

## INDUSTRIAL APPLICATION

### EMISSION CONTROL SYSTEMS FOR POWER GENERATING PRODUCTS

#### What is an Emission Control System?

An emission control system effectively combines all the emissions-related components of an engine into one comprehensive control system that can keep your emissions in compliance to Government regulations.

#### How does it work?

In some applications the overall system is comprised of an engine, a 3-way catalyst and air/fuel ratio control. Oxygen (O<sub>2</sub>) sensors read post-catalyst exhaust composition while Pressure sensors monitor airflow and the readings automatically adjust the engine's air/fuel ratio, keeping the catalyst operating efficiently even as speed, load and ambient conditions change.

#### Benefits:

- Automatically adjusts to achieve and maintain emissions compliance
- Lower catalyst-out emissions mean more engines per site without triggering tons-per-year limits such as Title V
  - Differential pressure and temperature sensors monitor across the catalyst to decrease

potential for damage and increase catalyst life

#### Where are pressure sensors used on a emission system?

The sensors may vary based on product but in some cases are located at the bottom of the Catalyst as Pre and Post catalyst sensors.

Typically your pressure requirements are low and would need roughly a 0 to 1 psi sensor. Applications may vary.

**Note:** with a low pressure sensor you would want to mount vertically with the port downward or at a positive angle. As exhaust has a tendency to create humidity concern that moisture/condensation could pool inside the sensor port if mounted with port upwards. Pooling of water/ condensation may cause a shift in output especially if the water would be allow to freeze.

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## RECOMMENDED PRODUCTS

Sensor Location	Product Series Recommendations
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1, 2

P356 Series

Pre-Catalyst Pressure Sensor

1

Pre-Catalyst Pressure Sensor

2

P356 Differential Pressure Sensor

Emissions Control Monitoring Module

Please note that these are just recommendations based on current applications. A thorough review by the end customer must be performed to determine the suitability of the product within their application.

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