

Fluid Intelligence Remote Oil Monitoring

Installation and applications

Detailed technical information, please check Fluid Monitoring brochure. More information Fluid Intelligence Oy. puh. 050 308 6554, email fi@fluidintelligence.fi

Installation

The sensor should be installed in oil system in place where measured oil composition is representative for oil condition in general in system.

General principles of installation of sensor are:

1. Installation should always be at spot where oil is generally flowing and though oil composition is representative in general oil composition in system.
2. Oil sensor should be installed always 90 degrees vertical level or as near as possible to 90 degrees vertical level
3. Suitable installation spots are found offline filter or cooling system flow, oil tank side, pressure line (max 20bar) or return line. Though each of these have pro's and con's so therefore each location should be picked up according rule 1.
4. For maintenance purposes, it is generally recommendable that oil sensor is possible to remove or replace during use of equipment.
5. If you are uncertain for installation location, please contact Fluid Intelligence for further advice!

Connection node (Lora/3G/other) should be installed safe and sheltered spot at site within sensor cable length of 10 metres from sensor. Node should have place that has as good as possible radio frequency range for LoRa or 3G network. Also connection node requires 230V (12V) power.

General principles of installation of sensor are:

- 230V (12V) power plug within 1m from node.

- Within 10 metres cable length from sensor (Please mind also safe route for cable from sensor to node)
- In challenging conditions, node and sensor should be extra protected.
- Node should be installed at minimum 1 metre high from ground level and should not be next to strong electromagnetic fields.

If applicable

If Fluid Monitoring is provided with Lora technology, sensor node requires Lora Access point.

Access point for Lora should be installed dry and good radio frequency range spot at wall.

General principles of installation of sensor are:

- 230V (12V) power
- Access point should be installed at minimum 1,5 metre high from ground level and should not be next to strong electromagnetic fields generating equipment

Examples of installation

Sensor at Compressor, offline filter suction line.



Example of Lora node and Lora Access point



Lora Node installation next to compressor



Lora Access Point at the wall in the control room

Crane Gear, natural oil flow in offline pipe



Turbine lubrication oil, Offline filter pressure line



Turbine control oil, return line 4-way connection



Water Turbine Bearing return line extra measuring point



Transformer,

Expansion tank and bottom valve external line natural oil flow



Please note! Sensor is weather protected with heat shrink plastic

Metso LogotrackLT1300GPB Crusher,
Hydraulic oil system return line



Metso LogotrackLT1300GPB Crusher,
Spindle lubrication oil pressure side



ROM Unit II PnP



Measurements of sensor



