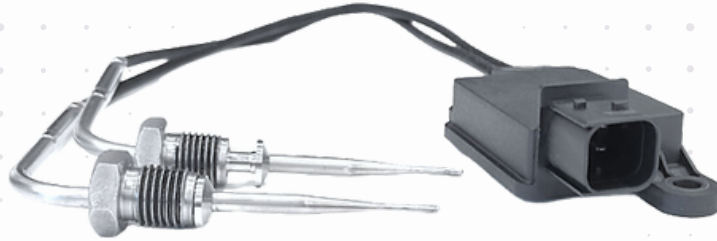


Exhaust Gas Temperature (EGT) Sensor Datasheet

The Thermocouple Type Probe EGT sensor is engineered for global emissions standards in on-road and off-road vehicles. Its integrated electronics convert thermocouple signals to a digital output, enhancing diagnostics and accuracy. Built for durability and stability at high temperatures, it is well suited for exhaust applications within gasoline and diesel engine systems, including turbo-charged applications. With probe lengths up to 80mm, it improves accuracy in larger pipes, optimizing emission system performance.

PRODUCT SPECIFICATIONS

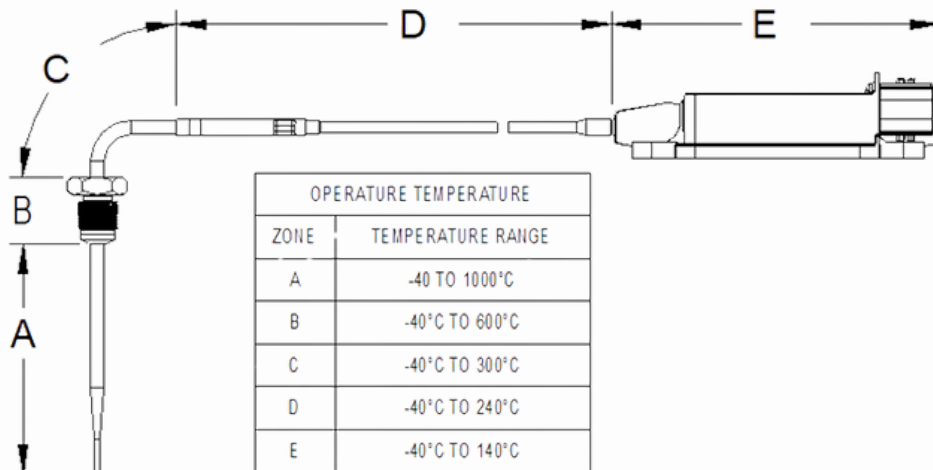


Typical Applications:

- Gasoline Particulate Filter (GPF)
- Diesel Particulate Filter (DPF)
- Other conditions (consult Sensience Sales Representative for specific applications)

Materials and Mounting:

- Sheath Material: Inconel 600
- Mounting Fittings: M12x1.25-6g, M14x1.5-6g, 400 stainless steel, or specific hex nut upon request
- Extension Wire: 24 AWG - 7 strands, PFA insulated and PFA jacket thermocouple wire, available in custom lengths
- Protective Sleeve: Silicone-coated fiberglass sleeve (optional)
- Connector: Typical CAN Tyco Electronics 114-18739-1 with 2 rows of 2 partial Ag-plated pins. Typical Tyco 3 Pin SENT Connector 1488991-5 with one row of Ag plated pins. Alternate connectors can be available upon customer request.

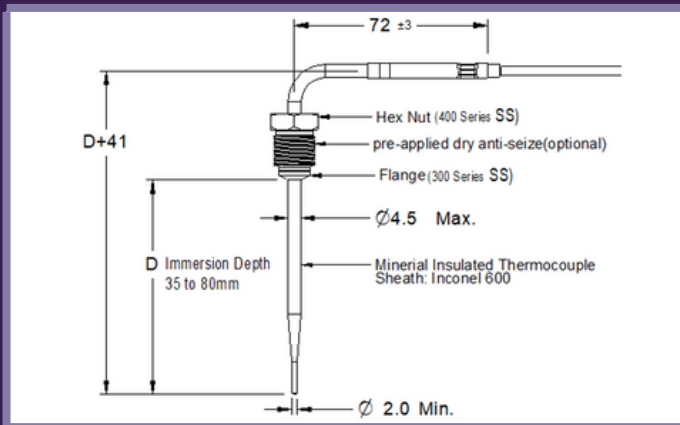


PRODUCT SPECIFICATIONS

Specification	Details
Sensor Type	Mineral insulated thermocouple, N type
Output Options	CAN: SAE J1939 - SENT: SAE J2716
CAN Communication Baud Rate	250kbps or 500kbps
Supply Voltage	CAN: 8V ~ 18V Battery, Current Consumption: $\leq 100\text{mA}$ - SENT: 4.75V ~ 5.25V Battery, Current Consumption: $\leq 10\text{Ma}$
Operating Temperature Range	Probe part: -40°C to 1000°C - Control Module: -40°C to 140°C
Sensor Output Accuracy	-40°C to 650°C : $\pm 5^{\circ}\text{C}$ - 650°C to 1000°C : $\pm 10^{\circ}\text{C}$
Thermal Time Constant T63	Typical 8sec. (depending on thermocouple size), in 5m/s air stream, from 25°C to 1000°C
Ingress Protection (IP) Code	IP6K9K & IPx7
Long Term Stability	Thermocouple: Drift $< \pm 4^{\circ}\text{C}$ after exposure to 1000°C (1832°F) for 1,300 hours - Control Module: Drift $< \pm 5^{\circ}\text{C}$ after exposure to 140°C (284°F) for 1,300 hours

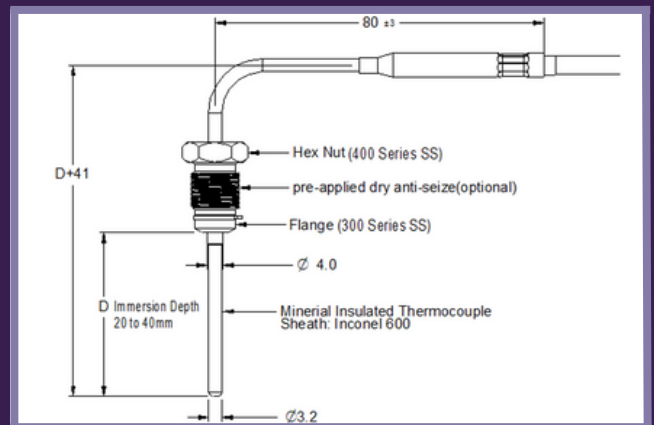
Dimensions

Tapered Thermocouple Probe



4.5mm thermocouple

Small Thermocouple Probe

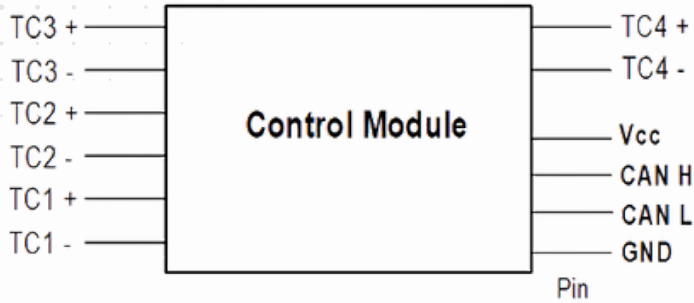


3.2mm thermocouple

Note: Thermocouple probes can be bent or straight upon customer request.

OUTPUT SPECIFICATIONS

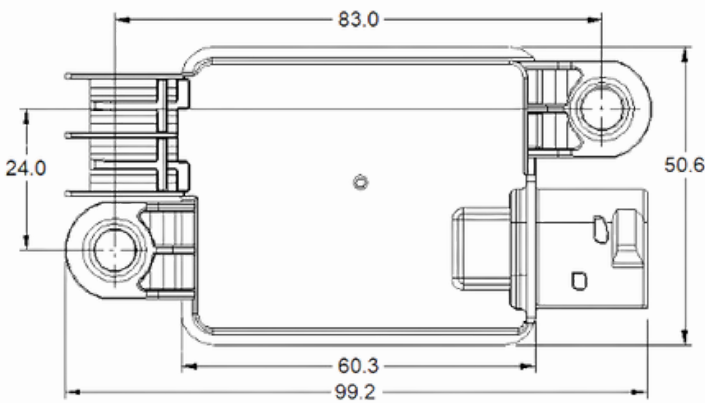
CAN Output:



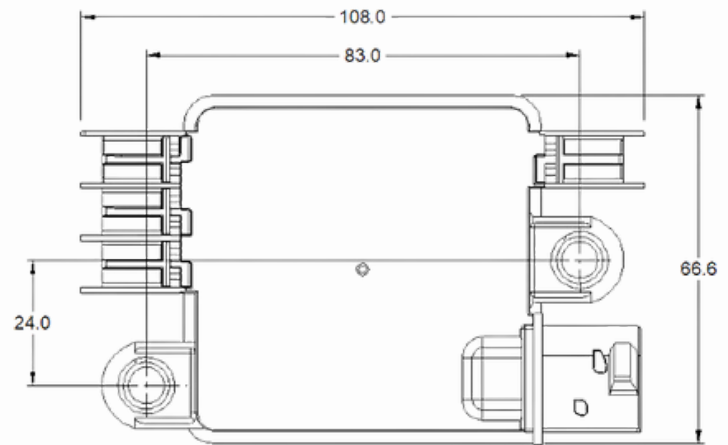
Note: J1939 compatible output is available with up to four probes.

Module case molded by PA66+33%GF, with good strength and toughness.

Note: The control module size and structure can be specified upon customer request.

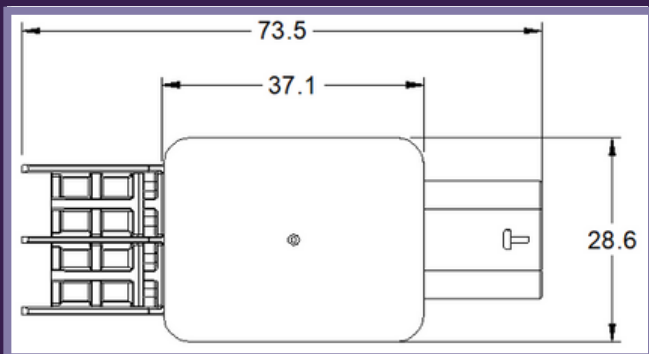


The size of control module for single probe and dual probes

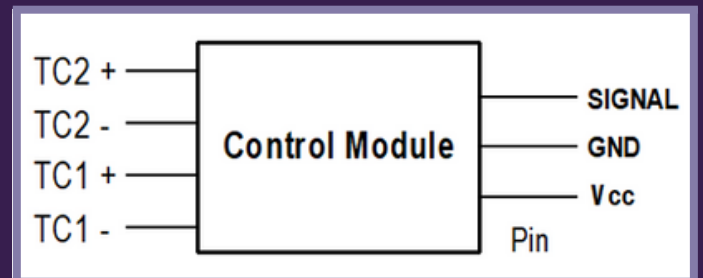


The size of control module for triple and four probes

SENT Output:



Note: The control module size and structure can be specified upon customer request.



Note: SENT output is available with single or dual probes.

Module case molded by PA66+33%GF, with good strength and toughness.