

FLUID PROPERTY SENSORS

We offer distinct technologies to measure fluids. Our tuning fork technology is coupled with efficient software algorithms for accurate measurement of viscosity, density and dielectric constant. Dedicated applications include oils (engine, hydraulic, transmission), fuels, fluid monitoring, and others. Our urea quality sensors, based on Near Infra-Red (NIR) technology or ultrasonic measurement perform an analysis of the Diesel Exhaust Fluid (DEF) fluid to provide urea concentration and secure misfilling protection to the Selective Catalytic Reduction (SCR) systems. Our highly reliable reed switch technology is combined with temperature measurement for level sensing. Robust design enables fluid property sensors to operate under diverse pressure, flow and temperature conditions to bring real-time fluid monitoring to engines, fuel systems, SCR systems, compressors, transmissions, gear boxes and many other industrial applications. Our new water-in-oil measurement sensor supplements the existing fluid quality range of products.



FLUID PROPERTY SENSORS



MEAS FPS2800

Package	Fully integrated, stand-alone module combines sensor and processing electronics for in-situ monitoring
Type	Engine oil quality sensor
Operating Range	Viscosity from 0.5 to 50 mPa-s Density from 0.65 to 1.5 g/cc Dielectric from 1.0 to 6.0
Operating Temp.	-40°C to 150°C
Unique Features	<ul style="list-style-type: none"> • Rugged construction for high pressure and high flow environments • CAN communication protocol (SAEJ1939 compliant)
Calibration	Factory calibrated with NIST traceable standards
Dimensions (mm)	73.3 x 30 x 30
Typical Applications	Lubricating oil quality



MEAS HTM2500B3C4 OIL

Package	Fully integrated, stand-alone module combines sensor and processing electronics for in-situ monitoring
Type	Water content in oil and temperature sensor
Operating Range	0 to 1 aw (aw, activity = water content / water content in saturated oil)
Operating Temp.	-40°C to 85°C
Unique Features	<ul style="list-style-type: none"> • Full interchange ability • High reliability and demonstrated long term stability in oil • Ratiometric to voltage supply • Sensitive elements with unique mechanical and chemical robustness
Calibration	Factory calibrated and tested
Dimensions (mm)	76.2 x 30 x 30
Typical Applications	Water content in oil and temperature monitoring for automotive, truck, transformers, industrial applications

DEF SCR SENSORS

DEF Level Sensors



FLS RB Series

Package	Rubber header and stainless steel body
Type	Combined level sensor, temperature sensor, filter, DEF draw and return heater, collar header
Operating Temp.	-40°C to 85°C
Features	<ul style="list-style-type: none"> • Available in a range of sizes • High reliability • Reed switch technology • Using coolant system to thaw frozen tank • DEF feed and return connections can be incorporated into the header • Various collar adapter options



FLS RC Series

Package	Rubber header and stainless steel body
Type	Combined level sensor, temperature sensor, filter, DEF draw and return heater, bayonet header
Operating Temp.	-40°C to 85°C
Features	<ul style="list-style-type: none"> • Available in a range of sizes • High reliability • Reed switch technology • Using coolant system to thaw frozen tank • DEF feed and return connections can be incorporated into the header



FLS P Series

Package	Plastic header and stainless steel body
Type	Combined level sensor, temperature sensor
Operating Temp.	-40°C to 85°C
Features	<ul style="list-style-type: none"> • Available in a range of sizes • High reliability • Reed switch technology



FLS PU Series

Package	Plastic header and stainless steel body
Type	Combined level sensor, temperature sensor, filter, DEF draw and return heater, bayonet header
Operating Temp.	-40°C to 85°C
Features	<ul style="list-style-type: none"> • Available in a range of sizes • High reliability • Reed switch technology • Using coolant system to thaw frozen tank • DEF feed and return connections can be incorporated into the header

DEF SCR SENSORS

DEF Level Sensors



QLS RB Series

Package	Rubber header and stainless steel body
Type	Combined level sensor with quality measurement, temperature sensor, filter, DEF draw and return heater, collar header
Operating Temp.	-40°C to 85°C
Operating Range	0% to 62.5% mass urea
Urea Concentration Accuracy	±2%
Features	<ul style="list-style-type: none"> • Available in a range of sizes • High reliability • Reed switch technology • Using coolant system to thaw frozen tank • DEF feed and return connections can be incorporated into the header • Integrated quality sensor • Various collar adapter options



QLS RC Series

Package	Rubber header and stainless steel body
Type	Combined level sensor with quality measurement, temperature sensor, filter, DEF draw and return heater, bayonet header
Operating Temp.	-40°C to 85°C
Operating Range	0% to 62.5% mass urea
Urea Concentration Accuracy	±2%
Features	<ul style="list-style-type: none"> • Available in a range of sizes • High reliability • Reed switch technology • Using coolant system to thaw frozen tank • DEF feed and return connections can be incorporated into the header • Integrated quality sensor



QLS PL Series

Package	Plastic header and stainless steel body
Type	Combined level sensor with quality measurement, temperature sensor, filter, DEF draw and return heater, screwed header
Operating Temp.	-40°C to 85°C
Operating Range	0% to 62.5% mass urea
Urea Concentration Accuracy	±2%
Features	<ul style="list-style-type: none"> • Available in a range of sizes • Foot options (Compact, normal and extended sizes) • High reliability • Reed switch technology • Using coolant system to thaw frozen tank • DEF feed and return connections can be incorporated into the header • Integrated quality sensor • Bayonet adaptor option

DEF FLS SERIES



AHM/L FLS AHM/L Series

Package	Rubber header and stainless steel body
Type	Combined level sensor, temperature sensor, filter, DEF draw and return heater, collar header
Operating Temp.	-40°C to 85°C
Features	<ul style="list-style-type: none"> • Available in a range of sizes • High reliability • Reed switch technology • Using coolant system to thaw frozen tank • DEF feed and return connections can be incorporated into the header • Various collar adapter options



TZS FLS TZS/I Series

Package	Rubber header and stainless steel body
Type	Combined level sensor, temperature sensor, filter, DEF draw and return heater, bayonet header
Operating Temp.	-40°C to 85°C
Features	<ul style="list-style-type: none"> • Available in a range of sizes • High reliability • Reed switch technology using coolant system to thaw frozen • DEF feed and return connections can be incorporated into the header



TKD FLS TZS/I Series

Package	Plastic header and stainless steel body
Type	Combined level sensor, temperature sensor, filter, DEF draw and return heater, SAE locking ring header
Operating Temp.	-40°C to 85°C
Features	<ul style="list-style-type: none"> • Available in a range of sizes • High reliability • Reed switch technology • Using coolant system to thaw frozen • DEF feed and return connections can be incorporated

DEF QLS SERIES



AHUQ QLS AHM Series

Package	Rubber header and stainless steel body
Type	Combined level sensor, temperature sensor, filter, DEF draw and return heater, collar header
Operating Temp.	-6°C to 55°C
Features	<ul style="list-style-type: none"> • Available in a range of sizes • High reliability • Reed switch technology • Using coolant system to thaw frozen DEF feed and return connections can be incorporated into the header • Integrated quality sensor • Various collar adapter options



TZL QLS TZS/L Series

Package	Plastic header and stainless steel body
Type	Combined level sensor with quality measurement, temperature sensor, filter, draw and return heater, bayonet header
Operating Temp.	-6°C to 55°C
Features	<ul style="list-style-type: none"> • Available in a range of sizes • Foot options (Compact, normal and extended sizes) • High reliability • Reed switch technology • Using coolant system to thaw frozen • DEF feed and return connections can be incorporated into the header • Integrated quality sensor