FluidIX Lub-6 In-Line Oil Condition Sensor

Condition-based oil change: Inline Oil Quality Sensor

- ✓ Sensor for online monitoring of oil condition (oil chemistry)
- ✓ Inline-capable sensor based on multi-channel IR measuring cells
- ✓ Adjustable limit values according to oil parameters
- ✓ Robust design for mounting on machines and systems
- ✓ Direct connection to control systems via digital signals and Ethernet
- ✓ Easy commissioning
- ✓ Configuration and diagnostics via graphical user interface

Technical Data

Features	
Supply Voltage	18...36 V DC
Maximum current draw	400 mA @18 V
Housing material	Aluminum
Dimensions	150 x 119 x 82 mm (L x B x H)
Operating conditions	
Operating temperature	0°C...+90°C (0...+194°F)
max. operating pressure	30 bar (435 psi)
Storage temperature	-40°C…+90°C
Digital I/O Ports	
Digital Input	1x Digital In 18...36V (10 mA max.)
Digital Output	4x Digital Out 18…36V (5 mA max.)
Ethernet Port	
10/100 Mbit/s Ethernet; Standard RJ-45 LAN 10/100 Base-T connector	
Communication via manufacturer-independent bus protocol Modbus TCP	

Product Description

Based on non-dispersive infrared (NDIR) technology, we offer an inline-capable measurement system that continuously monitors the oil condition directly within the system. The optical measurement system consists of a multi-channel infrared measuring cell with associated electronics and peripherals.

When measuring with NDIR technology, the molecules present in the oil absorb infrared light to varying degrees at specific wavenumbers due to their characteristic bonding structures. These molecular properties change over the course of operation, allowing for the detection of signal changes in specific regions of the infrared spectrum. The system thus provides continuous, real-time information about the oil condition.

The electronics are controlled and configured via a user-friendly, graphical interface. Digital outputs and a Modbus TCP/IP interface enable easy integration into a plant control system.

Messparameter

Depending on the detector configuration, up to six quantities can be determined simultaneously:

- ✓ Water content
- ✓ Oxidation
- ✓ Reciprocal oxidation
- ✓ Nitration
- ✓ Sulfation
- ✓ Soot content
- ✓ Anti-wear additive
- ✓ ZDDP anti-wear additive
- ✓ EP/AW additive
- ✓ Amonic antioxidant additive

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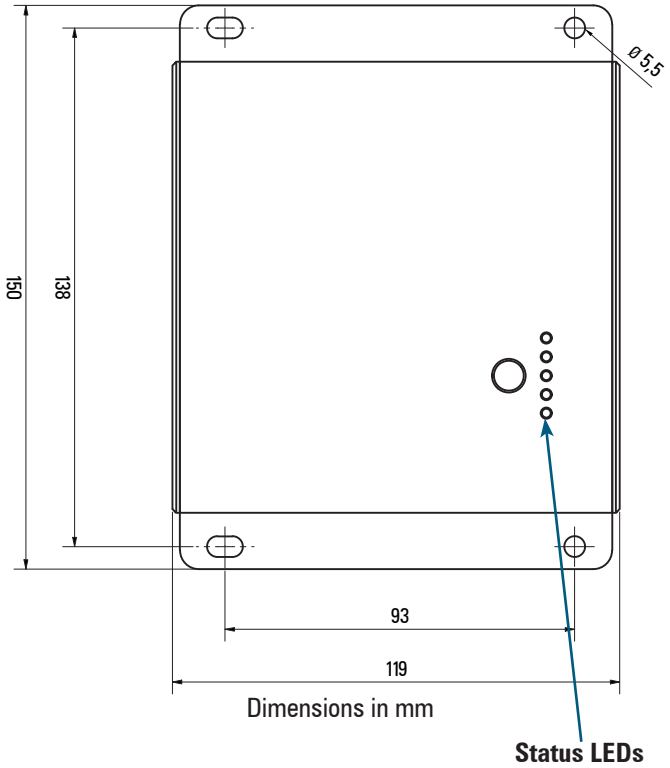
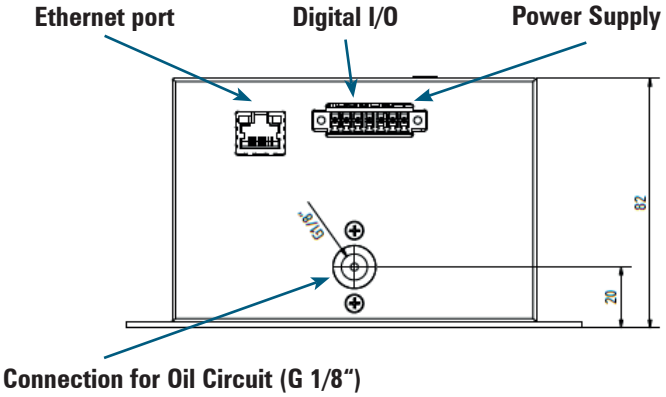
Dimensions

Dimensional drawing



Dimensions in mm

Connections



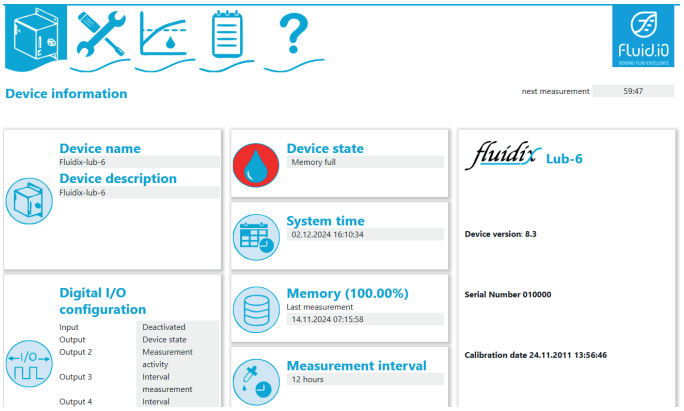
Order information

Scope of delivery

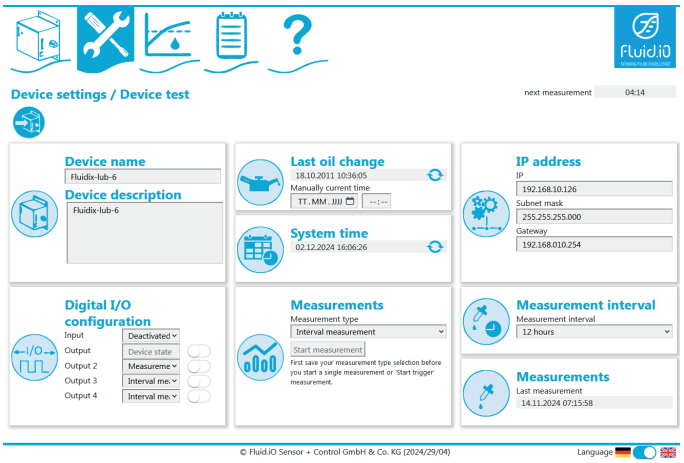
FluidIX Lub-6

Mounting & Installation instructions

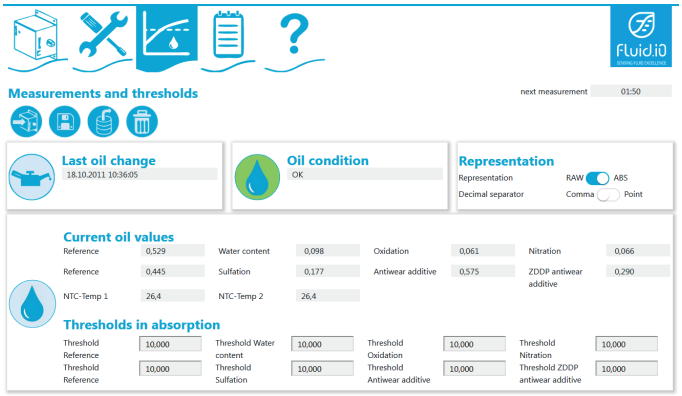
Webinterface



Overview



Device Settings



Measurements & Evaluation