

PAMAS SVSS

Particle Counting System for Infusion Solutions and Clean Fluids



PAMAS SVSS **Small Volume** **Syringe System**

Applications:

- Infusion solutions
- Clean fluids
- Water analysis
- Water for Injection (Offshore)
- Suspensions
- Partscleaning application
- Size Distribution Analysis
- Display shows measuring results in real time
- Measurement of small volumes down to 1 ml ampoules
- Large dynamic size range
- Simplest operation
- Highest particle concentrations up to 200,000 p/ml

PAMAS SVSS

Universal particle counting system with specific software solutions



The **PAMAS SVSS** is a standard particle measuring system for the measurement of clean, low viscous fluids and of pharmaceutical liquids. The laboratory instrument is designed especially for the particle analysis of low viscous, aqueous solutions. For the contamination analysis of higher viscosities, PAMAS offers the particle analysing system PAMAS SBSS.



PAMAS SBSS system for high viscosities or high vapour pressure.

Sampling

The user can process multiple samples and observe the particle concentration in up to 16 (optionally 32) free selectable size channels. Calibrating with polystyrene latex spheres of different sizes, the user can establish a calibration curve over the full range. An operator selectable flushing volume allows the user

to discard a specific amount of the fluid at the beginning of each sample to remove any fluid remaining from the previous sample. A stepper motor actuated precision syringe moves the sample through the particle sensor at the optimum flow rate. Due to its volume accuracy of 10 µl, **PAMAS SVSS** provides an accurate sample volume and guarantees reproducible measurement results. With the help of interchangeable syringes, **PAMAS SVSS** can handle sample volumes of 100 µl to one litre.

Sensor calibration

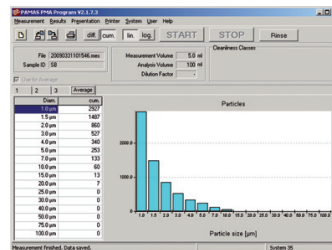
Calibration of sensors with latex spheres according to ISO 21501 or according to individual standards (on request).

Product features

- Preadjustable and automated sampling
- 16 free adjustable channels for particle size determination (32 channels on request)
- Threshold adjustment with D/A-converter
- Size of sample container 1 ml - 2,000 ml
- Analysis volume: 100 µl - 1,000 ml
- Constant sample flow and exact volume control via stepper-motor-driven syringe
- Interchangeable syringes with 1 ml, 10 ml and 25 ml volume

Software

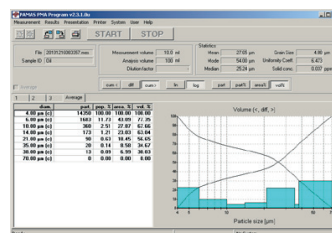
The **PAMAS SVSS** laboratory instrument can be operated using a software programme or as stand-alone system without any software. With the help of the software PAMAS PMA (Particle Measuring and Analysing software), single measurements and average results of test series are shown on a table or graph.



Complete remote control and report of measuring results using software PAMAS PMA.

Size Distribution Analysis

Beside contamination analysis, the **PAMAS SVSS** can be also used for the Size Distribution Analysis of powder in fluids, suspensions or dispersions. The PAMAS PMA software shows the size distribution as defined by the user in relation to population, area or volume.



Size Distribution Analysis with the PAMAS PMA software.

Technical data

Counter:

- Free adjustable 8, 16 or 32 channel D/A-converter system
- Backlit graphical LC-display with 320 x 240 pixel resolution.
- Integrated 32-column-thermoprinter
- Data transfer: ASCII code, RS 232 port
- Power supply via alternating current: 100 V, 120 V, 230 V, 240 V 50-60 Hz AC

Volumetric sensors:

PAMAS HCB-LD-25/25

Size range: 1-200 µm
Max. particle concentration: 120,000 p/ml* at 10 ml/min**

PAMAS HCB-LD-15/25

Size range: 1-100 µm
Max. particle concentration: 200,000 p/ml* at 10 ml/min**

PAMAS HCB-LD-50/50

Size range: 1-400 µm
Max. particle concentration: 24,000 p/ml* at 25 ml/min**

PAMAS HCB-LD-100

Size range: 2-800 µm
Max. particle concentration: 1,200 p/ml* at 50 ml/min**

PAMAS SLS-25/25

Size range 0.5-20µm
Max. particle concentration: 13,000 p/ml* at 10ml/min**

Size:

450 mm x 280 mm x 400 mm (W x D x H)

* Coincidence error of 7.8 %

**Various flow-rates can be selected



Management System
ISO 9001:2008

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