

PAMAS OLMS-4

Online Monitoring System for Hydraulic Fluids and Lube Oils



PAMAS OLMS-4

3 channel high resolution system for analysis according to ISO 4406:1999 4µm(c), 6µm(c), 14µm(c) based on ISO 11171

Pressureless sampling up to 7 bar

Option: Pressurized sampling up to 420 bar (6000 psi)

The volumetric cell design of PAMAS sensors guarantees the highest accuracy, resolution and best statistical information

Users can configure the system to their needs

Pressurized sensor avoids degassing

Display provides triple ISO code cleanliness classes

Highest repeatability and accuracy

User-friendly setup software

Viscosity independent up to 200 cSt (pressurized sampling up to 350 cSt ; Lube oil system up to 1,000 cSt)

Minimess M16x2 and standard connectors (DIN ISO 2353) or user specific

Operates on 90 - 230 V AC (50/60 Hz), or 12 - 30 V DC, or internal battery

Easy monitoring of contamination and cleaning process



The **PAMAS OLMS-4** is an online system designed for cleanliness monitoring in oil and hydraulic fluids. The measurement conditions can be easily programmed on the unit using the setup tool software.

Alarm levels are free-programmable (Indication by Red LED)

The back-flush mode allows fast clearing of eventual blockages in the internal flow path

Single particle counting system using the light blockage principle

A highly sophisticated sensor cell and optics guarantee best resolution and accuracy even under high pressure conditions.

Particle counting can be achieved using many methods, but only the use of volumetric cells, like those used in PAMAS sensors, can guarantee that all particles passing through the sensor are counted.

This results in better statistical analysis and prevents the loss of information compared to in-situ cells that detect only a small portion of the whole sample flow, especially as the samples are getting cleaner.

Applications

- Online measurements at live hydraulic systems up to 420bar
- Lube oil applications
- Long term analysis

Calibration

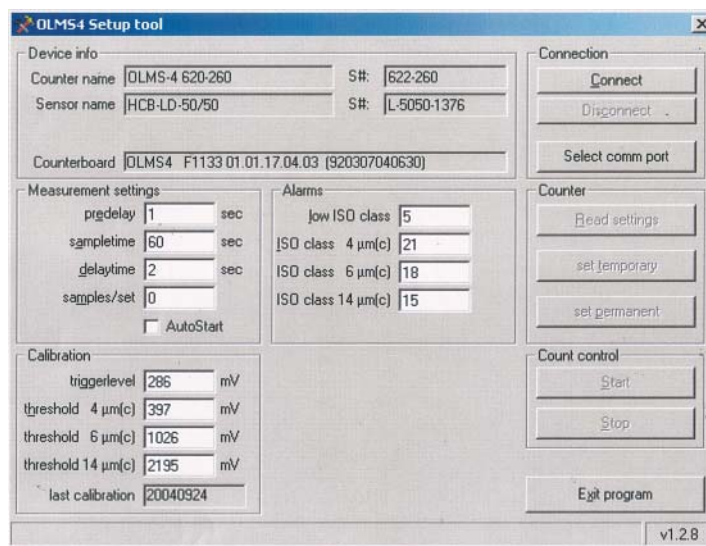
- According to ISO 11171:1999 with ISO MTD (NIST) in oil.
- According to ISO 4402:1991 with ACFTD in oil (optional).

Standards

Display shows cleanliness classes according to international standards ISO 4406:1987 or ISO 4406:1999 others on request).

Data Transmission:

- 4-20 mA for PLC connection (option)
- RS-232 for PC connection (option)



Technical data

Sampling system:

- Wear resistant ceramic piston pump with controlled constant flow.
- Viscosity range up to 200 cSt (pressurized sampling up to 350 cSt; lube oil system up to 1,000 cSt)

Pressure range:

- pressureless
- up to 7 bar (100 psi)
- optional up to 420 bar

PAMAS Volumetric Sensor: HCB-LD-50/50

Size range:

- 4 - 14 µm(c) (ISO 11171:1999)
- 2 - 15 µm (ISO 4402:1991)
- physical limit 400 µm

Max. particle concentration:

- 20,000 p/ml at flow rate 25 ml/min at 5% coincidence

Counter:

- 3-channel particle counter, standard calibration 4µm(c), 6µm(c), 14µm(c) (ISO 11171:1999) or 2µm, 5µm, 15µm (ISO 4402:1991)
- Red-Color-LED display, 3x2 characters
- Alarm displayed by red LED
- Power supply: 90 - 230 V AC (50 - 60 Hz) 12 - 30 V DC
- Weight and Size: Approx. 7,5 kg 300mm x 200mm x 150mm

Options:

- Alarm output
- pressurized sampling up to 420 bar (6000 psi)
- Skydrol compatibility
- Water hydraulic
- 4 - 20 mA outputs for PLC
- Start/Stop input
- Calibration according to ISO 4402

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