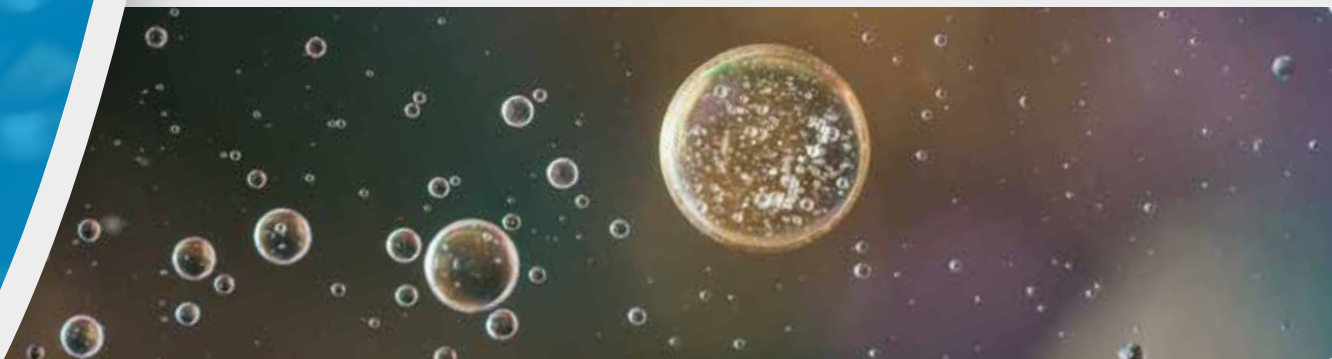




FluidiX LUB-6

inline oil condition sensor

REAL TIME LUBRICANT ANALYTICS



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Oil is an essential resource that deserves to be protected

In many machines and systems, oil is an elementary component for reducing friction and protecting against overheating. The condition of the oil decreases over time due to oxidation, dilution and the consumption of additives. The oil should be changed to prevent damages and extend the life of the machine.

Many plant operators therefore rely on timed oil change intervals. This time-based approach is not resource efficient and significantly increases the risk of machine damage. A laboratory analysis of the oil is a better approach to optimising the oil change. The disadvantage is that the oil samples must first be transported to a laboratory specialised in oil analysis. This leads to financial expenses and time losses for plant operators and has the disadvantage that the analysis never provides results in real time.

Therefore, **we bring the laboratory to the machine, which saves time, money and resources.** It should also be remembered that every oil change is expensive and pollutes the environment. At the same time, oil is a natural and therefore finite resource.

» *Fluidix Lub-6: The smart solution to cut machine maintenance cost and to reduce waste of fossil lubricants by 20%.* «



Safety for environment and machine

For a more responsible approach, inline oil condition measurement is a good choice. The predictive maintenance approach prevents machine damage and uses the oil more efficiently. By monitoring the oil condition in the oil circuit, plant operators will find the best time to change the oil in their machines. This saves resources, money and time.

By using precise measurements and monitoring for all risk components the occurrence of accidents and failures is reduced significantly.



**Service is
plannable**

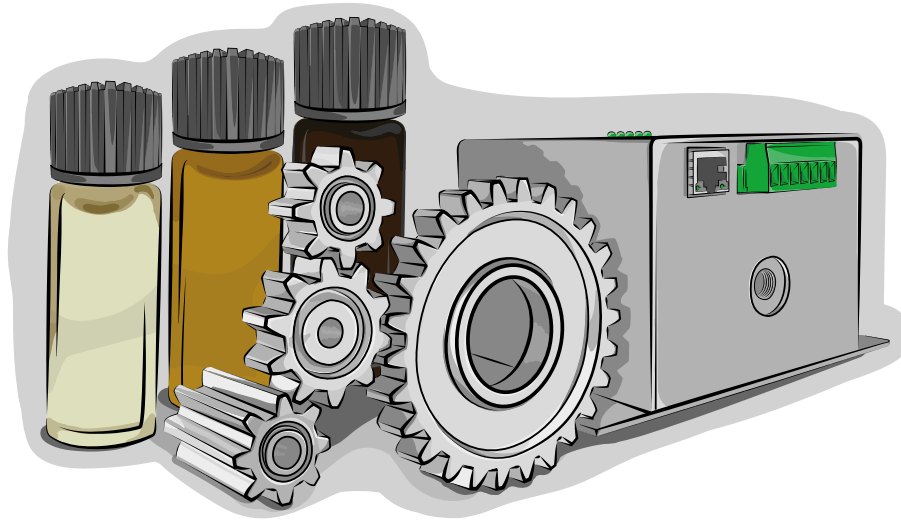


**reduce waste of
fossil lubricants**



**lower operating
costs**





The perfect oil for every application

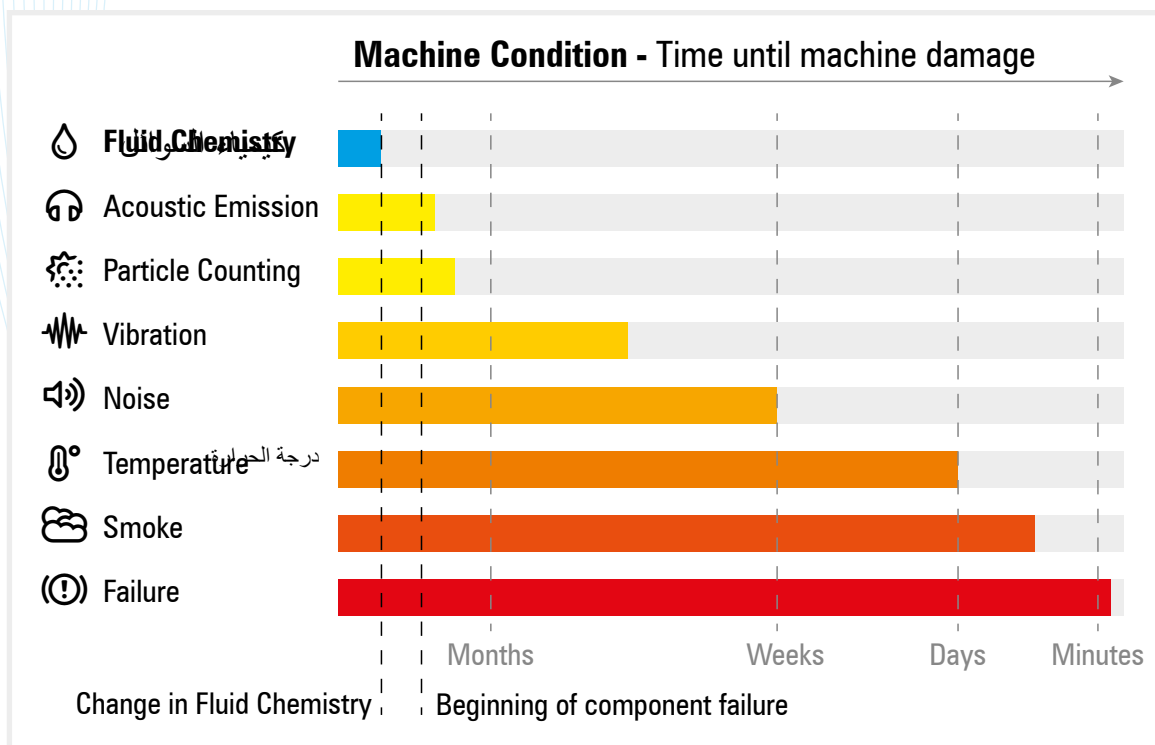
If we look at the composition of oils, we can see that they essentially (75-99%) consist of a base oil, such as mineral or synthetic oil. The remaining components of the oil are additives. These are designed to optimise the key performance aspect so that the final product delivers the optimum performance for the intended application.

Precise condition monitoring in the running process

This lubrication with oil prevents machine parts from contact and wear. Other important functions of oil include heat dissipation and protection against corrosion. However, the condition of the oil decreases over time as the chemical composition of the lubricant changes. As a result, it no longer has the desired properties to be able to operate the machine in question.

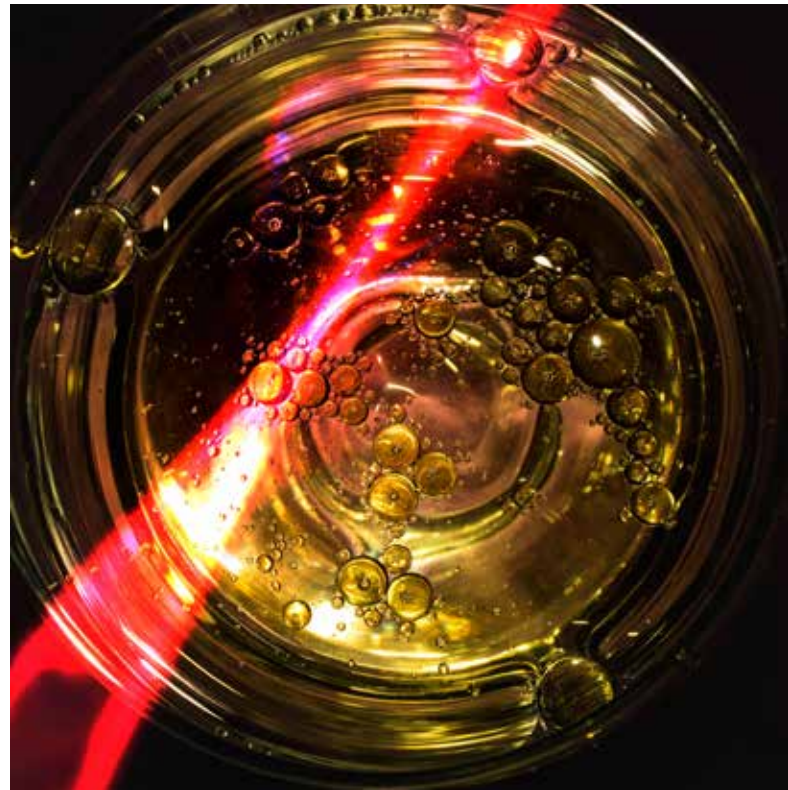
Comparison of indicators for machine damage

With oil chemistry, these changes can be detected very early and directly in the oil circuit.



Infrared sensor delivers measurement results in laboratory quality

The FluidiX Lub-6 works on the basis of NDIR technology (non-dispersive infrared technology). The measuring principle is based on the FTIR spectroscopy measuring method used as standard in the oil analysis laboratory. The optical measuring system consists of a multi-channel infrared measuring cell with associated electronics and peripherals. In this case, the molecules present in the oil absorb the infrared light at different wavelength in different degrees due to their typical binding forms. Over the course of the machine life cycle, these molecular properties change, whereby a signal change can be detected in certain regions of the infrared spectrum.



Measurable quantities

By using the optical method, it is possible to determine two reference bands as well as 6 further parameters in the oil. Together with our customers, we adapt the sensor to the desired measuring task.

- ✓ Water content
- ✓ Oxidation
- ✓ Reciprocal oxidation
- ✓ Nitration
- ✓ Sulfatation
- ✓ Soot content
- ✓ Antiwear additive
- ✓ ZDDP antiwear additive
- ✓ EP/AW additive
- ✓ Aminic antioxidant additive



Permanent monitoring of the oil condition



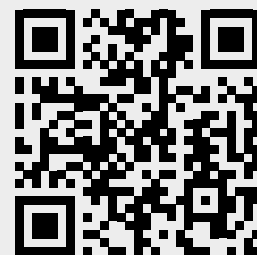
Determining the perfect time for an oil change



Optimal use of the machine oil



Watch
Now on
Youtube!



scan or click



Live data 24/7

operate with optimum lubricant condition, detect and avoid system failures.



Predictive maintenance

leverage the permanent lubricant oil condition monitoring with change and event reporting



Need based oil exchange

maximize lubricant oil usage & reduce consumption by up to 20%

The best maintenance strategy can be measured

Turn resource intensive time-based oil changes into a condition based approach. Due to its robust design, our oil condition monitoring sensor is suitable for direct installation in machines and facilities. The Fluidix Lub-6 helps plant operators to find a predictive maintenance strategy for their machine through continuous measurement. Through adjustable limit values, the sensor can display the oil parameters very accurately. Save time, costs and fossil lubricants.

Areas of application

- ✓ Power plant technology
- ✓ Electrical transformers
- ✓ Marine engines
- ✓ Wind turbines
- ✓ Turbines

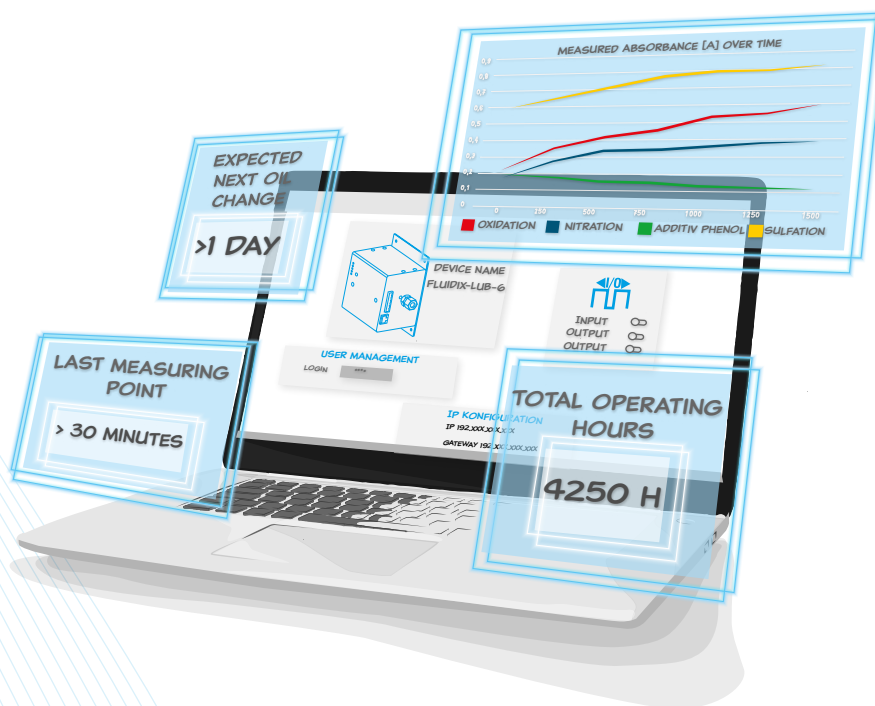


Easy integration and configuration

The sensor can be easily integrated into existing and new systems. Digital signals and Modbus TCP allow direct and easy connection of the sensor to a controller. A user-friendly interface helps to quickly configure the sensor settings. Measuring intervals can be defined and threshold alarm values can be set according to the oil parameters.

Complete control at all times

The measured values are displayed graphically so that a trend and appropriate maintenance measures can be derived. Another convenience feature is that the sensor functions as a data logger. This makes it possible to call up the display and evaluation of measured values from previous measurements.



Overview of the advantages



Minimized oil samples for lab assessment. Oil change when needed.



Optical measurement principle. Detects up to six measurands.



Operates as an early warning system and extends the machine lifecycle.



High quality electronic components and robust housing.



24/7 remote access.



Continuous measurement and calculation of key oil condition information.

Fluidix Lub-6 Technical Data

General Data

Housing	Aluminium
Dimensions	150 x 109 x 85 mm (L x W x H)
Operating voltage	18 ... 36V DC (max. current consumption 350 mA @18 V)

Operating conditions

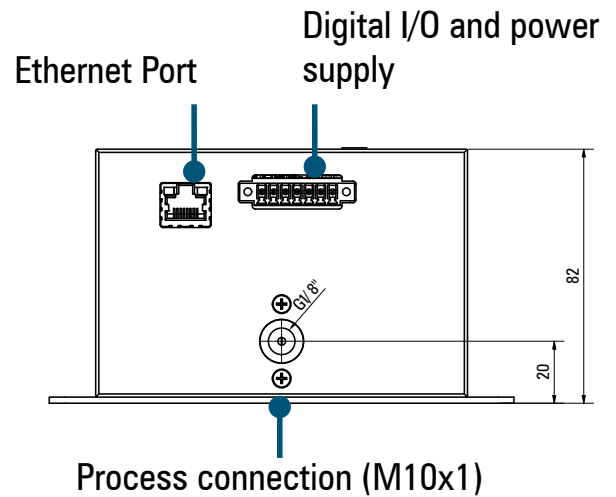
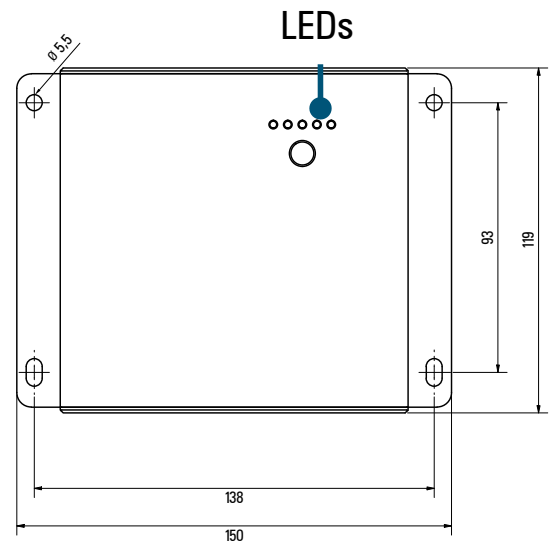
Operating temperature	0 ... + 70 ° C (optional 0...+90 ° C)
Maximum operating pressure	10 bar (optional 30 bar)
Storage temperature	-40 ... + 90 ° C

Digital I/O ports

Digital inputs	1x digital in 18...36V (10 mA max)
Digital outputs	4x digital out 18...36V (5 mA max)

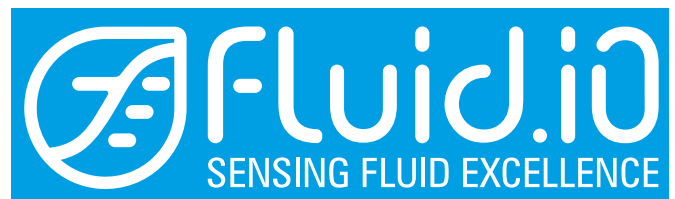
Ethernet port

10/100 Mbit/s Ethernet with a standard RJ-45 LAN 10/100 Base-T connector
Communication via manufacturer-independent bus protocol
Modbus TCP



Technische Änderungen vorbehalten.

Official Distributor:



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