VKL 10 ED

The VKL 10 ED model variant is a dilution system made of stainless steel, which works according to the ejector principle for chemically aggressive aerosols. The dilution system can be used up to a temperature of 700 Kelvin. Isobaric aerosol dilution up to 10 bar overpressure is possible.

The systems can be cascaded down to a dilution factor of 1:100,000.

The dilution system VKL 10 ED has no integrated pneumatical elements like the standard version VKL 10. The control of the defined clean air volume flow for the mixed air is a prerequisite for operating the VKL 10 ED.

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

DATASHEET

Volume flow (clean air)	18 – 45 l/min
Volume flow (suction flow)	2 – 5 l/min
Isokinetic suction nozzles	2 – 5 l/min
Maximum particle size	< 20 µm (for dusts)
Compressed air supply	13 bar
Dilution factor	1 : 10
Dimensions	100 • 245 • 100 mm (H • W • D)
Weight	Approx. 4 kg
Special features	Cascadable, chemical resistant