

Particle Counter Abakus mobil fluid

The particle counter "Abakus mobile fluid" is an evaluation system for measuring the number and size of particles in liquids and very viscous media. The measuring system is suitable for stationary lab use as well as for mobile use. The variable equipment with various sensors enables the particle counter to cover a measuring range of 0.8 µm up to 150 µm; hence, you can apply it in many areas. This includes cleanliness control of drinking water, of chemical and pharmaceutical solutions, testing of filtration facilities and checking of viscous liquids and hydraulic oils. With the measuring system, you can measure directly from pressure pipes up to 10 bar (optional 315 bar). The automatic suction pump DPS 1 delivers the samples from containers. The particle number may be shown on the LCD display in up to 32 freely definable size classes. Sensor characteristic lines and measuring rows can be archived in the measuring value memory of the device and printed out by the integrated logging printer. With the evaluation software "Log and Show", the measuring results can be exported to the PC in various programs (MS Excel, Lotus 1-2-3 etc.) via the built in interface and subsequently processed; the software also allows direct measuring and storing. The particle counter features an automatic calibrating function with which you yourself can check and, if necessary, calibrate the system.

Technical Specifications

Particle counter Abakus

Display and control	:	background-lighted graphical LCD display, 6-key-operation
Measuring mode	:	single or continuous measurement with a cycle period of 1 – 99 min
Data contents per data batch	:	data, time, sample number, 32 freely programmable particle size channels
Representation	:	cumulative and distributive particle number, volume percent distribution, conversion in the standards USP 23, ISO 4406, NAS 1638
Alarm level	:	for particle number, programmable for ISO or NAS classes
Printer	:	thermal printer DPU 414
Computer interface	:	RS 232 C (V. 24)
Power supply	:	230/115 VAC, 50/60 Hz, max. 10 W
Dimensions/Weight	:	350 x 220 x 380 (L x W x H) mm / 13 kg
Accessories	:	evaluation software "Log and Show", tank, 12 V battery for power supply, sample feeding system PZG for pressure admission of bottle samples
Option	:	measuring point switcher MU6 for six measuring points, system with Kalrez resp. Teflon seals (Abakus mobil fluid KALREZ)

Pump system DPS-1

Lowest measuring volume	:	10 ml
Flushing/measuring volume	:	10 ml – 1000 ml
Pressure at entrance	:	suction operation up to 10 bar (optional 315 bar)
Volume flow	:	30 ml, cannot be modified, independent of input pressure and viscosity

Particle sensors

Model	Flow rate in ml/min	Measuring range in µm with Latex calibration	Cell dimensions in µm	Max. concentration particle/ml
LDS 23/25	50	1 – 120 (200)	230 x 250	150 000
LDS 30/30	50	0,9 – 139	300 x 300	120 000
LDS 45/50	100	1,5 – 150 (400)	450 x 500	22 000
LDS 23/25 bs	20	0,7 – 120	230 x 250	150 000

The selected sensor is built into the measuring system depending on application and customer's requirement. The sensors are calibrated with certified Latex particles. The maximum concentration is indicated at a coincidence error of 7.8 %.