PAMAS
Partikelmess- und Analysesysteme

PAMAS OLS4031
Online particle counter with 32 size channels

Online particle counter as fixed installation for Fluid Condition Monitoring

Applications:

- Online measurement of hydraulic liquids up to 6 bar (or up to 420 bar on request)
- 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 32 size channels

REV 04/2019

IN THE WORLD OF PARTICLES PAMAS COUNTS

PAMAS OLS4031

Continuous contamination analysis and fluid condition monitoring

The **PAMAS OLS4031** online particle counter is a fixed installation for fluid condition monitoring. Emerged from the standard particle counter model **PAMAS S4031**, the **PAMAS OLS4031** online particle counter has been designed for online operations. The **PAMAS OLS4031** is equipped with up to 32 size channels which can be selected by the user and adjusted to the individual specific application. The **PAMAS OLS4031** is operated with the **PAMAS PMA** software for Particle Measuring and Analysis.

PAMAS OLS4031 for Phosphate-Ester

For Phosphate-Ester based hydraulic liquids (e.g. aviation hydraulic fluids), the PAMAS OLS4031 is manufactured with a special stainless steel shell that protects the housing from corrosive liquids.

PAMAS OLS4031 in stainless steel shell

The integrated stepper-motor-driven pump guarantees a constant flow.

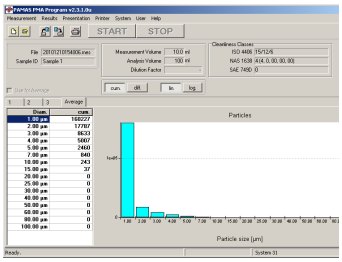
Particle sensor

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

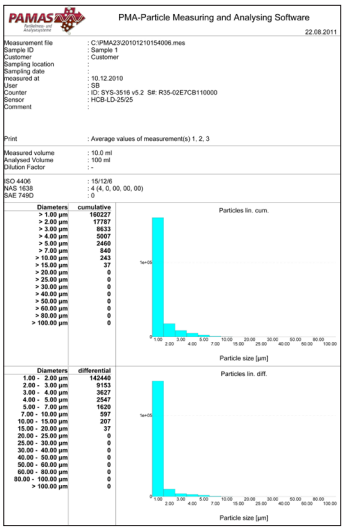
The Automatic Particle Counter is calibrated according to International Calibration Standards. The Calibration is traceable to Standard Reference Material® of the NIST (National Institute of Standards and Technology). More than one calibration can be preconfigured in a single system.

Remote control with software PAMAS PMA



The population histogram shows cumulative and differential particle counts.

Automatic storage and documentation in readable format.Classification of particle number and size within the sensor's size range.



Complete documentation showing measuring results in absolute and relative numbers

Technical Data

Particle counter:

- Particle counts in 32 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 (standard version): from pressureless up to 6 bar for single and online measurements

High pressure (on request): from 3 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 11171)
- 2-100 µm (according to ISO 4402)
- 1-200 µm
- (according to ISO 21501)

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%.

Other sensors for larger particle sizes or higher concentrations are available on request.

TÜVRheinland ZERTIFIZIERT

Management System ISO 9001:2015

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