VKL 10



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 μm 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 version 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/en/product/vkl10ed

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 • W • D)
Weight	Approx. 4 kg
Special features	Cascadable