

AdBlue / DEF Urea Quality, Concentration & Level Sensors (MU0005 / UQD0001 / TULC)

Ultrasonic & Tuning-Fork Urea Concentration, Temperature & Level Sensors for Euro VI SCR

Product Overview

Misensor Urea Quality Sensors (UQS / TULC) provide real-time monitoring of Diesel Exhaust Fluid (DEF / AdBlue / 32.5% aqueous urea) concentration, temperature, and tank level for Euro VI / Tier 4 Final SCR aftertreatment systems, communicating directly with the engine ECU via SAE J1939 CAN bus.

Key Features

- Simultaneous measurement of urea concentration (0-...
- High concentration accuracy: ±1.0% across -10°C to...
- Level resolution: 1mm (Ultrasonic TULC) with freez...
- Standard SAE J1939 CAN 2.0B digital interface (250...
- Integrated stainless steel engine coolant heating ...

Typical Applications

- Euro VI / China VI heavy-duty commercial trucks & ...
- Tier 4 Final off-highway construction & agricultur...
- Diesel generator SCR emission control systems

Technical Specifications & Model Selection

Parameter	MU0005 / UQD0001 (Quality Pr	TULC Combination Sensor (Lev
Urea Concentration Range	0% - 65% (Nominal 32.5% AdBlue)	0% - 50% (Nominal 32.5% AdBlue)
Concentration Accuracy	±1.0% (-10°C to +70°C)	±1.0% (-5°C to +70°C)
Liquid Level Range	Point Level Detection	100mm - 800mm Continuous (1mm Resolution)
Temperature Range & Accuracy	-40°C to +85°C (±1.0°C)	-40°C to +85°C (±1.0°C)
Supply Voltage	9-36V DC (12V / 24V Systems)	9-32V DC (12V / 24V Systems)
Communication Protocol	SAE J1939 CAN Bus	SAE J1939 CAN Bus
Ingress Protection	IP67 / IP69K	IP67 / IP69K