

# HIGH TEMPERATURE SENSOR

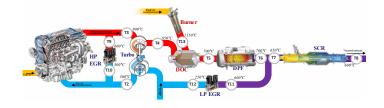
HTS

# Description

High temperature sensor measures vehicle exhaust gas temperature in aftertreatment applications for control, monitoring and diagnostics; used in conjunction with DPS, CPS, and HCM sensors.



## Disel



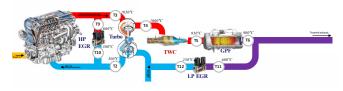
### **Features**

- Measures exhaust temperature at multiple points to use as inputs for reducing emissions while maximizing fuel economy
- Enables engine controller to appropriately regulate exhaust gas aftertreatment systems

# **Applications**

- Control, monitoring and protection of Diesel Particulate Filter on Diesel vehicles
- Control, monitoring and protection of Gasoline Particulate Filter on Gasoline vehicles
- Monitoring of SCR-catalysts for heavy duty Diesel engines
- Protection of temperature-sensitive components (e.g. turbo charger)
- Integrated into On-Board-Diagnostic Systems: detection of light-off temperature of catalysts
- Detection of temperature window to guarantee maximum efficiency of the catalysts
- Measurement of EGR-exhaust gas temperature

#### Gasoline





### Electrical

Sensor Type	Analog	Digital
Sensing element	PT200	Thermocouple N-type
Operating temperature	From -40°C up to 900°C, peak 950°C	From -40°C up to 1050°C, peak 1150°C
Protective cover	Alloy 601	Alloy 601

#### Common features

Insertion Depth (ID)	25, 30, 35, 40, 50, 70 mm
MI tube material	Stainless steel
Nut	Male / Female Several nut materials available to match coefficient of thermal expansion
Bending angle (°)	Values between 0° (straight) and 120°
Cable	PTFE insulated NPC (nickel-plated copper) strands / PTFE insulated combination of stainless steel strands and NPC strands
- length (L)	Values between 130 mm and 1500 mm
Cable options	Mechanical and/or thermal protection sleeves, cable ties, labels
Connector	Can be specified by customer
- plating terminals	Au / Ag / Sn

### Electrical

Sensor Type	Analog	
Sensor accuracy	±2.5°C from -40°C to 278°C ±0.9% from 278°C to 950°C	
Pull-up voltage	Up = +5V	
Pull-up resistance	$Rp = 1k\Omega \pm 0.1\%$	
Operational current	I = 2.8mA <> 4.2mA	
Sensor Type	Digital	
Sensor accuracy	±2.5°C from -40°C to 278°C ±0.9% from 278°C to 1150°C	
Supply voltage	Vcc = +5V	
Output	ASIC with SENT 100Hz /PWM Output, CAN capability	



For any new application, please contact responsible product family design engineer.

Specified operating temperature range and accuracy depends on application specifics.

For best results sensor type and configuration must be defined based on application conditions.

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