OIL LIFE SENSOR

High-quality real-time oil condition analysis

Filtertechnik



Extend oil use

Reduce maintenance

Reduce breakdowns

Detect contamination

PRODUCT DESCRIPTION

The oil life sensor delivers the ultimate high-quality real-time oil condition analysis. This enables multiple tangible operating benefits that include reduced maintenance costs, improved reliability, reduced oil wastage, and extended equipment life.

Our unique FSH™ core technology analyses oil condition holistically, detecting, measuring and tracking all and any contamination or wear with 0.01% sensitivity (100ppm) - other sensor systems typically look at specific parameters and ignore others. This unmatched real-time complete oil analysis capability is achieved through continuous analysis of the electro-chemical properties of the oil at a molecular level.

The oil life sensor analysis data provides unrivalled high-confidence insight into real-time equipment health and maintenance status. Reliable forecasting and planning of maintenance based upon actual equipment need and thus extended optimised maintenance intervals and reduced cost becomes possible; with the assurance and safety of continuous over-watch that detects any unexpected anomalies and or contamination.

The oil life sensor works with any oil type and is easily fitted to any equipment operating in any environment or application.

KEY FEATURES

- **Real-time oil analysis**
  Continuous real-time oil condition analysis with 0.01% sensitivity, detecting and reporting changes caused by wear and or contamination.
- **Reliable accuracy**
  Our unique molecular level analysis technology means that the smallest changes down to 100ppm are detected and reported in real time. This enables us reliably track oil wear and immediately detect contamination or equipment issues at the earliest stage.
- **Any oil type and equipment**
  Can be fitted and used on any equipment type operating in any environment using any oil type - mineral or synthetic.

BENEFITS

- **Reduce maintenance costs**
  Enables you to predict and pinpoint when equipment requires maintenance and oil is truly at the end of its life. This typically enables you to safely extend intervals between maintenance and reduce associated costs by approximately 30% per year.
- **Reduced downtime**
  Unseen equipment issues cause subtle changes to oil condition, which are detected and alerted, enabling pre-emptive maintenance before failure or major damage and/or accelerated wear.
- **Environmental (ESG) targets**
  Safely maximise oil use to reduce consumption by approximately 30% per annum. Reduce parts consumption and extend equipment life.

CASE STUDY

European diesel genset owner-operator achieved significant reductions in annual oil and maintenance costs. This was achieved through real-time Tan Delta oil condition monitoring, which identified that equipment was being maintained before needed and oil discarded with 25% of its life remaining.

During the first year, the sensor detected oxidation in the oil, which is an early sign of equipment issues. This enabled pre-emptive investigation, which discovered that a bearing needed changing – thus averting a possible catastrophic breakdown and associated cost.



ESG

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OIL LIFE SENSOR

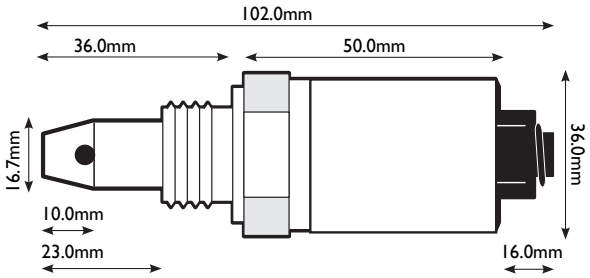
High-quality real-time oil condition analysis

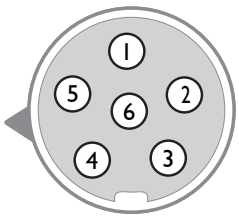
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TECHNICAL DATA

Material	Stainless Steel AISI304
Dimensions	102 x 36mm (L x W)
Weight	180g
Connection	32mm AF Hex Collar
Torque	25N m
Connector	6-Pin Bulgin PXP4013/06P/PC
Supply	+9-30 V DC
Consumption	0.4w Average
Digital Output	RS485, CANbus
Protocols Supported	Modbus, CanOpen and J1939
Analog Output	4-20mA
Output	Tan Delta Number (TDN) Oil Temperature (C or F)
Sensitivity	0.01%
Elements	All wear and contamination
Environmental	
Operating temperature	-40°C (-40°F) to +120°C (+248°F)
Calibrated Temperature	-20°C (-4°F) to +120°C (+248°F)
Fluid Temperature	-40°C (-40°F) to +120°C (+248°F)
Fluid Pressure	Up to 70 bar (1015 psi)
Storage Temperature	-55°C (-67°F) to +150°C (+302°F)
Standards and certification	
Water and dust	IP68 when connected
Shock and vibration	BS EN 60068-2-30 (Test Db - Cyc.Hum.) BS EN 60068-2-6 (Test Fc - Sine Vib.) BS EN 60068-2-27 (Test Ea - Mech. Shock)
EMC	EN 61000-6-4:2007 (Generic Emissions Standard for Industrial Environments) EN 61000-6-2:2005 (Generic Immunity Standard for Industrial Environments)
Conformity	CE Marked RoHS Compliant

DIMENSIONS AND CONNECTION

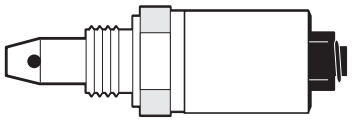




1. +9-30V DC
2. Oil Temperature - 4-20mA
3. Oil Condition - 4-20mA
4. RS485A / CANL
5. Ground / 0V
6. RS485A / CANL

WHAT'S IN THE BOX?

1 x Oil life sensor



Product buying alert notice

Cables are not supplied with this product.
They are supplied separately – see the cable section on our website.

For configuration you will require 1 x Cable-J.