

Cartridge-type Fume absorber



Absorption of hazardous and pollutant chemical vapours produced during the filling, decanting and draining of closed pressureless storage tanks and containers

For all current chemicals, acids, lyes, oils and solvents

For removal of CO₂ from air when storing demineralised water

For extracting humidity from gas atmospheres for materials which absorb humidity (H₂SO₄)

Suitable for installation in enclosed and outside positions

Ease of handling, with problem-free cartridge exchange

Protects against emissions

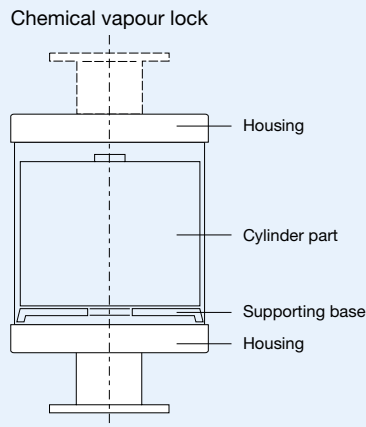
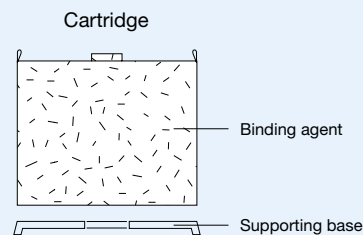
Sterile filtration

Pressure vacuum breakers

Design

All our chemical vapour locks are based on the cartridge system. In this design, the binding agent is already contained in the filter bag, which is subsequently disposed of with the used binding agent. In the standard finish, the housing is in PVC with a transparent cylinder section. For models with the additional label "G", the housing is in PP, with a glass cylinder. The housing can also be supplied in the steels (e.g. 1.4571 stainless steel) or PVDF. No materials containing asbestos or silicone are used in the manufacture of these items.

As a special finish, chemical vapour locks can also be manufactured to withstand pressures of up to 6bar. Models above the size of the can also be equipped for use in outside situations, with a self-regulating heating element. The element is then integrated into the filter bag. To protect the binding agent against the rain, a rain protector is required. Other than to change the cartridges, no maintenance is needed. The consumption of binding agents and is shown by the change in the colour indicators.



Advice regarding retrofitting kits

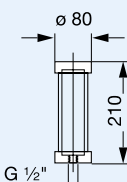
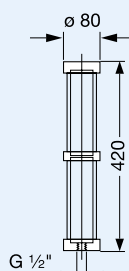
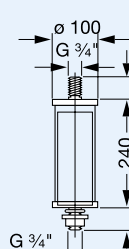
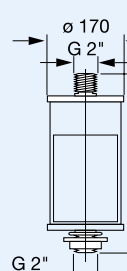
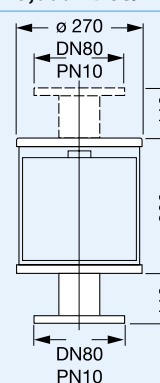




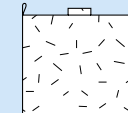
Existing old-style chemical vapour locks with a loose binding agent can be retrofitted cost-favourably for cartridge operation. Using cartridges makes replacing the binding agent a much more simple operation, meaning that the cost of conversion is recouped with the very first filter change.

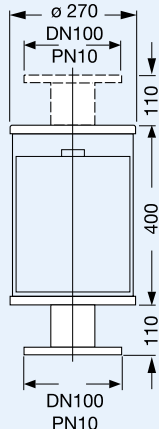
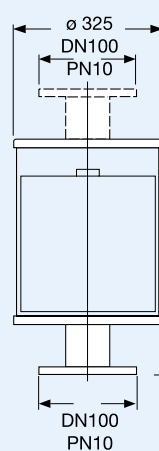
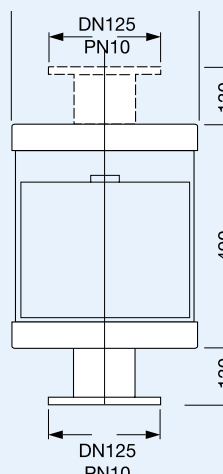
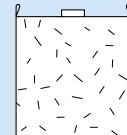

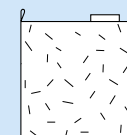
Advice on use and installation

- The storage tank should not be overfilled.
- The liquid must not penetrate into the binding agent or into the cartridge.
- The fill rate as shown in the table should never be exceeded.
- With fill procedures involving compressed air, the chemical vapour lock should always be over-dimensioned by one size, in order to ensure operational safety. Installation of a quick-action shut-off device is recommended.
- Avoid sudden pressure shocks and impacts or decompressions, especially during filling procedures and when displacing pressure from the supply tank.
- With new plants, the pressure loss in accordance with the nominal flow rate for prox. 1-10mbar. (at nominal velocity).
- The cartridges with binding agents are to be replaced at regular intervals (roughly half-yearly).
- With the cartridge design, the heating element is integrated into the filter bag. On site, the binding agent - e.g. BM4 - is then filled into the installed filter bag. These filter bags are to be replaced after they have been filled twice with binding agent; if binding agent BM1 is used, then the filter bag must be replaced after each use.
- The base glued to the cylinder part is always at the bottom. With the PPH finish, e.g. the SL11, the sealed-in part is similarly to be used as the base.
- If being set up outside, the chemical vapour locks must be protected against rain and sun using our rain protector
- Avoid temperatures over 50°C for PVC products, 80°C for the PP finish, and 40°C when using binding agent .
- Take note of the possible heating of the storage tank through insulation. Black tanks can be heated to temperatures of up to 80°C. This temperature generates significant volumes of vapourised gas. Run-off pipes must be installed with the fall on the chemical vapour lock running away from the tank, so that no condensate can flow back.

Chemical vapour locks for pressureless storage tanks and containers

Overview of types of chemical vapour locks for pressureless storage tanks and containers

Type	W101	2 x W102	W103	W104	W105
Max. air quantity	500 litres/h	500 litres/h	1,500 litres/h	5,000 litres/h	15,000 litres/h
Dimensions (in mm)					
Matching cartridge types with 1µ fine filter (filter unit for single use)					
Type WM1 ...	WM1KBL	WM1KBL	WM1K1	WM1K3	WM1K5
Type WM2 ...	WM2KBL	WM2KBL	WM2K1	WM2K3	WM2K5
Type WM4	WM4KBL	WM4KBL	WM4K1	WM4K3	WM4K5

Type	W106	W107	W108 1
Max. air quantity	30,000 litres/h	72,000 litres/h	50,000 litres/h
Dimensions (in mm)			
Matching cartridge types with 1µ fine filter (filter unit for single use)			
Type WM1 ...	WM1K7	WM1K9	WM1K11
Type WM2 ...	WM2K7	WM2K9	WM2K11
Type WM4 ...	WM4K7	WM4K9	WM4K11

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