



The VKL 10 series of dilution systems can reduce the concentration of aerosols by the dilution factor 01:10, also of very highly concentrated aerosols, in a defined and reliable way.

The Palas® VKL, 10 dilution systems, are used in vertical operation for the particle size range up to 20  $\mu\text{m}$  for powders and dusts. Dilution factors of up to 1:100,000 are achieved by cascading several VKL systems.

## BENEFITS

- The dilution systems from Palas® are characterized unambiguously. This is documented with a calibration certificate for each device
- The dilution steps deliver a temporally constant, representative dilution with the factors 10 and 100
- The dilution systems can be cascaded with the factors 100, 1,000, 10,000 and 100,000
- Low compressed air consumption, e.g. just 128 l/min with a dilution factor of 10,000 with four VKL 10 systems
- The dilution steps are combinable with all common particle counters
- With a simple test set-up, the users can check these cascaded dilution systems.
- Simple, functional test on-site

## APPLICATIONS

- Aerosol measurement technology: diesel exhaust gases, swarfs, coolant aerosols, weld smoke, oil droplets, test aerosols of filters, and inertial separators
- Separation efficiency determination with counting measuring methods, e.g., with dust filters or HEPA/ULPA filters
- Leak test and acceptance measurements of clean rooms, isolators, and safety work benches
- Inhalation toxicology
- Quality control of respirator masks and filter cartridges

## MODEL VARIATIONS



### VKL 10 ED

Pressure-resistant dilution system made of stainless steel for dilution at up to 10 bar counter-pressure, and for chemically aggressive aerosols with a dilution factor of 1:10.

<https://www.palas.de/product/vkl10ed>

## DATASHEET

Volume flow (clean air)	18 – 45 l/min
Volume flow (suction flow)	2 – 5 l/min
Isokinetic suction nozzles	0,028 – 0,06 l/min, 0,23 – 0,5 l/min, 0,6 – 1,6 l/min, 2 – 5 l/min, 28 l/min => 15 – 37 l/min
Maximum particle size	< 20 µm (for dusts)
Compressed air supply	4 – 8 bar
Dilution factor	1 : 10
Dimensions	100 • 245 • 100 mm (H • B • T)
Weight	Approx. 4 kg
Special features	Cascadable



Further information:  
<https://www.palas.de/product/vkl10>