OptoElektronik GmbH

FSV
Fluid Small Volume

Analysis instrument for determination of particle size and quantity in fluids

The particle counter FSV (Fluid Small Volume) has been developed for measuring low-viscous small volumes. It features all necessary system components in a compact design. In addition to a particle sensor of your choice the standard execution includes sample feed, sample platform with electronic height adjustment and continuously adjustable magnetic stirrer as well as integrated sensor electronics. The media contacting parts of the particle counter are made from Teflon, stainless steel, sapphire and quartz glass. The FSV is particularly suitable for the cleanliness control of water, pharmaceutical solutions, beverages, chemicals as well as for a particle size analysis of technical suspensions.

At a glance

- Size range from 0.8 µm with a maximum of 16 freely selectable particle size channels
- Measurement volume from 1 ml
- All in One PC - controlled fluid particle measuring system, fully automatic software controlled measurement
- Electronic height adjustment of sample platform
- Tipping device for easier insertion of the capillary tube into to sampling container
- Touch-sensitive switches for stopping the sample platform resp. sampling container upon contact with the capillary tube
- Sample platform with integrated magnet stirrer
- Application for purity control or particle size analysis

Applications

- Measurement of low viscosity and small volume liquids
- Purity control of pharmaceutical solutions, water, beverages, technical suspensions, oils and other liquid media
- Particle size analysis via particles dispersed in a liquid

Handling

Accurate sampling is performed by the vacuum injection module; first the preset volume is conveyed through the measuring cell of the sensor, then the full injection cylinder will be purged through a Teflon gauge which automatically switches over after the measurement. The sample platform is provided with an integrated magnetic stirrer which inhibits sedimentation of large particles. The operator can choose

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to have the measured particles of the sample volume dispensed in up to 16 particle size channels. By means of the background edit function and the observance of different dilution coefficients the carrier liquids can be measured, thus the particle number of the original sample can be reliably determined.

Benefits

Via serial port RS 232 the measuring procedure will be automatically processed by the particle counter. Evaluation of the transferred data is performed by the basic software which is also part of the delivery contents. This software permits a tabular or graphical monitor and print-out presentation of the readings in compliance with actual standards.

Sensor types

The measuring range from 0.8 until 500 micrometers is covered by various sensor types. Our expert team will support you in choosing the adequate sensor type for your measuring tasks

Specifications*

Features	FSV Fluid Small Volume
Size Range [µm]	0.8 - 500
Particle Channels	Maximum 16 freely selectable particle size channels
Measuring Principle	Extinction measurement
Measuring Volume [ml]	1 - 25
Sampling Modes	Volume controlled, time controlled, until preset number or manual
Measuring Media	All media compatible to Teflon, quartz glass and stainless steel
Sample Feed	Electronic height adjustment of sample platform, tipping device for easier insertion of the capillary tube into to sampling container
Max. Height of Sample Container	Max. 22 cm
Sampling	Vacuum injection module
Suspension Aid	Internal magnetic stirrer
Communication Mode	RS 232 V.24
Control and Evaluation	FL-WIN software
External Surface	Stainless steel
Dimension D x W x H [cm]	26x28x38
Weight [Kg]	Ca. 18
Power Supply	230/115 VAC, 50/60 Hz, max. 150 W
Operating Range	5 - 35 °C, 10 - 80 % RH, noncondensing

* All information is non-binding; specifications are subject to change without notice.