Extended [life-cycle]

OilWear

[COUNTER SERIES]

Technology based on artificial vision and AI algorithms that provide fast, real-time information about machine status, allowing decisions and actions to be taken at an early stage of failure, generating considerable savings.

- Particle counting according to ISO 4406 standard > 4 microns

- Discrimination and counting of air bubbles

- Classifies particles in 6 micron ranges
  (>4, >6, >14, >21, >38, >70)

- Oil degradation

- Shape analysis

- Fluid image storage

Atten2's OilWear® C100 is an online sensor that detects particles and bubbles larger than 4 microns in the machine fluid and classifies them into 6 size ranges. Designed to work installed in-line, it provides real- time information about the machine's condition through the contamination of its fluids.

OilWear® C100 is the best ally for predictive maintenance strategy based on oil cleanliness. The measurement of an abnormal amount of particles allows the early detection of machine failures and thus the initiation of corrective actions.

OilWear® C100 has a robust, modular design and is easy to integrate into any data acquisition system or CMS of the oil condition monitoring asset.

Integration and communication

The multiple options for visualization and interpretation of the data allow substantial improvements in the maintenance of the assets favoring better decision making

Types of fluids

- Hydraulic fluids and lubricants
- Fuels
- Mineral and synthetic oils
- Coolants
- Cutting fluids
- Aqueous solutions
- Glycols
- Cleaning fluids
- Water

[BENEFITS]

- Classification and counting of particles larger than 4 microns in 6 ranges

- Provides early information on machine condition, up to 7 times earlier than other technologies

- Provides fast and reliable information on fluid contamination

- Extends fluid life and reduces machine downtime

- Recognizes and classifies particles larger than 20 microns by wear type helping to identify root cause

- Integrates OilHealth technology that provides information on oil degradation and contamination

- Simple installation

- Full integration with SCADA/PC/PLC via digital communications for easy interpretation

[SPECIFICATIONS]

Counting output	Particle classification according to: ISO 4406:1999 // NAS 1638
Precision	+/- 1 ISO
Additional Variables	Device temperature measurement Bubble detection and discrimination
Power supply	24 VDC
Current consumption	<150 mA
Digital output	RS485 (Modbus: RTU) Ethernet RJ45 (Modbus: TCP/IP, FTP)
Operating pressure	Up to 150 bar
Electronic operating temperature	From -30° C up to 70°C
Fluid operating temperature	Up to 85° C
Viscosity range	Up to 1280 cSt
Flow rate	Up to 0,5 l/min / Optimal 0,2 l/min
Sensor size/weight	88.5 x 60 x 62 mm // 320 gr
Hydraulic connections	1/8 BSPPF (x2)
Materials	Aluminium, BK7 and FKM (other materials on request)
Internal datalog	Last 10.000 tests and 100 last images
Protection class	IP65
Certificates	CE, UL

Also available for explosive atmosphere environments

CE Ex II 3G Ex ec op is IIB T4 Gc

[DIMENSIONS]

M12, FEMALE 5 PIN CONNECTOR
MODBUS RTU AND POWER

88.5

60.0

31.6

25.7

M12 FEMALE 4 PIN CONNECTOR
MODBUS TCP

69.9

62.0