



WIO 200 - WATER IN OIL SENSOR

The simple insurance for your machine systems



TYPE APPROVED BY GL
MAN Diesel approved

WATER IN OIL IS THE CAUSE OF RANGE OF PROBLEMS DURING ENGINE OPERATION

- ⇒ Rust
- ⇒ Corrosion
- ⇒ Water etching
- ⇒ Erosion
- ⇒ Cavitation
- ⇒ Oil film strength loss tec.

WATER CAN ENTER THE OIL FROM DIFFERENT SOURCES:

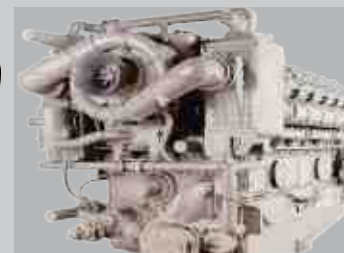
- ⇒ Oil contamination
- ⇒ Leaking coolers
- ⇒ During maintenance
- ⇒ Defective seals
- ⇒ Breathers
- ⇒ Condensation etc.

With the WIO (water in oil sensor) reduce repair costs and expensive downtime.

- ⇒ Measures the water activity (a_w) in oil (ppm or a_w).*
- ⇒ Applicable for following oils
Lubrication,-Gear box,- Turbine,- Diesel,-Hydraulic,- and Transformer oil
- ⇒ 24/7 monitoring
- ⇒ Easy installation and operation
- ⇒ Calibration certificate
- ⇒ GL approved and MAN Diesel Approved
- ⇒ Increase lifetime of engine parts, cylinders, bearings, etc.
- ⇒ Saved damages and downtime costs
- ⇒ Longer oil lifetime
- ⇒ Saved oil sample costs (and administration)
- ⇒ Potential savings on water filters, separators, etc. (only running when needed)
- ⇒ Online Measurement
- ⇒ Higher accuracy than most oil sample

* When measuring the "water activity" or "aw" a value between zero (0) and one (1,00) will be get, where 0 is no water and 1,00 means that the oil is saturated with water and if any more water is added to the system free water will be formed.

Your reliable partner for marine measuring instruments and service



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Technical Data

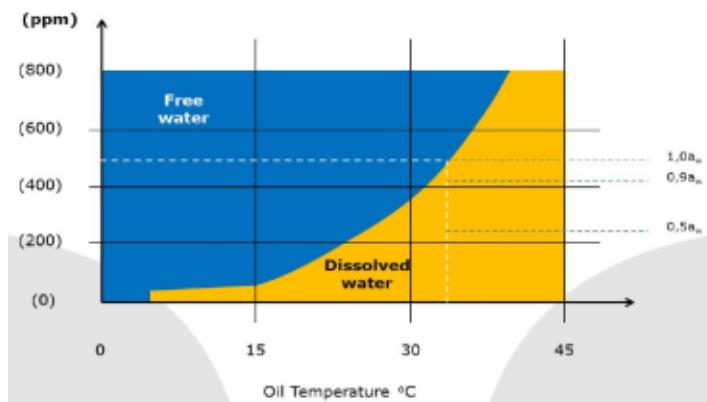
Measuring range:	0.01 to 1,00 a _w or ppm water content
Accuracy:	0,03 a _w for the range 0.....1 a _w water content
Resolution:	min. 0,004 a _w
Outputs :	NC Relais Output (250VAC/2A)
(depends on model)	4 to 20 mA (galvanic isolated)
Interface (depends on model)	RS232, RS485, CANopen
Display:	4 digit display for a _w /ppm
(depends on model)	LED display for High-/High High-Alarm acoustic Indicator for High-/High High-Alarm Testfunction for H/HH Alarm
Operating temperature:	0°C – 90°C
Pressure range:	0 bis 10 bar
Ambient temperature:	0°C – 85°C
Storage temperature:	-20°C – 85°C
Protection class:	IP66
Supply voltage:	24VDC +/- 10%

PRODUCTION, CALIBRATION AND TESTING

The WIO sensor, developed from PAJ (DK), meets the requirement of industrial and production engineering at a continuous control measurement, an adapted display of the results and to set alarm levels. The water content is measured in "parts per million" (ppm) or water activity (a_w).

All products are tested in PAJ own test facilities. The whole testing process is monitored and documented.

All sensors are calibrated directly in oil (on request with customer sample) and will be delivered with a calibration certificate.



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