

SCR Sensors



Gentech is a leading supplier of SCR sensors to key truck, bus, agricultural and construction OEM's

Gentech helps keep your trucks, buses and off-highway vehicles compliant with legislation. Avoiding high penalties associated with non-compliance of stringent EPA 2010 Euro 4, Euro 5, Tier 4a, Tier 4b, Euro 6 and JP 09 emission standards. We have developed the perfect flexible sensing solution for manufacturers using Selective Catalytic Reduction (SCR) systems, to monitor diesel emission fluid (DEF/AdBlue®) level.

Gentech has over 40 years experience in level sensor design. The proven reliability of our reed switch based level sensors is demonstrated in our supply of fuel and coolant sensors fitted to over 95% of trucks in the US. Manufactured to TS16949 standards, our SCR range has been designed to be flexible with a range of optional features that give our customers a cost effective one-stop-solution.

AdBlue® Sensing

Selective Catalytic Reduction (SCR) is an exhaust after treatment method used with diesel engines to reduce Nitrogen Oxide (NOx) emissions. The SCR system relies on the injection of an aqueous urea solution (AUS32) into the exhaust stream in order to facilitate the reduction of NOx emissions. AUS32 (32.5% urea and 67.5% demineralised water by weight) is generically known as Diesel Emission Fluid (DEF) or its registered trademark AdBlue®.

Quality Sensing

The optional integrated quality sensor detects and communicates instances when non-DEF/AdBlue® fluids are added to the tank. This is not currently a legislated requirement.



SCR I-Tube

The I-Tube sensor is for customers who require Level and Temperature sensing only. This sensor consists of a stainless steel sensing element incorporated into a plastic flange moulding. The standard flange matches the typical 5 way SAE bolt pattern but can be customised. The flange also incorporates a compact connector for quick and easy assembly to the wiring harness. The length of the sensing element and the electrical output can be customised to your requirements.



SCR U-Tube

The U-Tube sensor design is for use in medium duty systems. This sensor has a bayonet moulding with a stainless steel sensing element incorporated. This moulding is designed to match the bayonet insert found in many tanks but can be customised if required. This sensor can be supplied with a variety of different options including Heater Coils, DEF/AdBlue® Suction and Return pipes and filtration. AdBlue® fluid connection is via standard SAE J2044 connector ports that are integrated into the bayonet moulding. The length, electrical output and connectors can be customised to your requirements.



SCR L-Tube

The L-Tube sensor design is for use in heavy duty systems. This sensor has a stainless steel sensing element incorporated into stainless steel mounting plate which can be used with a standard tank locking ring or an SAE bolt pattern. This sensor can be supplied with Heater Coils, DEF/AdBlue® Suction and Return pipes, Filtration and Quality sensing. DEF/AdBlue® fluid connection is via standard SAE J2044 or Voss 246 series connector ports that are integrated into the header plate. The flange also incorporates a compact connector for quick and easy assembly to the wiring harness. The length of the sensing element and the electrical output can be customised to your requirements. The L-Tube can be combined with a quality sensor.



Features and options

The Gentech design team have worked extensively with manufacturers and OEM's globally and we are available to work with you on your specific application. The features and options available are as follows:-

- Available in a range of sizes to suit your application.
- High reliability from proven reed switch technology.
- Fail-safe Engine Control Unit interface.
- Heater elements using coolant system to thaw frozen DEF/AdBlue®.
- DEF/AdBlue® feed and return connections can be incorporated into the header.
- Solenoid valve can be added to isolate the coolant level when not required.
- Filtering systems to ensure no unwanted particles are fed into your SCR system.
- Integrated quality sensor ensuring your SCR system cannot be filled with the wrong solution.

Benefits

- Pay for what you require from our flexible solution to keep your costs to a minimum. The SCR sensor can be supplied with any of the above features or just as a level sensor. You are not paying for features you do not need.
- Long trouble free service as the system is based on proven technology.
- US, Far East and European manufacture saves delivery time and costs.
- Global support from our design experts, we work closely with you to give you the best solution for your requirements.



Customizable size and length

We are able to modify the height and length of the sensor to accommodate tank geometry.



Heating element

Why not use the engine cooling system to heat frozen DEF/AdBlue® in cold environments.



Integrated feed and return connections

The overall SCR system is simplified, by incorporating suction and return tubes for engine coolant and DEF/AdBlue® fluid, into the header.



Filtration

Optional filtering system prevents unwanted particles being fed into the SCR system.



Quality sensing

Although there currently is no legislative requirement for a quality sensor, this option can be integrated as part of the level sensor.



Engine Control Unit interface

Incorporated compact connector for quick and easy assembly to the wiring harness.

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Automotive Sensors



Fuel Sensors

For fuel tank. Externally mounted level sensors with optional filter, fuel take off and return. With cable or connector.



VCS Series

For coolant expansion tank. Externally mounted sensor with cable or connector.



LCS Series

For windscreen washer bottle. Push fit externally mounted level sensor, with cable or with integral connector.



PSS Series

Shunt Sensor for handbrake, seat and footbrake position. Surface mount with cable or with connector.



PI Series

Hood tilt switch. Surface mount non mercury tilt switch with cable or with connector.

Designing sensing solutions today,
for tomorrow's application demands...