

OilWear[®] is a range of online sensors for monitoring particles in fluids. They are based on a patented technology of digital image and video processing, which achieves outstanding and reliable results at low cost.



OilWear[®] PARTICLE SERIES



atten2's OilWear[®] P100 is an online sensor that quantifies particles larger than **14 μ** present in fluids and classifies them by size in **4 channels**. This is a **low cost** sensor designed to be permanently installed on a machine, or to be installed on multiple machines, providing **real-time** information on contamination of fluids.

OilWear[®] P100 provides key information to carry out a **predictive maintenance** strategy. The measure of an abnormal amount of particles allows the detection of early stages of machine failure and implementation of corrective actions.

OilWear[®] P100 has a fully **modular design**, and its measure module, which is the main responsible for the counting and classification of the particles, can be easily integrated into the oil **Condition Monitoring System**, simply ensuring minimum flow conditions in the oil that is monitored.

OilWear[®] P100

APPLICATIONS

- Component wash fluids
- Cutting fluids
- Aqueous solutions
- Coolants
- Water glycols
- Mineral and synthetic oils
- Hydraulic and lubricating fluids
- Fuels



BENEFITS

- Classification of particles of over 14 µm depending on size
- Low cost solution.
- Plug & Play, the sensor offers a standard output with single plug.
- Early information on the state of the machine is provided.
- It prolongs the life of the fluids and cuts machine downtime.
- It provides rapid, reliable information on the contamination of the fluids.
- Full integration with SCADA/PC/PLC by means of analogue and digital communications.
- Self-diagnosis, self-calibration and self-compensation.
- Possibility of stipulating warning levels.
- Possibility of stipulating the size ranges of the particles to be counted.
- Possibility of integrating with OilHealth®, whereby a single sensor provides information on oil degradation and contamination.

SPECIFICATIONS

OilWear® **P**
100

MEASURED VARIABLES	Counting particles larger than 14µ (4 channels of different sizes)
CALIBRATION	ISO 11171
PRECISION	±1 ISO code
ADDITIONAL VARIABLES	Temperature Sensor Air Bubble detection
FITTING POSITION	Vertical
SUPPLY VOLTAGE	24 V
POWER CONSUMPTION	<1A
ANALOG OUTPUT	0-10 V (4–20 mA) [Upon Request]
DIGITAL OUTPUT	RS485 (ModBUS: RTU) Ethernet RJ45 (ModBUS: TCP/IP, FTP, Telnet)
ALARMS	3 configurable alarms per level [Upon Request]
OPERATING PRESSURE	Maximum 20 bar
OPERATING TEMPERATURE	From 0°C to 70 °C
VISCOSITY RANGE	To 460 cSt
FLOW RATE	Self-regulated
SENSOR SIZE/WEIGHT	250 x 175 x 115mm / 3.000 gr
HYDRAULIC CONNECTIONS	1/8" BSP (x2)
MATERIALS	Stainless steel
MEMORY	Last 500 samples (measurement and sample image)
PROTECTION CLASS	IP65
CERTIFICATIONS	CE, GL pending

DIMENSIONS



atten2
info@atten2.com
www.atten2.com