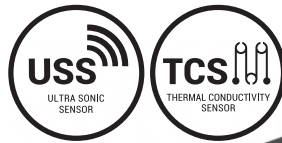


# AdBlue® / SCR Sensor

level, urea concentration and temperature of SCR fluid

In diesel vehicles, exhaust gas treatment with AdBlue® reduces nitrogen oxide (NOx) emissions by up to 90 percent. However, engines equipped with this technology only run if the tank contains sufficient AdBlue® fluid of the required quality. AST sensors monitor the fluid level in the AdBlue® tank so that the driver can top up the fluid in good time. The sensors also measure the quality of the AdBlue® fluid, which features a mixture of urea (32.5%) and demineralized water. The sensor is qualified according to ASIL B.

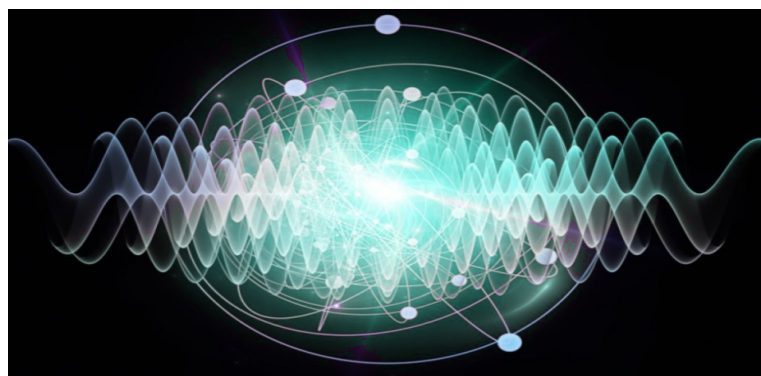
The urea concentration can alternatively be measured using an ultrasonic system (speed of sound) or using the TCS method (thermal conductivity).



- Precise measurement of urea concentration
- Ultrasonic level measurement
- Temperature measurement of the SCR fluid
- Welding geometry for integration into tank
- ASIL B qualified

## Technical data:

Fluid level	Ultrasonic (USS)
Urea concentration	Ultrasonic or TCS
Fluid level measuring range	0 mm to 800 mm
Concentration measuring range	0 to 40% urea concentration
Fluid level accuracy	± 1 mm
Concentration measuring accuracy	±1% (USS) ±3% (TCS) urea concentration
Geometry	customer specific
Interface	LIN / CAN / SENT 0 to 5 V analog ...



The level is determined using ultrasonic technology. The echo transit time of the ultrasonic signal from the sensor to the boundary layer between AdBlue and air is measured. In addition, a high-precision temperature measurement is carried out in the liquid.



**AST INTERNATIONAL**  
ADVANCED SENSOR TECHNOLOGIES

[www.ast-international.com](http://www.ast-international.com)

AST International is a leading provider of customized sensors and controls for automotive, domestic appliance, and industrial applications. Our products stand out on account of their cutting-edge sensor technology, best quality and reliability.

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