

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

Product Description

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

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

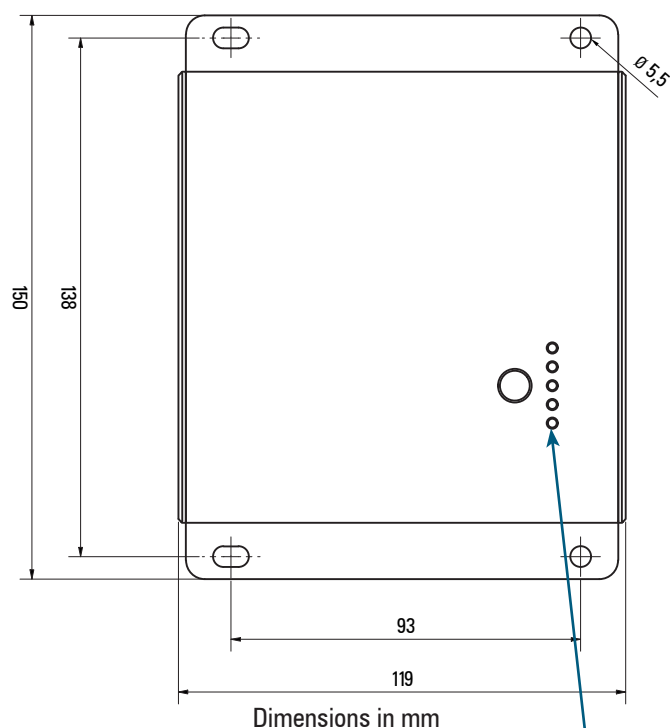
Depending on the detector configuration, up to six quantities can be determined simultaneously:

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

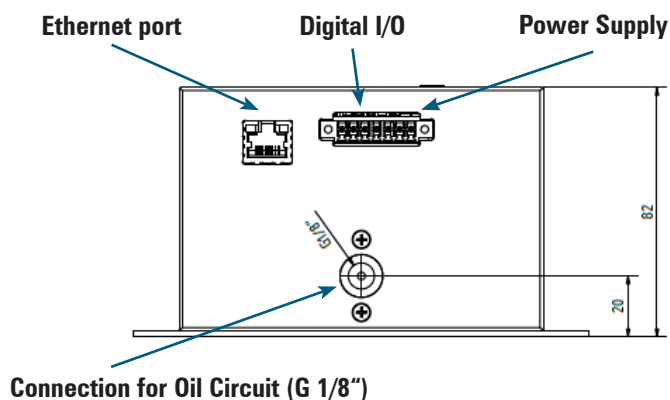
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Dimensions

Dimensional drawing



Connections



Order information

Scope of delivery

FluidIX Lub-6

Mounting & Installation instructions

Webinterface

Device information

next measurement 59:47

Device name Fluidix-lub-6 Device description Fluidix-lub-6	Device state Memory full System time 02.12.2024 16:10:34 Memory (100.00%) Last measurement 14.11.2024 07:15:58 Measurement interval 12 hours	fluidix Lub-6 Device version: 8.3 Serial Number 010000 Calibration date 24.11.2011 13:56:46
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Overview

Device settings / Device test

next measurement 04:14

Device name Fluidix-lub-6 Device description Fluidix-lub-6	Last oil change 18.10.2011 10:36:05 System time 02.12.2024 16:06:26	IP address IP: 192.168.10.126 Subnet mask: 255.255.255.000 Gateway: 192.168.0.10.254
Digital I/O configuration Input: Deactivated Output 2: Device state Output 3: Measurement activity Output 4: Interval measurement	Measurements Measurement type: Interval measurement Start measurement: First save your measurement type selection before you start a single measurement or 'Start trigger' measurement.	Measurement interval Measurement interval: 12 hours Measurements Last measurement: 14.11.2024 07:15:58

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Language:

Device Settings

Measurements and thresholds

next measurement 01:50

Last oil change 18.10.2011 10:36:05	Oil condition OK	Representation Representation: RAW <input checked="" type="checkbox"/> ABS Decimal separator: Comma <input type="checkbox"/> Point
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Current oil values Reference: 0.529 Reference: 0.445 NTC-Temp 1: 26.4	Water content: 0.098 Sulfation: 0.177 NTC-Temp 2: 26.4	Oxidation: 0.061 Antwear additive: 0.575	Nitration: 0.066 ZDDP antwear additive: 0.290
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Thresholds in absorption Threshold: 10,000 Reference: 10,000 Reference: 10,000	Threshold Water content: 10,000 Threshold Sulfation: 10,000	Threshold Oxidation: 10,000 Threshold Antwear additive: 10,000	Threshold Nitration: 10,000 Threshold ZDDP antwear additive: 10,000
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Measurements & Evaluation