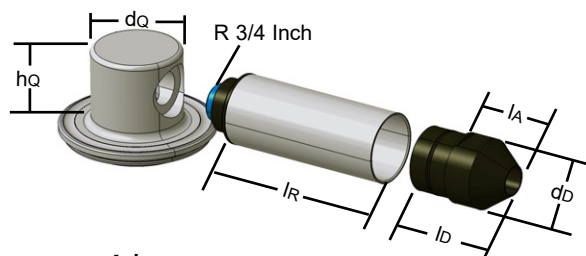


Transverse Adapter and Inlet Nozzles

Technical Data



Transverse Adapter:

| | |
|--|---------------------------|
| Outer diameter of inlet pipe: | 50 mm |
| Inner diameter of inlet pipe: | 46 mm |
| Pipe length (l _R) without thread: | 123 mm |
| Adapter height (h _q): | 55 mm |
| Adapter diameter (d _q): | 64 mm |
| Connection thread: | R 3/4 Inch |
| Flow tolerances achievable with MBASS30v3 : | ± 5 % |
| Flow tolerances achievable with MBASS30v2 : | ± 6 % |
| Flow tolerances achievable with MBASS30v1 : | ± 8 % |
| Weight: | |
| Transverse adapter with inlet pipe: | 675 g |
| Inlet pipe only: | 155 g |
| Material: | Anodized aluminum and POM |
| Article No.: | 02-160 |

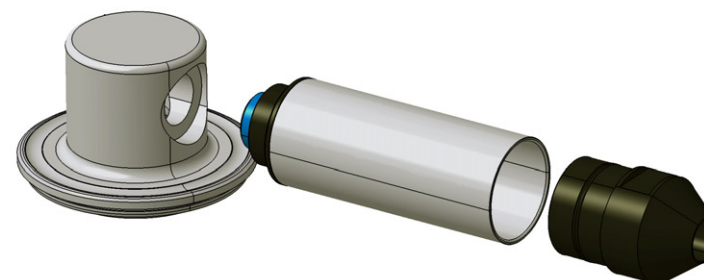
Inlet nozzles:

| | |
|---|------------------------------|
| Total length (l _D): | 70 mm |
| Length when inserted (l _A): | 40 mm |
| Outer diameter (d _D): | 50 mm |
| Weight depending on nozzle diameter: | 100 ~ 130 g |
| Material: | POM (Polyoxymethylene) |
| Article No.: | see table on page 3 |
| Note: | Subject to technical changes |

Please do also consider the operating manuals of **LKS 30** and **LKS100** air sampler as well as the operating manual of the used air conveying device.

Issued: 05/2023

Transverse Adapter and Inlet Nozzles for Air Samplers LKS 30 / LKS100



Adapter head

Inlet Pipe

Inlet Nozzle



Operating Manual

Transverse Adapter and Inlet Nozzles

The Transverse Adapter

Applications

The transverse adapter is an optional accessory for the air sampling heads **LKS 30** and **LKS100**. It allows to draw in the sample air horizontally. Additionally, isokinetic microbiological air samplings and the loading of PU foam cylinders for chemical air samplings are possible. The transverse adapter is used instead of the top part of the air sampling head.

Components

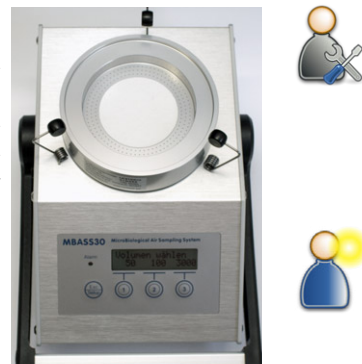
The transverse adapter consists of the adapter head and the inlet pipe. The inlet pipe gets screwed into the adapter head and can be unmounted for cleaning purpose. Only screw on the transverse adapter hand-tight. The sealing is provided by a gasket on the pipe.

Loading of PU Foam Cylinders

PU foam cylinders with a diameter of 50 mm and a length of 50 to 70 mm can be loaded for chemical air samplings. Up to two PU foam cylinders can be inserted in series in the pipe. When operating with **MBASS30**, 300 liters of sample air should be drawn in prior the sampling without a PU foam cylinder for acclimation. The sampling procedure is described in the relevant guidelines (e.g. DIN ISO 16000 parts 12 and 13).

In case the **MBASS30V2** (with membrane keyboard and LCD display) is used in combination with the **LKS100** air sampler, please consider the following:

The air sampling head **LKS100** has a much lower air resistance than the **LKS 30** when operating at 30l/min to load a PU foam cylinder. Depending on the resistance of the PU foam cylinder, this may lead to the error message "No sampler active". By placing the included 55 mm circular filter onto the jet plate, the air resistance of **LKS100** can be adjusted.



MBASS30V2 with 55 mm circular filter onto the jet plate

Transverse Adapter and Inlet Nozzles

Isokinetic Microbiological Air Samplings

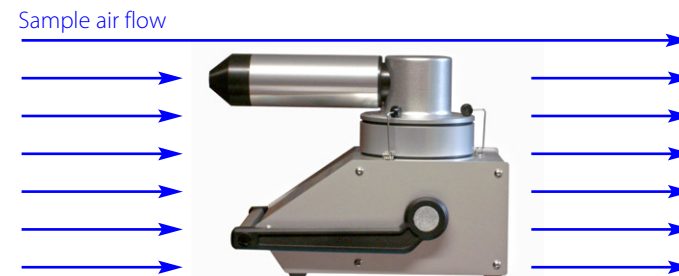
Inlet Nozzles

For isokinetic microbiological air samplings in external air flows, e.g. in air ducts, inlet nozzles are available to adapt the nominal flow rate of the sampling head to the one of the sample air.

| Inlet Nozzle No. | Flow with LKS 30 | Flow with LKS100 | Article No. |
|------------------|-------------------------|-------------------------|-------------|
| 1 | - | 3 m/s | 02-171 |
| 2 | 1,5 m/s | 5 m/s | 02-172 |
| 3 | 2 m/s | 7 m/s | 02-173 |
| 4 | 3 m/s | 10 m/s | 02-174 |
| 5 | 5 m/s | 16 m/s | 02-175 |
| 6 | 7 m/s | - | 02-176 |

The flow rate of the sample air has to be measured with a flow meter to determine the required inlet nozzle from the table above.

The cleaned inlet nozzle is mounted on the inlet pipe of the transverse adapter. The sealing is provided by an O-ring on the shaft of the inlet nozzle. When using **MBASS30** as air-conveying device, make sure that the outgoing air is flowing in the same direction as the sample air.



Sampling in external air flow with transverse adapter and inlet nozzle