Extended [life-cycle]

OilWear

[SHAPE 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 earlier stage of failure, to generate considerable savings.

- Particle counting according to ISO 4406 standard > 4 microns
- Classifies particles in 6 micron ranges
  (>4, >6, >14, >21, >38, >70)
- Oil degradation
- Shape analysis
- Discrimination and counting of air bubbles
- Fluid image storage

Atten[2]'s OilWear® S120 ATEX 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 be installed in-line, to provide real-time information about the machine's condition through the contamination of its fluids.

OilWear® S120 ATEX is the best ally for predictive maintenance strategy based on oil cleanliness. The measurement of an abnormal amount of particles allows for early detection of machine failures and thus the initiation of corrective actions.

OilWear® S120 ATEX has a robust, modular design and is easy to integrate into any data acquisition system or CMS of an oil condition monitored asset.

Integration and communication

The multiple options for visualization and interpretation of the data allow substantial improvements in the maintenance of assets for 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]

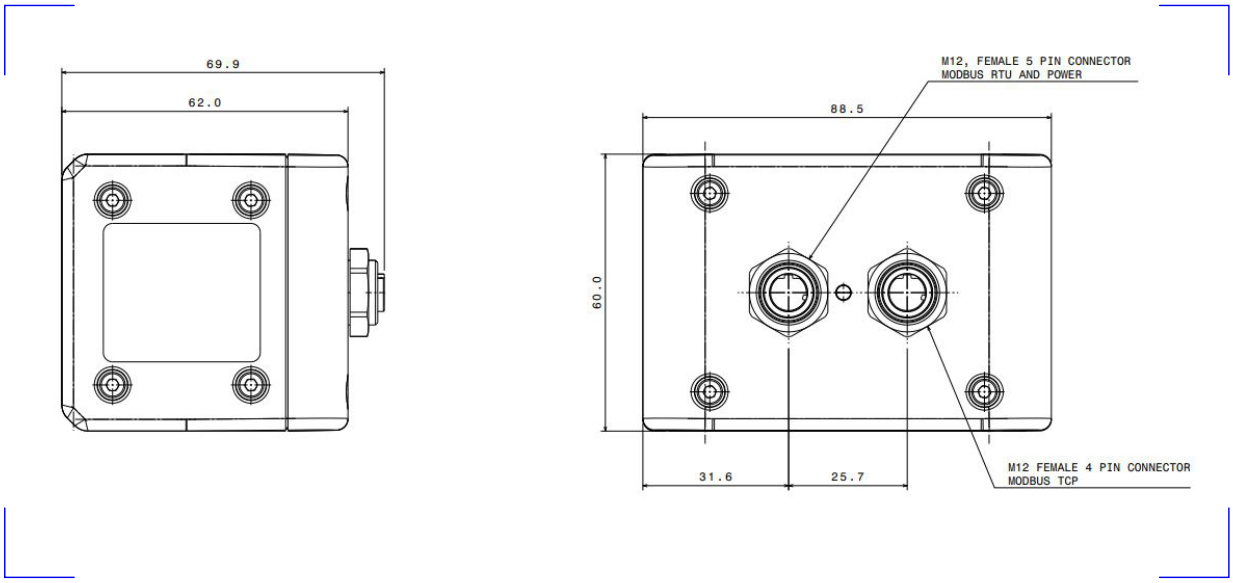
- Classification and counting of particles larger than 4 microns, in 6 micron ranges
- Provides early information on machine condition, up to 7 times earlier than other technologies
- Provides fast and reliable information on fluid contamination
- Extends fluid life and reduces machine downtime
- Recognizes 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]

Certifications	**CE** Ex II 3G Ex ec op is IIB T4 Gc **USA & Canada** - UL 121201 CSA C22.2 #213-17 NFPA 79 2021 Edition, Dated Oct. 25, 2020 Class I, Division 2, Groups C - D, T4, 0 Cº to +60º * Certified by SGS
Counting output	Particle classification according to: ISO 4406:1999 // NAS 1638 Total particles (P/ml) Air Bubble Detection & Discrimination & Counting (b/ml) Shape recognition (p/ml) - Fatigue, sliding, Cutting & Others Oil Degradation (%)
Precision	+/- 1 ISO
Additional variables	Device temperature measurement
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
Environmental temperature	From 0° C up to 60°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	Aluminum, BK7 and FKM (other materials on request)
Internal datalog	Last 10,000 tests and 100 last images
Protection class	IP55

* only available for certain SN, please confirm value with Atten[2] representative.

[DIMENSIONS]


69.9
62.0
M12, FEMALE 5 PIN CONNECTOR
MODBUS RTU AND POWER
88.5
60.0
31.6
25.7
M12 FEMALE 4 PIN CONNECTOR
MODBUS TCP