Solutions for exhaust gas aftertreatment AdBlue® Sensors

The ROAD AdBlue® Sensors are mainly multifunctional sensors with the functions of level measurement, temperature monitoring, heating function at low temperatures, quality determination of the urea solution and various filter inserts. As an option, there is also the integrated signal processing for CAN bus versions and a control valve for the heating circuit (engine coolant) integrated directly on the flange. In recent years, the AdBlue® Sensors from ROAD have become versatile all-rounders in this field, thanks to their versatile applications and outstanding innovations.





AdBlue® Sensors



ROAD AdBlue® Sensors and tank systems comply with international regulations such as EURO IV, V and VI, EPA 2017, Tier4 Final, Stage V etc. Our products are used in combination with a wide variety of SCR systems by a large number of international engine and vehicle manufacturers. The diverse range of applications ranges from trucks, buses, stationary systems to vehicles and mobile machines in daily off-road use. Special requirements for our AdBlue® Sensors are taken into account in the product development right from the start. Our quality stands for AdBlue® Sensors that work optimally under all operating and temperature conditions.

Key Features and Benefits

- Reliable output signals over the entire temperature range
- Complete integration of the electronics in the sensor flange
- Ice pressure resistant design of all components
- Very high long-term stability of the sensor
- Additional inline filters for AdBlue® and in the heating circuit
- Switching valve for the heating circuit (coolant flow) integrated in the flange
- Interchangeable AdBlue® filters in 2D or 3D design
- Individual design in form and function according to customer requirements

U-Shaped AdBlue® Sensors

U-Shaped AdBlue® Sensors are suitable for many AdBlue® Tanks and are available in different lengths with different functions. A variety of assembly methods enable simple and quick application to the respective tank.

L-Shaped AdBlue® Sensors

L-Shaped AdBlue® Sensors were developed for vehicles and machines with large AdBlue® Tanks. The L-Shaped heating elements extend the heating range of the AdBlue® Sensors, which melts the frozen liquid over a larger area.

S-Shaped AdBlue® Sensors

If a particularly high heating output is required, our AdBlue® Sensors with spiral heating element, S-Shape, are used. We realize a particularly strong heating output in a small space. We therefore recommend the spiral Ad-Blue® Sensor for operation in particularly cold areas or for quick defrosting.

AdBlue[®] Sensors with Integrated Valve

- The switching valve for the heating circuit integrated in the sensor flange represents an absolute innovation
- Significant reduction in installation effort thanks to integrated valve
- Maintenance processes significantly more effective, the valve is always directly on the sensor
- Reduction of leakage risk, fewer number of line interfaces
- No additional consideration of installation space required













AdBlue® Sensors with different Mounting Options



SAE-Flange



SAE-Bolts



Clamping hoop



Bayonet twistlock

AdBlue® Quality Sensors TQS

The AdBlue® quality sensor TQS is integrated in the AdBlue® sensor and continuously monitors the concentration and the quality of the urea solution in the tank. The quality sensor from ROAD is based on a new, patented ultrasonic measuring method with an extraordinarily high insensitivity to air pockets. This ensures that the vehicle emissions EURO VI, Stage V and stricter emissions laws and regulations can be met.



Key Features and Benefits

- Housing made entirely of stainless steel
- Ice pressure resistant thanks to high quality materials in a special design
- High measuring accuracy, completely temperature compensated
- Excellent long-term stability of the measuring accuracy and the materials used
- Fully automated production and calibration guarantee the highest quality standards
- Fast measured value acquisition and signal output

AdBlue® Sensors without Heating Function

These AdBlue® Sensors are used when the vehicle is used exclusively in special geographical areas or when the tank already has an integrated heater. All other functional features remain unchanged.



Single-tube AdBlue® Sensors

Exclusively for level measurement of certain sensors without additional functions. It is installed using a bayonet flange, the sensor length and additional switching outputs can be customized.







AdBlue® Tanks

To support "the single source strategy" ROAD also supplies its customers with a ready-to-install complete package. The fully tested and ready-to-install assembly consists of a sensor, tank with filler neck, tank cap, ventilation and, if desired, a support bracket. For implementation, we use standard tanks and sensors as well as the option of customer-specific solutions that are tailored precisely to the installation space and the desired tank volume of the customer, including the corresponding sensor.



Our tanks use high-strength High Density Polyethylene (HDPE) or Linear Low Density Polyethylene (LLDPE). These materials are particularly dense and dimensionally stable. These engineering plastics are also longterm resistant to AdBlue® and other aggressive liquids from the automotive sector, are chemically very stable, resistant to abrasion and are characterized by high impact resistance. Our AdBlue® tanks are approved for AdBlue® according to DIN 70070 and ISO 22241/1.

We produce AdBlue® tanks with volumes from 10 to 120 liters





16L Tank



16L Tank



12L Tank

10L Tank



Key Features and Benefits

- Bayonet or screw lock
- Lockable or without lock
- Dust cap, embossed with AdBlue®
- Tank ventilation can be integrated
- Different nominal dimensions

AdBlue® Tank Caps

standards.

Our AdBlue® Tank Caps have the same material properties as our AdBlue® Tanks and are therefore the perfect addition to the consistent maintenance of our quality



AdBlue® Filler Neck Accessories

The filler neck is another tank component. Our filler neck is made of plastic (also with a magnetic adapter) or steel, always to match the tank and the desired tank cap. The filler necks are available with different nominal sizes from 30mm to 100mm.

