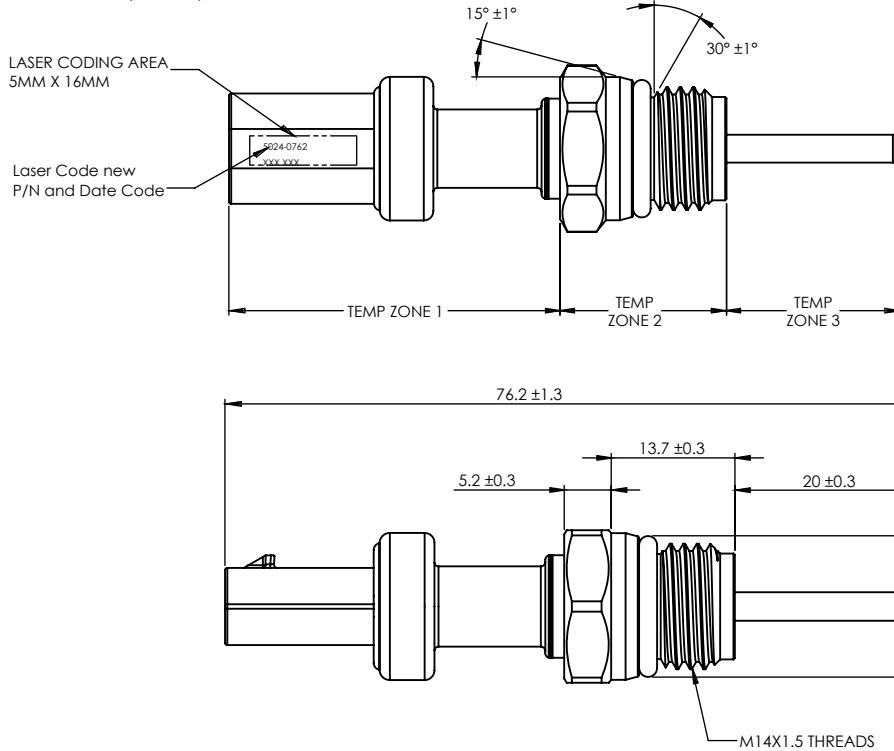
RESISTANCE-TEMPERATURE CHARACTERISTICS

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

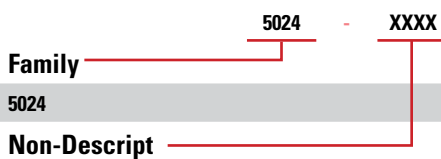


TEMP ONE	MAX APPLICATION TEMP ALLOWED
1	150°C
2	200°C
3	300°C



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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