

Dilution system with a dilution factor of 1:10



Benefits

- The dilution systems from Palas® are characterized unambiguously. This is documented with a calibration certificate for each individual 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 these cascaded dilution systems can be **checked by the users themselves**.
- **Isobaric dilution up to 10 bar overpressure / isothermal dilution up to 120°C with the VKL 10 E, VKL 10 ED, KHG 10 and KHG 10 D 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 E

Dilution system made of stainless steel for chemically aggressive aerosols with a dilution factor of 1:10.

<https://www.palas.de/product/vkl10e>



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

Datasheet

Parameter	Description
Dimensions	
	100 • 245 • 100 mm
Weight	
	approx. 4 kg
Dilution factor	1 : 10
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)
Special features	
	Cascadable
Volume flow (clean air)	
	18 – 45 l/min
Volume flow (suction flow)	2 – 5 l/min
Compressed air supply	4 – 8 bar

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