| 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
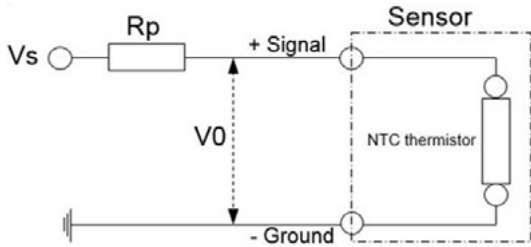- Commercial lawnmowers
- Boiler exhaust gas monitoring

SPECIFICATIONS

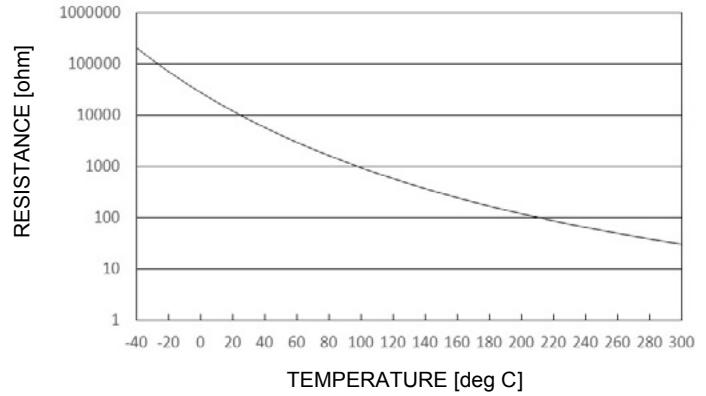|	
Max Operating Temperature (Probe Tip)	-55ºC to 300ºC (-67ºF to 572ºF)
Temperature Tolerance	25ºC±0.8ºC, 300ºC±3.7ºC
Sensor Type	10KΩ@25 ºC, NTC
Electrical Connector, Material	USCAR 1.2mm Keyway, PPS-GF40
Thread Design	M12X1.5, M12X1.25 or M14X1.5
Body and Probe Material	304L Stainless Steel, 316L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

www.sensata.com

Electrical Reference

2.REFERENCE CIRCUIT

Vs = 5V ± 0.25V
Rp = 2.21kΩ ± 1%
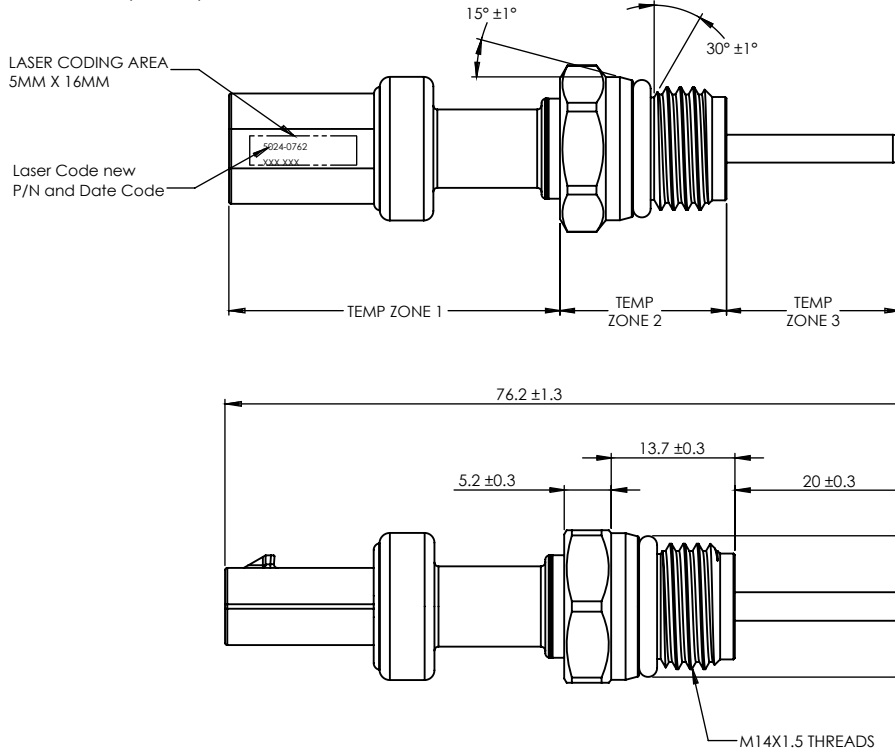V0 = Measurement results based on RT curve

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.
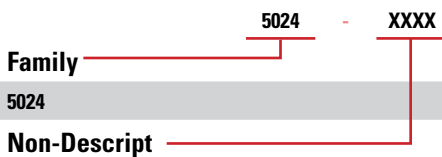Dimensions will vary with options selected

LASER CODING AREA
5MM X 16MM

5024-0762
XXX-XXX

Laser Code new
P/N and Date Code

15° ±1°   30° ±1°

TEMP ZONE 1   TEMP ZONE 2   TEMP ZONE 3

TEMP ONE	MAX APPLICATION TEMP ALLOWED
1	150℃
2	200℃
3	300℃

76.2 ±1.3
13.7 ±0.3
5.2 ±0.3
20 ±0.3
15 ±0.1

M14X1.5 THREADS

⬤ ORDERING OPTIONS

Example : 5024-0762

5024 - **XXXX**

Family

5024

Non-Descript

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.