



Heatable dilution system KHG 10 for isothermal dilution with a 1:10 dilution factor

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

- Dilution of hot aerosols, e.g. engine oil, DEHS, etc.
- 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. oil mist separators
- Hot gas filtration
- Toxicology, e.g. testing of medical nebulizers / inhalation studies etc.

Model Variations



KHG 10 D

KHG 10 D dilution system heatable and pressure-resistant up to 10 bar for isothermal and isobaric dilution with a dilution factor of 1:10.

<https://www.palas.de/product/khg10d>



<https://www.palas.de/product/khg10>

Datasheet

Parameter	Description
Power supply	115 – 230 V, 50 – 60 Hz
Dilution factor	1 : 10
Isokinetic suction nozzles	0.6 – 1.6 l/min, 2 – 5 l/min, 4 – 10 l/min, 8 – 16 l/min, 28 l/min => 15 – 37 l/min
Maximum particle size	< 20 µm (for dusts)
Special features	Heatable until 150 °C, cascadable, chemical resistant
Thermodynamic conditions for dilution	400°C
Volume flow (clean air)	18 – 45 l/min (heatable until 150 °C)
Volume flow (suction flow)	2 – 5 l/min
Compressed air supply	4 – 8 bar

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