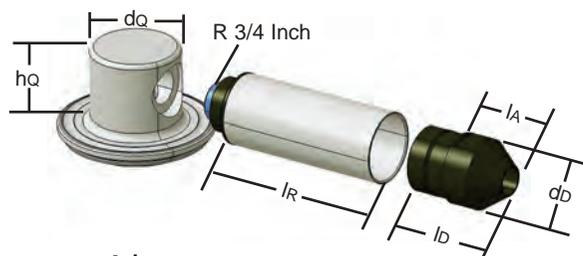


## Transverse Adapter and Inlet Nozzles

### 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 **MBASS30**:

when loading one PU foam cylinder	$\pm 6\%$
when loading two PU foam cylinders	$\pm 8\%$

#### Weight:

Transverse adapter <b>with</b> inlet pipe:	675 g
Inlet pipe only:	155 g

Material: Anodized aluminum and POM

Article No.: 02-160

#### Inlet nozzles:

Total length ( $l_B$ ):	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 consult the operating manuals of **LKS 30** and **LKS100** and of the used air-conveying devices.

Issued: 04/2017

## ▶ 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** and 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. 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 behind each other in the pipe. When operating with **MBASS30**, 300 liters of sample air should be drawn prior to 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).

#### Remark when using the air sampling head **LKS100**:

The air sampling head **LKS100** has a much lower air resistance than the **LKS 30** when operating at 30 l/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.



#### Remarks when using **MBASS30** as air-conveying device:

The usage of a binderless glass fiber filter is not possible due to its high flow resistance. Manual checking of the air flow before and after the sampling, as required by some guidelines, is not possible.



## 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 <b>LKS 30</b>	Flow with <b>LKS100</b>	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.

Sample air flow



Sampling in external air flow with transverse adapter and inlet nozzle