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 10, 100, 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, swarf, 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.

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimensions</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>approx. 8.5 kg</td>
</tr>
<tr>
<td><strong>Dilution factor</strong></td>
<td>1:10</td>
</tr>
<tr>
<td><strong>Isokinetic suction nozzles</strong></td>
<td>0.6 – 1.6 l/min, 2 – 5 l/min, 4 – 10 l/min, 8 – 16 l/min, 28 l/min =&gt; 15 – 37 l/min</td>
</tr>
<tr>
<td><strong>Maximum particle size</strong></td>
<td>&lt; 20 µm (for dusts)</td>
</tr>
<tr>
<td><strong>Special features</strong></td>
<td>Cascadable, chemical resistant</td>
</tr>
<tr>
<td><strong>Volume flow (clean air)</strong></td>
<td>18 – 45 l/min</td>
</tr>
<tr>
<td><strong>Volume flow (suction flow)</strong></td>
<td>2 – 5 l/min</td>
</tr>
<tr>
<td><strong>Compressed air supply</strong></td>
<td>4 – 8 bar</td>
</tr>
</tbody>
</table>

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