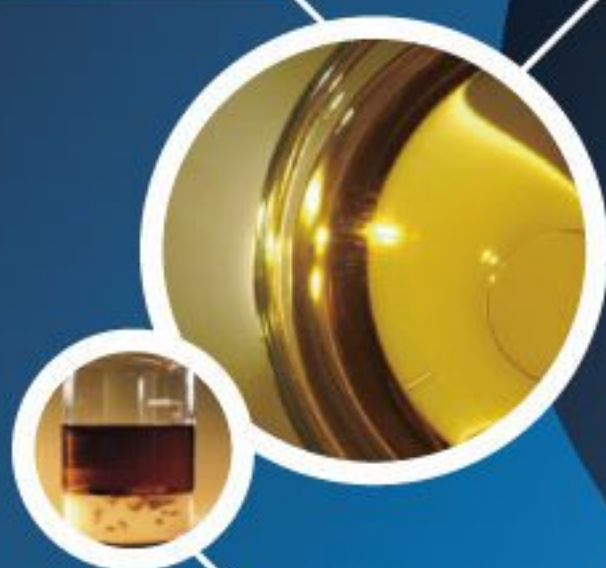


EASZ-1 ONLINE MOISTURE SENSOR

Unseen Moisture



Emulsions Free water

Accurate Measurement of Total Water in Oil

- ✓ Measures moisture or water whether dissolved or free
- ✓ Loop powered
- ✓ Temperature compensation
- ✓ Monitors Fluid condition of operating equipment
- ✓ Flexible ranges

Water contamination in fluids can cause numerous problems such as additive depletion, oil oxidation, corrosion, reduced lubricating film thickness, accelerated component wear rates, microbiological growth, reduction of dielectric strength, loss of power as an example. These problems can be prevented by online monitoring, so that problems can be averted in time.

EMC Compliant

Response Time 1 Second

Widest Measurement Range

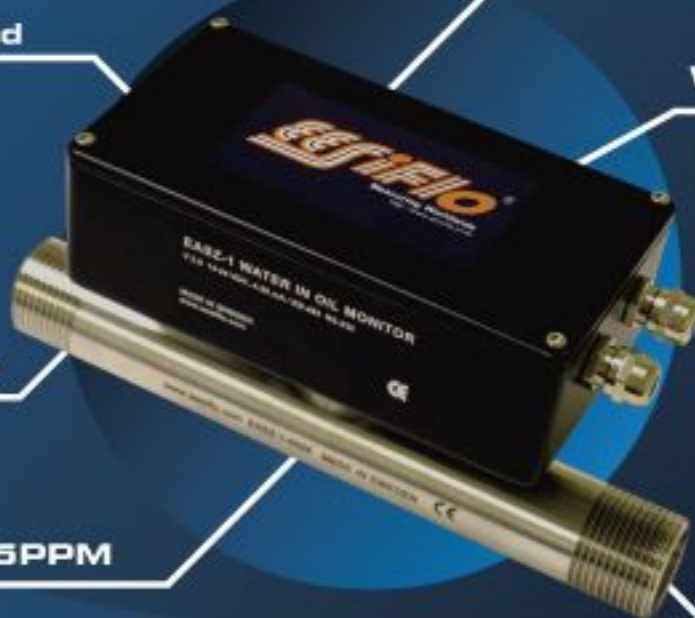
- 0-1,000 ppm
- 0-10,000 ppm
- 0-30,000 ppm
- 0-100,000 ppm
- 0-250,000 ppm

Stainless Steel Cell Construction

Loop Powered 2 -Wire

Resolution ± 35 PPM

Works on any type of oil!



COST EFFECTIVE ,ACCURATE AND STABLE MEASUREMENT WITH TEMPERATURE COMPENSATION

Continuous and accurate monitoring of water contamination in any oil including Lubrication Oils, fuels and Hydraulic Oils, Diesel and any oil based chemical. The EASZ-1 is a unique system which provides Operators of all types of Engines, pipelines, Turbines, Thrusters, Azipods, Gears, Separators, filtration systems and Stabilizers with a means of continuous monitoring of the oil systems for possible water contamination

The EASZ-1 temperature compensated microprocessor based loop powered water in oil sensor enables fast and reliable drift free online detection and monitoring of moisture percentage or ppm in oil. The EASZ-1 can be used in on-line moisture monitoring and as a control instrument allowing separators and oil purifiers to be started only when needed or as a diagnostic or preventative device protecting critical systems from premature failure. Most important of all is the response time which is seconds. The unit responds very quickly to a change in the capacitance of the oil being monitored and is not affected or knocked out of service by saturation and will continue to work in both high and low measurement ranges.

Water in oil can cause quick and costly breakdowns. They can happen so fast that in many cases, water in oil can be treated as a more serious contamination problem than metal particle contamination!

Water contamination can occur at any time. It is possible that serious damage can be caused on bearings and other lubricated components without the user knowing it is happening. The EASZ-1 water in oil analyzer can give early warning of a problem so that corrective action can be taken

Benefits of Expressing water contamination as ppm or percentage



Some Applications

- Hydraulic Fluids
- Lubricating Fluids
- Jet Fuel
- Fuel Oil
- Diesel

Measuring water.

The industry standard practice has been to report water content as a percentage of the total volume or in parts per million (ppm) The EASZ-1 can directly measure the ppm or percentage water in oil in a process.

This has enormous advantages for clients wishing to correlate actual moisture readings with laboratory results.

The fact is, the EASZ-1 is more reliable than spot sampling or laboratory results , simply because it is monitoring the total volume of oil 24 hours a day.

The EASZ-1 can be calibrated to any type of oil. The electronics do not drift and the sensing elements are not destroyed by water.

Water can occur in three different forms in oil : dissolved in the fuel, as a separate liquid phase (free water), and as a fuel-water emulsion. Some tiny amount of dissolved water is present in all oils. Free water or a water emulsion are potentially hazardous and must be avoided. The EASZ-1 is an instrument that will measure water contamination in a dissolved, emulsion or free water state below 100ppm with a resolution of +/- 35ppm and up to 250,000 ppm. The advantage of the EASZ-1 is it's ability to measure below and above saturation levels with a remarkable response time of 1 second.

No matter how accurate an instrument claims to be, the problem is real time immediate response measurements that can be considered representative of the liquid in the flowing stream. Whatever the situation, it is important to conduct independent laboratory tests which will prove the viability of a moisture in oil measurement device through representative and reliable composite samples.

Since laboratory analysis will report values in ppm, it is necessary to correlate ppm lab reports with ppm reports from the EASZ-1 sensor. The standard OEM sensor can be manufactured out of stainless steel but is not limited to this material. Special applications which require exotic materials such as Duplex, Monel, Hastelloy, Titanium or gold plating can be accommodated. Please contact our corporate headquarters for special requirements

FEATURES/BENEFITS



- ☑ TOTAL water Measurement
- ☑ Immediate Response to a change of state
- ☑ Temperature Compensation
- ☑ Excellent long term stability and drift free
- ☑ Recalibrate on site if necessary
- ☑ Easy to install
- ☑ No maintenance needed
- ☑ Loop Powered (2 wire) or 24 vdc
- ☑ Analog and RS 232 full duplex Output as standard
- ☑ User configurable range
- ☑ Lightweight and Robust
- ☑ RS-485 option allows up to 30 units to be connected in series
- ☑ Optional HART protocol on request
- ☑ Fully CE Compliant

EESIFLO MODEL EASZ-1 SPECIFICATIONS

GENERAL

Water in Oil range	0-1000 ppm, 0-10000ppm, 0-1%,0-3%,0-10% and 0-25%
Recommended Flow Range	5 to 150 LPM
Resolution	±35 PPM
Temperature compensation	Built in Temperature compensation
Temperature range	0-150 °C or 300 °F
Shipping Weight	Approximately 1kg/3lbs

MECHANICAL

Cell Construction Material	316L
Pipe Connection	1 inch NPT thread (other threads/sizes available)
Maximum Temperature	150 °C/300 °F
Pressure Rating	16 Bar /230 psi (higher pressure consult factory)

ELECTRICAL

Power Requirements	Loop Power or 24 vdc
Electronic Protection	IP 65
Operating Temperature	-40 °F -185 °F (-40 °C to 85 °C)
Enclosure	Anodized Aluminium Epoxy Coated
Outputs	4-20 mA DC , RS232 Full Duplex ,Optional RS485
Options	Remote readout/display

THE EASZ-1 IS NORMALLY A QUICK SHIP ITEM. PLEASE CONTACT YOUR NEAREST LOCATION OR REPRESENTATIVE BY VISITING WWW.EESIFLO.COM

Aerospace



Fuel Oil



Diesel Engines



Hydraulic Systems



EASZ-1

Fluid Condition Monitoring

Lubrication



Paper Mills



Steel Mills



Ship Engines



Online Moisture Meter
Real Time Water in Oil Monitor