PAMAS OLS40
Automatic particle counter for online contamination control

Applications:
- Online measurement of hydraulic liquids up to 7 bar (or up to 420 bar on request)
- Cleanliness control of lubricants
- Condition Monitoring of operating fluids
- Monitoring Facility Systems in Aviation Industry
- Test Rigs for Component Cleanliness

Volumetric measuring cell:
The volumetric cell design of PAMAS sensors guarantees highest accuracy and reproducibility. Every single particle of the sample volume is analysed on its way through the measuring cell.

Resolution:
Particle measurement in eight size channels
**PAMAS OLS40**

Continuous contamination analysis and fluid condition monitoring

The online particle counter PAMAS OLS40 is a fixed installation for the continuous cleanliness control of hydraulic liquids and lubricants. Emerged from the standard particle counter model PAMAS S40, the online particle counter PAMAS OLS40 was designed for online operations.

The standard shell is steel painted. A special stainless steel shell protects the housing from more corrosive liquids like Skydrol and Esther based fluids. The integrated stepper-motor-driven pump guarantees a constant flow.

**Particle sensor**

The instrument is equipped with the light extinction sensor PAMAS HCB-LD-50/50 with a nominal flow rate of 25 ml per minute and a maximum particle concentration of 24,000 particles per ml at a coincidence rate of 7.8%. Particle sensors with a higher flow rate and a higher maximum concentration are available on request.

**Calibration**

The Automatic Particle Counter is calibrated according to international Calibration Standards. The Calibration is traceable to Standard Reference Material of the NIST (National Institute of Standards and Technology). More than one calibration can be pre-configured in a single system.

**Software**

The online particle counter PAMAS OLS40 can be operated with two optional software programmes:
- Software POV (PAMAS Online Visualization)
- Software PCT (PAMAS Component Test)

With the help of the software, the measuring results are reported according to common cleanliness standards (e.g. ISO 4406 or SAE AS 4059). The measuring parameters may be programmed individually according to operator needs.

**Software POV**

The measuring operation can be started and stopped with the software POV (PAMAS Online Visualization). The measuring results are displayed on charts and schedules and can be printed and exported.

**Technical Data**

**Particle counter:**
- Particle counts in eight channels
- 32-bit high performance CPU with sophisticated programmable digital domain signal conditioning and 4096 internal channels
- Data transfer: 8 bit ASCII code through RS 232 port (57600 baud)
- Power supply via alternating current: 100 - 240 V or 50-60 Hz

**Sample pressure:**
- Low pressure: from pressureless up to 6 bar for single and online measurements
- High pressure: from 5 to 420 bar for online measurements

**Viscosity:**
- at low pressure up to 200 cSt (higher rates are available at a flow rate of 10 ml per minute);
- at high pressure up to 350 cSt

**Volumetric particle sensor:**

PAMAS HCB-LD-50/50

Measuring range:
- 4-70 µm (c) (according to ISO 4406 or SAE AS 4059 (A-F),(B-F) etc.)
- 2-100 µm (according NAS 1638)

Maximum particle concentration:
- 24,000 particle per millilitre at a nominal flow rate of 25 ml per minute and a coincidence rate of 7.8%.