

Air sampler LKS100 / LKS 30

Data sheet

The air sampling heads **LKS100** with an air flow of 100 l/min and **LKS 30** with an air flow of 30 l/min are perfect for air sampling of cultivable particles on culture media in standard petri dishes

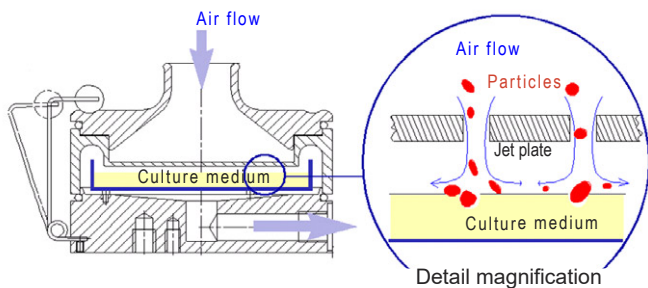


The air sampling heads **LKS100 / LKS 30** are operated with the convenient **MBASS30** system, here on the **DuoSta** and the **Carbon fibre tripod**.



The air sampling head **LKS 30** with base unit with hose connection, can be operated also with the separate diaphragm pump **MP2/39**

Function



The sample air is conveyed from top to bottom through the air sampling head. The flow velocity is considerably higher in the nozzle area and the airborne particles to be collected are accelerated in the direction of the culture medium in the petri dish. Underneath the jet plate, the flow velocity is reduced due to the enlarged cross-section to the extent that most particles, based on their inertia, collide with the culture medium in the petri dish and remain there.

The performance specifications of the LKS100 and LKS 30

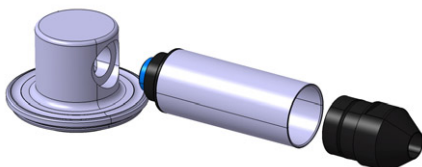
- ▶ The sampling heads are validated in accordance to EN ISO standard 14698-1
- ▶ The culture medium fixation allows sampling in all operating positions
- ▶ The hose connection at the sampling intake allows for samplings from hollow spaces
- ▶ The sampling heads are autoclavable
- ▶ The system is expandable with **PS 30** particle samplers and the **FA 30** filter adapter
- ▶ The high jet count (500 on the **LKS100**) reduces multiple occupancies with high bacterial counts

Technical data

Technical data	Air sampling head LKS100	Air sampling head LKS 30	Air sampling head LKS 30 with base unit with hose connection
Air flow	100 l/min		30 l/min
Cut-off value ($d_{ae 50}$)	1.1 μm		0.9 μm
Number of round jets	500		324
Sample media	Standard petri dish 90 - 95 mm x 15 mm (D x H)		
Sample air nozzle	extendable with hose (5/4 inch)		
Dimensions (L x W x H)	110 mm x 110 mm x 70 mm		125 mm x 142 mm x 100 mm
Weight	400 g		970 g
Pump connection	-	-	Nozzle for 8 mm hose
Tripod socket	-	-	UNC 1/4 inch (photo) and UNC 3/8 inch (microphone)

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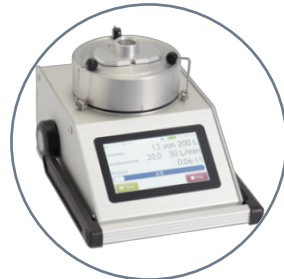
Optional transverse adapter and suction nozzles



With the transverse adapter for horizontal air intake via air sampling heads **LKS100** and **LKS 30** isokinetic microbiological air sampling of external flows can be performed. With corresponding suction nozzles, which are installed onto the transverse adapter, the flow velocity in the channel is adapted to the volume flow of the air sampler.



The **PS 30** particle sampler detects the overall spore total (cultivable and non-cultivable) in the air. The evaluation is possible without cultivation time using a light optical microscope.

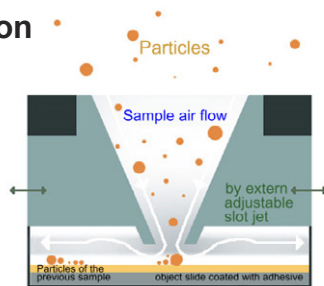


The particle sampling head **PS 30** is operated with the convenient **MBASS30** system, here on the **DuoSta** and the **Carbon fibre tripod**.

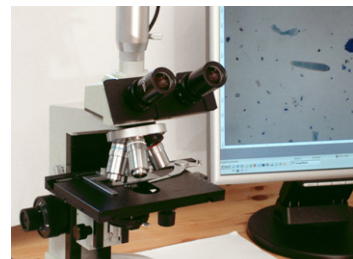


The particle sampling head **PS 30** with base unit with hose connection, can be operated also with the separate diaphragm pump **MP2/39**.

Function



The sample air is sucked in from outside through an external slot jet, which can be adjusted to three different positions. The considerably increased flow velocity at the jet outlet means the particles in the sample air are accelerated towards the collecting layer of the slide to which they remain adhered.



Directly after the sampling, the loaded slide can be stained and evaluated using a light optical microscope.

Characteristic spores and other particles are qualitatively determinable. Clusters and chains of spores are also detected. Quantification is possible.

Performance specifications of the PS 30

- **No cultivation time** – evaluation possible immediately after sampling
- Detection even of non-germinable spores and particles
- The hose connection at the sampling intake allows for samplings of hollow spaces
- Up to 3 samplings on a single slide through adjustable slot nozzles
- No temperature and time restrictions for sample transport
- The methods conform to the ISO 16000-20

Technical Data

	Particle sampling head PS 30	Particle sampling head PS 30 with base unit with hose connection
Air flow	30 l/min	
Cut-off value ($d_{ae 50}$)	1.8 μm	
Dimensions of slot jet	1.1 mm x 16 mm	
Sample media	adhesive coated slide 76 mm x 26 mm x 1 mm	
Sample air nozzle	extendable with hose (1 inch)	
Dimensions (L x W x H)	110 mm x 110 mm x 60 mm	125 mm x 142 mm x 90 mm
Weight	600 g	1170 g
Pump connection	-	Nozzle for 8 mm hose
Tripod socket	-	UNC 1/4 inch (photo) and UNC 3/8 inch (microphone)
Article No.	01-155	01-150
Note	Subject to technical modifications	

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